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**EXPLORING PUPILS' SUBJECTIVE EXPERIENCES  
OF LEARNING FRENCH AT PRIMARY SCHOOL**

**THREE VOLUMES**

**VOLUME I**

**Ph.D. in Applied Linguistics  
University of Dublin, Trinity College**

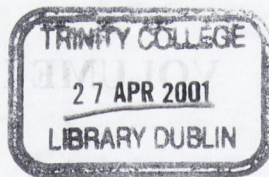
**October 2000**

**Áine Furlong**



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THREE VOLUMES



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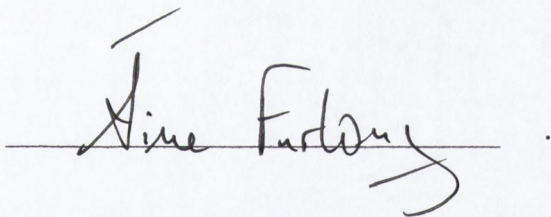
P.D. in Applied Linguistics  
University of Dublin, Trinity College

October 2000

Aine Furlong

## DECLARATION

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2. I declare that this thesis is entirely my own work and that any references to other works have been duly acknowledged.
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A handwritten signature in cursive script, reading "Aine Furlong", is written over a horizontal line. The signature is fluid and includes a long, sweeping tail on the letter "y".

Aine Furlong

To Myrrha the teacher and Michel the engineer.

For Martin and Lola the partners.



## Acknowledgments

I would like to offer my very special thanks to Prof. D.M. Singleton, Associate Professor of Applied Linguistics at Trinity College Dublin, for the guidance and invaluable advice he provided; for his commitment to excellence, for his open mind, for the respect he shows to learners and his unwavering support, I am truly grateful.

I would also like to acknowledge the encouragement and advice I received from Prof. Martha Nyikos, Director of Foreign Language and ESL Education, Indiana University, USA and from Dr. Vera Regan, Department of French, University College Dublin.

For statistical advice, I am grateful to Dr. Myra O'Regan, Department of Statistics, Trinity College Dublin, Dr. Jim Stack, Department of Physical & Quantitative Science, Waterford Institute of Technology, Jim Larragy, Information Systems Services, Trinity College Dublin and Milo O'Rathaille Department of Physical & Quantitative Science, Waterford Institute of Technology.

I am also indebted to Dr. Fionnuala Kennedy, Department of Humanities, Waterford Institute of Technology and to Dr. Mairi Keenleyside, Department of Child and Adolescent Psychiatry, South Eastern Health Board.

For financial support, I would like to thank the successive committees of the Alliance Française (Waterford) LTD, the Cultural Service of the French Embassy in Dublin and in particular Claude Kieffer, Marie-Thérèse Panther and Jacques-Michel Lacroix.

For practical and technical advice, I am grateful to Eamonn de Leastar, Waterford Institute of Technology, Frank Heraughty, Waterford Institute of Technology, Martin Furlong, Waterford Institute of Technology, Mark Delahunty University College Cork, the library staff of Institiúid Teangeolaíochta Éireann, Michel Bossy† and Amita Boulet-Desbareau.

For enlightening philosophical discussions and exchanges, special thanks to Michael O'Keeffe Department of Physical and Quantitative Science, Waterford Institute of Technology.

Finally, for their presence and discretion, I thank my sisters, my mother and the Furlong family.



## Summary

This study explored the meaning of an L3 learning experience at primary level in a phenomenological perspective. This implied that the experience was seen as a human and a lived experience and that, consequently, its meaning would emerge from participants' consciousness (Husserl 1928, Schutz 1970, Van Manen 1990). A questionnaire was designed to probe the subjectivity of 282 learners of French who provided retrospective accounts of the French learning experience. Three groups of individuals responded and comprised 138 primary school children who were attending French classes at the time of the study in 1994, as well as 83 secondary school adolescents from the junior cycle and 61 adolescents from the senior cycle who were looking back on a similar L3 learning experience which had taken place a number of years earlier (between one and six years). This French learning experience was representative of L3 learning at primary level in Ireland, at the time (I.N.T.O. 1991, Harris 1992). The research questions were formulated as follows:

- had the learners connected with the experience?
- had this experience been meaningful to these learners in general terms and in terms of the effects of this experience on their subsequent L3 learning?
- if the learners had connected with the experience, what was the nature of these connections?
- if the learners had not connected with the experience, what were the corresponding reasons?

The learners' responses served to construct and to convey the meaning of the experience in a hierarchical manner. The hierarchies were presented as the groups' stocks of knowledge, each of which contained participants' shared socio-cultural values, perceptions and memories (Schutz 1970). The responses were not viewed as separate variables, but were treated as the varying constituents of the L3 experience. The visualisation of the data facilitated this process and offered a solution to the problem of the statistical treatment of responses to open-ended questions. Learners' responses were analysed in a phenomenological perspective and were seen as manifestations of participants' consciousness and its constituents, namely, apprehension, perception and memory. This analysis revealed gender-related differences in participants' interpretation of the L3 experience. The study, while being embedded in a phenomenological perspective, used quantitative measures which facilitated the identification of hierarchies as well as significant differences between boys' and girls' perceptions. The methodological



orientation influenced the theoretical framework and a ‘conversational partnership’ between views in SLA, cognitive psychology and phenomenological pedagogy was initiated. The theoretical framework outlined chronological-maturational arguments in L2 learning and focused on experiential-developmental considerations which permitted L2 learning to be integrated in a Vygotskian cognitive framework. The decision to draw on Vygotsky’s psychology was in keeping with the perspective of the study: central to Vygotsky’s psychology and to Husserl’s phenomenology is the individual’s consciousness in a pre-existing social and cultural world. The notion of ‘entering an experience’ was explored and included a focus on current views of L2 motivation, as well as cognitive and phenomenological considerations. The notions of apprehension, perception and memory in respect of L2 learning were then examined in the context of ‘experiencing’. Once again, a cognitive approach to L2 learning (Skehan 1998) and phenomenology (La Garanderie 1995) were considered and this led to the identification of two learner styles, one temporal synthetic and memory-based, the other spatial and analytic. These learning styles were found to relate to females’ and males’ respective underlying cognitive abilities (Halpern 1992). Consequently, a review of gender-related differences in L2 learning ensued and provided supporting evidence for linking gender-related characteristics to learning style preferences.

The empirical study revealed a majority of positive perceptions of the L3 learning experience at primary level; the impressions seemed to be enduring and were manifest in participants’ reports of confidence- and language-related gains. The memories also brought the influence of the learning situation to the fore. Similarities across the three age-groups emerged from participants’ comments on the initial L3 learning experience. However, through the older learners’ retrospection, the development of an L3 learner consciousness emerged. This consciousness, through girls’ and boys’ apprehension, perception and memory of the L3 experience was characterised by significant gender-related differences: girls’ responses suggested more positive perceptions of the experience than in the case of boys. These differences appeared to influence the resourcefulness of the learner in the learning situation as well as the application of the L3. They also provided some support towards cognitive and socio-cultural preferences identified in the gender-difference literature. In this connection and to conclude, the inclusion of two learning styles, one temporal and synthetic, and the other spatial and analytic in the L2/L3 classroom was advocated.



DECLARATION	1
ACKNOWLEDGEMENTS	3
SUMMARY	4
CONTENTS	6
LIST OF ABBREVIATIONS	19

## **VOLUME I**

1.	INTRODUCTION	20
1.1	An overview of the study	20
1.2	Methodology	22
1.2.1	Phenomenology and qualitative strategies	23
1.2.2	Experience and first-order and second-order perspectives	27
1.2.3	Characteristics of a phenomenological study	30
1.2.3.1	Fundamentals	30
1.2.3.2	Time	31
1.2.3.3	The four existentials	33
1.2.3.4	Parts and whole	34
1.2.3.5	Constructing and conveying meaning	36
1.2.3.6	The relationship between the researcher and the phenomena	42
1.2.3.7	The progression from 'local' to 'global'	46
1.2.4	Summary and conclusion	52
2.	THEORETICAL FRAMEWORK	55
2.1	Introduction	55
2.2	Time and the L2 learner	57

2.2.1	Age and the L2 learner	57
2.2.2	Exposure time and the L2 learner	61
2.2.3	Long term effects of FLES	62
2.2.4	Summary	65
2.3	Development: the learner and the L2 learner	66
2.3.1	Development and neurobiology	67
2.3.2	Development and instruction	69
2.3.2.1	Exposure to and interaction with instruction	70
2.3.2.2	Instruction precedes development	71
2.3.2.3	Intellectual development emerges out of the meaningful interaction of taught subjects	72
2.3.2.4	Intellectual development is a dynamic process which becomes manifest in the Zone of Proximal Development	73
2.3.3	Development and mediation	75
2.3.4	Development and concept formation and the L2 learner	76
2.3.4.1	Syncretic groupings	77
2.3.4.2	Thinking in complexes	78
2.3.4.3	Potential concepts	83
2.3.4.4	Concepts	84
2.3.5	Summary	86
2.4	Entering experience: motivation and the L2 learner	87
2.4.1	L2 motivation	88
2.4.1.1	Summary	98
2.4.1.2	Additional remarks	98
2.4.2	Motivation and cognitive approaches	100
2.4.2.1	Summary	103
2.4.3	Motivation and phenomenology	104
2.4.3.1	Summary	107
2.4.4	Conclusion	107



2.5	Experiencing learning and L2 learning	109
2.5.1	Apprehension	111
2.5.1.1	Summary	113
2.5.2	Intuition	113
2.5.2.1	The material of intuition	114
2.5.2.2	The direction of intuition	115
2.5.2.3	Summary	119
2.5.2.4	Time and intuition	119
2.5.3	Memory	120
2.5.3.1	Summary	124
2.5.3.2	Summary of ‘experiencing’ learning and L2 learning	124
2.6	From theory to practice	126
2.6.1	Cohen	127
2.6.2	‘Write in order to read, read in order to speak, speak in order to write’	130
2.6.2.1	Summary	133
2.7	Conclusion	135
3.	GENDER-SPECIFIC DIFFERENCES IN L2 ACQUISITION	139
3.1	Introduction	139
3.2	L1 and L2 interactions among children aged 4 to 12 years	140
3.2.1	Summary table	144
3.3	Adolescents: self-reporting exercises in L2 acquisition	145
3.3.1	Summary table	147



3.4	Young adults and adults: responses to authentic L2 oral and written input	148
3.4.1	Summary table	153
3.5	Third level students: strategy use	154
3.5.1	Summary table	161
3.6	Third level students and adults: written peer reviews and L2-related questionnaires	162
3.6.1	Summary table	166
3.7	Males and females: L1 interactions	167
3.7.1	Summary table	170
3.8	Synthesis	172
3.9	Conclusion	173

## **VOLUME II**

CONTENTS	1
4. METHOD	7
4.1 Reasons for choosing a questionnaire	7
4.2 The participants	10
4.3 The number of participants	10
4.4 Comparability of the groups	11

4.5	Age considerations	12
4.5.1	Age at the time of the study	13
4.5.1.1	Summary	14
4.5.2	Age when starting French	15
4.5.3	Number of years learning French at primary level	16
4.5.4	Class at the time of the study	17
4.5.5	Summary of age considerations	19
4.6	Sampling	19
4.6.1	Summary	23
4.7	Non participants	23
4.8	The questionnaires	24
4.8.1	Advantages and disadvantages of open-ended questions	25
4.8.2	The genesis of the questionnaires	27
4.8.3	The design of the questionnaires	29
4.8.4	Processing the responses and reliability-checks	29
4.8.5	Piloting the questionnaires	30
4.9	Triangulation	31
4.10	Tables and percentages	32
4.11	Tables, commentaries and discussions	33
4.12	Summary of Method	34
5.	GROUP 1 RESULTS	36
5.1	Reasons and/or motives for learning an L3 at primary level and in general	37
5.1.1	Summary	49

5.2	Experience at primary level	50
5.2.1	Summary	69
5.3	Feelings when speaking French	71
5.3.1	Summary	73
5.4	Perceptions of cross-linguistic influence	74
5.4.1	Summary	77
5.5	Perceived language difficulty	78
5.5.1	Summary	80
5.6	Aural comprehension	81
5.6.1	Summary	84
5.7	L3 writing	85
5.7.1	Summary	89
5.8	Attitudes to languages	90
5.8.1	Summary	94
5.9	Perception of French people and country	95
5.9.1	Summary	102
6.	GROUP 2 RESULTS	103
6.1	Reasons and/or motives for learning an L3 at primary level and in general	104
6.1.1	Summary	116
6.2	Experience at primary level	117



6.2.1	Summary	128
6.3	Feelings when speaking French	129
6.3.1	Summary	133
6.4	Relationship between the experience at primary level and the experience at second level	134
6.4.1	Summary	139
6.5	Perceptions of cross-linguistic influence	140
6.5.1	Summary	145
6.6	Perceived language difficulty	146
6.6.1	Summary	149
6.7	Attitudes to languages	150
6.7.1	Summary	155
6.8	Attitudes to the curricular subjects of French, Irish and English	156
6.8.1	Summary	161
7.	<b>GROUP 3 RESULTS</b>	163
7.1	Reasons and/or motives for learning an L3 at primary level and in general	164
7.1.1	Summary	177
7.2	Experience at primary level	178
7.2.1	Summary	189
7.3	Feelings when speaking French	190
7.3.1	Summary	194

7.4	Relationship between the experience at primary level and the experience at second level	195
7.4.1	Summary	201
7.5	Perceptions of cross-linguistic influence	202
7.5.1	Summary	207
7.6	Perceived language difficulty	208
7.6.1	Summary	211
7.7	Attitudes to languages	212
7.7.1	Summary	217
7.8	Attitudes to the curricular subjects of French, Irish and English	218
7.8.1	Summary	223
8.	COMPARISON OF GROUP 1, GROUP 2 AND GROUP 3: RESULTS	225
8.1	Reasons and/or motives for learning an L3 at primary level and in general	226
8.1.1	Summary	233
8.2	Experience at primary level	234
8.2.1	Summary	238
8.3	Feelings when speaking French	239
8.4	Perceived language difficulty	241



9.	GENDER-RELATED CONSIDERATIONS: RESULTS	243
9.1	The further study: subjects and method	244
9.2	Results	245
9.3	Reasons and/or motives for learning an L3 at primary level and in general	245
9.3.1	Summary table	250
9.4	Experience at primary level	251
9.4.1	Part 1	251
9.4.2	Summary table	254
9.5	Experience at primary level: Part 2	255
9.5.1	Summary table	260
9.6	Feelings when speaking French	261
9.6.1	Summary table	262
9.7	Relationship between the experience at primary level and the experience at second level	263
9.7.1	Summary table	263
9.8	Perceptions of cross-linguistic influence	264
9.8.1	Summary table	266
9.9	Perceived language difficulty and comprehension strategies	267
9.9.1	Summary table	269
9.10	L3 writing	270
9.10.1	Summary table	271

9.11	Attitudes to languages	271
9.11.1	Summary table	278
9.12	Perceptions of native French speakers	279
9.12.1	Summary table	280

### **VOLUME III**

CONTENTS		1
10.	GROUP 1 DISCUSSION	5
10.1	Reasons and/or motives for learning an L3 at primary level	5
10.2	On the general importance of learning foreign languages	7
10.3	The experience at primary level	9
10.3.1	Part 1: on having started French at primary level	9
10.3.2	General summary of reasons and/or motives for learning an L3 at primary level and in general	10
10.3.3	The experience at primary level: Part 2	11
10.4	Feelings when speaking French	11
10.5	Perceptions of cross-linguistic influence	12
10.6	Perceived language difficulty	13
10.7	Aural comprehension	13
10.8	L3 writing	14
10.9	Attitudes to languages	14
10.10	Perception of French people and country	15
10.11	Conclusion	16



11.	GROUP 2 DISCUSSION	17
11.1	Reasons and/or motives for learning an L3 at primary level	17
11.2	On the general importance of learning foreign languages	18
11.3	The experience at primary level	19
11.3.1	Part 1: on the satisfaction of having started French at primary level	19
11.3.2	General summary of reasons and/or motives for learning an L3 at primary level and in general	21
11.3.3	Part 2: on native French speakers as teachers	22
11.3.4	Memories of French class at primary level	22
11.3.5	Summary of the experience at primary level	24
11.4	Feelings when speaking French	25
11.5	Relationship between the experience at primary level and the experience at second level	26
11.6	Perceptions of cross-linguistic influence	28
11.7	Perceived language difficulty	29
11.8	Attitudes to languages	30
11.9	Attitudes to the school subjects of French, Irish and English	31
11.10	Conclusion	32
12.	GROUP 3 DISCUSSION	34
12.1	Reasons and/or motives for learning an L3 at primary level	34
12.2	On the general importance of learning foreign languages	35
12.3	The experience at primary level	36
12.3.1.	Part 1: on the satisfaction of having started French at primary level	36
12.3.2	General summary of reasons and/or motives for learning an L3 at primary level and in general	37
12.3.3	Part 2: on native French speakers as teachers	38

12.3.4	Memories of French class at primary level	39
12.3.5	Summary of the experience at primary level	40
12.4	Feelings when speaking French	40
12.5	Relationship between the experience at primary level and the experience at second level	41
12.6	Perceptions of cross-linguistic influence	42
12.7	Perceived language difficulty	43
12.8	Attitudes to languages	44
12.9	Attitudes to the school subjects of French, Irish and English	45
12.10	Conclusion	46
13.	COMPARISON OF GROUP1, GROUP 2 AND GROUP3: DISCUSSION	48
13.1	Reasons and motives for learning an L3 at primary level	48
13.2	Whose decision was it that you should learn French at primary level?	49
13.3	On the importance of learning foreign languages	50
13.4	On the satisfaction of having started French at primary level	50
13.5	Summary of reasons and/or motives for learning an L3 at primary level and in general	51
13.6	Feelings when speaking French	52
13.7	Perceived language difficulty	52
13.8	Conclusion	52
14.	GENDER-RELATED CONSIDERATIONS: DISCUSSION	54
14.1	Conclusion	59



15.	GENERAL CONCLUSION	62
16.	BIBLIOGRAPHY	73
17.	APPENDIX	102
17.1	Group 1 questionnaire	103
17.2	Group 2 and Group 3 questionnaire	109
17.3	Sample of completed questionnaire; Group 1 participant: completion time details	118
17.4	Sample of completed questionnaire; Group 2 participant: views on the school subjects of French, Irish and English	120
17.5	Sample of completed questionnaire; Group 3 participant: views on games in the language class at primary level	123
17.6	Letter to G1 parents and participants	125
17.7	Letter to G2 and G3 parents and participants	127
17.8	Reliability-check 1	129
17.9	Reliability-check 2	131
17.10	Sample of course content	133

## LIST OF ABBREVIATIONS

AMTB: Attitude/Motivation Test Battery

CLI: Cross-linguistic Influence

CPH: Critical Period Hypothesis

FLES: Foreign Languages in the Elementary School

G1: Group 1

G2: Group 2

G3: Group 3

HR: High Risk [second language learners] (Sparks et al 1992)

LR: Low Risk [second language learners] (Sparks et al 1992)

LCDH: Linguistic Coding Deficit Hypothesis (Sparks et al 1993b)

LD: L1 Learning Disability

L1: first language

L2: second language

L3: third language

L4: fourth language

LAB: Language Aptitude Battery (Pimsleur 1966)

MBTI: Myers-Briggs Type Indicator

N.A.: not applicable

SLA: Second language Acquisition

SILL: Strategy Inventory for Language Learning

T1: treatment 1

T2: treatment 2

T3: treatment 3

T4: treatment 4 (Nyikos 1990)

TPR: Total Physical Response (Asher 1982)



# 1. Introduction

## 1.1 An overview of the study

The aim of this study is to explore the subjectivity of L3 learners, in the context of providing an insight into the learning experience, at primary level, of 282 participants in County Waterford, Ireland. The learning experience in question focused on French as an L3, English and Irish representing the learners' L1 and L2, respectively. The intent was to provide evidence from three age groups, G1, primary school pupils, G2, junior secondary school students and G3, senior secondary school students. The primary L3 learning experience was or had previously been similar for the three age groups in terms of the approach, the content of the courses and the time at which the classes took place (see Appendix).

The concerns which prompted the study may be outlined as follows:

- In the context of the age-factor and L2 acquisition literature, evidence seems to indicate that, in a formal situation, L2 learning at a young age does not appear to lead to superior L2 attainment when compared with the L2 attainment of older learners, with the same amount of exposure time (Singleton 1989, Blondin *et al* 1998 ).
- At the time of the study, French in Ireland, at primary level, was extra-curricular; this meant that the learning of the L3 occurred within obvious limitations such as dependence on the will of the school to offer the L3 after school hours, undefined curriculum guidelines within the Irish educational framework, limited availability of teachers, the absence of articulation at second level (the latter is also accentuated by the dichotomy of the primary and secondary school curricula and their respective approaches to teaching/learning).
- In the context of L2 learning at primary level, there is a dearth of experiential reports based on the subjectivity of L2 learners.

This last point raises the issue of the independence of learners' experience vis-à-vis the age issue and prompts consideration of the notion that experience is an additional factor in any evaluation of L3 learning at primary level (cf. Singleton 1989).



‘There is at least one question mark over early second language instruction which is also independent of the age factor issue. This has to do simply with the quality of the experience of learning a second language in the initial stages of schooling; unless the experience is a positive one it is likely to result in antipathy towards the language and culture in question and in demotivation in respect of subsequent second language learning experience (1989, p.244).

Singleton further states

‘in all other areas of life, from what we eat to whom we spend time with, present preferences tend to be heavily influenced by past experience’ (1989, p.248).

These two statements represent the foundations on which this study rests and out of which it evolves.

In contradistinction to current evaluations of primary level L2 teaching/learning, which incorporate all the stake holders in the experience and take account of the views of parents, teachers, schools and pupils, this study does not attempt to undertake such a task for two reasons:

- the resources of the researcher were limited (see Method).
- the aim of this study was to provide an insight into an L3 learning experience as opposed to an evaluation of that experience.

In light of this, the questions which guided the study dealt with the meaning or the essence of the L3 experience:

- had the learners connected with the L3 experience?
- had this experience been meaningful to these learners, in general terms and in terms of the effects of this experience on their subsequent L3 learning?
- if the learners had connected with the experience, what was the nature of these connections?
- If the learners had not connected with the experience, what were the reasons for this?

The last two questions led to insights into gender-related differences.



It is clear that the concerns outlined above relate to the field of Applied Linguistics; however, because the study's main thrust is the meaning of the learning experience itself (Husserl 1928), and because the researcher's personal experience, as a teacher/researcher, is tied up with that of the learners in question (Van Manen 1990), it naturally follows that the study should be embedded in philosophical considerations. These considerations provide the methodological orientation of the study. The latter is, in essence, phenomenological (Husserl 1928, transl. Ricoeur 1950, Schutz 1970, Van Manen 1990).

## 1.2 Methodology

The methodology of this study combines and juxtaposes qualitative with quantitative characteristics; in this way, and as observed by Johnstone (private communication), the methodology represents 'a fusion of realism (or positivism) and phenomenology (or interpretivism)'.

Every aspect of the methodology will be discussed and an outline will be given of the strengths, weaknesses and difficulties which an approach of this type engenders (Morse 1994). However, it is essential to state, at the outset, that the combination of the two approaches is deliberate for a number of reasons:

- on the qualitative front, as previously stated, the aim of the study is to explore and reveal the learning experience *as it is perceived* by individuals.
- on the quantitative front, it is possible to see many participants' perceptions, *in total and as a whole*, as informing the investigation quantitatively.

On the subject of linking qualitative and quantitative data, Miles and Huberman (1994) suggest that

'We have to face the fact that numbers and words are both needed if we are to understand the world' (p.40).

More specifically, linking qualitative and quantitative data can provide an opportunity to

'a) enable confirmation or corroboration of each other via triangulation,



- b) elaborate or develop analysis, providing richer detail,
- c) initiate new thinking through attention to surprises or paradoxes, “turning ideas around”, providing fresh insight’ (Rossman and Wilson 1991, in Miles and Huberman 1994, p.41).

### **1.2.1 Phenomenology and qualitative strategies**

Morse (1998) outlines a number of qualitative strategies which help to place phenomenology within the paradigms which have been identified to date. These paradigms define the research questions. For example, should the project be concerned with the values and beliefs of cultural groups, the questions will be descriptive, the paradigm is anthropology and the field is ethnography. Questions of ‘process’ over time and change are treated by resorting to grounded theory and pertain to sociology. Ethnoscience, on the other hand, ask questions about verbal interactions and turn to semiotics for direction while qualitative ethology poses behavioural questions and might turn to anthropology and zoology for guidance. Finally phenomenology asks ‘meaning’ questions and its paradigm is philosophy (pp.56-85). Van Manen expresses the phenomenological question thus:

‘[Phenomenologists] do not ask “how do these children learn this particular material?” but [they] ask “what is the nature or essence of the experience of learning (so that I can now better understand what this particular experience is like for the children)’ (1990, p.10).

The question indicates a deep concern for the phenomenon under study as phenomenologists

‘hope to discover the deeper meaning of lived experience for individuals in terms of their relationship with time, space and their personal history’ (Noerager Stern 1994, p.215).

A variety of disciplines – social sciences (Schutz 1970), human research sciences and pedagogy (Van Manen 1990), nursing studies (Morse et al 1994) - are firmly grounded in the phenomenological perspective as defined by Husserl (1928, transl. Ricoeur 1950). Sadly, the



field of Applied Linguistics is not represented here as no study proposing such a methodological orientation was found .

Before attempting to define Husserl's thought, it is crucial to highlight the difficulties met by the phenomenological researcher. First, in response to the question 'How do you do it?' [qualitative research], Morse (1994) notes that

'until a decade ago, methods books were relatively rare for some qualitative methods, ethnography perhaps being the exception. In the case of phenomenology, this rarity is still probably true' (p.4).

This statement is illustrated by Cohen Zichi and Omery (1994) who, in their account of phenomenological research, point out that

'research reports from 13 journals reveal interesting trends in discussion of the phenomenological methods used. Very few discussed methods in relation to phenomenological philosophers... researchers most often cited secondary sources to reference their methods. A number of reports lacked a discussion of the method or lacked references to support the method that was described in general terms. For example, articles in the journal 'Phenomenology and Pedagogy' do not include discussions of methods, yet it is a well respected journal in phenomenology' (1994, p.150).

One of the proposed reasons for this trend is that editorial limitations prevent the researcher from elaborating on methodology. However, another possibility is provided by Schutz (1970), who describes the task of reducing

'the thought of a great philosopher to a few basic propositions understandable to an audience not familiar with his thought [to be], as a rule, a hopeless undertaking' (p.53).

In respect of Husserl's work, Schutz adds that there are 'special difficulties' relating to 'his condensed presentation and highly technical language'. Compounded with these observations is the fact that Husserl saw himself as 'a beginner in the truest sense of the word' and 'found it essential to start again and again' (Schutz 1970, p.53).



Hence, the researcher who decides to explore the ‘lived experience’ (Van Manen, 1990) of individuals, while being compelled to turn to phenomenology, does so with few points of reference. Furthermore, the research approach itself advocates the ‘bracketing’ or ‘setting aside’ of *a priori* knowledge (Husserl 1928, transl 1950). In terms of the presentation of a study, this means that

‘a theoretical framework is not consistent with this approach which values going to the ‘things’ or phenomena themselves as opposed to going to concepts, theories or other derivatives from immediate experience’ (Cohen Zichi and Omery 1994, p.151).

The issue of a theoretical framework is the source of much debate among phenomenologists. For example, within these methodological concerns there are phenomenologists who state that

- i. a study should be simply (in the truest sense) eidetic – descriptive (Giorgi 1970). The description ‘...allows the phenomena to come directly into view, rather than to be viewed (and distorted) through our standpoint’ (Cohen Zichi and Omery 1994, p.139).

Others take the view that

- ii. the phenomenon under study is of and in a pre-existing historical and socio-cultural world (Schutz 1970, Van Manen 1990). This perspective implies that once the phenomenon is described, *a priori* notions having been bracketed out, we can return to a hermeneutic dimension and integrate our pre-existing knowledge in our interpretation of the findings (Van Manen 1990, Ray 1994). Van Manen describes this process as

‘a conversational partnership that reveals the limits and possibilities of one’s own interpretive achievement’ (p.76).

Some believe that

- iii. ‘theory, rather than being the conceptual sum of its parts, reveals a process of possibilities that, when, captured as insights and represented as narrative or model, belongs to the inner structures of meaning and understanding (Ray 1994, p.124).



Finally, there are phenomenologists who recognise that

- iv. 'the realities of a practice discipline [in this case, nursing] may require that the research methods (specific techniques or steps) be altered to fit clinically important questions. Concerns about method ought to be less important than concerns about methodology (theoretical understanding and articulation of the method) when practice realities serve as an additional guide' (Cohen Zichi and Omery 1994, p.152).

In respect of the above, the orientation of this study is phenomenological because it questions the nature of the connections children make with the L3 experience; it also explores, through the personal accounts of L3 learners, the relationships L3 learners have with time (the time of learning, as well as the temporal orientation of a particular learning style), and space (the learning environment as well as the spatial orientation of another learning style).

On the question of theory, the inclusion of a theoretical framework in this study is in keeping with statements ii), iii) and iv). With regard to Cohen Zichi's and Omery's views (1994), the realities of the discipline of Applied Linguistics require a theoretical framework. This implied that initially, the theoretical input needed to be derived from a review of L2 studies which dealt with the age factor, L2 motivation, L2 attitude, and Cross-Linguistic Influence. However, the review highlighted the fact that while the focus of the studies in question contributed to the elaboration of theoretical constructs, they did not provide adequate links which would enable a better understanding of the meaning of the L3 experience from the learners' point of view. Furthermore, gender-related differences emerged, and as these appeared to be at the core of the learners' interpretation of the experience, the decision was made to revise the entire theory of the study. As a result, 'a process of possibilities' (Ray 1994) was established by the inclusion of additional L2 studies which dealt with L2 aptitude, L2 gender-related differences and L2 learning/teaching approaches. The studies were presented, integrated and/or contrasted with the work of a psychologist (Vygotsky) and the views of a phenomenologist (La Garanderie). This approach led to an active 'conversational partnership' (Van Manen 1990) within different theoretical fields and between theory and the empirical findings, all of which became the dynamic of the entire study itself.



### 1.2.2 Experience and first-order and second-order perspectives

The study of this L3 experience evolves around ‘meaning’ questions (Morse 1998, Van Manen 1990) which reflect the study’s phenomenological orientation. Therefore, it is essential to understand the perspective within which the orientation of this inquiry takes place.

Husserl in Ideen zu einer Reinen Phaenomenologie und Phaenomenologischen Philosophie (3<sup>rd</sup> ed. 1928) (Idées Directrices pour une Phénoménologie, transl. Ricoeur 1950, Ideas Pertaining to a Pure Phenomenology and to a Phenomenological Philosophy) challenges the natural and empirical sciences in their definition of experience. Consequently, the methodologies, methods and results obtained from empirical approaches are also questioned.

The kernel of the issue lies in the interpretation of what experience means or is. For the empiricist, experience is derived from first-order qualities which are attributed to the phenomenon under study. These qualities are described as ‘objective’ or ‘true’. As a result, the object/phenomenon is situated in an abstract space, removed from reality. The observation of the object relies on *a priori* concepts and theories. For Husserl, abstract concepts, which designate the object, ‘fill a space whose only characteristics are mathematical signs’ (p.129). The consequence of this outlook leads to a designated phenomenon whose meaning does not translate at all into our real world.

Husserl argues that the elements which would enable a meaningful translation of the phenomena into our world should be derived from second-order qualities. These qualities contribute to making the phenomenon real as opposed to true. These qualities are subjective and relate to the ‘pure appearance of things’: the colour, the sound and the odour of things as we perceive them and as we gain meaning from them. On this view, we do not stand in our pre-existing world in an isolated and objective position, i.e. in a transcendent position with respect to external reality. We are actively involved in constituting experience. Hence, for Husserl, the designated meaning of experience, as it is assumed in the natural sciences is erroneous. The error lies in the fact that second-order qualities are simply taken as ‘mere signs’ of the phenomenon under study. While the natural sciences recognise that the colour, the odour or the taste of things adhere to the corporal or bodily essence of the object, these qualities are not the object itself. As a result, the object, in its objective form, that is, in its isolated and objective position to the world, is taken for granted; the experience on which the empirical study of the object rests is fundamentally flawed, because the meaningful



constituents of that experience have been subtracted (Husserl 1928 pp.63-7, pp.128-34, see also Schutz 1970, pp55-6).

In the phenomenological perspective, experience comprises apprehension (what ‘animates’ the object), perception and memory ( the latter being attached to the former in our consciousness). The process is active, intentional and subject to constant movement and change: we apprehend and have different perceptions of an object and we attribute different memories to that object; the object becomes empirically – in the phenomenological sense - meaningful in our consciousness. Therefore, the meanings derived from our experience of that object are shaped, coloured or sensed by ‘multiple brush strokes or sketches’ which are as meaningful in themselves as the essential meaning of the object that is achieved in our consciousness. Hence, in order to gain meaning from the phenomena which surround us, we must return to consciousness. We can achieve this by returning to the essence of things themselves through our apprehension, perception and memory of them; we must, however, suspend or ‘bracket’ our assumptions and our *a priori* knowledge of the phenomenon. Merleau-Ponty writes the following:

‘[we must] return to the things themselves... to that world which precedes knowledge, of which knowledge always *speaks* [author’s italics], in relation to which every scientific schematization is an abstract and derivative sign-language, as is geography in relation to a countryside in which we have learnt beforehand what a forest, a prairie or a river is’ (1962, preface ix ).

Parallels will now be drawn between the foregoing, the field of Applied Linguistics and the study of L3 experience at primary level. This exercise will highlight the relevance of the methodological orientation which was chosen for the investigation.

In the light of the discussion of phenomena which are ‘taken for granted’ and/or *a priori* notions, one can say that the field of Applied Linguistics develops multiple constructs and theories in respect of the L2 acquisition/learning process. These constructs are based on the first-order qualities of the L2 learner and provide theoretical frameworks for such phenomena as L2 motivation, L2 learning strategies, L2 learner attitudes, etc., all of which aim to provide an understanding of the L2 learning process. However, the meanings derived from this first-order perspective rest on the fact that the L2 learner is in a transcendent and isolated position with respect to the L2 learning experience. In other words, the learner, as an L2 learner, is



taken for granted. His or her ‘intentionality’ in relation to the L2 learning experience is not questioned. It is on this basis that the theoretical frameworks listed above are made possible.

From a phenomenological perspective, the L2 learner cannot be taken for granted, and consequently, the L2 learning process and our *a priori* knowledge of it must be suspended, that is, ‘bracketed’. His or her apprehension, perception and memory must be brought about in order to understand and convey the meaning of this L3 experience. The study, therefore, examines the ‘intentionality’ of the learners as L3 learners. The questions may be expressed in the following manner: why does a learner connect with the L3 experience? Why is this experience meaningful to the learner? Why do some learners fail to find meaning in the L3 experience and, as a result, are L3 learners in name only? The answers to these questions are elicited from the learners themselves, from their subjectivity and retrospectively. The questions provide the second-order perspective to this study. Freeman (1998) suggests that

‘the distinction [which research makes between first-order perspectives and second-order perspectives] is useful because it makes clear that any inquiry can exist on two planes: the level of action and the level of perception’ (p.66).

This L3 study exists on two planes and reflects the merging of realism and phenomenology in the following manner:

- on the level of action and first-order perspectives, statistical significance is assigned to the differences between male and female L3 learners. This means that there is less than a 5% chance that the null hypothesis – no relationship between gender and the variables in question - is rejected.
- on the level of perception and second-order perspectives, multiple responses to numerous open-ended questions are detailed and interpreted in relation to the L3 experience. These accounts provide the ‘subjective’ quality of the study.

However, it should be made clear that the gender-related differences which emerge in the study are initially derived from a phenomenological perspective, that is, no prior assumptions were made; they were apprehended and perceived during the course of the analysis of the data. The decision to perform statistical tests on the responses of the learners rests on the fact that these quantitative results are interpreted as ‘mere signs’ which serve to provide additional light on the matter, and to guide further and deeper future investigations.



### 1.2.3 Characteristics of a phenomenological study

The characteristics of phenomenological studies are drawn from the work of Schutz (1970) in social sciences and Van Manen in education and pedagogy (1990), as well as from a number of methodological reviews of qualitative strategies (Holstein and Gubrium 1998, Ray 1994, Cohen Zichi and Omery 1994, Miles and Huberman 1994). These features will enable us to further define the phenomenological orientation of this L3 study.

#### 1.2.3.1 Fundamentals:

Fundamental characteristics of phenomenological research in social sciences and in education are defined by Schutz and Van Manen. The two researchers use contrast as a device to explain the differences between traditional views in their respective fields and their own concerns.

In Schutz's case, problems of sociology or economics may be analysed by observing specific phenomena such as 'social adjustment or the theory of international trade' and by devising 'schemes of reference, typologies and statistical methods'. These phenomena and what constitute them – social groups, institutions, legal and economic systems etc. – are described as 'integral elements of our life-world'. This life-world exists and pre-exists in terms of 'its own history, its own relationship with time and space'. Included in the latter dimensions are 'the existence of fellowmen, the actions of men upon men, the communication between symbols and signs', etc. which Schutz describes as 'the intersubjectivity of thought and action'. He believes social sciences should not take these for granted (pp.55-6).

Van Manen recognises that one may be interested in the subjective experience of subjects in order to show their experience from their 'vantage point'. A study on parenting may hope to uncover the viewpoints of a father, a mother, a single parent, parents in a working class environment, parents who can afford to employ nannies etc.,

'but the thrust of phenomenological research remains oriented to asking the questions of what is the nature of the phenomenon (parenting) as an essentially human experience' (p.62).

Schutz further explains that while the pre-existing structures of our life-world may pertain to different cultures and societies,



‘certain features, however, are common to all social worlds because they are rooted in the human condition. Everywhere we find sex groups, age groups and some division of labour conditioned by them’ (p.79).

This L3 study deals with a total of 23 schools (primary and secondary). Some schools are mixed, others are single sex; some are urban, others are rural; some are disadvantaged, others are not; some are Irish speaking schools, some are catholic, some are protestant and some are multidenominational. However, the focus of this study is the nature of the L3 experience as a human learning experience. Consequently, the aforementioned features are not investigated in the study. However, common features to the human condition (age and gender) are present in the study. They are dealt with at a later stage of this general introduction, in the section entitled ‘The progression from ‘local’ to ‘global’ ‘.

#### 1.2.3.2 Time:

The central role which time plays in experience is acknowledged in the investigative approach which a phenomenologist adopts. This role, when broken down into stages, becomes the point/s of departure and the source of information for the phenomenological study.

The intentionality of our actions in the life-world is informed by what Schutz calls ‘memory-evidence’. Memory-evidence includes socio-cultural and historical values as well as/ or information gleaned from previous experiences. Schutz (1970) argues that

‘recoverability to memory is, in fact, the first prerequisite of all rational construction. That which is irrecoverable ... can only be lived but never thought: it is in principle incapable of being verbalized’ (p.65).

Hence, ‘memory-evidence’ helps to constitute experience; experience is, then, brought about by consciousness. This view implies that one cannot account for experience while it is being experienced. The individual needs to ‘cast a retrospective glance’ in order to gain meaning from the experience. The experience which is not brought about by consciousness has not been reflected upon yet: it is ‘unconscious’.



‘Only from the point of view of the retrospective glance do there exist discrete experiences. Only the already experienced is meaningful, not that which is experienced’ (Schutz 1970, p.63).

Retrospection as opposed to introspection is central to phenomenological research. Schutz identifies three stages which might provide the starting points for a study of this type. These stages enable the researcher to collect ‘memory-evidence’ from the individuals’ experience. This ‘memory-evidence’ is perceived with more or less intensity depending on the stage of the experience.

‘Stage 1: the act is still in the pure project stage.

Stage 2: the action has begun and the act is on its way to fulfilment .

Stage 3: the act has been executed and is being looked back on as a fait accompli ‘ (Schutz 1970, p.120) .

In the first stage, although nothing has occurred as yet, memory-evidence from previously acquired knowledge or past experience informs and guides the individual in his intention to experience the phenomenon. This intentionality allows the individual to assign values to the variables which are gradually filling the Present (Schutz 1970, p.130). The intensity of prior memory-evidence, in the consciousness of the individual, varies and depends on how close it is to the experience.

‘Naturally, memory-evidence is weaker and has less claim on us, than direct, present experience. And the closer it is to the latter, the stronger it is ‘(Schutz 1970, p.130).

In our study of L3 experience, the points of departure for the investigation are situated at stage 2 (primary school) and stage 3 (secondary school, junior and senior cycles).

With regard to the occurrence of memory-evidence, the findings suggest that

- at stage 2, the memory-evidence which informs the learners’ intentionality seems to decrease during the experience – in this case memory-evidence refers to reasons and/or motives for learning French at primary level and in general. These reasons and/or motives take the form of pre-conceived goals or previously acquired knowledge;



- as the L3 experience is in the process of being related (at Stage 2 , in primary school, and at Stage 3, in secondary school), it is the experience itself, in its varied structures, which appears to dominate the accounts – and by extension, the consciousness - of our learners;
- at Stage 3, we are also in a position to see how the varied constituents of the L3 experience at primary level become, in turn, memory-evidence and to what extent the latter informs the secondary school experience of the older learners, in a meaningful manner.

Finally, this perspective suggests underlying implications for the motivation to learn an L3 which will be discussed in the theoretical framework.

#### 1.2.3.3 The four existentials:

A phenomenological study is guided by taking account of the four existentials: ‘lived space’, ‘lived body’, ‘lived time’ and ‘lived other’ (Morse 1994, Van Manen 1990).

Van Manen suggests that ‘lived space’ is difficult to articulate because ‘the experience of ‘lived space’ is largely ‘pre-verbal’ and is not usually reflected upon; but, nevertheless, it affects us and the way we feel (1990, p.102). The analogy which Van Manen uses to describe what is meant by ‘lived space’ is particularly relevant to our study and will be discussed below:

‘Walking alone in a foreign and busy city may render a sense of lostness, strangeness, vulnerability and possibly excitement and stimulation’ (1990, p.102).

‘Lived body’ refers to our corporality and the fact that we are ‘bodily in the world’ (Van Manen 1990 p.102, Morse 1994).

‘Lived time’ is the category which deals with memories of the past or ‘near forgotten experiences’ which leave their traces on the individual (Van Manen 1990, p.102).

‘Lived other’ is the category of ‘the lived relation we maintain with others in the interpersonal space that we share with them’ (Van Manen 1990, p.102).

Of the four existentials, three are explored in this study. The category which is unexplored is ‘lived body’, principally due to the fact that such information is more likely to be gleaned in



an interview situation where body language may also add to the experience described by the L3 learners.

'Lived space' and the analogy used by Van Manen are echoed in the varied accounts of the L3 learners. The relevance of this analogy not only refers to the feelings expressed by the learners - anxiety, excitement, confidence, etc. - but also to the original concern which motivated the investigation of the learner's connections with the L3 experience: one recalls that, at the time, the L3 was external to the general learning experience of the children, that the subject taught was, in essence, a foreign language and culture with which the majority were unfamiliar, that the L3 language class was itself a culture of its own - some learners describe French class as 'different', where 'a lot' is learned. Therefore it is not difficult to imagine the L3 classroom in terms similar to those of 'a foreign and busy city'.

'Lived time' is particularly relevant to Groups 2 and 3 of the study, whose memories of the L3 experience at primary level are explored and the 'traces' of which are described and interpreted in the context of the L3 at second level.

'Lived other' also features in the study when questions relating to the classroom mix of people, peers and teachers are asked; learners' spontaneous expressions which relate to the 'lived other' also feature in the report of this L3 study.

#### 1.2.3.4 Parts and whole:

Van Manen explains that a phenomenological researcher must maintain 'a strong and oriented relation' to the phenomenon under study. When the relation is strong and oriented, the parts illuminate the whole (1990, p.33):

...one needs to constantly measure the overall design of the study/text against the significance that the parts must play in the total textual structure... At several points it is necessary to step back and look at the total [in our case, the meaning of the L3 experience], at the contextual givens [at primary and secondary levels] and how each of the parts needs to contribute towards the total' (1990, p.34).

This approach to research reflects Husserl's and Schutz's views, which affirm that the individual draws meaning from the experience by assigning values - socio-cultural, historical - to the constituents of the experience. These parts take the forms of images, theories, ideas, attitudes, etc. (Holstein and Gubrium 1998, pp.138-40).



Van Manen expands the concept of ‘parts and whole’ by suggesting that the researcher, having grounded the study ‘in a laying open of the question’, examine what contributions current theories may make to the question; he also recommends that the researcher explore the possibility that these theories mask our understanding of the phenomenon (1990, p.34).

This study of experience of an L3 at primary level is consistent with the above: with respect to the relation L2 theories have with the question of meaning in our L3 experience, the following areas are explored: age and L2 acquisition, L2 motivation, L2 attitudes, L2 aptitude, learner style, L2 gender differences, L2 learning/teaching approaches. The analysis of each of these domains shows how they relate to the concept of experience (in the phenomenological sense) and how they sometimes fail to ‘illuminate’ that concept. For example, the theoretical framework reveals how age-related L2 studies and evaluations of primary school L2 experiences (on which the decision-making process of governments rests), consider time – the time of learning, L2 exposure time, L2 performance in relation to the latter, younger versus older learner, ‘the longer the better’ view...- as the sole and fundamental criterion for analysis. Our analysis points to the missing concept of space and how its inclusion in its ‘lived’ sense and abstract sense may further inform evaluation programmes and L2 learning in general. L2 motivation as a construct is also examined and contrasted with the phenomenological interpretation of motivation, that is, the ‘because’ perspective and the ‘in order to’ perspective (Schutz 1970). Cognitive approaches to L2 learning, learner style and L2-related gender difference studies are explored in an attempt to reveal the common features. By maintaining a ‘strong and oriented relation’ with the space and time concepts and the role they play in experience, the L2 studies mentioned above are woven into phenomenological pedagogy (La Garanderie 1995) and into the gender-related empirical findings. L2 learning/teaching approaches are also considered within the time/space perspective.

In respect of the empirical study, the initial questions (had the learners connected with the L3 experience? Had the experience been meaningful to them? What was the nature of these connections? Why do some learners fail to connect with the L3 experience?) are considered as ‘the whole’. Its parts are considered under the following modalities:

- each completed questionnaire represents a prism of the L3 experience,
- each item or question represents a facet of the prism,



- each response represents a reflection of the facet.

There are many reflections, facets and prisms to the study, which combined together, represent parts of the whole. The manner in which these features are reported present rhetorical difficulties which necessitate a global presentation of the findings as is explained in the following section.

Finally, in explicit terms, the study itself does not reflect ‘the whole’: it is, in itself, only an aspect of the L3 experience. According to Van Manen, ‘meaning questions can never be closed down’ (1990, p.23).

#### 1.2.3.5 Constructing and conveying meaning:

This section summarises the views expressed in the previous section and explains why they affect the presentation of the data as well as the report of the findings.

As suggested in the previous section, the meaning of this L3 experience is derived from taking account of ‘parts’ and ‘whole’. It follows that each response, which emerges from the accounts of the L3 learners, bears significance for the global interpretation of the L3 experience at primary level. In other words, each response actively constitutes a part of the reality of the L3 experience; each response acts simultaneously as constructing material and conveyor of meaning.

‘Social phenomenology rests on the tenet that social interaction constructs as much as conveys meaning’ (Holstein and Gubrium 1998, p.140).

Central to Schutz’s belief is ‘the safeguarding of the subjective point of view’ (Holstein and Gubrium 1998, p.138). The subjectivity is informed by ‘a stock of knowledge’ which comprises commonsense constructs and categories that are social in origin (Holstein and Gubrium 1998, p.139). These constructs and categories enable the interpretation of experience subjectively and intersubjectively since the socio-cultural and historical backgrounds are shared, implicitly. However, Schutz does not take our intersubjectivity for granted and asks:

‘How can methods for interpreting the social interrelationship be warranted if they are not based upon careful description of the underlying assumptions and their implications? These questions cannot be answered by the methods of social sciences. They require a philosophical analysis. And phenomenology... has not only opened an



avenue of approach for such an analysis but has in addition started the analysis itself' (1970, p.56).

The medium which enables the researcher to achieve understanding of the experience of others is language: the individual, on a quest for meaning, categorises the 'myriad of phenomena of everyday life' into 'typifications' which language articulates in a manner that makes meaning recognisable to others.

The typifications constitute the 'stocks of knowledge' and the latter are 'always essentially open-ended' (Holstein and Gubrium 1998, pp.139-40).

The stocks of knowledge point to

'the already experienced [which] presupposes memory and all of its functions such as retention, recollection, recognition' (Schutz 1970, p.75).

On this view, memory provides evidence for the stocks of knowledge. Language expresses this memory-evidence into a hierarchy which enables the interpretation of the experience.

Schutz adds that stocks of knowledge are subdivided into

'layers of different relevance ... which establish the borderlines of the various zones of our knowledge ... zones of distinctness and vagueness, of clarity and obscurity, of precision and ambiguity' (1970, p.74).

In other words, individuals choose to illuminate, with varying degrees of 'distinctness', 'clarity' and 'precision', the zones of knowledge which guide the interpretation of the experience. The variations in the interpretation of the experience are determined by the interrelatedness of perception (see section on first and second-order perspectives), memory of the pre-experienced and relevance. Language is the medium which enables access to these zones of knowledge. Thus, through language use, one becomes aware of the multiple and meaningful shades of the experience.

On the question of stocks of knowledge, it is useful to provide some further definitions, particularly with regard to their characteristics. Schutz proposes that stocks of knowledge are not homogenous because they are

- 1) incoherent,



- 2) only partially clear and
- 3) not at all free from contradiction.

Incoherence results from partial organisation of our knowledge under plans of any kind (plans of life, plans of work and leisure, plans of social roles etc.) and the hierarchy of which changes with the situation and with the growth of personality (1970,p.75).

Partial clarity reflects man's partial interest in the clarity of his knowledge of every-day things. The example provided by Schutz suggests that man has no interest in finding out how telecommunication works , as he is only interested in using it.

The contradicting nature of stocks of knowledge emerges from the context-dependent aspect of 'our thought which is spread over subject-matters located within different and differently relevant levels' (1970, p.76).

In the context of our study of L3 experience at primary level, the stocks of knowledge which the learners articulate bear similar characteristics of incoherence, partial clarity and contradiction: learners assign meaning to their experience in relation to plans which change with the situation and growth of personality (plans for secondary school, plans for entry in third level, plans for work, plans for travel, etc.). Meaning, for some, is found in the anticipation of being able to use the language; for others, however, the L3 is meaningless because there is no point in learning about the workings of another language since they are already able to communicate and use a 'universal' language. Finally the matter of relevance emerges when male and female L3 learners are compared. The L3 appears to be relevant for different reasons or at 'different levels' for males and females, which suggests 'differently relevant levels' in the learners' perception of the L3.

In light of the above, the challenge which faces this study is in the translation of all the 'parts' of the experience into a coherent and meaningful, albeit incomplete 'whole'. The aim is to find a means to describe the detail of stocks of knowledge which in turn become collective 'schemes of interpretation' of the L3 experience:

'It is the stock of knowledge at hand that serves as the scheme of interpretation for the actually emergent experience' (Schutz 1970, p. 75).



The arguments used to define experience have relied on two analogies: the *construction* analogy (Schutz 1970, Holstein and Gubrium 1998) and the *light* analogy (Schutz 1970) . With regard to the first analogy, we have seen how language contributes to the construction and conveyance of meaning by taking account of ‘the underlying assumptions’ of our L3 learners and by organising them into stocks of knowledge (Schutz 1970). However, the second analogy suggests that within stocks of knowledge there are hierarchies or ‘layers of different relevance’ which establish ‘zones of distinctness and vagueness, of clarity and obscurity, of precision and ambiguity’. Hence, the *light* analogy suggests that the hierarchies within stocks of knowledge are indications – or illuminations - of what the learners perceive and/or remember to be relevant. These analogies are, perhaps, indications on how to proceed in the report of our learners’ L3 experience.

Hence, each response expressed by our learners is represented by a block. The blocks are of equal size. The identical size reflects the fact that each response is equally significant in its contribution to the meaning of the experience. However, the frequency of occurrence of the responses shows how perception, memory and relevance influence the variations in the learners’ stock of knowledge: the responses, as constituents of the experience, bear varying degrees of intensity and bring to light the hierarchies within each stock of knowledge. The variables are not treated separately; they are treated as the **varying constituents** of the L3 experience. Visually, the responses emerge as blocks/bands of colour of equal size. A reference scale is used to measure the variations in the spectrum of responses provided by the participants. This scale is equal to 100% and made up of \*10 colour bands (for further explanations on the tables see ‘Tables and Percentages’ in Method). The visualisation of the data serves two purposes: it provides a detailed visual record of the learners’ responses and delineates the collective scheme of interpretation of the L3 experience. The following sample table and commentary provide an example of the interpretation of one aspect of the study:

\*Note that the first band ranges from 0% to 10%, and is , therefore, marginally wider than the other bands.



## Are you glad you started French?

G1's responses suggest that the majority are glad they started French – 91% - whilst 9% of responses express dissatisfaction.

G1 participants provide 17 response types for their satisfaction with French classes at primary level. The preferred reasons and/or motives are *secondary school advantage* - 24% of responses -, the *fun* factor - 19% of responses -, the *discovery of another language* - 12% of responses - and plans for *travel and holidays* - 9% of responses . Additional factors suggest that in the immediate context, French class means *learning a lot* – 6% -, that *it is interesting* – 4% -, *useful* – 6% -, that *a taste for the L3 is being developed* – 6% - and that *understanding improves* – 1%. In a wider context, learners express plans to use the L3 – *to talk to people*, 5% - , *to know other cultures* – 2%; mention of *Europe* is made – 1% - as well as the wide use of the L3 in the world – *it's a universal language*, 1%. Learning age – *the younger, the better* 2% -, education enhancement – *it's good education*, 2% - and peer considerations – *my friends were going*, 1% - also come into play.

Hence, in this collective stock of knowledge, the emerging hierarchy indicates:

- factors related to the experience itself (*fun, discovery and taste for another language, interest, a lot is learned, understanding improves, it's a nice hobby, my friends were going*),
- a mix of pragmatism (*it will help me in secondary school, it's useful, to talk to people*),
- general considerations (*travel, to know other cultures, Europe, it's a universal language, it's good education*),
- exposure time/age reasons (*the younger, the better*).

**Table 31 (G1 = 138)**  
**Are you glad you started French?**

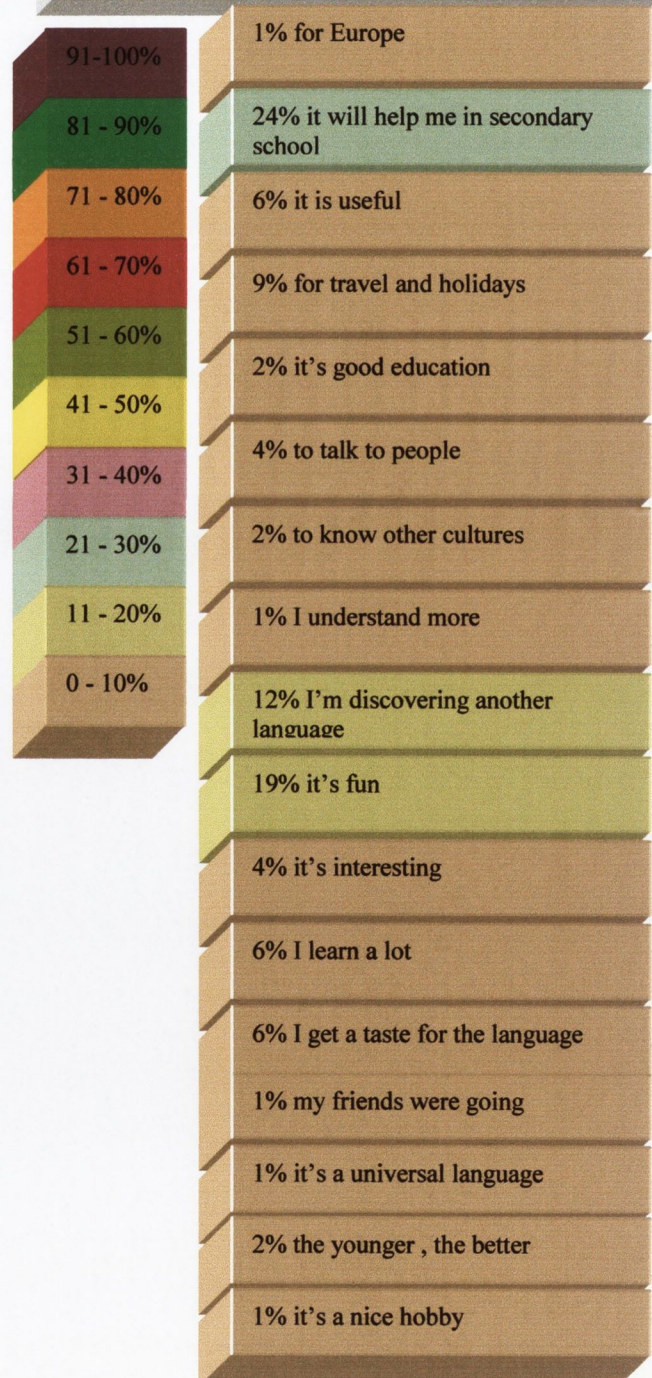
Yes: 91%  
n: 125

No: 9%  
n: 13

n = 138 no response = 0

Percentages are based on responses

**Table 32 (G1 = 138)**  
**Reasons and/or motives for being glad**



n = 164 no response = 13

Percentages are based on responses



Note that, in the example provided, percentages do not feature within the hierarchy in the accompanying commentary. The percentages which appear are simply used to enable the hierarchical interpretation of the responses. Should percentages appear, the hierarchy would be reduced to a series of separate categories. Spindler and Spindler (1992) recommend that on using a qualitative approach to quantitative materials,

‘one must avoid the premature or overly extensive use [of instrumentation and quantification] as a security mechanism’ (p.69).

This presentation of findings illustrates the difficulties a researcher is faced with when combining qualitative and quantitative approaches. Reviews on the combination of the two approaches reflect the unresolved nature of the problem: it is still perceived as a dilemma or even as a betrayal . Swanson and Chapman (1994) conducted a study which involved the two approaches. The instruments and approaches used were distinct, in that they pertained to the traditional methods used in the respective methodologies. The account they provide suggests a great deal of discomfort:

‘... we found that, in embedding a qualitative evaluation within a quasi-experimental study, that the research design, rather than the participants, drove the study’(1994, p.77).

Furthermore,

‘our dilemma was that the goals, processes, problems, and consequences related to the intervention – what we were analysing by using qualitative methods - were vastly complex and, it appeared to us, somewhat new materials. We suddenly found ourselves asking, Was it foolhardy for us to have predicted outcomes for the quasi-experimental phase of the study when we were, in effect, exploring uncharted territory?’ (1994, p.81)

The researchers describe the two approaches as ‘two distinct cultures’, and urge researchers to become ‘bicultural’. However, their experience suggests that the two cultures did not appear to sit comfortably together. This aspect prompts them to suggest ‘a synthesis between the two cultures [in order to] allay the distrust one has for the other’ (1994, p.89), a point which, however, they immediately qualify by stressing the importance of ‘preserving the significant



differences between the two cultures' (1994, p.89). Similarly Spindler and Spindler (1992), while acknowledging the benefits which can be derived from the use of instrumentation and quantification in extending and reinforcing interpretations, quickly add that 'both should be kept in their places' (p.69). Other researchers also point out that studies which are 'predominantly in the grounded theory, phenomenological or ethnographic traditions usually involve some attention to frequency of occurrence'. One of the reasons is that 'a range of variations yields a typology of responses' which may allow links to other phenomena (Dreher 1994, p.284-7). This view applies to this L3 study as is illustrated by the emerging pattern of responses which suggests that the perception and interpretation of the L3 experience may have links with gender-related differences.

Finally, taking account of these unresolved issues, and wishing to preserve the aspirations of social phenomenology, how does one provide a detailed overview of learners' underlying assumptions and define the hierarchy under which these are organised without resorting to some form of quantitative measures? How does one account for 'different levels of relevance' which are differently relevant without resorting to similar methods? Logic would suggest that one answer may be found in a synthesis between the qualitative and quantitative cultures. This study of an L3 experience at primary level proposes to tackle the challenge.

#### 1.2.3.6 The relationship between the researcher and the phenomena:

What follows explains the active role of the researcher in a phenomenological study. The previous section established that socio-cultural and historical paradigms shape individuals' stocks of knowledge and provide schemes of interpretation for the experience. This phenomenon is manifest in individuals and researcher alike; Schutz (1970) explores the notion of interpretation as follows:

'...does not interpretation of the other's meaning and of the meaning of his acts and the result of these acts presuppose a self-interpretation of the observer or partner? How can I in my attitude as a man or social scientist, find an approach to all of this if not by recourse to a stock of pre-interpreted experiences built up by sedimentation within my own conscious life?' (p.56).

For Schutz, sedimentation is derived from 'the concepts of meaning, of motives, of ends, of acts' which are arranged in a structured manner in consciousness over inner time. When



articulated, these structures become recognisable to others and, thereby, promote mutual understanding and communication (p.56). The inference is that both researcher (man or social scientist) and subject (man or object of study) are linked by the phenomenon of sedimentation. Furthermore, this phenomenon, through language use, provides the means of interpretation of the experience: researcher and subject are intent on gaining from and providing meaning to the experience; meaning that is recognisable, plausible to all concerned. Hence, from a phenomenological perspective, the researcher cannot stand as a detached observer. Holstein and Gubrium (1998) reiterate this point:

‘...interpretation is shaped by the resources that are locally available, recognised and accepted, making meaningful experience – its perception, representation and authenticity – a socially rather than privately constructed phenomenon’ (pp.147-8).

For his part, Van Manen (1990) makes the role of the researcher explicit:

‘Phenomenological research does not start or proceed in a disembodied fashion. It is always a project of someone: a real person, who in the context of particular individual, social and historical life circumstances, sets out to make sense of a certain aspect of human existence’ (pp.30-1).

Van Manen explains that the researcher ‘stands in the fullness of life, in the midst of the world of living relations and shared situations’. The role of the researcher, from this perspective, is ‘to actively explore the category of lived experience in all its modalities and aspects’ (pp. 31-2). As a researcher, Van Manen explores pedagogy under the categories of ‘parenting’ and ‘teaching’. His research interest is both motivated and guided by the fact that he himself is a parent and a teacher.

In the context of the L3 study in question, the researcher was one of the teachers at the time of the investigation. Her research interest emerged from a number of ‘shared situations’ which she had experienced over 20 years of practice at primary level. Her concerns were real, in the phenomenological sense, that is in the ‘lived’ sense. They had to do with the reality of the experience, a reality which was not merely observed, but which was fully shared. Some of the



relevant qualities of the observed as well as the shared reality of the experience are outlined as follows.

The observed reality has to do with the external aspects of the experience, which place the latter in the context of many other L3 experiences of the time. They include:

- classes taking place after school hours,
- few or no links with the primary curriculum,
- optional attendance,
- visiting teachers,
- no continuity at second level,
- payment of fees.

Such L3 learning experiences, at the time, were common throughout Ireland and cause for interest and/or concern in linguistic and teaching circles (see Harris 1992).

The **shared** reality of the L3 experience in question relates to its 'lived' aspects. They include:

- making the decision to learn/teach an L3,
- reasons and motives for learning the L3,
- learning/teaching an L3 at primary school,
- having fun,
- defining the learning environment,
- coping with peers/learners from different classes and sometimes different levels,
- working together,
- making language discoveries, cultural discoveries etc.,
- expressing surprise, excitement, fear, disillusion, confusion, curiosity...,
- speaking, reading, writing and understanding in a different language,
- observing and setting different rules,
- observing and understanding different people (native teachers, new pupils/peers...),
- experimenting with different approaches.

The issues which emerge from this type of investigation are recognisable to applied linguists as aspects of L2 motivation, L2 attitude, the acquisition of the 4 skills, L2 socio-affective factors, language awareness, cross-linguistic influence etc. However, the object of this study is to explore the 'lived' counterparts of these aspects of applied linguistics. In this sense, one is reminded of a 'through the looking glass' effect. In the context of teacher-research and on the question of types of knowledge which emerge from various research perspectives, Freeman



(1998) points out that although many educational researchers are or have been teachers, their understanding is always etic, because ‘they do not work there [in the classroom under study]’; they do not share the culture. In contrast, the emic view includes and depends on the teacher-researcher. He argues that while emic and etic views may converge at some stage, the process of achieving understanding is different. The difference lies in the type of knowledge which emerges from the research process. He believes that the emic perspective shows where ‘the knowledge actually lies’:

‘In that process of insiders making sense of what happens in the classroom, different knowledge is created and valued’ (1998, p.73).

The meaning or ‘sense’ of this L3 experience is derived from emic views which provide knowledge which is ‘different’ from etic views, simply because it is ‘lived’ knowledge. However, it is important to recall that this experience spans a period of approximately 10 years and that it is the learners’ retrospection which determines its meaning in time, as well as providing the insights. Therefore, the research process is not emic in the strict sense of the word, in that the latter implies a certain immediacy and context-dependence. The research process relating to this L3 experience adds the dimension of retrospection, that is, the meaningfulness of that experience in time.

In short, the characteristics of the role of the researcher in a phenomenological study influence the project because

- i. the project matters to the person/researcher (this researcher is an experienced L3 teacher at primary level).

He/she triggers

- ii. retrospection (the L3 learners are at Stages 2 and 3 of Schutz’s retrospective time frame),
- iii. in a heuristic manner (as many aspects of the L3 experience as is feasible are explored and no assumptions about the learners’ experience are made).

The researcher also delineates

- iv. the set of pre-existing cultural, social and local values (the L3 classroom)

because

- v. these values are shared by the learners, the teacher and the researcher.



These five points have implications for the method or the manner in which this L3 experience is brought to light. The section dealing with ‘Method’ provides a detailed account of method and procedures and how these relate to the phenomenological orientation of this study.

#### 1.2.3.7 The progression from ‘local’ to ‘global’

The present section examines phenomenology’s tentative aspirations to universality and positions the L3 study in question in this perspective.

As previously established, the fundamental characteristic of phenomenological research lies in its focus on human experience that is intrinsically linked to the human condition. Within the human condition, a number of features are universally shared and comprise ‘sex groups, age groups and a division of labour conditioned by them’ (Schutz 1970, p.79). It follows that these shared features form parts of the foundations on which human experience rests and grows. These constituents may remain invisible; yet, in this study of L3 experience one of the shared human features, namely gender, rose to the surface. This unexpected discovery emerged from the process of analysing and re-analysing the detail of the experience which its subjects had generously and copiously provided. It led to a re-defining of the meaning of the learning experience through ‘writing and re-writing’. The act of ‘writing and re-writing’ is a crucial stepping stone in a phenomenological study: Morse (1994) suggests that this process

‘sensitizes the investigator, by providing new insights, increasing the level of abstraction and moving the descriptions away from the particular to the more universal sphere’ (pp.36-7).

On the question of universality, Van Manen (1990) writes

‘Phenomenology is neither mere particularity nor sheer universality... [it] consists of mediating in a personal way the antinomy of particularity (being interested in concreteness, difference and what is unique) and universality (being interested in the essential, in difference that makes a difference)’ (p.23).

The L3 study at hand encompasses the features of age and gender. The age feature refers to the time of learning, that is, ‘lived’ time and the traces left by this phenomenon on the learners



as they grow older. Age in this case is not used as an arbitrary scale for potential evaluation measures. Neither does it serve as an assessment instrument. Rather than being taken for granted as a separate and isolated factor in L3 learning, it becomes one of the essential aspects of the experience itself, a corner stone on which the L3 learning experience rests and out of which the experience grows. In other words, age, in this perspective, is ‘primary school time’ with all the learning implications and approaches that characterise this particularity: learning time which is child-centred, discovery-oriented, activity-based, where formal subjects are not presented as ‘specialist’ subjects and where the curriculum is about ‘enablement’ (see the *Irish Primary Curriculum Teacher Guidelines*, 1999).

The second feature which characterises this L3 experience is gender, or more specifically, gender-related differences in an L3 learning experience at primary level. As previously outlined, the identification of the gender differences arose from analysis and re-analysis and ultimately, writing and re-writing of the interpretation of both the findings and the theory. The process was necessary because signs of differences were manifest in the experience. The differences appear to be at the level of apprehension, perception, memory-evidence and relevance, in other words, at the heart of the learners’ interpretation of the experience. The gender-related differences are derived from quantitative measures, namely significance tests. The significance tests are applied to individual constituents of a stock of knowledge or, sometimes, to categories of constituents. In other words, the constituents are separated from the *collective* interpretation of a particular situation (or question, e.g., Are you glad you started French at primary level?) and are analysed in terms of underlying differences which contribute to a definition of males’ and females’ interpretation and understanding of an L3 learning experience. Kozulin (1990) articulates the phenomenon in the following manner:

‘Since the appearance of understanding often hinges on the shared referential similarity of the words used, it may obscure profound differences in the communicants’ representational substructures.

... [this issue] could be raised in the context of dialogues between genders, different generations and different socio-economic groups. The underlying problem is that different types of thinking may lead to one and the same cognitive product, which could be mistakenly perceived as a sign of similar reasoning’ (p.164).



The differences revealed by the significance tests reflect the ‘types of thinking’ referred to above. In keeping with quantitative traditions, the findings are presented in tabular form and display patterns of differences which cannot be interpreted as absolute. It would have been interesting to relate the gender differences to each age group. However, these differences were not originally anticipated and, unfortunately, technological limitations did not allow the creation, post-hoc, of three-way contingency tables, i.e., age + gender + variables. An alternative would have been to create a separate file for each group ( the data for all three groups are represented in a single SPSS file). The time required to complete this task was, unfortunately, not available.

Two sample tables and the corresponding commentaries of the gender-related differences are provided below.

'Are you glad you started French?' 'Say why'.

Groups 1, 2, and 3 (Tables 289, 290)

**Table 289**

ARE YOU GLAD YOU STARTED FRENCH?		
	Girls	Boys
YES	167	87
	94%	84%
NO	10	16
	6%	16%
Total	177	103
Chi-squared = 9.24 with 1 degree of freedom p = 0.01		

94% of girls and 84% of boys provided positive responses to this question. The difference between girls' and boys' responses is significant –  $p = 0.01$  - (Table 289).



**Table 290**

REASONS AND/OR MOTIVES FOR BEING GLAD			
	Girls	Boys	
FUN CATEGORY	31 17%	6 6%	Chi-squared = 8.34 with 1 degree of freedom p = 0.005
CONFIDENCE CATEGORY: I was better than the others, it develops confidence, I was allowed in the A stream, there is less pressure in 1st year, I'm able to keep up in class	19 11%	3 3%	Chi-squared = 5.53 with 1 degree of freedom p = 0.01
TO TALK TO PEOPLE	2 1%	7 8%	Chi-squared = 7.37 with 1 degree of freedom p = 0.009

Reasons and/or motives for being glad yielded significant differences, as responses indicate that more girls are happy with French classes because they have fun - 17% and 6% of girls' and boys' responses, respectively, under this heading,  $p = 0.005$ . Confidence gains are also reflected in girls' responses in particular - 11% and 3% of girls' and boys' responses, respectively, relative to reasons for being glad in the confidence category,  $p = 0.01$  - and include *I was better than the others, it develops confidence, I was allowed in the A stream, there is less pressure in first year, I'm able to keep up in class*. On the other hand, there are indications that boys are interested in the act of communication or the applied aspect of L3 learning - *to talk to people*, 1% girls, 8% boys,  $p = 0.009$  - (Table 290).

The results achieved are viewed as 'working hypotheses, not conclusions' (Cronbach 1975, p.189) because the orientation of the study does not seek identification of cause and effect. It is simply discovery-oriented and intent on conveying the meaning of this L3 experience. However, this perspective enables the unearthing of possibilities which are created through the links an experience has with time and space. These links are established at two levels: 'lived' time and 'lived' space which eventually lead to the abstract notions of time and space for the gender-related interpretation of the experience. This orientation of the study is consistent with Van Manen's description of phenomenological research: 'an interest in concreteness and difference' (the 'lived' L3 experience) as well as 'an interest in the essential, in difference that

makes a difference' (the gender-related interpretation of the experience). Furthermore, through the qualitative process of writing and re-writing, as well as through the application of a quantitative procedure of significance, the experience is gradually removed from its local and temporal limitations and is raised to an 'increased level of abstraction' (Morse 1994).



### 1.2.4 Summary and conclusion

The orientation of the study is phenomenological because it is concerned with the meaning of an L3 learning experience at primary level. However, the study combines and juxtaposes qualitative and quantitative approaches. The following is a summary table of the features of the study which highlights the study's methodological relation to phenomenology and its deviations.

Phenomenological orientation	The L3 study	Deviations
<p>Second-order qualities: Perception and lived experience</p> <p>A dynamic process between reviews of studies in the field of Applied Linguistics, and the discussion of the works of a psychologist and a phenomenologist .</p> <p>A human experience: Do learners make connections with the L3 experience? If so, what is the nature of these connections? If not, why? What is the meaning of the experience for the learners?</p> <p>G1 are at Stage 2 (the action has begun and the act is on its way to fulfillment). G2 and G3 are at Stage 3 (the act has been executed and is been looked back on as a fait accompli) (Schutz 1970).</p> <p>'Lived space': the L3 classroom and associated feelings 'Lived time': the traces left by the L3 experience. 'Lived other': relations with others (peers, teachers, foreigners).</p>	<p style="text-align: center;"><b>General philosophical perspective</b></p> <p style="text-align: center;">← Theory →</p> <p style="text-align: center;">The empirical study Exploration of the subjectivity of 282 learners. Open-ended questions.</p> <p style="text-align: center;"><b>Time: retrospection</b></p> <p style="text-align: center;">← G1 are at primary level. The majority of the learners are in 5<sup>th</sup> and 6<sup>th</sup> classes and have nearly completed their first or second year of the learning experience. G2 and G3 are at post-primary level and have completed the experience.</p> <p style="text-align: center;"><b>The four existentials</b></p>	<p>First order qualities: Abstract qualities assigned to male and female learners.</p> <p>The realities of the discipline of Applied Linguistics require a theoretical framework.</p> <p>Large numbers.</p> <p>'Lived body' is not explored.</p>

Phenomenological orientation	The L3 study	Deviations
<p>L2 studies are compared, contrasted and/or integrated in the phenomenological perspective of the study.</p> <p>A completed questionnaire represents a prism An item or question represents a facet of the experience A response is a reflection of the facet. The study does not reflect 'the whole' of the experience, because it is open-ended in itself.</p> <p>The meaning of the experience is conveyed through language use. Interpretation emerges out of the hierarchies within stocks of knowledge. This is visually translated by blocks and colour bands: each response is viewed as a varying constituent of the experience.</p> <p>The research project matters to the teacher/researcher, who triggers retrospection, in a heuristic manner; shared set of pre-existing cultural, social and local values between learners, teacher and researcher.</p> <p>Age = 'lived time': primary school time bears common features within many primary school experiences in the world of education. Gender = a feature common to all social worlds; here, gender-related differences appear to influence the learners' interpretation of the experience.</p> <p>The gender dimension emerged from the process of re-analysing, writing and re-writing. The study as a whole is raised from its local level to a more global level. The same process was applied to 'lived time' and 'lived space' which led to the abstract concepts of time and space.</p>	<p style="text-align: center;"><b>'Parts' and 'whole'</b></p> <p style="text-align: center;">Theory ←</p> <p style="text-align: center;">Empirical study ←</p> <p style="text-align: center;"><b>Conveying and constructing meaning</b> ← →</p> <p style="text-align: center;"><b>Relationship between the researcher and the phenomenon</b> ←</p> <p style="text-align: center;"><b>The progression from 'local' to 'global'</b> ← →</p> <p style="text-align: center;"><b>Writing and re-writing</b> ←</p>	<p>Use of frequencies.</p> <p>Quantitative measures (significance tests) contribute to raising the study to a higher level of abstraction: male and female qualities are taken as objective and/or abstract entities.</p>



The above summary concludes this introduction and shows that, in spite of some deviations, the fundamental orientation which drives this study is phenomenological . This orientation is expressed in respect of the methodology and in respect of the interpretation of the theory and empirical findings. The deviations emerge at the level of the method.

## 2. Theoretical framework

### 2.1 Introduction

When one examines the general effects of L2 acquisition in a formal situation, multiple questions arise. These questions are ontological in nature - when? how? where?... This suggests that the issue of L2 acquisition at primary level, is still in search of a *raison d'être*. Mention of *raison d'être* itself implies that limits in terms of **time** - when should we learn? -, in terms of **space** - the context -, and the **connections** between these two concepts – how do we learn? - have been defined. The questions reveal the challenge which is presented to us and it is in the light of the tentative answers to these questions that an approach towards the interpretation of an L2 learning experience will be proposed. More specifically, the elaboration of this theoretical framework will serve to accommodate the analysis of an L3 learning experience at primary level in Ireland. Since views and experiences in the field are quite diverse, a set of boundaries needs to be established for our purpose. The 'when' and 'how' will be dealt with in relation to the years of elementary schooling; this discussion will consider the L2 learner in terms of

- age,
- exposure time,
- long term effects of foreign languages in the elementary school (FLES).

Neurobiological insights will be presented in order to highlight the link between an individual's interaction with the environment and his/her development.

The question of development will then be examined in the light of Vygotsky's psychology. This review of development will focus on the role of three dimensions in a learner's daily life, namely:

- instruction,
- mediation,
- perception in concept formation in general, and in the L2 learning process in particular.

The aim of this review is to distance ourselves from a simplistic view of the age factor in L2 learning and to show that the process of L2 learning is, in itself, a developmental process; the foregoing applies to all learners, but becomes particularly relevant when one is dealing with young learners, whose lives are particularly marked by



development. The term ‘developmental’ is used in the sense of ‘experiential-developmental’ and contrasts with the term ‘maturational’ which is used in the sense of ‘chronological-maturational’.

These considerations will serve to introduce the central aspect of this study, namely the exploration of an L3 learning experience. Hence, motivation in general and L2 motivation in particular will be viewed in terms of ‘entering an experience’. The experience itself will be viewed as an individual’s quest for meaning. This quest, it is proposed, is initially dependent on and triggered by perceptual factors (aural and visual); these factors also contribute to sustaining the quest for meaning by providing the material for meaning acquisition (time and space), thereby defining the orientation of the learner (synthetic and/or analytic). Consequently, in order to acquire meaning, an individual undergoing an experience is likely to use and rely on either factor in varying degrees. Since our purpose is to elucidate the meaning of an L3 experience for 282 participants, such notions, whether perceptual (aural/visual) or conceptual (time and space), cannot be ignored. The basis for this statement rests on notable gender-related differences in participants’ interpretation of the L3 experience at primary level. It should also be emphasised that the L3 experience is not divorced from a general understanding of experience. Hence, the act of entering the experience and the act of experiencing are viewed in a phenomenological perspective. This means that while the discussion draws on L2 motivation literature, ‘motivation’ is conceived within Husserl’s (1928/1950) and Schutz’s (1970) interpretations of motivation. Similarly, while integrating L2 learning dimensions, the discussion of ‘experiencing’ draws its material from the work of a phenomenologist, namely La Garanderie (1995). This approach is consistent with current developments in L2 research which adopt a cognitive approach to L2 learning (Skehan 1998, Little 1991). Such developments suggest that the learner and the learning situation are gradually becoming the focus of L2 research (Dörnyei 1994; Oxford and Shearin 1994; Tremblay and Gardner 1995; Skehan 1998; Little, Dam and Timmer 2000). In keeping with such developments and central to this study is the learner’s interpretation of the L3 experience at primary level. His/ her accounts of the experience open a window on the network of connections that learners make with an experience.

Finally, the description of one L2 learning approach will illustrate the point that differences in perception and in the ways in which we acquire meaning need not function in an exclusive manner. The ‘write to read-read to speak- speak to write’



approach (Cohen 1992) is an example of how differences in learning styles may be powerfully combined to boost the L2 learning process.

## 2.2 Time and the L2 learner

This section focuses on the time of learning, that is, the age of the learner, exposure time or the duration of the L2 learning experience and long term effects of the foreign language in the elementary school. At the heart of these L2 considerations lies the notion of time, which, for a variety of reasons, we argue, is an unsatisfactory measure of L2 attainment.

### 2.2.1 Age and the L2 learner

The debate about chronological-maturational aspects of L2 learning sets the younger learner in opposition to the older learner. It is a debate fraught with controversy and still unresolved. The controversial aspect lies in the discrepancy between people's expectations - those involved in the learning process and those who are not - and the actual achievement. The question of time is central to the controversy, in that, for many, the assumed innateness of a language acquisition faculty is expected to manifest itself in the L2 learning process, particularly when younger learners are considered in the light of the Critical Period Hypothesis (CPH). However, as Singleton's review of the age factor in L2 acquisition has shown (1989), there does not seem to be any absolute learning advantage for the younger learner in a formal situation. This suggests that the putative innateness of language coupled with a putative critical period do not translate conclusively into the formal context of L2 acquisition. Furthermore, even when an early start is shown to be advantageous, the attainment is described as 'eventual', and/or 'masked'.

In this regard, age-related attainment measures appear to yield contradictory results when the learning environment is taken into account: on the one hand, naturalistic studies show the eventual superiority of younger beginners over older beginners in a time period of approximately 15 months (see Snow and Hoefnagel-Höhle 1978a, 1978b, in Singleton 1989, pp.118-20); on the other hand, studies of formal learning situations



show that the advantage is manifest among older learners when the measure is based on equal amounts of exposure time (see early and late immersion studies in Singleton 1989, p.237).

Whilst the focus of naturalistic and formal learning situations is L2 attainment in relation to age, it becomes apparent that the temporal measure is different. In the first instance, L2 learning time includes

‘at least a proportion of home and social life as well as what took place during school hours’ (Singleton 1989, p.121).

In the second instance, exposure time or the duration of the experience can only refer to the limited number of contact hours learners have with the L2 in school. In both instances the variable is of course the time factor; however, in the naturalistic situation it would seem that the experience factor has also a significant role to play in that the L2 is acquired in a variety of contexts (home, play, social life, school, etc.). The naturalistic situation suggests that the learner does not merely benefit from more L2 exposure time, but rather from a multiplicity of opportunities for the L2 to become explicit within a multidimensional environment. If one were to remain in a time domain, and if one were to translate the younger learner’s advantage associated with a naturalistic situation into an exposure time learning framework, Singleton estimates that a naturalistic L2 experience of 1 year @ 10 hours per day or a total of 3,650 hours would require a period of more than 18 years @ 200 hours per year for the younger learner’s advantage to become manifest (1989, p.236). Based on this arithmetical exercise there seems to be little or no reason for an early L2 introduction in the primary school system.

However, if one is to consider the learning experience in relation to its quality, and adopt a qualitative evaluation of its worth, it becomes apparent that the outcomes will be analysed in terms of the meaningfulness learners assign to the experience rather than eventual linguistic attainment. In a qualitative investigation of L2 motivation Ushioda suggests that

‘cause and effect are ... not determined by measuring and manipulating variables and making reasoned inferences, but are simply identified by the individual's own perceptions of relevant experience and motivational processes. Students who experience success or positive rewards attribute their motivation



in part to that *experience*, and to the expectation of *its continued renewal*' (1994, p.82) [my own emphasis].

Interestingly, in Burstall's report, it becomes apparent that the majority of the children involved had experienced a sense of irrelevance in their learning, combined with little or no continuity at secondary level:

'There are certain aspects of learning French which children of all levels of achievement tend to reject, such as the enforced passivity, repetition and incomprehension associated with the use of the tape recorder, and the practice of reading aloud' (1974, p.243).

Burstall adds that secondary schools, due to the mixed intake of children, were not able to accommodate the early learners of French in special groups (1974.p.245).

The importance of a positive experience at a young age cannot be overestimated. A time domain analysis in an L2 acquisition context is inadequate. Analysis of this kind has led some, precipitately, to dismiss the notion of the early introduction of foreign languages at elementary level : Burstall's final response to the British experiment of the 70's, was

'unequivocally... negative, in terms of any substantial gain in the mastery achieved by beginning to learn at age 8' (Burstall 1974,p.243).

However, she did report gains in attitude.

Furthermore, a time-scale which plots the progress of the learner does not assess his/her position in terms of space, that is, in terms of his/her interaction with the learning environment and the development that will ensue. In other words, the experience of the learner fails to be considered in all its dimensions.

Perhaps the debate should focus on the difference between the less experienced learner and the more experienced learner, thus allowing the incorporation of the developmental dimension into an account of the learning process. Bialystok articulates the L2 learning task of young and older learners in the following manner:



'The adult...has a much simpler task than the child. First, the adult does not need to reconstruct the original conceptual representations of the world out of which the symbolic representations for language evolved. Adults have already done that - they already know about the world. The adult needs only to construct and organise the symbolic representational system for the language being learned' (1990, p.67).

Recent evidence suggests that the age issue in L2 learning is still the source of much debate. Singleton (forthcoming) identifies the two questions which divide the field:

- (a) 'is the apparent advantage of L2 acquirers, whose exposure begins early in life a broad tendency or an absolutely inviolate law?'
- (b) 'how are such age effects to be explained?'

In respect of the first question, evidence suggests that even in the case of very early beginners, some subtle details in the L2 set them apart from monoglots. Ekberg (1998) reports a number of lexico-grammatical differences between bilingual Swedish teenagers and native speakers of a similar age-group; Flege (1999) suggests that very young children exposed to an L2 in an L2 environment are quite likely to end up speaking the L2 with a non-native accent. The very fact that these bilingual speakers have a knowledge of two languages is proposed as an explanation for the differences (see Grosjean 1992, Cook 1995, Flege 1999). Singleton, for his part, suggests that the various age-related phenomena are probably the result of the interaction of a multiplicity of causes (forthcoming and 1989).

In response to (b), possible causes may be experiential and related to the child's general cognitive development, as in the case of an early exposure to L2 literacy and its effects on L2 proficiency; Bialystok and Hakuta (1999) point to the case of young immigrants attending school whose experience of the L2 is likely to confer a serious advantage on them over those who arrive in the L2 community at a later stage. Additional age-related cognitive characteristics indicate that, in the case of older learners, abilities such as being able to perform under time pressure, risk-taking and recall of detail deteriorate over the life span. This deterioration is likely to be reflected in the decline in ultimate language proficiency (Bialystok and Hakuta 1999). Bongaerts (1999) emphasises the role of instruction and shows that when subjects receive intensive perceptual training in subtle phonetic contrasts between L1 and L2 speech sounds, late acquisition of an L2 accent is still possible. Motivation and the desire to be identified with the L2 culture and



with native speakers of the language are also perceived to be influential factors in successful L2 proficiency in adulthood (Moyer 1999). Hence, in the light of this evidence, Singleton concludes that

‘... the notion that L2 age effects are exclusively neurologically based, that they are associated with absolute, well defined chronological limits and that they are particular to language looks less and less plausible’ (forthcoming).

### **2.2.2 Exposure time and the L2 learner**

The issue of exposure time itself is unclear. On the one hand it is perceived by most researchers and instructors alike as 'a crucial factor in differentiating levels of language proficiency' (Singleton 1989, p.237). On the other hand, inevitably tied to the latter is the quality of instruction received by the learners (Singleton 1989, p.234), and socio-economic factors (Burstall 1974,p.166, and Singleton 1989,p.136).

Furthermore, exposure time effects often figure in studies in a confounding role (see Genesee 1992, p.210, Singleton 1989, p.135). Genesee explains :

'...if early and late immersion students are compared at the same age (that is at the same grade level), then immersion students will have had more exposure to French, because they will have been studying French longer. Conversely, if they are compared when they have had equal amounts of exposure to French in school, then they will differ in age and overall maturity at the time of the assessment' ( 1992, p.210).

Given this, it is not possible to evaluate the effects of an early or late introduction to a foreign language in terms of age and/or exposure time alone, since experiential-developmental factors are an intrinsic part of any meaningful learning experience, at any given time. In other words, for the accurate observation of a learning experience, time references do not suffice without some anchorage in space, that is, the link between the learner, the environment, and the effects on his/her development.



Finally, the notion of achievement needs to be considered. The way in which achievement is customarily tested seems to be predicated on the notion of attainment of a particular goal, at a particular time, by all competitors. In the case of testing less experienced vs. more experienced learners, use of time criteria alone (age and exposure time) is unbalanced. It is akin to pitching a long distance runner against a sprinter. For each category, the time reference is different - one covers more distance over a longer period of time, and the other runs a shorter distance in a briefer period of time. For each competitor the achievement is different and equally commendable. However, if we equate the younger learner to the long distance runner, the quality of the achievement takes on dimensions which a stop-watch cannot record: more ground has been covered, over many different types of terrain and over a longer period of time. In other words the younger learner has used his/her time to explore the many paths along his/her language learning route. The metaphor is very relevant to L2 acquisition in that many processes of a cognitive, psychological, and socio-affective nature are at play and should be open to exploration and exploitation by the teacher and the learner alike.

In a response to the questioning of the value of modern foreign language instruction in the curriculum, Singleton reminds the reader of the specific and unique richness of second language acquisition, and argues that

'no other subject area - and this is the real point - is capable of simultaneously delivering the entire range [of benefits] in such generous measures' (1992a, p.71).

### **2.2.3 Long term effects of FLES**

However, one should not dismiss the effects of prolonged exposure time to an L2. Some recent findings suggest that an early and sustained exposure to an L2 has some impact on the development of the L1. Neufeld's 1993 summary on the long-range effects of early French immersion on twenty Anglophones investigated the following features:

- 1) the ability to detect subtle ambiguity in statements;
- 2) the identification of non-standard deviations in English grammar;
- 3) the perception of nuanced differences in meaning in vocabulary;
- 4) the production of synonyms for low frequency words;



5) the spontaneous generation of meaningful, well formed utterances frequently involving abstract concepts and figurative speech (1993, p.8).

The subjects had completed an early immersion programme between the ages of 5 and 10, and were attending the University of Ottawa. They were compared to twenty carefully matched Anglophones who had been instructed in French, one hour per day, at primary level (the number of years learning French is not specified by the researcher). All subjects were tested for vocabulary richness, sensitivity to multiple meanings, tolerance for non-standard structures in grammar, and ability to construct well formed, meaningful utterances involving abstract concepts and ideas. No adverse effects were recorded in the early immersion students, as their performance matched that of the control group on most measures.

However, the immersion group responded quite distinctively to measures of figurative or metaphoric language. This became evident in the sentence creation task. For example, the stimulus string 'appear fruit rock' generated sentences such as 'the rock appeared like a piece of fruit' or 'the rock was fruit-like' for more than half of the immersion graduates. Non-immersion students produced standard sentences such as 'the rocks appeared all around the fruit trees' or 'the fruit appeared to mingle with the rock'. When this perception test for tolerance of non-standard usage was combined with the results of oral production measures, the immersion group proved significantly more figurative in their use of English (1993, p.9-10).

Interestingly, Neufeld's findings confirm those of Titone (1993), who investigated the metalinguistic development associated with bilingual education in very young subjects aged 3:3 and 4:4. He found that 87.5% of the 19 Italian-French bilinguals as opposed to 50% of the 18 monolinguals, showed an ability to invent new concepts and new words. The instruments used were the Terman-Merill IQ test, an L1 oral comprehension and production test, and an L2 comprehension test.

In Scotland, Phase 2 of the research/evaluation programme of the Scottish pilot projects tracked the first cohort of young learners who had subsequently reached Secondary 4 and had sat the Standard Grade examinations. While initial evidence suggested that progress in the L2 had slowed down in Secondary 2 when compared to Secondary 1, the researchers found that

'the schools concerned were entering a substantially wider range of pupils than before, yet were able to maintain their previous standards of attainment. This



suggests that the advantage of primary school learners over secondary school beginners was being maintained up to the age of sixteen' (Johnstone 1996, p.173).

The fact that the majority of the Scottish pilot learners had chosen to sit the exam represents a change from previous trends when only a minority of learners would present themselves for examination. Furthermore, the national average had been attained by almost all of these pupils from the weakest to the most able; their results matched the average level attained by 40% of the best pupils in the previous years (Blondin et al. 1998, p.25). In terms of L2 development, the Scottish pilot children appeared to use more words as they progressed, with some limitations in terms of their creative use of the language. Large chunks of sentences were memorised but the children did not appear to manipulate these structures successfully in a conversational situation, although their written work suggested the beginnings of a metalinguistic awareness. Nevertheless, gains in confidence, willingness to take risks or to speak in class were also reported (Blondin et al., 1998, pp.29-37).

In France, three years after the introduction of foreign languages into the primary school at ages 9 and 10, the effects appeared to be more behavioural than linguistic, i.e., active listening habits, better sound discrimination and better recall (Favard 1993, p.38). Favard argues that because these benefits are not immediately obvious, they are perceived to be insufficient by the public at large in terms of expected immediate returns, namely, the performance of these learners on productive tasks. To remedy these shortcomings, articulation and continuity between the primary and the secondary school systems are advocated.

Burstall's 1974 report on the introduction of French into British primary schools in the 60's and 70's stresses that

'early achievement in French affects later attitudes and achievement to a greater extent than early attitudes towards learning French (1974, p.214).

She adds that 'in language learning, nothing succeeds like success' (1974, p.243). In other words, it is reasonable to assume that if children undergo a rewarding L2 experience at primary level, subsequent successful experiences can be expected. This view appears to be confirmed in the findings of the Irish L3 learning experience in the



following words: '*I was good at it* [French at primary level], *so I worked at it* [at second level]'.

#### 2.2.4 Summary of Time and the L2 learner

With regard to L2 acquisition and the issue of 'when', we note that the question of time is at the centre of the controversy for the following reasons :

- although many L2 researchers take the line that the language faculty is innate and that language acquisition is constrained by a critical period, it is evident that an early L2 experience does not necessarily lead to successful L2 acquisition within a formal context. The advantage attributed to younger L2 learners over older L2 learners appears to emerge principally from naturalistic language learning situations which involve a great deal more L2 input than the school context is in a position to provide;
- when naturalistic L2 situations are examined, the multiple connections the individual makes with the environment, namely, home, school, social life, become apparent. Hence, the evaluation of an L2 learning experience based on a time domain analysis alone seems unsatisfactory, as the quality of the experience itself is masked;
- in a formal context, looking at L2 attainment in terms of exposure time is problematic as comparisons between younger and older learners cannot be abstracted from maturity discrepancies. These time-related difficulties highlight the absence of a consideration of environmental and developmental factors which undoubtedly make an important contribution to the learning experience and its success. Nevertheless, some studies report long-term effects which suggest that prolonged L2 experience contributes to the development of L1 language flexibility, creativity and useful listening skills. These developments were observed among experienced L2 adult learners and children alike (Neufeld 1993, Titone 1993). Additional evidence also suggests that an initial advantage in the early years of secondary school may still be manifest at sixteen years of age (Johnstone 1996);



- accordingly, chronological-maturational arguments alone, in the context of the debate about early L2 instruction are not sufficient, because they fail to take into account the dimension of the learner and the learning experience.

### 2.3 Development: the learner and the L2 learner

Four sections constitute this part of the theoretical framework. The sections highlight the importance of the environment in an individual's development (as suggested by neurobiological findings) and proceed to focus on the place of instruction and the role of mediation in the life of learners. In addition, L2 learning will be considered as an experiential-developmental process and will be integrated in Vygotsky's analysis of concept formation. Our approach serves two purposes; it establishes:

- a clear demarcation line between chronological-maturational arguments in L2 learning and the experiential-developmental position adopted in this study,
- the omnipresence of perception (outer and inner) in the L2 learning process.

This last point will be fully developed as we progress to the analysis of learner styles in Section 2.5 of this theoretical framework.

The reliance on Vygotsky's description of concept formation emerges from the connections which exist between Husserl's phenomenology and Vygotsky's psychology. The philosopher and the psychologist were contemporaries and shared the conviction that consciousness provides the essence of meaning. Both men believed that 'meanings' derived from our outer and inner perceptions of the phenomena which surround us were also constituents of human consciousness: human consciousness is, in essence, in and of the world; hence, socio-cultural and historical signs become mediators in the acquisition of meaning. This is reflected in Vygotsky's references to literary works which he used as socio-cultural clues or signs to access human consciousness and to enable the interpretation of cognitive psychological processes (see the description of the syntax of inner speech through Tolstoy's *Anna Karenina*). This methodological approach mirrors those of phenomenological researchers (see Van Manen 1990). In this respect, Vygotsky points out that



‘the empirical fact is only a starting point, the general principle ‘hidden’ in this fact will inevitably reveal itself as the scientific notion evolves from its empirical “beginnings” to its philosophical “end” ‘ (Kozulin 1990, p.92).

According to Kozulin , the key words in Vygotsky’s psychology are *consciousness* and *culture* (1990, p.4). Therefore, L2 learning as an experiential-developmental process based on Vygotsky’s interpretation of concept formation is in keeping with the phenomenological perspective within which this study is embedded: the theoretical framework develops into ‘a conversational partnership’ (Van Manen 1990, p.76 –see Chapter 1) between relevant theoretical domains (L2 literature, cognitive psychology and pedagogical phenomenology) and leads us to the central aspect of the study: the role of perception within the phenomenological interpretation of experience. In other words, references to Vygotsky’s psychology facilitate the transition from **age** (L2 chronological-maturational arguments) to **development** (L2 experiential-developmental considerations) and, subsequently through consciousness, from the role of perception and memory in **development** to **the meaning** of a learning experience.

### 2.3.1 Development and neurobiology

According to Changeux (in Cohen 1982, p.40), the development of the nervous system is coupled with its ability to function. For the system to function and develop, interaction with the environment is imperative. Each stage of the development is a critical moment. Connections and their networks arise in a dove-tailed and hierarchical manner. Each time a connection occurs, a synapsis is in the process of formation. If the synapsis is to last into adulthood, it has to be stabilised, and it is at this very point that action is required. Should the action be manifest before the connection is established, nothing will happen. Should the stimulus occur too late, the synapsis will have regressed, without having had a chance to stabilise.

Changeux cannot offer a rigorous demonstration of the veracity of his hypothesis, but proposes that while the nervous system will develop, just as the growing body will, i.e., independently of the environment, the nervous system will not be maintained unless a stimulus is provided by the environment. The coupling effect between development and



stimulus results in the stabilisation of the connection. In other words, in terms of the development of efficacy, the system is activity-dependent.

In relation to language acquisition, Changeux sees the associated cognitive operations as important stimuli for the stabilisation of the system. Rather than advocating a correct time to learn, he recommends a wide variety of activities to stimulate the two hemispheres of the brain. This last consideration points to the importance of the stabilisation effect which enables acquisition to last into adulthood. Robertson (1999) suggests that the peak of connectivity between cells and the formation of synapses typically happens between the ages of four and seven. Learning is identified as one of the key factors in determining which synapses stay and which synapses go. The synapses are in constant formation and connect with neurones on an on-going basis. Robertson states that

‘those synapses which don’t become connected to other neurones through learning and experience simply wither away...’ (1999, p.137).

In the midst of constant brain activity, stabilised connections have the ability to protect the patterns which store experience and memory when one faces ‘remoulding’ experiences (1999, pp. 10-2). Robertson describes the case of six Portuguese illiterate women whose brains did not appear to function in the same way as those of literate people when confronted with phonological tasks such as repeating nonsense words. Compared to literate women, some areas of the Portuguese women’s brains and in particular the left hemisphere did not manifest activity on a PET scanner. Instead, the activation was located in the frontal part of the brain (Castro-Caldas 1998). Robertson concludes:

‘here we have the concrete proof that what we learn as children physically sculpts our brains and makes them work in quite different ways (1999, p.136).

Additional evidence emerges from a study conducted in the 1980’s in London, which assessed four types of child care (Melhuish 1990). The findings suggest that the differences between the four types of care and their effects on language development were dramatic. It appeared that the children who were cared for in nurseries used fewer words than those who were cared for by parents and nannies. Interaction and responses



to facial expressions occurred more frequently with parents and nannies than with nursery staff. Interestingly, the nursery children came from households where mothers had higher education qualifications. Robertson notes that ‘the effect of day-care reversed the effects of social class on language development’ (1999, p.140). Once again, the importance of experience, stimulation and learning for one’s cognitive development comes to the fore. Hence, it is reasonable to assume that an early L2 learning experience is likely to influence some aspects of the cognitive development of children in the long term.

### **2.3.2 Development and instruction**

For Vygotsky, the cognitive development of a child emerges out of the interactive nature of two types of concepts; the everyday or spontaneous concept and the scientific concept. The former is acquired through everyday experiences and the latter is accessed via instruction or formal schooling. School, on this view, fosters the development of higher intellectual functions ‘whose main features are reflective awareness and deliberate control’ (1962, p.90).

Vygotsky conducted four separate experiments which investigated the effects of instruction in the taught subjects of reading and writing, grammar, arithmetic, natural science and social science. The experiments aimed to prove the following:

- the psychological functions in the development of a child cannot be considered to be mature when instruction begins; the functions develop through exposure to and interaction with instruction;
- the curve of development does not coincide with the curve of instruction; instruction precedes development;
- intellectual development is not compartmentalised according to subjects taught; it grows out of the meaningful interactions of these subjects;
- intellectual development should not be measured in terms of mental age or completed stages because it is a dynamic process which manifests itself in the Zone of Proximal Development.



### 2.3.2.1 Exposure to and interaction with instruction:

Writing, as a higher psychological function, is considered by Vygotsky to be a typical example of the type of material provided by instruction. The process of writing is described thus:

‘in learning to write, the child must disengage himself from the sensory aspect of speech and replace words by images of words’ (1962, p.98).

Vygotsky suggests that it is the abstract quality of writing which is the cause of acquisition difficulties and not physical and motor-coordination limitations experienced by young children: the sound structures must be dissected, memorised, alphabetical symbols and sequences of words must form sentences. As oral speech precedes inner speech, written speech follows inner speech. Since inner speech is activated in the process of writing, the child must attempt to master this compact and condensed form of speech by ‘deploying’ it into a comprehensible output. While semantics is the material of inner speech, in a constant and non conscious manner, Vygotsky proposes that writing is ‘deliberate semantics’ (1962,p.100). The temporal discrepancy which exists between the development of oral speech and written speech, as well as the fact that the child is stimulated to think in an abstract manner, are, for Vygotsky, convincing arguments to justify the role of instruction in child development. Furthermore, as writing and grammar are taught, the initially immature intellectual functions grow and contribute to leading the child to higher levels of speech development. The process is one where

‘the development of psychological foundations for instruction in basic subjects does not precede instruction, but unfolds in a continuous interaction with the contributions of instruction (1962, p.101).

In this sense, L2 writing and the teaching of grammar provide similar opportunities to the learner to develop higher levels of awareness and speech development. Cohen’s L2 learning approach, where the written and the oral forms of L2 are simultaneously presented, exemplifies the interactive process of oral speech, inner and written speech, and the awareness which ensues. Thus, oral speech as a concept of the spontaneous type and written speech as a scientific concept converge into one conceptual web. Elsewhere



in the L2 literature, and without resorting to Cohen's particular L2 learning approach, we note that L2 writing is described as

'... central to language learning... because written language positively invites us to treat it as an object... From the earliest stage [L2 writing] encourages an explicit interest in linguistic form and allows the learner to use written prompts and cues to support the development of social and interactive speech' (Little 2000, p.13).

In the Scottish pilot projects, the teaching of grammar and written language, combined with exposure time to the L2, appear to generate curiosity and awareness on the part of the child, as well as increased knowledge. Visiting language teachers point out:

'Pupils notice what they think is perhaps an error in the written word, which is, for example, an adjective agreement... In my experience pupils don't ask for an explanation of why a sound is different, e.g. *blanc/blanche*, but do for the written word' (Low et al. 1995, p.56).

Primary school teachers suggest:

'Grammar points in the foreign language are a useful revision of English grammar, whether taught directly or introduced subtly, grammar is essential' (Low et al. 1995, p.56).

#### 2.3.2.2 Instruction precedes development:

The question of time in the process of instruction and in the development of the corresponding psychological functions was also considered by Vygotsky. He found that a child's psychological functions do not necessarily coincide with the progression of the school curriculum. One explanation is that the attainment of precise instructional aims and objectives is expected to occur within a specific time period within the schedule of time tables, and according to age. Another explanation points to the relationship between experience and development as opposed to age and development, as suggested by personal construct theories (Bannister and Fransella 1986, p.67). The two explanations are contained in Vygotsky's example of the teaching of the decimal



system. The school curriculum aims to teach the concept, but the child cannot conceive that system at once. He/she writes the figures, adds and multiplies, and solves problems until eventually the concept is formed. Hence, Vygotsky concludes:

‘the curve of development does not coincide with the curve of school instruction; by and large, instruction precedes development’ (1962, p.102).

### 2.3.2.3 Intellectual development emerges out of the meaningful interaction of taught subjects:

Vygotsky states that the principal contributions of the school years are ‘consciousness and deliberate mastery’; these underlie the main psychic functions which are required for learning; it is in the emergence of consciousness and skilful control of one’s actions that these functions are interdependent (1962, p.102). In this sense, the primary school situation relies on this interdependence of subjects, since they are not compartmentalised. Hence, L2 learning, when integrated in the primary curriculum is both influential on other subjects and influenced by other subjects; this process contributes to the cognitive development of the child. This view is expressed as a wish in the concluding remarks of the Final Report of the Scottish project:

‘In respect of models of foreign language provision, the clearest message from research is that pupils’ foreign or second language development at primary school will be likely to make good progress when the language is used in order to learn something outside of itself, i.e. important aspects of the subject matter of the primary school curriculum’ (Low et al. 1995, p.184).

However, the likelihood of an integrated approach to L2 learning at primary level bears its own difficulties and perhaps other models may provide interim solutions. For example, the autonomous L2 classroom provides pupils with multiple opportunities to choose topics and develop skills which are useful across the curriculum. Hence, a reading activity may include:

- reading aloud or in silence,
- looking up new words in the dictionary,



- learning new words by making word chains, word pyramids, changing one word in a sentence,
- playing alphabet games,
- writing a cloze test,
- noting down the pronunciation,
- practicing spelling,
- retelling the story,
- translating into the L1,
- making a book review,
- interviewing a peer about his/her book (Thomsen 2000, p.80).

In the Irish context, the current *Draft Curriculum Guidelines in the Modern Languages Pilot Project at Primary School* suggest

‘The approach will be an integrated one where effective links can be made between language development, cultural awareness and communicative competence, and other areas of the curriculum’ (National Council for Curriculum and Assessment 1999, p.17).

The draft curriculum guidelines recommend links with Science - weather diaries, labels for items on the classroom’s ‘table of interest’, charts and maps (1999, p.28) -, with Physical Education by following instructions in the L3 (1999, p.22), with Music by comparing and contrasting music from the L3 community with music from Ireland, both traditional and modern - what instruments are used, identify the rhythm, can it be related to music already known from Ireland/from other countries? Can anything be inferred from this? ( 1999, p.38) -, with Geography and the identification of countries and cities in Europe ( 1999, p.26), with Maths and the discussion of currencies, their names, denominations - are they decimal? what is the value against the Punt,? against the Euro? (1999, p.39).

#### 2.3.2.4 Intellectual development is a dynamic process which becomes manifest in the Zone of Proximal Development:

Vygotsky was concerned with the fact that the mental development of a child was measured in terms of its ‘completed part’, that is, the part of the development which a



child was expected to have mastered on his own by a certain age. However, by providing slight assistance in the form of a leading question to two children aged eight, Vygotsky found that one child could solve a problem normally designed for a twelve year old child and that the other child had solved a problem designed for a nine year old child. This finding suggested that the mental development of the two children was not the same. The discrepancy resided in each child's Zone of Proximal Development: one child's Zone was equal to 4 which represents the difference between his mental age – 8 years old - and his actual achievement – solving a problem designed for a 12 year old child; the other child's Zone was equal to 1 which is equal to the difference between his mental age – 8 years old - and his achievement – solving a problem designed for a 9 year old child. This measure of mental development, Vygotsky argued, was more appropriate and helpful in providing clues to a child's intellectual progress than mental age. Furthermore, the child with the larger Zone of Proximal Development was expected to do much better in school. This concept provides two dimensions which are of interest to L2 learning approaches. The first dimension is that it establishes clearly that the concept of fixed stages of development is invalid. Therefore, chronological-maturational arguments in respect of L2 learning are considerably weakened. The second dimension resides in the fact that

‘what the child can do in cooperation today, he can do alone tomorrow. Therefore the only good kind of instruction is that which marches ahead of development and leads it (1962, p.104).

It should be noted that the Zone of Proximal Development, for Vygotsky, is specifically related to the interaction of scientific and spontaneous concepts. The focus has subsequently been shifted from its original point in that it includes the notion of intersubjectivity between a child and an adult through the process of negotiation of meanings. This view emerges out of the socio-cultural theory of ‘the shared world’ (Kozulin 1990, p.170). Hence, negotiation of meaning becomes embodied in the concept of mediation, that is the mediating role adopted by the adult, the teacher or the peer.



### 2.3.3 Development and mediation

Vygotsky writes:

‘all the higher psychic functions are mediated processes, and signs are the basic means used to master and direct them. The mediating sign is incorporated in their structure as an indispensable, indeed central, part of the total process. In concept formation, that sign is the word which at first plays the role of means in forming a concept and later becomes its symbol’ (1962, p.56).

These words suggest that, for Vygotsky, mediation is essentially semiotic. We suggest that this definition of mediation is due to the direction which Vygotsky gives to development: the latter is first social and then individual (1962, p.20). As words are first acquired through social interaction, their meaning becomes gradually internalised and idiosyncratic; this occurs first through the process of mediation as a social phenomenon ; this process gradually becomes an interpretative operation where meaning is sign-dependent because it is the result of one’s subjective interpretation. Vygotsky suggests that , in this perspective, an individual processes and interprets ‘meaning’ in a manner which will bring and make ‘sense’ to him or her. Speech plays a central and continuous role in an individual’s development; however, speech itself undergoes a transformation and it is this transformation in the form of the differentiation of its functions which gives the clues to the child’s developmental process. The differentiation of the functions of speech occurs on the emergence of egocentric speech. Egocentric speech is seen as a separate linguistic form from vocal speech and it emerges when the child transfers social and collaborative forms of behaviour to ‘the sphere of inner-personal psychic functions’ (1962, p.19). Egocentric speech goes on to develop into inner speech. This state coincides with the construction of complexes in the child’s thought and eventually leads to the formation of concepts in the adolescent’s mind. Hence, speech development, while being socialised as in Piaget’s view, grows from being social to egocentric to inner speech. This direction is the reverse of that advocated by Piaget who believes that speech evolves from autistic to egocentric thought and from speech to logical thinking (1962, p.20). Kozulin points out that Vygotsky attempted to base his theory in a ‘socio-scientific framework’ (i.e. the measurement of a child’s Zone of



Proximal Development through mediation and adult intervention) but eventually arrived at conclusions resembling ‘psychological hermeneutics’ (the ability of human consciousness to interpret, assign meaning and define the world by making subjective what is presented as objective, by transforming the object into sign/s – linguistic and other - and by using these signs as mediators). Mediators are, in essence, socially meaningful and may take the form of material tools, a system of symbols or the behaviour of another human being (Kozulin 1990, p. 114).

In an L2 learning situation, mediators may be gestures, learners, teachers, language as a medium for interaction and /or as a tool for mastering skills (Little 2000), computers and writing (Cohen 1992), goal-directed activity in a task-based approach (Skehan 1998), or the use of specific tools such as the portfolio as advocated by Donato and McCormick (1994). In the last case, the portfolio acts as ‘a benchmark for thinking about performance, planning future courses of action and monitoring one’s accomplishments’ (1994, p.457). The portfolio in this case becomes ‘the cultural tool of the classroom’ (1994, p.463). In respect of the use of material tools as mediators, while they are instrumental in the acquisition of meaning, they are not directly related to speech. Vygotsky states:

‘There is a vast area of thought that has no direct relation to speech. The thinking manifested in the use of tools belongs in this area as does practical intellect in general... The fusion of thought and speech, in adults as well as in children is a phenomenon limited to a circumscribed area’ (1962, p.47-8).

#### **2.3.4 Development and concept formation and the L2 learner**

So far we have emphasised the cultural nature of development through the influence of instruction and the use of mediators. However, these processes do not explain how meaning is acquired and how development ensues.

‘The cultural task per se does not explain the mechanism itself that results in concept formation. The investigator must aim to understand the intrinsic bonds



between the external tasks and the developmental dynamics' (Vygotsky 1962, p.59).

An account of concept formation is provided in the review which follows. It will provide links with L2 learning and show the perceptual nature of concept formation and, by extension, of L2 learning. Thus, having described L2 learning as a developmental process, we will also be in a position to investigate the role of perception in learners' interpretation of experience.

Concept formation according to Vygotsky comprises three major preconceptual phases under which several sub-stages can be categorised. First, the phases are not age-dependent as they do not relate to fixed stages of development; second, in order to solve problems, adults and children resort to the strategies which constitute the phases on a daily basis. However, depending on the stage of intellectual development, certain phases may be explored more intensively than others by the learner. Reliance on a particular phase does not exclude reliance on other phases, each phase contributing to the development of verbal thinking. Third, perception and memory are the two essential and active components in complex-thinking (1962, pp.62-78).

The preconceptual phases comprise:

- syncretic groupings,
- complexes which are 'a preconceptual form of generalization',
- potential concepts which represent 'the elementary forms of abstraction' (Kozulin 1990, p.161).

#### 2.3.4.1 Syncretic groupings

The syncretic grouping phase is characterised by its subjective and highly unstable nature. Objects are grouped because of a vague feeling that they belong together. This group is likened to a disorganised 'heap'. This phase includes the strategies of *trial and error* without any structure to the result of these actions, the *syncretic organisation of the visual field* – grouping objects together - and *re-organisation of the syncretic heap*.

The latter is as disorganised as the first heap, but this time it is a two-step strategy.

In an L2 learning situation, particularly in an authentic setting, where stimuli are perceived in a chaotic manner with simultaneous input of sound, images and movement, the initial impressions may be based on vague feelings of relatedness between objects or signs; the learner may resort to such strategies.



#### 2.3.4.2 Thinking in complexes

The preconceptual forms of generalisation are active in this phase and the bonds between its components are concrete and factual, rather than abstract and logical:

‘the factual bonds which underlie complexes are discovered through direct experience’ (Vygotsky 1962, p.62).

Five types of complexes are identified in the following manner:

- i. the associative type,
- ii. collections,
- iii. the chain complex,
- iv. the diffuse complex,
- v. the pseudo-concept.

##### i. The associative type

This type of complex bonds objects because of a similarity or a contrast or proximity in space. The ties between the objects are perceptually compelling for the learner. As a result, the object is not known under its ‘proper name’ but becomes a ‘family name’ under which many apparently unrelated objects may be grouped. Kozulin (1990) points out that adults often use this type of complex, as in the case of the ‘Watergate’ scandal. The name ‘Watergate’ refers to an office block which then became synonymous with a political scandal; consequently, when another political scandal emerged, the term ‘Irangate’ was coined .

In an L2 learning situation, the concept of grammatical gender is often apprehended under this type of complex. It is not uncommon to witness children organising all new words under the ‘masculine/feminine’ classification at the expense of the actual name of the word. Reports from classroom observations describe the association of objects under ‘male ‘ or ‘female’ categories; this type of association leads the child to produce answers which are related to the gender category rather than the name of the object. Hence, objects become ‘males’ or ‘females’ and, as a result, when a child is shown a ruler, the answer is likely to be: “it is a ‘she’ !”, or “it is a ‘la’ ” or “it is feminine!”.

L3 grammatical gender-related associative type complexes may be enacted in the form of ‘marriages’ between classroom items such as “**le** crayon” and “**la** règle” ; both items

are walked down the aisle of an imaginary church on the basis that the tie between them is perceived to be compelling ( because of the gender with which they are associated ) .

## ii. Collections

Collections are formed in associations by contrast. This type of complex is long-lasting because experience teaches the child certain forms of functional groupings, e.g., knife, fork, spoon ... and a plate; cup, saucer... and a spoon.

‘The grouping of objects is performed on the basis of their participation in the practical operation of their functional co-operation’ (Vygotsky 1962, p.63).

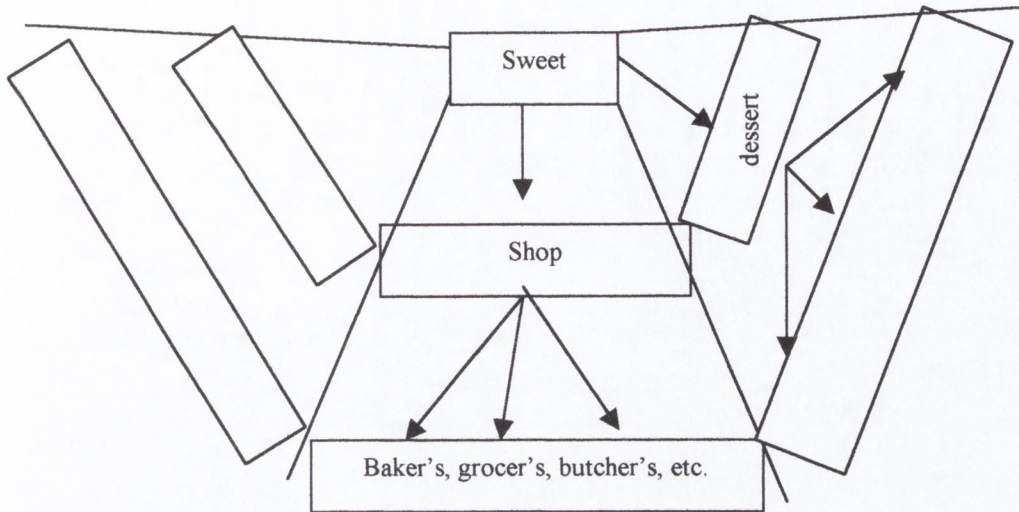
This complex does not exclude the complex previously described where objects may be associated because of an observed relationship.

In an L2 learning situation, lexical collections and associations are often encouraged in children (see for example the reading activities mentioned in (2.3.2.3). Lexical approaches to language learning also use this form of complex; learners construct word webs or word hooks based on functional collections or perceptually compelling associations. (see diagrams below). Finally, this type of complex clearly illustrates the underlying influence of socio-cultural parameters.



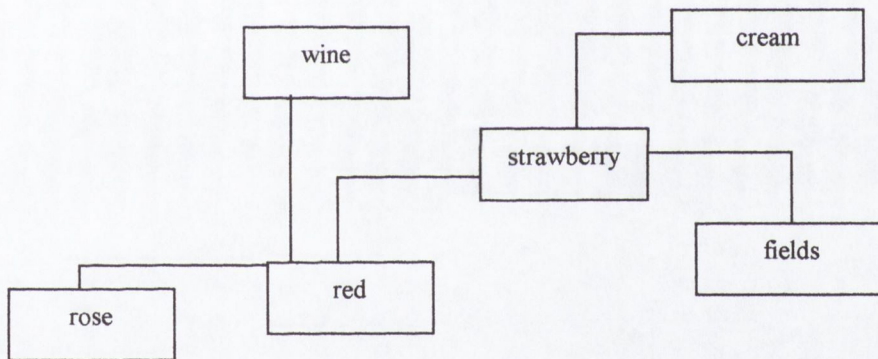
Word webs:

Functional co-operation of objects



Word hooks:

Perceptually compelling associations



### iii. The chain complex

This complex is a dynamic consecutive joining of individual links into a single chain, with meaning carried over from one link to the next (1962, p.64). This complex type starts with an object – a yellow triangle - and links a yellow circle to the triangle. The next link may be a blue circle and so on. The links are equally important, with no special role and no hierarchical role, because there is no hierarchical structure to the complex. For Vygotsky, this complex demonstrates the perceptually concrete and factual nature of complex thinking (1962, p.64).

In an L2 learning situation, it is reasonable to place 'prefabricated utterances' under this type of complex. Johnstone (1994) describes this type of utterance as 'longer and connected to form strings of phrases' Thus, the following example is provided:



‘Ein König und eine Königin wohnen in einem großen Schloß... Sie haben eine schöne Tochter... Ihr Haar ist so schwarz wie Ebenholz’ (1994, p.35).

In this utterance the child does not assign any particular function or rank to the words in the sentences. The string of phrases is possibly retrieved from memory because it was initially acquired in a perceptual and factual manner, through actions, rhythmic repetitions, visual props, gradual construction, de-construction and re-construction of the story, role play etc.

#### iv. The diffuse complex

Perceptually concrete groups of objects or images are formed by means of diffuse, indeterminate bonds. A child may associate a trapezoid with a triangle, because the former suggests a triangle with the top cut off (1962, p.65). Similarly, colour may generate this dynamic, leading to the combination of yellow, blue and green. The attributes of the objects are dim, unreal and unstable (1962, p.66). This type of complex illustrates the active role of intuition in the quest for meaning. This quest leads the child outside ‘the boundaries of his/her immediate factual experience’ and explains why sometimes, children make sudden and unexpected progress in language production. In L2 learning, the diffuse complex may be manifest in a child’s sudden transition from the immediate world of safe ‘ready-made’ and ‘prefabricated utterances to ‘creative’, albeit incorrect sentences:

‘Sport préféré est football’ (Johnstone 1994, p.35).

In this L2 production, the choice and the place of the words are intuitive, unstable and driven by the intention of assigning meaning to L2 learning.

#### v. The pseudo-concept

This type of complex plays a predominant role in a child’s real life thinking; objects are assembled in a manner which appears conceptual: all triangles are assembled thereby giving the illusion that the child has acquired the concept of the triangle. However, Vygotsky argues that this type of association is performed perceptually, that is, on the basis of the external shape of the object, not on the basis of the concept of the shape. In a child’s language – which reflects his thinking in complexes -, word meanings are not



acquired spontaneously. They develop along a pre-determined line which a given word already has in the language of adults. Thus, while a child's word is phenotypically similar to the adult's, it is not the same psychologically. Vygotsky argues that 'the adult cannot pass on to the child his mode of thinking' (1962, p.68). The important aspect of the pseudo-concept is that it allows children and adults to communicate and understand each other.

'The adult merely supplies the ready-made meaning of a word around which a child forms a complex – with all the structural, functional and genetic peculiarities of thinking in complexes... [Hence], verbal intercourse with adults becomes a powerful factor in the development of the child's concept' (1962, pp.68-9).

In an L2 learning situation, learners are often faced with the fact that the meanings of words acquired in the language classroom do not always coincide to the meanings of the same words in the country of the target language. However, what they have learned in the classroom enables the learners to communicate adequately with native speakers. It follows that the level of L2 proficiency of the teacher is likely to play a crucial part in L2 concept formation (see Oxford and Shearin 1994). Similarly, the nature of L2 materials is likely to assist the learner at this phase of concept formation; hence, the use of authentic materials (see Devitt, 1986, Little and Singleton 1991), and the features of the communicative approach all aim to bring the learner from the phase of thinking in complexes to the phase of conceptual thinking. Shiels (1993) articulates the rationale of the communicative approach thus:

'Learners... need to be prepared to use the language for real communication outside the classroom, for example, on visits to the target community, meeting foreign visitors at home, exchanging letters, audio or video cassettes, results of projects, etc., with schools or friends in the target community. In this process learners need to experience the similarities and differences between their own experiences and concepts and those of the target culture so that communication is facilitated by appropriate intercultural understanding' (1993, p.2).



Vygotsky points out that the pseudo-concept enables the child to operate with concepts, to practise conceptual thinking before he is clearly aware of the nature of these operations (1962, p.69).

#### 2.3.4.3 Potential concepts

In potential concepts, once a trait has been abstracted from the object, it is not easily lost among other traits; however, it is still formed out of perceptual (similar impressions between objects) or action-bound thinking (similar functions between objects). The latter form of thinking is an important source of potential concepts (1962, p.78). In potential concepts the external attributes of the object are ‘destroyed through its abstraction’ and the possibility of unifying the attributes on a different basis opens up. It is the combination of complex-thinking and abstraction which enable the child to reach generalisation or the formation of genuine concepts. This is achieved in adolescence, a time of transition between complexes and concepts. Vygotsky suggests that adolescents and adults alike, find it extremely difficult to articulate a concept because it is still bound in reality; in other words, it is still a function of complex-thinking and relies on perceptual and concrete clues:

‘Analysis of reality with the help of concepts precedes analysis of the concepts themselves’ (1962, p.79).

In an L2 learning situation, when a learner attempts to grasp the concept of grammatical tenses and moods (in French, *l'imparfait* and *le passé composé* or the subjunctive), he or she will rely on ‘an analysis of reality’, by defining the contextual and grammatical cues which indicate and determine the choice of the tense or the mood. The learner, in most cases, is not concerned with ‘an analysis of the concept’ itself, e.g. the essence of the subjunctive mood in a language, because the focus is first and foremost on the appropriate and correct use of the particular grammatical feature. Similarly, when considering the grammatical concept of direct and indirect objects in a sentence, the learner ‘destroys’ the external traits of the word and extracts the fundamental abstract quality of the grammatical complement.



#### 2.3.4.4 Concepts

Vygotsky suggests that the greatest difficulty of all resides in the application of a concept. The transition from the abstract to the concrete becomes as arduous as the transition from the concrete to the abstract which the adolescent experienced previously (1962, p.80). It is a movement of thought from the particular to the general and from the general to the particular. Hence, conceptual thinking in the form of a logical schema does not exist, it is a dynamic process and it is impossible to teach. Once acquired, concepts interact with each other, according to their levels of generalisations or their 'equivalence'. For example, the concept of numbers, developed through the study of arithmetic suggests that any number can be expressed in countless ways, because of the infinity of numbers and because the concept of any number contains all its relationships to all other numbers. The number one, may therefore be expressed as:

- 1000 – 999,
- the difference between any two consecutive numbers,
- any number divided by itself, etc. .

The operations are abstract, that is,

'they are governed by relations of generality between concepts –a system of relations absent from perception and memory... to transfer an object of thought from structure A to structure B, one must transcend the given structural bonds' (1962, p.115-6).

To illustrate the point, let us return to the grammatical concept of direct and indirect objects in French. Once a learner has extracted the essence of the complement – direct or indirect - from the word in a sentence – 'because of its relationships to all other words in the sentence' - he or she is in a position to apply and transfer the grammatical concept, in a conceptual manner to multiple structures of the language; the application of the concept may affect verbs (past participle, pronominal), pronouns (relative and personal) and the interpretation of prepositions etc.

A final word about concepts... we initially mentioned the existence of two types of concepts: the spontaneous concept acquired through experience as in the word 'brother', and the scientific concept acquired through the medium of instruction as in the word 'exploitation'. Vygotsky suggests that the spontaneous everyday concept works its way



upwards during the course of development; it facilitates the acquisition of scientific concepts which, in turn, works their way downwards towards experience. The concepts, therefore, develop in reverse directions: 'starting apart they move to meet each other' (1962, p.108). The everyday concept 'gives body and vitality' to the structure provided by the scientific concept. For this reason, Vygotsky uses the instruction of a foreign language as a way of illustrating the process which occurs; formal L2 learning, as a scientific concept, works its way downwards towards the L1 and the child's everyday experience of language; this experience is injected into the L2 through real acts of communication: the L2 is given vitality; simultaneously, through the formal instruction of the L2, the child becomes aware of a structured and conceptual understanding of language, which, in turn, enables his L1 to slowly work its way upwards into the domain of scientific concepts. However, the psychologist stresses the fundamental difference between the teaching of a scientific concept and an L2. In Vygotsky's description, L2 teaching is considered in terms of its external traits, its form, while the scientific concept is generally concerned with semantics only. However, it has to be said that the focus of L2 learning/teaching has shifted considerably from form to meaning since Vygotsky wrote these words (see the role of meaning in Skehan's task-based approach 1998, the shift from teaching method to learning/teaching approach in Shiels 1993, and from teaching to learning Little et al. 2000).

Having reached this phase of our analysis and having defined the experience of L2 learning within the Vygotskian developmental framework, it appears that the role of perception in complex-thinking has a crucial influence on the learner's ability to form associations between the traits of the objects that surround him. This results into some form of generalisation about the relationships between objects; consequently, through complex-thinking, the formation of generalisations is likely to influence meaning. Vygotsky describes this phenomenon as 'a new type of inner perception' which means a shift to a higher type of inner activity. This new way of perceiving things opens up new possibilities for handling them. Hence, the chess player's moves are determined by what he sees on the board. When his perception of the game changes, his strategy will also change. School instruction encourages the development of this type of inner perception (1962, pp.91-2).



### 2.3.5 Summary of development , the learner and the L2 learner

This review of concept formation, according to Vygotsky, proposed a cognitive interpretation of L2 learning which is, in essence, developmental. It enabled us

- to distance ourselves from the L2 maturational debate by discussing the key role of instruction and the notion of the Zone of Proximal Development – an essentially mediated phenomenon through the use of tools, symbols or the behaviour of other human beings;
- to establish the notion that the individual's perception of the world provides direction for his or her understanding of the same world, both in a concrete and in a conceptual manner.

It follows that in an L2 learning experience, an individual's perception of the L2 through classroom experience is likely to influence his or her understanding of that experience perceptually and conceptually. Considering that two types of interpretation of the L3 experience emerged from participants' responses in this study, it is proposed that an explanation might be found in the differences between people's perceptions (see Section 5 of this chapter and Chapter 3). However, first, it proved necessary to establish whether perception has a role to play in an L2 learning experience. This was achieved by considering the L2 learning process as a developmental experience which includes the phenomenon of thinking in complexes and eventually, conceptual thinking. In this connection, we showed that L2 concept formation is achieved by considering the following:

- thinking in complexes is a type of thinking which is rooted in our daily experiences;
- this type of thinking is perceptual, activity-bound and is equally used by adults and children; hence, it is not constrained by chronological-maturational boundaries;
- conceptual thinking occurs in adolescence, when the L2 learner masters abstraction and combines complex-thinking at the same time; this enables the learner to apply the concept in multiple situations;
- perception plays a crucial role in concept formation. While perception and memory are absent in the type of relations which exist between concepts, there appears to be an inner form of perception in the learner which will determine the



application possibilities of the concept to reality. In other words, this suggests that perception has a dual role: one which assists the learner in the acquisition of meaning and the other which guides the learner in the application of meaning to real situations;

Finally, this review suggests that if L2 learning concepts are to be acquired in the course of one's development, then L2 learning depends on the stimulation of complex-thinking by exposing the learner to multiple approaches and experiences. Hence a developmental approach to L2 learning is likely to include the following (this list does not pretend to be exhaustive nor does it represent a hierarchy of learning phases since no fixed stages of development are associated with concept formation):

- L2 lexical approaches to encourage 'collection and associative types' of complex-thinking;
- story telling, songs, rhymes and prefabricated dialogues to stimulate 'chain complexes';
- autonomous learning opportunities for the creation of meaningful L2 productions as evidenced in the 'diffuse complex';
- authentic experiences for the establishment of the 'pseudo-concept';
- grammatical L2 features, Language Awareness and opportunities to apply this knowledge in the development of the potential concept;
- a communicative approach which underlies all of the above suggestions and which takes the socio-cultural aspect of L2 learning into account.

## 2.4 Entering experience: motivation and the L2 learner

We have established that experience is meaningfully defined in terms of an individual's consciousness. The latter includes apprehension, perception and memory which interact in an active and intentional manner; hence, in the phenomenological perspective, motivation underlies the phenomenon of consciousness. This implies that the individual or the learner and his or her environment become the focus of study. Recent developments within the L2 motivation literature suggest similar interpretations of motivation.



The initial model, constructed in a socio-educational perspective ( Gardner 1985), has gradually evolved toward a cognitive perspective derived from other areas of psychology ( Crookes and Schmidt 1989, Oxford and Shearin 1994, Dörnyei 1994, Tremblay and Gardner 1995, Ushioda 1996). Included in the cognitive perspective is the underlying role of an L2 experience, principally in terms of its causal relationship to motivation (Ushioda 1996).

The review which follows provides a summary of current thinking in relation to L2 motivation; it then progresses to a consideration of cognitive approaches in learning processes - L2 and other - (Skehan 1998, Ausubel, Novak and Hanesian, 1978) and concludes with the phenomenological perspective within which this study is embedded (Husserl 1928/1950, Schutz 1970).

#### **2.4.1 L2 motivation**

The theory of L2 motivation has, until recently, been based on Gardner's socio-educational model (1985). However, some L2 researchers have proposed that the model be expanded on the grounds that

‘the current theory might not cover all possible kinds of L2 learning motivation’ (Oxford and Shearin 1994, p.12).

Furthermore, the field of L2 motivation appears to contain an element of confusion in respect of the interpretation of some key elements of the theory. Oxford and Shearin (1994) identify four conditions which prevent adequate comprehension of L2 learners' motivation. These relate to:

- i. the meaning of L2 learning,
- ii. the context within which the L2 is learned,
- iii. the non inclusion of some key motivational theories,
- iv. teachers' lack of awareness of their learners' motives for learning a foreign language.

With regard to (i.), the parameters which define language learning goals in the socio-educational model seem to exclude a number of language learning motives and situations. As the model stood at the time of the review, it included two motivational orientations: an integrative orientation and an instrumental orientation. The integrative



orientation implies that the learner has an open and positive regard for other groups that speak the language. The instrumental orientation refers to pragmatic reasons for L2 learning such as one's career prospects (Gardner and Lambert 1972).

‘We see the major motivational goal - from the point of view of the learner - to be a general orientation or outlook toward the learning process which can take either an integrative or an instrumental form’ (1972, p.15).

Motives for L2 learning which are not included in this model are associated with the need to fulfil a language requirement or the varied developmental paths which an L2 learner may follow. Thus, Oxford and Shearin provide an example where the concept of interest appears to have influenced subsequent L2 learning decisions. Furthermore, the notions of integrativeness and instrumentality lead to confusion in that both concepts refer to orientations as well as motivation. While an orientation may exert some influence on motivation, it does not necessarily lead to motivated behaviour. In addition, the two notions are often contrasted in L2 motivational literature. In this respect, Gardner and Tremblay (1994) state that integrative and instrumental orientations often correlate positively; they express surprise that the socio-educational model should suggest such a different interpretation, particularly since ‘the central concept is motivation’ (and not the contrast between integrative and instrumental orientations and/or motivations), as well as the important dimension of integrative motivation (1994, p.361).

The context within which the L2 is learned is also a source of confusion. In a second language learning situation the L2 is an integral part of the learner's life; a typical example of this is in Québec. As a result, the L2 input manifests itself in multiple forms and presents numerous opportunities for interaction. In a foreign language environment, opportunities for varied exposure to and interaction with the L2 are limited to the language classroom. This situation, when compared with the second language learning situation, is bound to affect the nature and the level of motivation of the L2 learner. The third source of confusion in the field of L2 motivation (see iii.) concerns the theoretical basis of the socio-educational model. The model is grounded in the socio-psychological perspective and focuses on the learner's relationship with the target language group. The approach excludes other relevant factors - factors which may be



directly related to the L2 learner and to the L2 learning situation, and may not rest entirely on social relationships.

Finally, Oxford and Shearin suggest that L2 teachers often make assumptions about their learners' motivations. As a result, learners' real motivations which are described as 'individualistic and multifaceted' may never be taken into account.

The identification of the limitations of the socio-educational model leads Oxford and Shearin to review a number of motivational theories with the explicit purpose of articulating strategic implications for the language classroom. Similarly, Dörnyei's review (1994) is primarily concerned with the question of motivational strategies for the foreign language classroom:

'I believe that the question of how to motivate students is an area on which L2 motivation research has not placed sufficient emphasis in the past' (1994, p.274).

In response to these remarks and concerns, Gardner and Tremblay assert that the socio-educational model is not 'limited or limiting' (1994, p.359), because the model includes a behavioural component (motivational intensity), a cognitive component (desire) and an affective component (attitudes toward learning the language). Furthermore, they clearly state that while hypotheses and implications for the L2 classroom are welcome, they do not contribute to the construct validation of L2 motivation since no empirical evidence is provided (p.365, 1994). They argue that 'this step cannot be bypassed' (p.366). On foot of this discussion, Tremblay and Gardner (1995) have proposed an expanded model of L2 motivation. This model, as well as including measures of attitudes, motivation and indices of achievement in French courses, includes new measures such as persistence, attention, goal-specificity and causal attributions to each other (p.505). However, it should be noted that while the researchers' endeavours include the expansion of the model, they are primarily concerned with construct validation. They propose that in order to understand a concept – motivation -, it is necessary to elaborate a nomological network. Such a network includes mediators or links which explain the relationships between variables. As relationships emerge and as mediators are identified through reliable empirical testing, the construct progresses towards validation (p.506).



The expanded model includes variables which reflect motivational behaviour and which are perceptible by an external observer. These variables include effort, persistence and attention. Scales to measure persistence and attention were developed for the study, while effort is already measured in the AMTB (Attitudes/Motivation Test Battery). Motivational antecedents also feature and refer to ‘factors that cannot be readily perceived by an external observer’ but which are likely to influence cognitive and affective aspects of motivation. These antecedents are related to expectancy, self-efficacy, valence, causal attributions and goal-setting. The structural equation modelling approach is used and includes two parts :the measurement model and the structural model. The first part allows the identification of the relationships between latent variables, e.g. motivational behaviour, and their corresponding indicator variables, e.g., effort, persistence and attention. Each indicator is seen as influencing Motivational Behaviour according to their loadings which vary from -1 to 1. In other words, an indicator functions as a mediator in the nomological network referred to above. The structural model involves the identification of paths which determines whether the relationships which are manifest are significant. Hence, the structural equation modelling approach indicates how well the model fits with the data (1995, p.513). The results suggest that

‘specific goals, frequent references to these goals lead to increased levels of motivational behavior [increased intensity, persistence and attention]’ (p.515).

Goal salience appears to be influenced by Language Attitudes (positive attitudes foster the development of specific language learning goals). Valence emerges as the second mediator. In other words, when L2 learning is valued, higher levels of motivational behaviour are manifest. The third mediator which influences Motivational Behaviour is self-efficacy which, itself, is influenced by Language Attitudes. Finally, even in the case of a second language learning situation, Achievement is significantly influenced by Motivational Behaviour and this, in spite of the influential role of Language Dominance.

The researchers acknowledge that the structural equation modelling analysis is, in itself, insufficient to confirm the model. It simply establishes whether the model fits the data or not. They also recognise that the direction of the paths indicating causation is specified a priori by the researchers, and may, therefore, hide other path directions.



They advocate larger samples to ensure stability of the reported relationships. In addition, Tremblay and Gardner state that the model in its expanded version provides a sound basis for the generation of strategies for the L2 classroom, with particular reference to goal-setting, valence and self-efficacy.

This study represents a significant expansion of the L2 motivational model. The researchers recommend further research in the characteristics of the L2 learning environment as a possible source of influence on motivation: this would include a focus on goal-setting, valence, self-efficacy and causal attributions (1995, p.516). The model also provides initial empirical support for the motivational recommendations made by Oxford and Shearin as well as Dörnyei. These recommendations are now reviewed with the purpose of highlighting the research directions adopted by these L2 researchers. Here, the focus is on the L2 learner and the L2 learning situation. Multiple theories serve as the backdrop for the generation of strategies for the foreign language classroom. These theories also contribute to the elaboration of a new L2 motivational model (Dörnyei 1994).

First, Oxford and Shearin advocate the inclusion of sources derived from general, industrial, educational and cognitive developmental psychology. This, in turn, serves to guide the systematic inclusion of implications for the L2 learning situation.

References are made to need theories which include hierarchies of need - from biological needs one progresses to psychological needs - and need for achievement is associated with one's past successes or failures; in the L2 classroom, this means taking L2 learners' emotional and psychological insecurities into account, considering the orientations of the students - internally and externally-directed learners - and providing work that leads to success.

Instrumentality theories which include Atkinson's expectancy-value theory, VIE (valence, instrumentality, expectancy) and goal-setting theory; the factor of valence relates to the probability of success or failure, instrumentality focuses on additional positive outcomes as a result of the decision to engage in a particular activity and expectancy is based on Atkinson's theory. Goal-setting theory takes an individual's accepted goals into account on the basis that these goals will influence performance, attention, action, persistence and strategy use. These translate into the L2 context as L2 learners expectancy of success or failure, meaningful and valuable outcomes; goals should be specific, hard but achievable, accepted by students and accompanied by feed-back.



Equity theories suggest that the L2 learners need to believe that the learning benefits outweigh the effort produced. Hence, the teacher should be aware of students' needs and provide specific communicative activities, e.g., ordering a meal in a restaurant, asking for directions, etc., if the need is related to survival skills in the target community.

Reinforcement theories are based on stimulus, response and reward; the L2 teachers may use such strategies to provide learners with extrinsic rewards, as well as making them aware of the value of intrinsic rewards.

Social cognition theories include self-efficacy and attribution. Self-efficacy focuses on one's ability, creativity, adaptability and capacity to perform under particular conditions. This approach leads individuals to be more persistent and to produce greater efforts. Attribution theory suggests that greater satisfaction is achieved when success is self-attributed rather than related to external factors. In L2 learning, this means giving learners a sense of control by linking the outcome to the performance, encouraging effectiveness by suggesting or making learners aware of strategies, establishing a system of fair rewards, and providing opportunities for self-evaluation and satisfaction. The mastery model suggests that students should master clear criteria rather than compare their performance with the performance of others. This approach fosters risk-taking, involvement and participation; hence, the L2 environment should be non-threatening and positive at all times.

Cognitive developmental theories include Piaget's sensorimotor, preoperational, concrete operational and formal operational stages which are all dependent on stimulating environments, and which L2 classrooms are likely to provide.

Vygotsky's Zone of Proximal Development is also considered because it includes a focus on learning goals based on learners' interests and needs as well as mediation provided by the L2 teacher.

Furthermore, specific references are made to the L2 learner, and to Crookes's and Schmidt's focus on internal attitudinal factors. These factors include interest based on L2 attitudes, experience and background knowledge; internal attitudes are also dependent on the relevance of L2 learning efforts to achievement of needs and expectancy of success or failure, as well as extrinsic rewards.

In addition, Crookes and Schmidt refer to external behavioural characteristics which include the decision of the learner to engage actively in L2 learning, and his or her persistence and sustained high activity level (Crookes and Schmidt 1989).



Dörnyei (1994) also mentions additional theoretical components of L2 motivation such as intrinsic and extrinsic motivation, cognitive theories of motivation and motives related to the learning situation, which include course-specific, teacher-specific and group-specific components. His review leads to the elaboration of a new motivational construct which comprises three levels: the language level, the learner level and the learning situation level.

At the language level, the components are:

- Integrative Motivational Subsystem,
- Instrumental Motivational Subsystem.

At the learner level, we find:

- Need for achievement,
- Self-confidence which includes Language Use Anxiety, Perceived L2 competence, Causal attributions and Self-efficacy.

At the learning situation level, the following aspects are included:

- Course-specific Motivational Components which comprise Interest, Relevance, Expectancy, Satisfaction,
- Teacher-Specific motivational components such as Affiliative Drive, Authority Type, Direct Socialization of Motivation (Modelling, Task Presentation and Feedback),
- Group-specific Motivational Components represented by Goal-Orientedness, Norm and Reward System, Group Cohesion, Classroom Goal Structure. (1994, p.280).

It should be noted that the language level, in this framework, represents the narrowest domain and includes Gardner's socio-educational model while the largest domain is at the learning situation level. This last observation suggests that the learning situation is likely to provide a fertile ground for opportunities towards the development of individuals' motivated behaviour (the learner level). This concurs with the concluding remarks made by Tremblay and Gardner in the 1995 study (see above); this view is also prevalent in Oxford and Shearin whose summary of motivational implications for the L2 teacher, corresponds, in fact, to a series of classroom-based recommendations: teachers should include activities that are valuable parts of L2 learning from the student's point of view; teachers should set challenging goals and sub-goals and accept varied student goals and take differences in learning styles into account; instructional



content should vary, as should pacing, grouping and materials; native speakers, and former students should be invited into the classroom; 'the classroom should be a welcoming and positive place where psychological needs are met and language anxiety is kept to the minimum' (1994, p.p.24-5). Similarly, Dörnyei's on-going research appears to be concerned with 'Group Dynamics' or 'Classroom Dynamics' (Dörnyei and Malderez 1997). Finally, Dörnyei's motivational construct is contextualised around a series of thirty strategies for the benefit of the L2 teacher. These strategies are similar to those outlined by Oxford and Shearin (1994); however, emphasis is placed on the fact that

'the... strategies are not rock-solid golden rules, but rather suggestions that may work with one teacher or group better than another, and that might work today but not tomorrow as they lose their novelty' (p.280).

Additional views are found in the field of learner autonomy. Learner motivation, in this context, derives its theoretical framework from educational psychology and proposes a cognitive view of motivation (Ushioda 1996, pp.12-28). However, in contrast with other curricular subjects, Ushioda points out that L2 learning includes the component of language use or 'speaking'. Language use may influence learners' interpretation of success, not simply in academic terms but also in communicative terms. In other words, perceived success in L2 learning may be related to communicative success inside or outside the classroom (1996, pp.29-35). According to Ushioda, perceived success is rooted in the learner's past experience and based on the motivational concept of attributional theory. Another proposed perspective includes the engagement of intrinsic motivational processes which are described as

'the intrinsic urge to explore and master the world of one's surroundings' (1996, p.41).

In this respect, Dörnyei suggests that

'co-operative goal structure is more likely to foster intrinsic motivation when compared to competitive or individual learning' (1994, p.249).



However, this urge may decrease as learning becomes more abstract and removed from reality. This consideration leads Ushioda to state that

‘intrinsically motivated learning is not simply learning for the sake of learning but learning that is clearly embedded in living’ (1996, p.42).

A study conducted by Noels, Clément and Pelletier (1999) investigated L2 motivation within the framework of self-determination theory (Deci and Ryan, 1985). The authors propose that the distinction between intrinsic and extrinsic motivation is useful because it can be integrated in the self-determination framework under which many other reasons for L2 learning may also be included. Intrinsic motivation is defined as:

‘the motivation to perform an activity because the student has chosen to do so; the activity represents a challenge to their existing competencies and requires them to use their creativity. This kind of motivation is highly self-determined’ (1999, p.24).

Extrinsic motivation has been empirically divided into three categories for the purpose of measuring the degree of self-determination. The categories include external, introjected and identified regulation. Tangible reward or punishment defines the level of external regulation; internalised behaviours such as guilt (e.g. over not finishing homework) and self-aggrandisement (impressing peers with one’s performance) are considered to reflect introjected regulation; finally, the perception that an activity is personally worthwhile determines the student’s degree of identified regulation. Deci and Ryan (1985) also refer to the concept of amotivation which is experienced by learners who do not see a relation between their actions and the associated consequences; the feeling is one of helplessness and lack of control leading the individual to give up the activity in question (Noels et al 1999, p.25). The researchers propose that the distinction between intrinsic and extrinsic motivation may usefully determine the predictability of learning outcomes such as intensity of motivation, anxiety levels in the L2 classroom and competence in the L2. Furthermore, the self-determination framework also includes factors in the social environment, such as the teacher’s communicative style, which may also be seen as a key influence in establishing the learner’s level of motivational intensity.



The study included 78 Anglophone participants aged between 18 and 36 years and attending a 6-week summer French immersion programme sponsored by the Canadian government. The students were distributed across seven classes taught by seven teachers. The length of time spent learning French varied from a few weeks to 19 years. The instrument used was a questionnaire divided into three sections. Section 1 was designed to measure amotivation and both intrinsic and extrinsic motivation. Section 2 represented a measurement of educational variables such as classroom anxiety, motivational intensity, intention to continue L2 study, self-evaluation, L2 course achievement and perceived control. Section 3 measured perceptions of the teacher. The results indicated that greater amotivation appeared to be related to greater levels of anxiety in the L2 classroom, lower motivational intensity and less intention to continue studying. Self evaluation of language competence showed a relationship between amotivation and lower competence. In contrast, intrinsically motivated learners displayed higher levels of competence. In addition, greater intrinsic motivation was positively associated with an informative teaching style and negatively associated with perceptions of the teacher as controlling. The latter style also led to higher levels of anxiety in the classroom, lower motivational intensity and less desire to continue the study of the L2. The converse was true when the teacher was perceived as providing relevant feedback: students reported greater motivational intensity and intention to continue the study of the L2. In the case of externally motivated students, the researchers found that the teacher's style did not appear to be as relevant. However, this finding does not rule out the possibility that a teacher's style, through the promotion of autonomy and constructive feedback, may change the student's type of motivation (1999, pp. 28 – 30). Finally, the researchers observed the following:

‘... learning a language for material rewards or because of some pressure is not supportive of sustained effort or eventual competence. In contrast, the more students feel that they personally have chosen to learn the language, the more they are learning it because they enjoy the learning process, the more effort they make and the more they intend to pursue their study’ (1999, p.30).

Finally, a key element in Ushioda's motivational framework (1996) proposes views from the goal-setting theory which encompasses past experience and its influence on shaping future goals, as well as the value assigned by learners to the task at hand (p.18).



Interestingly, this aspect of motivational theory appears to be particularly sensitive to learning style and/or ability (Oxford and Shearin 1994, p.19). This finding implies that an L2 motivational framework may be directly influenced by learners' preferences and behaviour.

#### 2.4.1.1 Summary of L2 motivation

This review has established that L2 motivation derived from a socio-educational framework proved to be incomplete as an explanatory model of the L2 learner's motivation. In fact, the model, before its recent expanded version, appeared to apply to only one of the three L2 motivational levels identified by Dörnyei (1994), namely the Language Level. This framework did not include sufficient focus on the L2 Learner and on the Learning Situation. Hence, the latter concerns led researchers to consider other motivational theories derived from psychology in general and educational psychology in particular. Tremblay and Gardner (1995) proposed the Structural Equation Modelling Analysis as a means of integrating new mediators in the L2 Motivation Construct. The results show that Goal-Setting, Valence, Self-Efficacy are influential on Motivational Behavior; Achievement emerges as dependent on Motivational Behavior. The two researchers emphasised the importance of construct validation for a theory of L2 motivation (1994, 1995). With regard to Oxford and Shearin (1994), Dörnyei (1994), Ushioda (1996) and Noels, Clément and Pelletier (1999), the enrichment of an understanding of L2 motivation is derived from reviews of motivational theories which enabled the articulation of a set of contextualised strategies, that is, motivational strategies for the L2 classroom (Oxford and Shearin 1994, Dörnyei 1994, Noels et al 1999), and the autonomous learner (Ushioda 1996).

Finally, all reviews appear to concur on the potential importance of the learning situation itself and its likely influence on the learner's motivation.

#### 2.4.1.2 Additional remarks

While the multiplicity of views, theories and models are welcome in the domain of L2 motivation, one cannot help but notice that the research aims of the aforementioned researchers are, in essence, different: Gardner's primary concern is with the development of a theoretical construct which, through empirical evidence, gradually fulfils the goals of replicability and ultimately validation. This, Gardner believes, has been achieved in the context of second language learning (as opposed to foreign



language learning) and in the bilingual school setting (1995). Hence, on this view, the value of the construct rests entirely on the notions of replicability of findings and validation. For Oxford and Shearin, Dörnyei and Ushioda, the value of a motivational construct rests principally on its relevance to the learning situation and the learner. In this case, the research orientation becomes highly contextualised and dependent on so many unpredictable factors that the goals of replicability and construct validation become difficult to achieve.

Weiner proposes eight principles for the construction of a general theory of motivation (1992). They are summarised as follows:

- i. A theory of motivation must be built on reliable (replicable) empirical relations.
- ii. A theory of motivation must be based on general laws rather than individual differences.
- iii. A theory of motivation must include the self (the self lies at the very core of human experience).
- iv. A theory of motivation must include the full range of cognitive processes (mental processes which include information search, retrieval, short and long term memory, categorisation, judgment and decision-making).
- v. A theory of motivation must include the full range of emotions.
- vi. A theory of motivation must include sequential (historical) causal relations (does thought produce both feelings and behaviours? Does thought antedate feelings which give rise to action? Does thought generate feelings and thought and feelings generate behaviour?).
- vii. A theory of motivation must be able to account for achievement striving and affiliative goals, as social acceptance is the most prevalent of human concerns.
- viii. A theory of motivation must consider some additional common sense concepts: expressions which have motivational significance such as 'value', 'interest' and 'importance'.

Weiner proposes the following explanation with regard to principle (viii):



‘how is this [*motivational significance in common sense concepts*] translated into the scientific language of motivation? For Atkinson, ‘value’ is entirely linked with probability of success and does not make contact with our common sense notion of value. Another common sense term is ‘interest’ which must have motivational significance. Another word is ‘importance’. Is importance merely another word, a synonym for motivation or will it also require incorporation into the systematic study of motivation along with value, interest, desire, want and a host of other phrases that permeate everyday language and connect with motivational issues’ (1992, pp.361-64).

Hence, the dilemma experienced in the aims of L2 motivational research is revealed in the tension between Principles (i) and (ii), and Principle (viii). We recall the concern expressed by Gardner and Tremblay in respect of the necessity to generate reliable empirical findings based on general laws of L2 motivation, in order to ‘capture the essence of the motivation construct’ (Gardner and Tremblay 1994, p.266). This is contrasted with the systematic articulation of L2 classroom strategies based on notions of *interest* (see Dörnyei’s Learning Situation Level, or Oxford and Shearin’s reference to interest as a motivational factor for L2 learning), on the nature of the *value* assigned to goals which appears to be influenced by learner style and/or ability, as well as past experience inside and outside the classroom (Ushioda 1996, Oxford and Shearin 1994). These strategies were described by Dörnyei as essentially unstable in their dependence on the teacher, the group or their novelty; yet, they were proposed for their motivational significance in the language classroom. Husserl states that simple and everyday concepts which lend themselves to detailed scientific description are not necessarily ‘exact’; these concepts are inexact *in essence* and not because of chance. It is for this reason, that these simple and everyday concepts are non-mathematical (1928/1950, p.236).

#### **2.4.2 Motivation and cognitive approaches**

The previous review of L2 motivation suggests that goal-setting theory is a key component within the L2 motivational construct (Tremblay and Gardner 1995, Oxford and Shearin 1994, Dörnyei 1994, Ushioda 1996). Goal-setting represents a cognitive approach to L2 learning in that it involves patterns of thinking which relate to the



subjective value individuals assign to a task; goal-setting also means defining short and long-term goals and the belief that past performance is likely to shape future motivation to achieve particular goals (Ushioda 1996, p.18). Within this perspective, Skehan advocates a direct cognitive approach to L2 learning by means of a task-based approach (1998). The purpose of this review is to identify specific cognitive components which are manifest in the task-based approach and to relate these to a cognitive motivational framework.

Skehan (1998) identifies three stages in information processing which are transferred to the task-based approach: the input stage, the central processing stage and the output stage. Each stage draws on specific cognitive aspects. For example, the input stage depends on the creation of conditions which induce *noticing*. For Skehan, the act of noticing is crucial at that particular point. At the central processing stage, *attention* becomes the next key factor, and Skehan emphasises the importance of this cognitive element by suggesting a range of attention manipulation devices to facilitate performance. These include awareness of time pressure, modality (oral or written performance), support which eases attention management (such as visuals or dictionaries), surprise (task-modifying elements), control on the learner's part, stakes (implying the prioritisation of goals which may prove to be different from the completion of the task itself). The output stage also requires the component of attention, particularly if the aim is public performance or tests. These aims also contribute to heighten attention in the previous cognitive stage. Skehan suggests that attentional resources appear to play an important role in fluency, competency and accuracy as all three elements compete during on-going communication (Skehan 1998, pp. 61-73, pp.142-145). In the L2 classroom, the task-based approach specifically involves:

- i. choosing a range of target structures,
- ii. choosing tasks which meet the utility criterion,
- iii. sequencing tasks to achieve balanced goal development,
- iv. maximising chances of use of a focus on form through attentional manipulation,
- v. using cycles of accountability (p.288).

This approach emphasises the importance of cognitive aspects of learning with particular reference to the act of noticing and to attention. Similarly, Ausubel, Novack and Hanesian (1978) suggest that



‘in some circumstances... the most appropriate way of arousing motivation to learn is to focus on the cognitive rather than on motivational aspects of learning and to rely on motivation that is developed from successful educational achievement to energize further learning’ (p.401).

This view is adopted on the basis that:

- i. motivation is not necessary for learning to occur because a good deal of learning occurs without any explicit intention to learn,
- ii. the causal relationship between motivation and learning is typically reciprocal rather than unidirectional,
- iii. frequently the best way to teach unmotivated students is to ignore their motivational state for the time being, and to concentrate on teaching them as effectively as possible (pp.400-401).

Hence, if we are to focus on learners’ cognitive drive, by means of provoking and sustaining phenomena such as *noticing* and *attention*, the process of L2 learning is likely to depend on the preliminary aspects of learning, that is, the preliminary interpretation of the input in its sensory form –visual or aural.

In relation to a learner’s L1 and to the first listening to a proposition, Ausubel et al. argue that perception precedes cognition and that

‘ it is the immediate content of awareness that follows from preliminary interpretation of the sensory input’ (1978, p.62).

They suggest that the immediate content of awareness occurs between the primitive sensation stage and the actual emergence of meaning in a proposition. The awareness is of a potential meaning which is then incorporated within a cognitive existing structure. This accommodation presupposes knowledge of vocabulary and at least a grasp of syntax. On a second listening to the proposition, the meaning is not potential because it does not rely on perception anymore: it is immediately conveyed and it is actual. In the case of an already meaningful proposition (the learner’s L1), the product is derived from perception rather than from learning (1978, pp.62-3). It follows that in the case of an L2 learner with little vocabulary and syntax knowledge, the product is more likely to be derived from ‘learning’ as well as sensory input. Hence, the process is primarily cognitive. The challenge resides in the promotion of opportunities which can facilitate



‘the immediate content of awareness’ to manifest itself after the initial interpretation of the sensory input. Ausubel et al. refer to the mediating effect of the L1 when learning an L2. The mediation includes noting similarities and differences; the value of multiple sensory forms of input is stressed, one form of input ‘propping’ the other in the acquisition of meaning. More specifically, prior familiarisation with the stimulus is recommended, as well as simultaneous exposure to the written and oral forms of the material. Reading is also identified as a means of obtaining cues and grasping syntactic structures while listening skills are being developed (1978, p.80).

A phenomenologist recognises ‘the immediate content of awareness’ as the path which perceptually leads the learner from sensory input to meaning. This path is marked out with sensory cues and referential cues which pertain to the learner’s cognitive existing structure. This, in effect, represents the active role which perception, intuition and attention play in any learning experience (see La Garanderie 1995).

#### 2.4.2.1 Summary of motivation and cognitive approaches

Our review has relied on the work of Skehan (1998) and Ausubel, Novak and Hanesian (1978) which suggests that considerable motivational gains are derived from a cognitive approach to L2 learning (see review of L2 motivation above). This implies that if learners are presented with tasks which promote ‘noticing’ and ‘attention’ as well as goal-setting, there is an increased possibility of generating motivation. Ausubel et al. suggest that the cognitive approach to learning is perhaps the most effective way of dealing with unmotivated learners. The approach relies on sensory input – aural and/or visual - and the manner in which this type of input may be interpreted cognitively to serve as cues for subsequent meaning acquisition. The learner’s acquired knowledge of his/her L1 enables perception to precede learning, thus providing relief to the central processing stage. However, in an L2, the central processing stage is likely to be beset with more demands; therefore, it is proposed that the learner’s L1 may have a mediating role and that simultaneous sensory cues – aural and visual - may also assist in activating the learner’s ‘immediate content of awareness’ (sensory and cognitive existing cues). This approach to L2 learning was associated with La Garanderie’s treatment of intuition in a learning experience.



### 2.4.3 Motivation and phenomenology

In Husserlian terms, motivation is the act of entering experiences. This act is never an empty logical possibility because it finds its motivation in the chain of events generated by experience. The links of the chain are represented by a series of new motivations which are barely constituted and immediately refashioned in the individual's mind. The motivations vary according to their status: a status of apprehension or a status of determination; they also vary in richness and precision because the phenomena may be previously known or unknown or as yet undiscovered (1928/1959 p.157). The phenomena pre-exist in our world, ready to be perceived by us when we become aware and conscious of them. In other words, these experiences, as yet 'unlived', form the background to our on-going experiences (p.146).

How is this understanding of motivation translated into our everyday lives? Let us take the example of the school setting, which represents a chain of learning experiences into which children enter by integrating new and barely constituted motivations, constantly refashioned. The classroom, the language class, the school yard are all settings where children's apprehension and determination are likely to interact in varying degrees of richness and precision. Subjects such as maths, French, physical education or Irish are all integrated in the child's apprehension of the stimuli which these subjects constitute. In phenomenological terms, it is apprehension which 'animates the object' about to be experienced. Also integrated is the determination to interact with the curricular subjects as well as with peers and teachers. All of these factors are likely to influence *noticing* and *attention*. Connections made with learning materials vary according to the individual's existing knowledge. In the case of ab initio L2 learners, a number of pre-conceived goals, cultural or historical but unexperienced as yet, may form some of the learners' determination: *I would like to learn French in order to travel*, and the chain of experiences within the language class may also determine or be determined by the learner's motivation and apprehension of the material: *it's fun, it's easy or it's boring, it's difficult*. The process is reciprocal, as suggested by Ausubel et al. (1978). Hence, assigning meaning to and deriving meaningfulness from an experience is a cognitive and intentional process; the world is a 'lived world' which includes 'lived' space, 'lived' body, 'lived' time and 'lived' others and in which consciousness is the provider of meaning; consciousness also includes the notion of memory, or the propriety which lived experience has of retaining the past (1928/1950, p.248). As a result, the cognitive



process which *is* consciousness integrates both motivation and memory as underlying factors. Schutz (1970) argues that the role of memory (or the past) in motivation and motives is manifest in the language we use. The sociologist proposes that, in essence, there are two kinds of motives which determine experience: the 'in order to' motive and the 'because' motive.

'From the point of view of the actor, this class of motives [the 'in order to' motives] refers to his future... and the 'because' motive refers to his past experiences' (1970, pp.126-7).

Language use, however, does not provide such clear distinctions and often combines both classes of motives in one expression, namely, 'because'. Hence, we may encounter the following sentence: 'the murderer killed his victim because he wanted to obtain his money'. In this example, 'because' integrates 'in order to' relations. Schutz's analysis of this ambiguity incorporates two dimensions; a temporal dimension –past/future and another dimension which relates to the individual's interpretation of the world.

With regard to the temporal dimension of motivation and motives, Schutz proposes that:

- i. for the 'in order to' motive, meaning means what [the individual] has actually in view as bestowing meaning upon his on-going actions [in order to] attain a pre-conceived goal;
- ii. for the 'because' motive, the individual investigates by what circumstances he has been determined to do what he did; this is essentially derived from retrospection;
- iii. however, the retrospective glance also enables the individual to project the meaning of his past experience into his on-going and future actions; this state of affairs determines the meaningfulness of the past experience, it assists future intentions and informs future experiences (1970, pp.127-8).

Hence, Schutz states that the genuine 'because' motive refers to past or future perfect experiences.

'It reveals itself by its temporal structure only to the retrospective glance... and it is the mirror-effect of temporal projection which explains why on one hand a linguistic 'because' form may and is frequently used for expressing genuine 'in



order to' relations, and why on the other hand, it is impossible to express genuine 'because' relations by an 'in order to' sentence.' (1970, p.128).

The second dimension of this analysis of motivation focuses on the individual's interpretation of the world. On this view, motivation may have an objective and a subjective status. In the first instance, when the individual's intention is turned to the future in order to attain pre-conceived goals, his motives have a subjective meaning, since they reflect 'the actor's intention to bring about a state of affairs' (1970, p.127). In the second instance, when the individual attempts to understand the circumstances of his past experiences, the status of the 'because' motives is objective as 'the actor becomes an observer of himself' (1970, p.128).

This phenomenological analysis of motivation, as an underlying factor of consciousness, is applied to the present study and serves to interpret the status of our participants' apprehension of the L3 and determination to learn French at primary level. These reasons and/or motives are divided into three categories and reveal the types of motives which are active in this experience. The categories are:

- Pre-conceived goals or 'in order to' motives. This class of motives is future oriented and comprises socio-cultural evidence which is not likely to have been experienced yet. It reveals the learners intention 'to bring about a state of affairs or to attain pre-conceived goals'. Typically, these may relate to the intention of learning a foreign language in order 'to talk', 'to travel' or 'to gain an advantage at second level'.
- Circumstances at primary level or 'because' motives. This class of motives emerges from participants' retrospective observations of the circumstances which best describe the L3 experience at primary level. Remarks such as 'fun', 'boring', 'interesting' are included in this category.
- Meaningfulness of the experience or 'because/in order to' motives. This class of motives reflects how past experiences at primary level have assisted the learners in their on-going experience at second level at the time of the study, and how these experiences may also influence future experiences. Responses in this category include *French at primary level helped me with the pronunciation, I gained confidence* or *I thought I knew too much and never worked at it.*



#### 2.4.3.1 Summary of motivation and phenomenology

In phenomenology, motivation underlies consciousness. It enables the individual to enter experience. The process is cognitive, intentional and integrates memory.

Motivation may have the status of apprehension or determination and is part of a chain of events generated by experience. Motivation is in a constant state of redefinition, modification and bears various degrees of precision and richness depending on the individual's previous knowledge of the experience at hand. Motivation is also temporal and includes the past and the future; in a mirror-effect, the past may also inform future intentions. Because our consciousness is of the 'lived' world, motivation, as well as being a cognitive process, is a socio-cultural and historical phenomenon. This may be observed through the effects of memory and our informed interactions with 'lived' space, 'lived' body, 'lived' time and 'lived' others. Finally, motivation is never an empty logical possibility.

#### **2.4.4 Conclusion on entering experience: motivation and the L2 learner**

A review of L2 motivation has shown that the socio-educational model does not translate in a straightforward fashion into the L2 classroom. This has led researchers to consider numerous motivational theories (Oxford and Shearin 1994, Dörnyei 1994, Ushioda 1996, Noels et al 1999) and to the elaboration of an expanded L2 motivational construct (Gardner and Tremblay 1994, Tremblay and Gardner 1995); in addition, a new model has emerged which includes three motivational levels: the language level, the learner level and the learning situation level (Dörnyei 1994). However, Weiner's principles for a theory of motivation (1992) have revealed the inherent difficulties of the domain by outlining the tension which exists between, on the one hand, construct validation based on general laws and on the other hand, common sense motivational concepts. This tension surfaces in the L2 motivational literature as different priorities emerge, with one set of thinking aspiring to construct validation based on reliable empirical evidence and articulated around motivational general laws (Gardner and Tremblay 1994), and the other set aspiring to the definition of relevant motivational strategies for the language classroom which are, in essence, unstable (Dörnyei 1994). This review has also shown the growing interest in the L2 learning situation as well as



cognitive approaches to L2 motivation with references to the relations between motivation and experience (Ushioda 1996).

Motivational suggestions emanating from cognitive approaches to L2 learning and educational psychology were proposed on the basis that motivation is not a pre-requisite for learning to occur. The review provided an opportunity to identify some cognitive components which may have a role to play in L2 motivation. Skehan's information processing model and its application to the task-based approach enabled the identification of two components, namely, 'noticing' and 'attention' (1998). Ausubel, Novak and Hanusian (1978) outlined the importance of sensory stimuli in the initial stages of learning and connections were made with Skehan's act of noticing. In addition, Ausubel et al. suggested that simultaneous sensory L2 cues – aural and visual - may increase the role of perception and reduce the focus on 'learning' at the input stage, thus facilitating central processing. It is proposed that these measures may also promote attention in the L2 learner.

Finally, the phenomenological perspective within which this study is embedded refers to motivation as an integral part of a chain of experiences and as an underlying factor of consciousness (Husserl 1928/1950). Phenomenology provides a cognitive view as well as a socio-cultural approach to motivation and acknowledges the determining role of memory. In this way, the perspective may be seen as encompassing the cognitive views mentioned above. In respect of the cognitive aspects of motivation, apprehension and determination were identified as two modalities of motivation ; however, motivation undergoes constant changes and alterations with various degrees of intensity according to the individual's knowledge of the experience at hand. This phenomenon may be related to the acknowledged unstable nature of new and varied motivational strategies (Dörnyei 1994). In a socio-cultural context, references were made to Schutz's analysis of motivation and motives which includes a temporal perspective – past, future, past/future - thereby applying particular prominence to the act of retrospection. This study examines three types of motives which emerge from participants' retrospection and includes the categories of pre-conceived goals, circumstances at primary level and meaningfulness of the experience. Finally, while Ushioda (1996) mentions that 'intrinsically motivated learning is ... clearly embedded in living' (p.42), it is here proposed that all types of motivation are possibly embedded in living, as 'motivation is never an empty logical possibility' (Husserl 1928/1950, p.157).



## 2.5 ‘Experiencing’ learning and L2 learning

We recall that consciousness provides the meaning of experience (Husserl 1928/1955) and that an individual’s consciousness comprises the three components of **apprehension, perception and memory**. Furthermore, L2 learning as an experiential-developmental process acknowledges the role of perception and memory in concept formation (Vygotsky 1962); therefore, an understanding of the phenomenon of ‘experiencing’ must entail the consideration of the three components of consciousness. In respect of the second component of an individual’s consciousness, we suggest that the act of perceiving is an interpretative operation: we perceive something in a positive or negative light because we have interpreted the phenomenon in a meaningful manner. However, for perception or the interpretation of a phenomenon to happen, another factor needs to intervene: we propose that **intuition** fulfils this mediating role. Hence, as this section deals with the phenomenon of experience in learning, and more specifically with the manner in which meaning is interpreted, we will examine the role of intuition, as well as the components of apprehension and memory.

The arguments presented heretofore have highlighted the following dimensions:

- i. L2 learning may be seen as an experiential- developmental process through the formation of concepts (Vygotsky 1962);
- ii. the formation of concepts is mediated by combining everyday experience and instruction;
- iii. thinking in complexes enables the formation of concepts;
- iv. thinking in complexes rests on the ability to form multiple types of associations by identifying similar and contrastive traits between objects and by noticing the functional relationships between objects;
- v. perception and memory play a crucial role in the development of these psychic functions;
- vi. in the course of development a new type of perception emerges: it is described as inner perception and appears to influence strategy choice;
- vii. in a phenomenological perspective, motivation to enter an experience depends on apprehension and determination;



- viii. L2 motivation, as a construct, has expanded and includes a significant focus on the learner and the learning situation;
- ix. when L2 learning is presented as a cognitive process, the key factors which determine the entry into the learning experience are ‘noticing’ and ‘attention’ (Skehan 1998); these factors are initially triggered by responding to sensory input.

We suggest that the phenomena of ‘noticing’ and ‘attention’, when translated into a phenomenological framework are akin to those of ‘apprehension’ and ‘intuition’. What follows is a phenomenological analysis of the nature of an individual’s apprehension and intuition; this analysis will highlight the part played by the two phenomena of apprehension and intuition as the individual experiences learning and as he/she interprets the meaning of the learning experience.

The ensuing argument suggests that, in the initial stages of learning (L2 learning included), we gain experience and knowledge of the world by relying on sensory input; this determines our apprehension of the object; this initial phase serves as a trigger for the activation of intuition. Since, in phenomenological terms, the learner is viewed as an individual on a quest for meaning (La Garanderie 1995), we propose that while intuition provides the learner with a particular orientation in his/her learning, thereby defining his/her learning style in *synthetic* or *analytic* terms, it also provides the material within which the learner’s orientation will thrive –*time* or *space*. In simpler terms, intuition is seen as possessing a dual function:

- i. it acts as a sign-post and directs the learner towards a particular path which leads to meaning acquisition;
- ii. it provides the learners with the material which enables meaning acquisition.

One can use, in this context, the metaphor of the path which directs the traveller and whose surface quality along with the nature of the terrain determine the success of the traveller’s progress.

It should be stressed, however, that the philosophical notions of time and space are not considered separately; their meanings cannot be considered as separate and independent entities in phenomenology, because this philosophy’s concern is about the ‘lived world’. Therefore, the learning styles which emerge from the two dimensions cannot be considered as being mutually exclusive. However, having adopted the view that L2 learning is a cognitive and developmental process, our task is to extract and expose the



traits associated with learners' orientations when confronted with a learning task. The purpose is to show that

- L2 learning is a particularly rich subject which can accommodate two learning orientations –synthetic and analytic;
- L2 learning can also provide two types of intuitive material for the learner to rely on –time and space.

References to L2 aptitude and L2 learning styles will be made and will serve to highlight possible links which may exist between L2 aptitude, L2 learning style and L2 gender-related differences. This approach is justified by the fact that we view L2 learning as a cognitive and developmental process. Therefore, some understanding of the mental representations and processes that enable meaning acquisition is necessary. In this regard, Skehan (1998), in reference to the use of Aptitude tests proposes

‘Aptitude tests have a rationale in relation to language learning processes and then an even wider justification through general psychological processes’ (Skehan 1998, p.205).

### **2.5.1 Apprehension**

Husserl (1928/1955) defines apprehension as that which ‘animates the object’. Skehan (1998) suggests that

‘ For L2 input, the concept of noticing is central since it then leads to the examination of the different influences upon noticing itself, which are categorised as based on input qualities [sensory factors] and input focusing [attention/intuition], as well as internal factors [central processing] and task demands’ (p.61).

For Ausubel et al. (1978), the preliminary interpretation of sensory input determines the preliminary aspects of learning (p.62, see also 2.4.2 Motivation and Cognitive Approaches). Hence, presuming that one exhibits varying degrees of sensitivity to sensory stimuli, it is safe to assume that the manner in which the L2 material is presented to the learner is likely to impact on his/her intention and ability to remain



focused on the L2 task. The field of L2 aptitude, as well as findings in gender-related differences in cognitive abilities serve to throw some light on the matter. In the first domain, Skehan (1998) suggests that the first of three factors in L2 aptitude is phonemic coding ability. This ability is regarded as particularly important at the ‘beginning levels’ of language learning and crucial in determining whether the required processing activity involved at that stage is worth the effort (1998, p.203):

‘it is about converting acoustic input into what might be termed as processable input’ (1998, p.203);

consequently,

‘failure in this area may mean virtually no input to deal with, and in informal situations, the end of exposure to language learning opportunities’ (1998, p.203).

Additional evidence is provided by Sparks, Ganschow et al. (1992, 1993), who propose the Linguistic Coding Deficit Hypothesis (LCDH) as an explanation for some learners L2 learning difficulties at the initial stages of the process. LCDH includes L1-related difficulties and problems with the use of the phonological code. Service and Craig (1993) argue that the perception, creation and retention of phonological representations in working memory is critical for long term L2 learning to occur (p.609). In gender-related differences in cognitive abilities, there is evidence to suggest male and female variability in terms of perception of sensory input. In hearing, females appear to show greater sensitivity to pure tones (tones of one frequency); hearing ability decreases at a later age in females than in males (Baker 1987). On the other hand, males under the age of 40 appear to display better dynamic visual acuity than females. Loss of far vision occurs at a later stage for males than for females (Baker 1987). Halpern (1992) also reports huge gender-related differences in attention disorders between females and males, the latter suffering from the disorder in greater proportions (see Rebok 1987). Halpern suggests that although

‘there is considerable evidence for some sex differences in perception and attention, it is difficult to translate findings like these ... hearing thresholds [or visual acuity] into predictions about cognitive performance’ (1992, p.63).



However, in regard to L2 learning, while acknowledging this difficulty, Skehan suggests that

‘the successful phonemic coding of acoustic stimulus will result in a richer corpus of material which will be processed, examined for consistency of patterning and which will then become the basis for rule formation at the central processing stage’ (1998, p.204).

Hence, it is fair to assume that sensitivity towards particular types of sensory stimuli facilitates and eases the conversion of this input into working material, at the central processing stages.

#### 2.5.1.1 Summary of apprehension:

- Apprehension ‘animates the object’; ‘noticing’ is an alternative label placed on the phenomenon of apprehension;
- phonemic coding ability is identified as the first of three factors in the L2 aptitude construct; it is situated at the input stage;
- at the beginning levels of L2 learning, phonemic coding ability plays a crucial role;
- phonemic ability converts acoustic input into processable input;
- successful conversion of acoustic stimulus into processable input results in a rich corpus of ‘working’ material at the central processing stage;
- there is evidence of gender-related sensory differences, with females exhibiting superior hearing faculties and males displaying superior visual acuity; for both groups, the relevant ability lasts longer across the age span;
- sensitivity to particular sensory stimuli is likely to facilitate the learning process at the central processing stage.

#### 2.5.2 **Intuition**

When introducing the dual role of intuition we suggested that it provided a direction as well as the material which enables the learner to progress in his quest for meaning. This



quest sees the activation of intuition (La Garanderie 1995). La Garanderie considers intuition as a legitimate learning structure, because its purpose is to acquire meaning [*un projet de sens*]. For Husserl (1928/1955) and La Garanderie (1995) there is an intrinsic link between setting aside or 'bracketing' some of the conditioning factors which surround and limit us and the liberation of intuition as provider of meaning. In parallel with Husserl's plea to return to consciousness in its purest form for the elucidation of meaning, La Garanderie, through the activation of intuition, encourages the return to the learning process in its purest form, the ultimate goal also being consciousness.

#### 2.5.2.1 The material of intuition

La Garanderie defines consciousness as possessing the awareness of 'something'. He argues that for the 'something' to acquire meaning or direction [*pour que ce quelque chose prenne sens*], consciousness has to accommodate it in meaningful places [*des lieux de sens*], which he suggests are space and time. If consciousness attempts to find meaning or direction outside of space and time it will lose itself 'in an ocean for which we have neither boat nor sail' (1995, p.95). Similarly, Bialystok, who places consciousness at the highest level of analysis of knowledge, suggests that the analytic process which leads to consciousness has to address itself to the 'conceptual repertoire' of the learner or his/her 'emerging representational structure' in order to become meaningful (1990, p.67-71). In other words, like La Garanderie, Bialystok postulates that the learning material needs to find suitable accommodation in the learner's mental representation of the world.

In phenomenological terms, one's representation of the world is subordinate to the pre-existing notions of time and space. In other words, human thought submits itself to these abstract notions and converts them into the 'lived world'. Through this conversion, the phenomena which surround us become comprehensible and as a result, manageable. This process is initially mediated by our senses and regulated by rituals, the calendar, past and future events (Husserl 1928/1955, p.164); the process, then, becomes socio-cultural as well as historical. It is manifest when we establish links between objects in space (their place) and /or in time (their occurrence) and the degree of our relationship with these two notions. The conversion of the meaning of time and space into 'lived' sense is possible because human thought itself, comprises the *a priori* [i.e. pre-existing] categories of time and space (Kozulin 1990, p.122). Thus, time and



space are, in essence, the material within which meaning can be accommodated. Section 2.6 of this chapter illustrates how time and space are converted in a concrete manner in an L2 learning situation.

### 2.5.2.2 The direction of intuition

La Garanderie (1995, pp.12-5) suggests that the mental treatment of the things we perceive is purposefully led by intuition to evoke either visual images or aural/verbal images. This, in turn, he says, leads to comprehension, which, in itself, will differ according to the individual.

In the case of individuals whose expression is visual, the perceptive act will, according to La Garanderie, establish a global image at the onset of the perception of the object. Through successive representations, the evocative treatment will draw various elements together, and eventually will meet the global image established at the beginning of the process. When the perceptive act is triggered visually, the meaning of the object is accommodated in and by space; from an initial global image, the intuition of meaning initiates and follows a process of 'filling out' space [*remplissement*]. The global image, which is related, in a generic rather than specific sense, to meaning, provides the material for the intuitive quest for meaning; the material is space.

The act of perception in the consciousness of a 'spatial/visual' individual may be initiated via hearing. In this case, the subject will construct a plan with visual elements of an imaginative nature. La Garanderie cites Napoleon who used to say to his officers :

'Tell me, in such a manner that when I have heard I will think I have seen'  
(1995, p.14).

In the case of a consciousness which operates in an aural fashion - by re-hearing, re-listening, or talking to itself - the material for meaning acquisition will, according to La Garanderie, be temporal. The work associated with the task is one of discovery. For this type of individual, intuition establishes the possibility of a route or itinerary, where the details of the perceived object are dealt with sequentially, in a temporal order and on an increasing or decreasing principle: the elements are ordered from the weakest perception to the strongest or conversely (1995, p.16).



La Garanderie believes that it is in the initial mental sketching of a space as yet unexplored, or of a time as yet unrecorded, that the activity of perception has its prime objective.

Pedagogically speaking, it is not wrong to say that the individual who conceptualises in and with space depends on facts and elements in order to understand a plan. On the other hand, the individual who conceptualises in and with time requires links in order to understand an itinerary. The former represents an analytic process while the latter is synthetic (La Garanderie 1995, p.42, p.70).

In L2 literature, the skill components of analysis and control present similar features. In this context, analysis is about the organisation of knowledge

‘into networks and schemata, and making explicit what had been implicit or intuitive’,

while the control skill component is about

‘co-ordinating form and meaning, thereby reflecting the ability intentionally to consider the aspects of language relevant to the solution of the problem’  
( Bialystok 1986, p.498-9).

La Garanderie proposes that the consideration of the perceptive act is, in fact, a phenomenological interpretation of attention. He suggests that it is possible to teach an individual how to be mentally attentive, believing that such attentiveness can be sustained almost all the time during one's waking hours, once it has become a habit or way of life. He adds that such a habit contributes to the development of intelligence, memory and imagination. In this regard, Cohen (1992) notes that when children are exposed to a multi-sensory L2 learning approach, namely 'write to read, read to speak, and speak to write', higher levels of attention develop and lead to a positive change in learning attitudes (see section 2.6 of this chapter). We also recall Skehan's advocacy of a conscious and deliberate manipulation of attention during an L2 learning exercise in a task-based approach (see 2.4.2 Motivation).

At this stage it is not difficult to see the links between La Garanderie's reasoning and the empowerment gained by the learner once he takes responsibility for his own learning and, ultimately, becomes aware of his own acquisition process. La Garanderie



describes the autonomous learner as 'the artisan of his own pedagogy' (1995,p.39). Such views are expressed in the principles of the learning-centred environment as defined by Dam (2000) which provides 'a setting where individual differences are catered for and ... where awareness-raising is the means as well as the aim' (p.36).

One can anticipate that a wide variety of materials will have to be made available to facilitate the learner in the discovery of his style - spatial or temporal. L2 materials would seem particularly suitable with their varied sources of visual, aural and verbal stimulation.

While spatial and temporal access to meaning are not mutually exclusive, La Garanderie posits that the consciousness of the human being is marked by habit (1995,p.43).

Furthermore, these habits appear to be contracted as early as the junior grades of school.

He does not suggest any particular study to support his claim, but we can legitimately refer, in this context, to studies investigating age-related gender-specific differences in young male and female language learners aged between 4 and 12 years. Haas (1979) and Wong-Fillmore (1979), mention the propensity for boys not to engage in 'real talk'; when they do so, it appears the talk is in the form of sound effects. As they grow older, their speech includes references to perceptual, functional attributes and location remarks. With regard to visual-spatial abilities, that is 'the ability to represent, transform, generate and recall non-linguistic information', age-related evidence is available, although, as expected, more difficult to collect; the factors which are tested include spatial perception, mental rotation, spatial visualisation and spatio-temporal ability. In general, differences favouring the boys can be detected at around 7 years old; these accelerate to adult levels around age 11 but only reach statistical significance by age 18 (Halpern 1992, p.71-2). An interesting finding emerges out of the spatio-temporal ability tests which indicate male superiority in time estimation. Females appear to overestimate time intervals between moving objects, a finding which leads the researchers to conclude that 'some portion of the sex-related differences found with dynamic displays may be due to differences in time perception' (Rammsayer and Lustnauer 1989 in Halpern 1992, p.70). Evidence of this kind emphasises the important role space plays in the development of male subjects; it also suggests that an analytical/spatial orientation enables a particular understanding of the environment.

Girls, for their part, in expressing their needs and wishes, verbalise and communicate significantly more in the course of the socialisation process (Haas 1979; Wong-Fillmore 1979). Additional evidence suggests that verbal abilities and in particular syntax



formation appears earlier in girls than boys – between 2 ½ and 4 years of age; girls' utterances contain more words; this advantage is maintained through elementary school (Halpern 1992, p.67). In this case, we note the role language plays, at an early stage of development, through the use of words and the elaboration of syntax and communicative operations; these observations would suggest that words have a significant part in rendering these subjects' environment intelligible. We can discern the synthetic/temporal orientation described by La Garanderie.

As we return to L2 literature, Skehan notes that the question of modularity in syntax-semantics is particularly pronounced in special circumstances, that is, in cases of exceptional L1 aptitude; in such instances, syntax and semantics appear to function independently of one another. In L2 learning, the question of modularity is present when one considers the information processing construct. This construct includes input processing and phonemic coding ability, central processing and language analytic ability, output stage and memory. Skehan suggests that very talented L2 learners are likely to possess very high levels of verbal memory which affects the output stage, while weak learners appear to be characterised by lack of input skills or phonemic coding ability (1998, p.233). However, the focus on the 'fixedness' of an innate language learning ability leaves little scope for the accommodation of different perceptions in an L2 learning situation. Hence, the more flexible notion of learner style is considered by Skehan. Of interest is the observation that

'conceptualisations of style, all rest on two dimensions of variation ... [which] relate to information processing stages' (1998, p.254) [my emphasis].

The conceptualisations of learning styles comprise learners' representation systems as well as the processing characteristics on which the learners rely during the L2 learning process. These include:

- a verbal-visual representation and an analytic-holistic processing style (Riding 1991),
- abstract-concrete representation and serial-random processing preference (Gregorc 1979),
- abstract-concrete representation and active-passive processing orientation (Kolb 1976),



- Field Dependence and Field Independence, which may be seen as representations of the world as well as processing strategies (Willing 1987),
- Miller's integrated model of cognitive styles which includes perception, thought and memory (1987),
- and finally, Skehan's analytic-memory representation forms and processing styles (Skehan 1998).

Skehan argues that because

'the profiles of different sorts of learners are relatively small [essentially two profiles], we can envisage useful adaptations of instructional approaches, which fall short of the nightmare of a different set of materials for every different learner' (1998, p.6).

#### 2.5.2.3 Summary of intuition

We propose that the learner's representation of the world in terms of time and/or space coincides with the various representations outlined above (verbal/visual, abstract/concrete, analytic/memory). Similarly, we suggest that intuition in its synthetic and analytic forms is also in keeping with the processing strategies discussed above (analytic/holistic, serial/random, active/passive, analytic/memory). The additional claim which is made is that these styles may be gender-related: in making sense of the world and at an early stage of development, girls appear to rely on words and verbal communication, in contrast with boys who appear to engage in concrete operations and spatial activities at the expense of 'real talk'.

#### 2.5.2.4 Time and intuition

La Garanderie does not suggest that the learner's visual or verbal orientation suffices to achieve comprehension. A time element has to be incorporated: the visual intuition captures the place where the next meaningful element is going to be; similarly, the aural intuition will emerge in the consciousness as it guesses the probable meaning of the words which are going to follow. The time reference in this case is obviously the future. We find similarities in Vygotsky's 'Zone of Proximal Development', where movement between one phase of comprehension and the next becomes the dynamic for potentially new meaning. Furthermore, in an L2 situation we are reminded of the learner's own expectation of renewal of his/her experience as mentioned by Burstall (1974) and



Ushioda (1994). This temporal orientation within the learner suggests that instruction has a clear role to play in terms of encouraging and sustaining the acquisition process.

Vygotsky states that

‘instruction must be aimed not so much at the ripe as the ripening functions... instruction must be oriented to the future not the past’ (1962, p.104).

In a wider framework, continuity in an L2 learning experience at elementary level should not be overlooked.

### 2.5.3 Memory

The component of memory has been present at all stages of our theoretical discussions. Memory features along with perception during the course of the developmental process (Vygotsky 1962); it also appears as one of the three components which constitute an individual’s consciousness (Husserl 1928/1955, Schutz 1970). In L2 research, memory is deemed central to an understanding of language acquisition (Skehan 1998). This review includes a focus on memory as a feature of L2 processing (Skehan 1998) and establishes links with a cognitive view of gender differences (Halpern 1992).

So important is the role of memory in L2 learning that Skehan defines a particular L2 learning style in terms of its memory characteristics. This style is contrasted with an analytical orientation. The two orientations are polarised; yet they are modular and function independently of each other; hence, language learners may possess high analytic abilities and low memory, or high analytic abilities and high memory, etc..

The central processing stage of the general L2 information processing construct includes a number of abilities characterised by pattern identification, generalisation, restructuring, and dual coding. Dual coding itself contains two processing forms: one coding system appears to be rule-based, creative and flexible, but yields slower returns because of processing ‘overheads’. The other system is memory-based and reliant on language chunks; it is less flexible but faster to access at the output stage because its ‘units are easy to assemble’. The outcomes are faster and easier output which is the basis for native-like selection and fluency (Skehan 1998, p.205). Skehan believes that most people alternate between the two coding systems.



In addition to the role played by memory in the dual coding system, this cognitive characteristic comes to the fore at the output stage of the L2 information processing construct; Skehan argues that this last stage depends on the quick retrieval of L2 information. Figure 1 plots the relationship of L2 aptitude components to L2 proficiency, and indicates the prominence of each component at the various stages of L2 learning.







To summarise briefly, Skehan's theoretical framework of L2 learning assigns a prominent place to memory, as it is perceived to be active in three domains:

- memory appears at the central processing stage of general L2 information processing as a coding system; it re-appears at the output stage, when easy access and fast retrieval of information is necessary; in this manner, memory facilitates 'native-like selection and fluency' (Skehan 1998, p.205);
- memory, while being present at all levels of language learning will have a particular role to play at advanced levels;
- memory itself serves to define a particular learning orientation in contrast with an analytical approach to language learning (1998, p.251).

These observations suggest that memory is likely to be of particular influence both during the act of L2 learning since it is active at two of the three stages of information processing (the central and the output stages), and over a period of time during the general progress of the L2 learner as he or she reaches advanced L2 levels. Furthermore, memory also characterises a particular learning style. Hence, it is reasonable to assume that memory is likely to be responsible for successful L2 learning to a significant degree.

So far in our discussions, references to the gender-difference literature stressed divisions between males and females on the basis of particular abilities in verbal, visual/spatial and mathematical fields. The divisions indicate clear categories of gender-specific abilities. However, Halpern (1992) suggests that when gender-differences are considered in the light of cognitive psychology, the divisions are more subtle. Halpern examined the underlying cognitive processes which are active while male and female subjects perform tasks at which they excel. Her results indicate that females excel at generating synonyms (associational fluency), language production and word fluency, computation, and anagrams. Males on the other hand, appear to excel in verbal analogies, mathematical problem solving, mental rotation and spatial perception, spatiotemporal tasks (dynamic visual displays). Halpern claims that this division of tasks shows that there are specific mathematical and verbal domains in which males and females excel; this finding allows for more flexibility when considering gender-related cognitive differences. However, the most significant observation suggests differences in the underlying cognitive processes which are at play while the tasks are being performed. Females' underlying cognitive processes pointed to rapid access to and retrieval of information in memory, while males' underlying cognitive processes



indicated the ability to maintain and manipulate a mental representation (Halpern 1992, pp.89-90).

These conclusions enable us to clearly link Skehan's learning profiles of analysis and memory to the underlying cognitive abilities exhibited by males and females in Halpern's report. Furthermore, if memory is perceived to be influential in producing successful L2 learners, females are likely to benefit from a substantial advantage since their underlying cognitive abilities suggest a memory-based coding system. If this system is manifest in the context of tasks at which females excel, it is probable ( in the light of the role played by memory in L2 learning,) that language learning itself will be perceived by females as a rewarding and fulfilling undertaking .

#### 2.5.3.1 Summary of memory

- memory characterises one of two learner profiles identified by Skehan (1998); the other profile is analytic;
- memory appears to be important at all levels of L2 learning, with a particular role at advanced levels;
- in information processing, memory is defined as a coding system at the central processing stage;
- the activation of memory is crucial at the output stage and enables fast access and retrieval of information;
- the gender-difference literature identifies memory and mental representations at the core of females' and males' respective underlying cognitive abilities.

On foot of these observations, it is fair to conclude that if memory is a key component for successful L2 learning, and if females' underlying cognitive processes are memory reliant, then females are likely to perceive L2 learning as easier and more rewarding than males. They are also likely to be more successful.

#### 2.5.3.2 Summary of 'experiencing' learning and L2 learning

The arguments proposed in this section include a focus on learning orientations because these provide indications as to how an individual may perceive a learning experience; in this connection the following observations were made:



- on ‘experiencing’ learning, the individual’s consciousness apprehends the task; this results in the activation of intuition (La Garanderie 1995);
- the apprehension of an object is linked to sensory stimuli (Husserl 1928/1955; Ausubel et al. 1978);
- sensitivity to particular forms of sensory stimuli provides the working material for the central processing stage (Skehan 1998);
- females are reported to be particularly sensitive to aural stimuli by displaying a wider range of auditory faculties over a longer period of time (Baker 1987) ;
- males superiority resides in spatial/visual tasks; this ability lasts longer for males than for females (Baker 1987);
- the activation of intuition resulting from the initial apprehension of the task leads the learner on a quest for meaning (La Garanderie 1995);
- intuition provides the learner with a direction and enables his/her progress;
- the direction defines the style of the learning style of the individual; this style is described as analytic or synthetic;
- the learner’s progress is enabled by the accommodation of meaning in a meaningful place; the place is time or space (la Garanderie 1995);
- time and space are pre-existing categories of human thought (Husserl 1928/1955; Kozulin 1990);
- the L2 aptitude literature, L2 learner styles literature and the gender differences literature identify
  - two dimensions in L2 learning styles; these dimensions being akin to those outlined above,
  - two types of ability which can be identified with abilities respectively characteristic of females and males;
- in respect of gender-related abilities, females display precocious and superior verbal abilities when compared to boys; in contrast, males manifest an early preference for ‘concrete operations’ and superior visual/spatial abilities; this initial developmental inclination may explain the formation of a habit in the orientation to learning;
- while learning styles are marked by habit, these are more flexible than the notion of L2 aptitude (Skehan 1998); hence, a synthetic and temporal orientation does not exclude analytic and spatial input in an absolute manner and vice-versa;



- in the same way, time and space, while being separate notions in an abstract sense, cannot be considered separately if one is to make sense of the ‘lived world’;
- memory has been identified as a crucial component of the L2 learning process, particularly at the output stage; it is also present at all levels of language learning with particular importance at the advanced levels;
- links between L2 learning styles and gender-related underlying cognitive processes have been established; they are analytic and memory-based;
- an analytic learning orientation is found in males when they perform tasks at which they excel, and similarly, a memory coding system appears to be especially active in females when conducting tasks at which they excel;
- these links allow us to conclude that, in L2 learning, girls may experience more ease than boys, particularly at the central and the output stages of information processing, since these stages demand a particularly well developed memory coding system.

## 2.6 From theory to practice

In the light of the developmental arguments presented in 2.3 and of the identification of two learning orientations in 2.5, the question of the transfer of the related theories to the L2 classroom requires some attention. While recognising the existence of numerous L2 learning and teaching approaches, and having acknowledged the value of some teaching and learning approaches in the context of the developmental perspectives of this chapter, we would like to focus on one particular approach for its relevance to the theories developed so far. This approach illustrates the developmental aspects of L2 learning through the gradual construction of meaning in a child’s formal learning experience. By encouraging the simultaneous acquisition of the written and oral codes of the L2, the approach accelerates the dynamic convergence of scientific and everyday concepts; by relying on guidance from the teacher and on the corrective input from the computer, the process of mediation is exemplified; finally, by relying on aural and visual signs, the conversion of the abstract notions of time and space into concrete experience becomes manifest; thus, two learning orientations are reconciled.



### 2.6.1 Cohen

Before developing into a researcher, Rachel Cohen was a primary school teacher in a bilingual school in Paris. While there, she observed children aged 3 to 9 years and who appeared able to manipulate symbols from 3 years upwards. She found that the passage from one set of symbols in one language into another, and vice-versa, gave them access to the comprehension of rules which operate in various languages. These children acquired both the ability to abstract and mental flexibility; also positive repercussive effects on other disciplines such as mathematics were recorded (1992, p.52-3).

When it was suggested that these children came from a privileged socio-economic background, and that the results of her tests may have been affected by this factor, Cohen decided to investigate children of immigrant families who were socio-economically deprived and non-Francophone.

Having noted the aforementioned ability to manipulate symbols at a young age, together with the children's eagerness to read, Cohen became interested in reading skills. She found that children aged between 2:3 years and 5:2 years on September 1st, were perfectly capable of constructing their own learning by acquiring the written and the oral codes of the language simultaneously. The process was learner-centred and creative.

For the child it involved the development of an awareness of written characteristics such as spatial structuring, letter identification and word identification. The development of this awareness was achieved with the support of technology, namely the computer and the voice synthesiser, as well as the help of the teacher.

The process involved 'filling out' a blank screen - and here we are reminded of La Garanderie's 'spatial' thinker whose intuition of meaning constitutes a process of filling out space - as letters were identified and typed with the simultaneous activation of the voice synthesiser. The combination of the space-bar key, the visual display of the words and the voice synthesiser helped to define the word-boundaries visually as well as aurally. The latter are of capital importance to L2 learners, since the difficulty in identifying the word-boundaries and utterances in an aural task is repeatedly mentioned by teachers and learners alike.



Such an approach raises questions about the absoluteness of Piaget's stages of development. We recall Vygotsky's hypothesis according to which development is mediated in the 'Zone of Proximal Development' which itself becomes the dynamic for learning. In Cohen's study, the output combination of computer display and voice synthesiser appears to provide the opportunity of a learning dynamic for the child. Papert (in Cohen 1982, p.91) believes that the computer is not simply a powerful educational tool. He suggests that its strength lies in its ability to overcome the difficulty associated with the passage of the child's reasoning to that of an adult. In other words, the child is encouraged to become responsible for his/her own learning and in doing so, he/she acquires the ability to reflect and to distance him/herself from the learning material. It can be argued that this transition is comparable to what one finds in Bialystok's explanation of the development of language proficiency, where the

'earliest linguistic knowledge remains implicit and inaccessible until it is explicated through the component process of analysis. When it becomes explicit in this way, it can be symbolised... The symbolisation of knowledge is the beginning of the child's representation of language' (1990,p.66).

The creative utilisation of the computer as a mediator allows the learner to access his/her learning directly; the screen is not filled with symbols which have to be deciphered, rather it is blank and there to be filled. The process encourages the development of collection and associative type complexes; the child's elaboration of story lines combines the features of chain complexes while concern for meaning is expressed by the development of diffuse complexes. Grammatical awareness emerges and promotes the enrichment of pseudo as well as potential concepts (see 2.3). The software which has been devised anticipates a heuristic process in the learning approach of these children, thus acknowledging intuition as the learning structure. The combination of the visual elements of language with its aural/verbal characteristics allows the learner to operate within spatial and temporal modes. Finally, oral and written codes are not mutually exclusive.

Trocmé-Fabre (1991,p.72-5) outlines the four skills which language learners have to come to grips with. Two of these are linked to comprehension - aural and written-, and the two others are expression-dependent - oral and written. From another point of view the skills could be presented as two types of aural skills and two types of written skills.



In any case, it is clear that divisions are inbuilt into her approach. She favours sequential stages entitled 'Observe', 'Obey', 'Organise', 'Choose', and 'Create'. The 'Observe' stage involves the discovery of the world with one's body and senses; 'Obey' demands that one pays attention to language rules with sufficient time to accommodate the input before dealing with productive tasks; 'Organise' calls upon the ability to classify information by means of comparison and identification; 'Choose' is the discovery of one's learning style; and 'Create' is the opportunity to extend in meaningful manner knowledge which has already been acquired.

Cohen, on the other hand, considers the four skills at the same time, thus avoiding dysfunction in any particular field. In this manner she allows for the fact that learning stages do not necessarily happen sequentially. For example, when a learner is confronted with a new word, various processes come into play; the processes will call not only upon observation of new phonemes, morphemes, graphemes etc., but also upon adherence to L2 oral and written rules, while organisation of the input into one's representational system should enable the learner to choose his/her own learning path; and finally, with Cohen's approach, the child can also become creative at a very early stage of the acquisition process. The following section of this chapter will describe Cohen's approach in more detail.

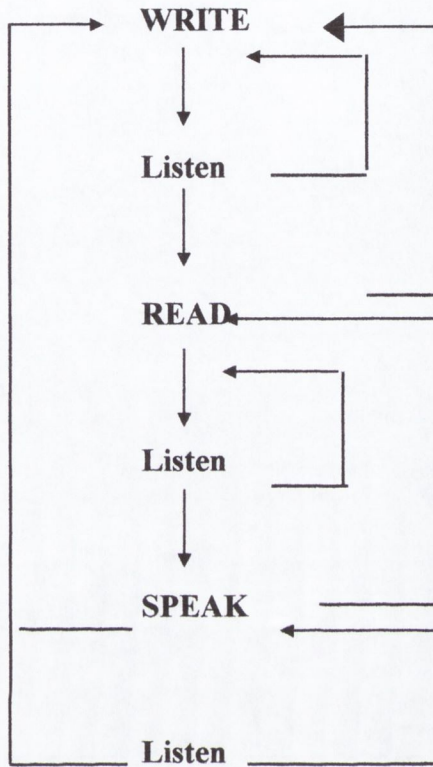
The aforementioned issue of dysfunction appears to be of importance in the neurobiological field: Changeux (in Cohen 1982, pp.40-1), describes a rather cruel experiment conducted by Weisel (1963, 1965) where a young cat whose eye had been closed by stitching its eyelids for a period of three to four months, suffered more severe disorders than a cat whose two eyes had been stitched up, and which had been brought up in total sightlessness for the same period of time. He concludes that a function which does not follow its natural developmental process, that is, according to its physiology - the physiology of the cat is defined as the ability to see with two eyes - is more damaging than no function at all.

Cohen's emphasis on putting in place a multifunctional approach suggests a desire on her part to prevent any 'dysfunction' in the development of any of the four L2 skills and perhaps, by extension, in the development of any of the processes at play during a learning experience. A review of her approach follows.



## 2.6.2 'Write in order to read, read in order to speak, speak in order to write'

Cohen's illustration of her approach is as follows:



She describes the interaction among all acts of communication as dynamic, each phase having an influence on the other. She sees the loop as reconstituting itself at a higher level as the child progresses in his/her acquisition of language. She stresses that the levels are learner-specific and do not follow any pre-set rules. She adds that the listening component, through the use of the voice synthesiser, finds a place at all stages of the process. The effect is the emergence of phonological awareness, a particularly important predictor for success in L2 acquisition (Cohen 1992, p.225; Service 1992).

Cohen's research partners are numerous and have included, among others, the junior school of Montjoie, La Plaine-St-Denis in Paris with its children aged between 2:3 years and 5:2 years, the Commandant Charcot primary school in Neuilly/Seine with its children aged 7 to 8 years, the Rothschild Foundation day hospital in Paris, caring for children and adolescents with behavioural disorders, and the Centre for Speech Therapy and Applied Pedagogy (COPA), the subjects in this last case being deaf children. Each institution used the same software and the same hardware.



Cohen's research results are qualitative and for our purpose, we shall report on the results from the first two institutions mentioned above.

The junior school of Montjoie is situated in a district of Paris which, at the time, held one of the poorest records of general academic achievement, according to its local newsletter. In 1981, the success rate at the Baccalauréat exam (the final secondary school examination) was only 47.8% for St Denis students. The national average was reported to be 65.9%. 75% of the children aged between 2:3 years and 5:2 years on September 1<sup>st</sup> were foreigners, with 72% unskilled fathers and 56% unemployed mothers.

In Cohen's approach, the child's task was to type a word in French, in order to trigger the appearance of a picture on the screen, while listening to the letters, one after the other, until the word was finally completed. During the process, the child repeated/read the word. The meaning of the written word was supported by the picture. Once the picture was completed, the teacher helped the child to refine the vocabulary and establish links between various elements of the pictures, by making sentences and by gradually composing a story. The idea belonged to the child who utilised all the means of communication at his/her disposal. The teacher used the opportunity to establish correct lexical and grammatical structures.

Oral language improved and it was this new stage which stimulated the child to write. A text editor enabled the child to write his/her story on the computer while choosing to re-hear the letters-words-sentences if he/she so wished. After printing the text, he/she read it. The process implied a constant movement from the written language to the oral language, with the omnipresence of the listening component.

The child's completed story was printed in book form, which was then placed in a library to which all children had access.

Cohen points out that 'all that can be said can be written, and conversely all that can be written can be said' (1992,p.74). The points of reference for the child in this approach are auditory but are supported in a constant and security-inducing manner by the visual forms of the words. Cohen believes that the visual apprehension of language is more accessible to the young child than its aural apprehension. Arguably, for some learners the sound of a word may be equally reassuring when its written form appears on the screen.

The evolution of the learner's written production follows this sequence:

- the child types at random,



- the child types a familiar word,
- the child types a new word,
- the child types a sentence or a phrase for his/her picture.

This approach allows the child to experiment and progress intuitively, both in the discovery of the language and of his/her learning process.

Because the child interacts with the machine in a play-like manner, a number of indispensable L2 operations are catered for. These operations which are normally perceived negatively by the child - repetition, non-comprehension, lack of creativity, correctness -, are borne by the computer. In addition to self correction, the learner receives positive feedback by listening to his own production. Cohen notes that not only are solid foundations put in place, but the L2 construction process is very fast.

The teacher involved in the Montjoie experiment recorded unusually high levels of attention for this young age group. The voice synthesiser reduced the child's dependence on the adult and increased his/her autonomy. The same teacher noticed the development of a desire for neat work due to the perfection of the printed version of his/her text and, as the voice synthesiser spoke without pauses when punctuation was omitted, children acquired a new vigilance in relation to punctuation. Very significantly, the teacher reported a transfer of attitudes induced by the computer-based exercises to other activities, manifesting itself for example in improved art work, and creativity.

In the light of these findings, Cohen suggests that the age thresholds for L2 instruction are questionable. Furthermore, she concludes that with the advent of the keyboard, the traditional assumption that motor co-ordination is a prerequisite for learning to write is also unfounded.

When the same approach was used with older children in the Commandant Charcot school, similar observations were reported. Fourteen of these 7/8 year old children had L1 reading difficulties and concentration spans of approximately 10 minutes. With the aural input of the voice synthesiser, concentration time increased to 45 minutes. The sense of guilt diminished, as mistakes became a matter between the learner and the machine. The *delete* key served to remove the fear of making a mistake, diminished the sense of frustration and encouraged the shy learners. In addition to the development of a sense of aesthetics and perfection, as reported in the Montjoie junior school, the need to be understood by others emerged as a crucial element. This was achieved by a gradual change in attitude towards learning: a researcher's approach emerged in the learners' trials, evaluations, deletions and final productions (Cohen 1992, p.95). The positive



treatment of errors became rewarding for these children, and it contributed to the development of their personality. With regard to the latter point, both experiments promoted numerous interactions between the learners. These were referred to as 'intense activity', leading to autonomy and self expression, which, in turn, led to the 'construction of language'. Transfer processes became evident, through recall and its utilisation, through spatial and temporal awareness and through more sophisticated manipulations of the machine. Organisation of work, attention habits, concentration, autonomy and confidence manifested themselves in other areas. Cohen and the teachers involved in the experiment identified confidence as the fundamental gain for these learners (1992,p.216-17). The artificial quality of the voice synthesiser, which reinforces the latent knowledge that man is superior to the machine, appears to be an incidental contributor to the development of confidence(1992, p.232).

Finally, Cohen suggests that the simultaneous acquisition of L1 and/or L2 oral and written codes allows all children - young and older, proficient or less proficient readers - to identify the meaningless from the meaningful word. Thus, it can be assumed, awareness of the signifier and the signified removes the risk of a disconnected approach to language learning and leads to a wholesome apprehension and comprehension of language (1992,p.225).

#### 2.6.2.1 Summary of Cohen's approach

- Cohen noticed that 3 year olds who had been exposed to two languages were capable of manipulating symbols and language rules;
- in promoting the simultaneous acquisition of the written and the oral forms of language, Cohen shows that the children were also capable of constructing their own learning;
- technology becomes central in developing a creative learner-centred approach and in overcoming motor-co-ordination difficulties;
- the gradual filling out of space on the screen and the immediate feedback by means of the voice synthesiser provides an intuitive and uncluttered access to learning;
- with regard to L2 learning, dysfunction between the four skills is reduced by the equality of treatment of the oral and the written forms;



- the approach is represented dynamically in 'learn to write in order to read, read in order to speak, and speak in order to write';
- at all stages of this process, the listening component is present and reinforces phonological memory.

From the learner's point of view, some negatively perceived L2 tasks, such as repetition and correction are taken on by the machine. Demoralising experiences induced by making errors become rewarding, in that it is the learner who performs the correction and who receives positive feedback from the machine.

The reported effects of this approach are manifest in:

- increased attention span,
- a solid L2 base which is speedily acquired,
- a reduction of dependency on adults,
- an increase in autonomous, inquisitive and organised work practices,
- a striving for perfection,
- an understanding of punctuation,
- the desire to be understood by others, and to express oneself,
- development of self-confidence.

Transfer of these attitudes to other areas of these children's school work was observed. All the teachers involved in the experiment recorded a high degree of personal involvement on the part of the learners and a faster learning pace.

Finally, this L2 learning approach emphasises cognitive and experiential-developmental characteristics, thereby removing the constricting notions of fixed developmental stages.



## 2.7 Conclusion of the theoretical framework

The theoretical framework of this study was elaborated on the basis of four considerations:

- i. in a formal L2 learning situation, chronological-maturational arguments cannot be retained when experiential-developmental arguments are considered;
- ii. an individual's interpretation of an experience is derived from his/her consciousness and consciousness is likely to differ according to his/her manner of apprehending, perceiving and remembering that experience;
- iii. to some extent, we can say that the differences mentioned above are gender-related;
- iv. L2 learning provides the learner with multiple opportunities to combine two learning styles, one analytic and the other synthetic.

With regard to chronological-maturational arguments and L2 learning in formal contexts, we noted that research findings rely, principally, on a time domain analysis where L2 performance is measured in terms of the learner's age and exposure time to the L2. The results are unsatisfactory because developmental considerations and environmental factors are not taken into account.

In contrast with chronological-maturational arguments, the experiential-developmental perspectives bring the influence of formal instruction to the fore as a means of activating a learner's Zone of Proximal Development (Vygotsky 1962). This concept proposes that a learner will achieve more in co-operation with a mediator (a tool, a sign or the behaviour of another human being) than is suggested by his/her mental age. Furthermore, we showed that L2 learning, in a developmental perspective, proves to be a fertile ground for concept formation and provides multiple ways of encouraging thinking in complexes. In addition, the consideration of concept formation in L2 learning highlighted the importance of perception and memory in an individual's understanding of learning experiences, a fact which provided links with the phenomenological perspective of this discussion.



Consequently, an analysis of what ‘entering’ an experience entails followed. This analysis comprised a review of L2 motivation, motivation and cognitive approaches and motivation and phenomenology.

The field of L2 motivation has expanded and moved from the initial construct which comprised integrative and instrumental orientations to the inclusion of theories gleaned from various domains of psychology. The integration of additional motivational factors in L2 learning has shifted the focus from the general language level, to L2 motivation at the learner level and at the learning situation level.

Cognitive approaches suggest that perceptual factors may have an important role to play in motivating a learner in the initial stages of the experience. Cognitive approaches were also identified as particularly suitable means of generating motivation among unmotivated learners. This is achieved by triggering ‘noticing’ and ‘attention’ and by setting goals in a task-based approach. Aural and visual stimuli were identified as key factors.

Motivation in phenomenology is viewed as an underlying component of consciousness, in that it enables the individual to enter an experience through his/her apprehension of the phenomenon and through determination. The process is cognitive as well as socio-cultural; it is also historical, as memory of the past plays a part in an individual’s motivation to act in the future. In the phenomenological perspective, an individual’s motivation is subject to constant redefinitions, as new possibilities to connect with and make sense of an experience surround the learner.

Having dealt with the individual’s ‘entry’ into the experience, we then considered the act of ‘experiencing’ learning and L2 learning. The analysis was broken down into the three categories which constitute an individual’s consciousness of experience: apprehension, perception and memory. For each category, systematic connections were established with L2 learning and with learner styles, as well as gender-related differences.

Apprehension, Husserl suggests, ‘animates’ the object and is a function of one’s sensitivity to sensory stimuli. Females and males appear to exhibit higher levels of sensitivity in hearing and visual acuity, respectively; in the context of L2 learning, Phonemic Coding Ability, that is, the ability to convert acoustic input into processable input, has been identified as a key factor in the initial stages of L2 information processing and at the beginning levels of L2 learning. Consequently, on the basis of



these observations, it was possible to draw tentative links between females' superior auditory sensitivity and the likely advantage gleaned from such a faculty, at the initial stages of language learning.

Perception was described as an interpretative operation led by the phenomenon of intuition. A phenomenological analysis of intuition ensued and proposed that intuition may be regarded as a learning structure in its own right. Intuition is defined within the abstract parameters of time and space as they are pre-existing categories of human thought. Consequently, the role of intuition is to convert these abstract categories into working material which can accommodate meaning. In addition, intuition also directs the learner during his or her learning experience in a temporal, verbal/aural orientation towards meaning acquisition or towards a visual/spatial understanding of the material. As a result, the learner emerges possessing a synthetic style or an analytic style. These views compared favourably with existing learner style theories which all rest on two representational and processing dimensions. However, the two styles were also compared with gender-related differences in the development of boys and girls. Boys' initial development appears to grow out of the engagement with concrete operations and their superior abilities in spatial and visual tasks; girls' early development suggests a propensity to engage in communicative tasks as evidenced in their precocious verbal development. If this is the case, the formation of a learning orientation habit, according to gender, may have its roots in development itself.

The critical role of instruction emerged once again, when the importance of creating future opportunities for intuition to continue on its quest for meaning was highlighted. The apparent arbitrary division of gender-related styles was not endorsed on the basis that, just as the combination of time and space constitute the fundamental structures for an understanding of the world, temporal and spatial learning orientations are equally and justifiably reconcilable and manageable in an L2 learning situation.

The third component of an individual's consciousness, Memory, was integrated within a cognitive perspective of L2 learning, i.e., in the form of access and retrieval of information, its retrospective quality having been dealt with, in the motivation section. The review showed that this faculty is central to the L2 learning process by manifesting itself at the central and at the output stages of L2 information processing. Furthermore, memory appeared to facilitate long term L2 learning as evidenced at the advanced stages of L2 learning. Connections were made with cognitive approaches in the gender-difference research field. The findings indicated a clear advantage for females in terms



of memory-based cognitive processes and contrasted with males' reliance on mental representations. These cognitive processes are activated when each gender performs tasks at which he or she excels. On foot of this observation, it is possible to suggest that, due to the prominent place of memory in L2 information processing, females are likely to be more successful learners.

The consideration of Cohen's L2 learning approach enabled the process of transferring theory to practice. This approach illustrates how the abstract concepts of time and space are converted in the learning situation by way of the simultaneous presentation of the oral/aural/written forms of language. Learning is mediated by the teacher for guidance and by the computer for trial and error. The effects of the approach exert a powerful influence on the children's L2 acquisition, performance and general development by limiting the possibility of dysfunction in any of the four skills; it also accommodates a temporal and synthetic learning style, as well as a spatial and analytic orientation.

The conclusions which emanate from the elaboration of this theoretical framework propose that the learner's consciousness be considered in terms of *his* and *her* apprehension, perception and memory of the learning experience. In L2 learning, this supposes first, consciously contrived changes within the learning situation itself and second, a gradual evolution on the learner's part. It suggests that the changes within the learning environment will be of an inclusive nature if they cater for two learning orientations - synthetic and analytic; the objectives are to allay the anxieties of learners faced with unfamiliar learning tasks and to encourage development. In this framework, the opportunities for change and development are to be found in the environment and are there to be apprehended by the learner. Hence, it is the responsibility of those who manage this environment to ensure that the learning material and the learning experience are apprehended, perceived and memorised according to one's orientation. Chapter 3 pursues the exploration of such orientations in the context of gender-related differences in L1 acquisition and L2 learning.



### 3. Gender-specific differences in L2 acquisition

#### 3.1 Introduction

The identification of a temporal/synthetic and a spatial/analytic orientations to the world in Chapter 2 included references to the gender-differences literature. These references were made in the course of our analysis of apprehension, perception/intuition and memory. With regard to apprehension, gender differences between females and males were reported at the input stage of L2 information processing in the form of differences in female and male responses to auditory sensory stimuli (Halpern 1992). In respect of perception, gender-related differences alluded to females' and males' developmental paths, which pointed to the precocious development of verbal abilities in girls and to boys' initial reliance on 'speech independent' activities and superior visual-spatial abilities (Haas 1979, Wong-Fillmore 1979, Halpern 1992). Finally, memory, as a key factor of successful L2 learning (Skehan 1998) was also identified as a particular characteristic of females' underlying cognitive abilities ( Halpern 1992). On foot of the foregoing, it seemed plausible to investigate the issue of gender-differences in language acquisition, the focus being L2 learning.

With regard to the L2 literature, when the subject of L2 gender-specific differences becomes an issue, its review proves particularly difficult because of the limited number of studies conducted in the field. Oxford and Nyikos (1988) complained of similar obstacles:

'In a review of some eighty articles, papers, and chapters describing language learning strategy research, only four studies were found which directly examined sex differences in strategy use' (1988, p.321).

Although the researchers point out that gender is 'a classic and significant predictor in educational, psychological, and linguistic research', the issue remains largely unexplored in applied linguistics.

This chapter will attempt to review the matter under six headings, and chronologically, starting with young learners, and then going on to deal with adolescents, young adults and adults. The decision to include a chronological/maturational perspective in this review is based on accepted psychological evidence that some behavioural and/or cognitive patterns are acquired at a young age, and appear to remain stable throughout



the life span of an individual (see literature on internal working models, Cairns 1991; Sroufe and Rutter 1984).

In addition, L2 oral and written skills will be examined in the context of language use and perceptions, cognitive styles, strategy use and personality types. Some L1 evidence will also be reported, in the light of its potential pertinence to L2 gender-related differences, particularly in relation to the nature of responses to surveys and questionnaires and to daily male-female interactions.

### 3.2 L1 and L2 interactions among children aged 4 to 12 years

The present section of this chapter will look at two studies conducted in an L1 situation involving children aged 4 to 12 years, and an L2 situation involving five children aged 5:7 years and 7:3 years.

Adelaide Haas (1979) studied gender-associated features in the spoken language of elementary school children, and established three categories as follows : 4 years old, 8 years old, and 12 years old. She took the following evidence as her starting point:

- gender-related speech variation begins to occur during childhood ; Lakoff (1975) estimates that these differences are acquired before age 10;
- boys appear to learn ‘new male language’ ( 1979, p.101), while girls appear to continue speaking the variety learned from their mother ( Garcia-Zamor 1973);
- speech alone proves sufficient to identify boys and girls aged 4 to 12 years. Meditch (1976) argues that, because recorded samples of boys and girls allow the accurate identification of the boys more often, the latter must learn sex-appropriate speech earlier than girls;
- interaction between pre-school children, parents and/or teachers varies significantly according to the gender of the child; e.g. boys receive less input from their mothers but interact more with directive-dispensing teachers, while the girls are talked to more often by their mothers and are asked more questions by their teachers (Cherry 1975);
- Sause (1975) found boys to be more talkative and verbally aggressive, referring to space, quantity, physical movement, self and value judgements. On the other



hand, girls were found to exhibit shyness and to identify with a 'female role' (Haas 1979, p. 102 ).

Taking these observations on board, Haas explored specific features of language

- *Form, Topic, Content* and *Use* - in the speech of 24 normal middle and upper-middle class white children aged 4, 8, and 12 years.

*Form* comprises:

laughter, crying, screams, sound effects.

*Topic* refers to:

the subject matter of the conversation.

*Content* features:

actions or movement, labelling of persons or objects, perceptual attributes including visual or audible references and other perceptual qualities of an object, place or person (includes age); functional attributes which describe uses of objects, person, place (includes scores in games); location where place is the emphasis (here, there); positive or negative judgement; wishing-needing which expresses a desire for a person, a place, an object, an event, etc..

*Use* includes:

socially and cognitively selected behaviours such as information giving, direct or indirect requests, compliance, assertion, disagreeing....

Three research questions were asked :

- Are there features of *Form, Topic, Content* and *Use* which are gender-associated ?
- Does production of gender-associated features differ as a function of whether the speaker is in same gender or mixed gender dyads ?
- Are the sexes more differentiated with increasing age by their production of gender-associated features ?

The same children were placed in same-gender and mixed-gender dyads, in turn. The findings suggest that the boys have already acquired male-associated features by age 4, and not by age 10 as Lakoff had suggested. Furthermore, girls appear to develop female-associated features between the ages of 4 and 12; that is to say, they give less information progressively with age in same gender-dyads, and increase their compliance in both types of dyads. This phenomenon contradicts the original assumption that boys



learn 'new male language', while girls continue to speak the variety learned from their mother. It would appear that girls display just as much, if not more, sensitivity to gender-role. This is particularly true of mixed-gender dyads where differences in *Form* - increased laughter for girls - and *Use* - increased compliant remarks for girls, and information giving and direct requests for boys - were clearly identified. In same-gender dyads, the younger girls expressed more wishes and needs, while the boys produced more sound effects, and referred to functional attributes, and location as they grew older.

*Content* and *Topic* differences emerged in same-gender dyads, girls favouring school, the experimental situation and sitting games, while boys preferred to discuss sport in all age groups and dyads. This finding suggests gender-specific interests; however, at 8 years old, both boys and girls talked most about sports.

Wong-Fillmore (1979) drew her observations from a one year longitudinal study of 5 Spanish speaking children and their L2 development. In this study, each child was paired with an English speaking friend.

Wong-Fillmore quickly discerned that

'the first strategies used have nothing to do with learning a language, rather an awareness of the need to establish social contact' (1979 , p. 223).

The socialisation process for the girls centred on verbalisation and communication of needs and problems. Boys, on the other hand, engaged in 'super-macho' games that required little 'real talk' (1979, p.223).

Interestingly, Haas's younger age group produced L1 gender-associated differences in the form of sound effects for boys [little 'real talk'] and wishing-needing utterances for girls ['communication of needs and problems']. Wong-Fillmore also noticed that while one of the boys was very good at remembering formulaic expressions, it didn't prove sufficient for rapid progress in his L2 as he lacked flexibility and resented change and modification. On the other hand, one of the girls (5:3 years), showing an interest in belonging to the English group, also proved interested in understanding how things worked. This latter disposition became valuable when experimenting with linguistic



structures and led to rapid progress in the child's L2. Similarly, Haas's 8 to 12 year old boys' L1 speech contained many references to perceptual and functional attributes [how things work] together with location remarks. This suggests a need, on the part of these older boys to understand their environment in a physical and analytical manner.



### 3.2.1 Summary table: children

Study	L1/L2	n	Age	Focus of the study	Methodology	Results Male	Results Female
Hass (1979)	L1	24	4-12y.	Speech Features in spoken language: Form Topic  Content  Use	Laboratory observation	Male-associated features acquired by age 4  Sound-effects. Sport for all ages.  Functional attributes.  Information giving, direct requests	Female-associated features develop between 4-12  Laughter. School, sitting games the experiment. Wishes, needs.  Less information with age, and more compliant.
Wong-Fillmore [1979]	L2	5	5-7y	L2 development over 1 year	Classroom observation	Little real talk Macho games 1 subject: Memorization of formulaic expressions Lacked flexibility. Resented change and modification. Slow L2 progress.	Needs and problems  1 subject: Identified with target language group Showed an interest in 'how things worked' Transfer of the latter feature to L2. Rapid L2 progress.

Points to note:

The L1 and L2 studies share gender-related speech features: 'little real talk' for boys, and articulation of wishes and needs for girls.

The Content category in the male speech features includes the need to know 'how things work' - functional attributes; transfer of this need to L2 acquisition is shown to facilitate learning (Wong-Fillmore 1979). Although this ability was identified in a female subject, the possibility of encouraging the transfer of a similar ability among male learners should not be overlooked.

Memorisation of formulaic expressions does not necessarily promote flexibility and does not necessarily lead to rapid L2 progress.



### 3.3 Adolescents: self-reporting exercises in L2 acquisition

Two studies of adolescents' perceptions of L2 learning are reported here. These refer to strategy use and motivation among boys and girls.

Graham and Rees (1995) investigated gender differences in language learning among second level students in 1986 and in 1992/3. Questionnaires were administered in the first and second studies, with a further analysis in the second instance of 24 students, using think aloud protocols, interviews, and diaries. Both studies revealed high levels of anxiety on the part of the girls in spite of reports of enjoyment as a strong motivating force. Furthermore, the girls displayed sensitivity to their peers' judgement, not so much in relation to their competence in the L2 but rather in relation to how they would be perceived as persons. The boys, appeared to have a different agenda defined as 'personal' by the authors and dependent on the 'relevance factor' (Allwright 1984). The issue of work and language acquisition is also discussed, the girls having stated that they would work harder at the things they enjoyed, and even harder as a way of coping with anxiety. Graham and Rees also refer to the relationship which may exist between low self-confidence and conscientiousness (Kelly 1985). Boys will only work, on this view, at what seems appropriate or relevant. In both cases, the least self-directed males and females displayed more difficulty in explaining how they learned. Graham and Rees suggest that if a link between learning strategies and the resulting outcomes could be established, the learners would be more successful. In other words, articulating the outcome of certain strategy uses may contribute to fostering awareness of one's learning style, thus giving a sense of control to these learners.

In a review of various Australian educational reports, and on the topic of work, Martin (1994) refers to research evidence which shows that girls outperform boys because of their willingness to co-operate and collaborate through more involvement and more organisation than boys (Lasch 1994). Furthermore, boys are more likely to discontinue L2 acquisition because of the workload associated with the task. To sustain the claim Martin quotes a Commonwealth funded report commissioned by the Australian Second Language Learning Program, which suggests that 85% of the boys surveyed described 'learning a language to be more difficult than mathematics' (Zammit 1992). Here Martin establishes a relationship between the workload associated with L2 acquisition



and the language difficulty factor. We have seen that girls will work anyway, whether they enjoy what they are doing or whether they experience anxiety; boys will work if the subject studied is relevant (Graham and Rees 1995). Hence, perceived relevance may be a more likely predictor of boys' successful L2 acquisition. In this connection, the manner in which languages are sold, referring to travel and employment, is not entirely convincing to the boys. Perhaps one way of elucidating these problems would be a closer analysis of the gender-related understanding of what language learning and language in general are about. In other words, what is it that makes language accessible and relevant to both boys and girls.



### 3.3.1 Summary table: adolescents

Study	L1/L2	n	Age	Focus of study	Methodology	Results Male	Results Female
Graham & Rees [1995]	L2	198 384 24	Teens	Gender differences in L2 acquisition.	Questionnaire Self-reports. Diaries. Think-aloud interviews.	Personal agenda. Will work at what is perceived to be relevant.	Anxiety. Enjoyment. Sensitive to peer judgement in relation to personality and not competence. Work harder. Link between conscientiousness and low confidence.
Martin [1994]	L2	N.A.	Teens	Gender differences in L2 acquisition.	Review of educational reports.	Likely to discontinue L2 because of associated workload. L2 is more difficult than maths. Unconvincing L2 vocational relevance.	Cooperation. Collaboration. More involved in school life. More organized.

Points to note:

The relevance factor is important for boys, as they construct their personal working agenda.

There appears to be a relationship between the work-load associated with L2 and perceived L2 difficulty among boys. This suggests a problem with the mental accommodation of the learning material.

Anxiety and/or enjoyment lead/s girls to work harder. Girls appear to be more resourceful in their use of the learning environment.



### 3.4 Young adults and adults: responses to authentic L2 oral and written input

The issues of L2 oral and written input appear to correlate very strongly with gender-specific learning strategies. Here, we review four relevant studies by Bacon (1992), Boyle (1987), Nyikos (1990), and Bacon and Finnemann (1992).

Bacon (1992) investigated gender-effects in comprehension, processing strategies, and cognitive and affective responses in foreign language listening. In a review of the listening process, Bacon refers to three stages identified by Anderson (1985): perception, parsing, utilisation. The three stages draw respectively on echoic memory, short-term memory, and finally long-term memory. Bacon also reminds us of O'Malley and Chamot's (1990) categorisation of learning strategies into intentional cognitive actions and affective actions. The intentional cognitive actions can be divided into two sub-categories: metacognitive or global strategies, and cognitive or local strategies. The global strategies involve higher order planning, selective attention, monitoring and advance organisation. The local strategies manipulate information through inferencing, elaboration, grouping, imagery and deduction (O'Malley and Chamot 1990, p.216). Bacon suggests that global strategies also include evaluating comprehension and that local strategies make use of rehearsal, summarising and reorganisation. The social-affective strategies come into play during interaction. Bacon and Finnemann (1990) found differences between men and women's self-reports of L2 comprehension: men appeared to depend more on local strategies while women appeared to draw more on global strategies. In addition, women reported more interaction with native Spanish speakers, suggesting greater use of social affective strategies. Furthermore, men showed a propensity to vary their local strategies in relation to difficulty and did not vary their global strategies as much as women. This resulted, as far as men were concerned, in a bottom-up approach, translation being resorted to as a means of confronting difficulty. Women, for their part, were more consistent in their use of local strategies, and made use of 'a think in Spanish' approach, irrespective of the difficulty. They also used global strategies in higher proportion than men, by planning their listening, monitoring their comprehension and evaluating their strategy use. The men appeared to



‘by-pass the planning and monitoring aspects in favour of a direct cognitive approach’ (Bacon 1992, p.171).

In the study in question, men and women listened to two radio broadcasts, of varying difficulty, in Spanish. Immediate retrospective comments recorded the listeners’ comprehension strategies, level of comprehension, confidence and affective responses to the passages. When the difficult passage was presented first, women reacted more positively to the challenge and displayed higher levels of confidence and affective responses than men. However, men expressed confidence consistently across passage difficulty and order. (Confidence-level similarities across difficulty levels in relation to previous gender research in mathematics, have also been observed ). The actual comprehension performance did not vary across gender.

In relation to performance in a listening task, Boyle (1987) provides evidence which, he argues, proves that male learners are superior to females in recognition listening vocabulary tests. While he predicted that girls would outperform boys on all other measures including reading, listening, dictation, syntax, stress and intonation, he hypothesised that listening vocabulary tests were the males’ area of strength. The sample comprised a total of 257 Chinese males and 233 Chinese females who were tested in English. All subjects were aged between 18 and 20 years. The listening vocabulary tests were first, a picture vocabulary test, test 11, where a word was heard and a cross put over the picture which the word represented and second, test 12, a test with four written alternatives in the native language. It emerged from an analysis of the results that the female subjects had a higher mean score than the males in the first ten tests while the males outperformed the females in tests 11 and 12 with a 0.000 significance level in test 11, the picture test. The superiority of the male subject in these latter tests, according to Boyle (1987) and supported by Brimer (1969), is accounted for by the fact that

‘boys are dependent upon discriminating listening for a longer period of time than the girls are [ the latter’s speech develops faster ], and thus may become more proficient in it’ (Boyle, 1987, p.282).



However, evidence emerging from another study suggests that the boys' superiority in listening vocabulary recognition tasks may come from another source. Nyikos (1990), wrote the following:

'Meaningfulness assigned to cues by the learner will be tempered by the relative value these cues have to the learner from his/her cultural, hence gender-role perspective' (1990, p.277).

Nyikos proposed to analyse the effects of a selection of 'cues' or learning aids on learners of German. The sample amounted to 135 university students at beginner's level. Nyikos presented four treatment conditions relating to study lists, each containing nine German nouns in their singular and plural forms, along with the definite article. The measure was a quiz comprising written cues in English in the singular form, on which the respondents based their recall of the German grammatical article, and the singular and plural forms of each cued noun. The quiz was administered twenty-five minutes after the vocabulary study session. The treatment conditions were as follows:

Treatment 1: colour linked to one grammatical gender - green = neuter gender - (T1).

Treatment 2: picture - visual image linked to the word to be memorised - (T2).

Treatment 3: rote memorisation of nine German nouns containing singular and plural forms, along with definite article (T3).

Treatment 4: colour + picture - colour-coded picture linked to the word - (T4).

The results pointed to the overwhelming advantage of men over women in Treatment 4. Nyikos argues that men may respond better to visual and spatial stimuli - colour + picture. She posits that

'men were able to establish an associative bond between colour-coded information on the one hand, and the pictorial, spatial cues on the other' (1990, p.284).

This finding appears to concur with the traditional view that men are superior in visual and spatial tasks, an aptitude which contributes to the ability of combining stimuli in a



manner that is logical and relevant to the male learning style, and which helps to identify a particular learning strategy.

On the basis of this evidence, it appears that Boyle's analysis of the Chinese males' superiority in vocabulary recognition tasks fails to consider the picture element which may have had some part to play in the performance of these subjects.

Incidentally, the colour-only treatment (T1) together with the picture-only treatment (T2) proved successful with more females than males. The researcher attributes the female superiority in T1 to the permeation of socialised learning strategies, i.e., women are more 'colour-educated' than men. For the picture-only task (T2), Nyikos (Oxford and Nyikos 1988) suggests in another paper that the pictures were very simple line drawings devoid of three-dimensional representations, a fact which may have been less appealing to the male subjects. Finally, in relation to comparability, the objectives of the tests conducted by Boyle (1987) and Nyikos(1990) were similar in nature, a vocabulary recognition task on the one hand, and a vocabulary recall task on the other, and the samples involved were of a similar age level and educational level.

Our fourth study ( Bacon and Finnemann 1992), reports on the predictability of group/gender membership from responses to a questionnaire investigating attitude, motivation, willingness, comprehension, and affective responses in respect of authentic L2 oral and written input. The researchers recall males' superiority in visual-spatial tasks (Halpern 1986), and in analysis (Benbow and Stanley 1980), together with females' ability to surpass males in verbal receptive and productive skills in higher or lower level tasks. However, they note that the traditional biases favouring mathematics achievement for males, and verbal achievement for females, are weakening (Marsh 1989). In another study Marsh et al (1988) found that, while males reported higher self-concepts in mathematics than females, their achievement was lower than that of their female counterparts. When considering attitude and motivation, Gardner and Lambert (1972) found that females were more motivated than males and had more positive attitudes towards speakers of the target language. ESL studies point to the production of more comprehensible output on the part of men, and the search for more comprehensible input on the part of women (Gass and Varonis 1986).

The socialisation factor is put forward as an explanation for verbal gender differences by Nyikos (1990), who sees women's perception of good grades in terms of perception



of approval and men's in terms of peer competition. Nyikos suggests that the women outperformed the men because they were able to determine 'the criterion for success'.

In the study in question a one hundred-and-nine item questionnaire was administered to 938 third level respondents. The most significant result pointed to the higher motivation of the females relative to males, both instrumentally and integratively, when dealing with authentic oral and written input. The women made greater use of private, non-oral strategies in language learning. When dealing with authentic input, women used more global/synthetic strategies, but fewer decoding/analytic strategies than men. Women showed a higher level of social interaction with the target language (cf. Bacon and Finnemann 1992, p.490). Group membership could be predicted in 62% of the cases. Overall, women reported higher levels of motivation, strategy use, comprehension, positive affect, willingness to confront and exposure to authentic input.

Of interest is the renewed indication of women's willingness to confront challenge, as seen in the listening comprehension study previously described by Bacon (1992).

Author	Year	Level	Sample Size
Nyikos	1992	L2	138
Bacon	1992	L2	258
Finnemann	1992	L2	258

#### Points to note:

- Male subjects use a direct strategy
- are superior in visual/spatial L2 recall (see Nyikos 1992)



### 3.4.1 Summary table: young adults

Study	L1/L2	n	Age	Focus of the study	Methodology	Results Male	Results Female
Bacon [1992]	L2	19 m. 31 f.	3rd level	Gender and listening comprehension	Exposure to two radio broadcasts. Varying difficulty.	Display confidence. Local strategy dependence.  Direct cognitive approach. More negative when confronted with difficult passage first.	Higher levels of confidence and affective responses. Global strategy use Systematic use of local strategies. Use of social and affective strategies. Positive reaction when confronted with difficult passage first.
Boyle [1987]	L2	257m. 233 f.	3rd level	Gender and listening vocabulary tests.	Vocabulary recognition tasks.	Superior in picture vocab. test, and L1 written alternative test.	Superior in all other measure [reading, listening dictation, etc.]
Nyikos [1990]	L2	135	3rd level	Gender and effects of various learning aids.	Colour, T1. Picture, T2 Rote memorisation, T3 Colour+ picture T4	T4	T1 T2 T3
Bacon Finnemann [1992]	L2	938	3rd level	Predictability of group/gender membership.  62% predictability.	Questionnaire + authentic oral and written input.	More use of decoding/analytic strategies.	Higher instrumental, and integrative motivation. More use of private, non-oral strategies. More use of global/synthetic strategies. More L2 social interactions.

Points to note :

Male subjects use a direct cognitive approach, resort to decoding/analytic strategies, and are superior in visual/spatial tasks, which, when presented to them, lead to successful L2 recall (see Nyikos 1990; Boyle 1987).



Female subjects are willing to confront challenge, use global/synthetic and social/affective strategies and display higher levels of instrumental and integrative motivation.

### 3.5 Third-level students: strategy use

The previous section examined young adult and adult responses to oral and written input. In the course of the review, some learning strategies emerged as particularly relevant to the learner, and the gender to which he or she belonged. This section will attempt to review the reasons which determine that a learner will gravitate more readily towards the use of a particular set of learning strategies. This review is based, for a large part, on the work of three researchers, Ehrman, Oxford, and Nyikos.

Reporting on a variety of studies, Oxford and Nyikos (1988) refer to Politzer's (1983) findings which highlight the complexity of relating learning strategies to language achievement. Factors influencing strategy choice are partly due to the instructional environment - course level, teaching and evaluation methods, language being learnt. Subject to the selected language and the evaluation methods used, different types of achievement can be observed in, for example, the field of communicative competence, and rule-based competence. However, Politzer's study reveals that gender differences become clearly relevant, particularly when the interaction-social behaviour scale tips in favour of female learners. This finding confirms the social orientation females display in their L1 and coincides with Gilligan's (1982) description of females' predominant social image as the 'web', while the males' counterpart is referred to as the 'hierarchy'. With regard to the instructional environment, studies have revealed that a more favourable attitude and higher levels of confidence are found in females when low levels of competition are promoted in the classroom, together with choral drill practice and high levels of personalised teacher contact. On the other hand, male learners have been found to perform better in

'... teacher fronted classrooms, where raised hands lead to males dominating teacher-student interactions, regardless of the teacher's gender' (Eccles, MacIvar, and Crawford-Lange 1986, in Nyikos 1990, p.274).



This evidence points to the potential influence of the learning environment and its likely impact on the strategy choice of the learner, which, in turn, may contribute to hindering the development of gender-related learning strategies.

For example, Oxford and Nyikos (1989), analysed the responses of 1,200 third-level students to the Strategy Inventory for Language Learning (SILL). To their surprise, the female respondents did not choose functional practice strategies more often than men. These strategies involve authentic language use. The researchers suggested that the extra-curricular effort which such strategies demand were neither encouraged nor rewarded by the university, and that this academic and traditional environment led to the suppression of functional practice strategies, and to the promotion of performance on discrete tasks (1989, p.297). This particular and very large study investigated the kinds of strategies used by the students, and what variables influenced the use of such strategies. Among these variables, gender, course status and motivation featured. Of interest is the fact that two-thirds of the students were inexperienced language learners, and half of the total sample were majoring in technical subjects, such as engineering, computer science or physical science. With regard to the kinds of strategies used by the sample, five main categories emerged:

- formal rule-related practice strategies, which involve the use of structural knowledge, finding similarities between languages, generating and revising rules, analysing words;
- functional practice strategies. These include attending foreign language films, and seeking authentic oral and written input;
- resourceful, independent strategies which aim at embedding the L2 material into the memory, and the independent use of metacognitive strategies such as planning, self-testing and self-reward;
- general study strategies. These involve studying hard, time management, preparation;
- conversational input elicitation.

The variables found to influence the choice of these strategies were extracted from the sample's responses to a background questionnaire. The most powerful influence proved to be motivation, followed by gender, and it emerged that there was a series of interactions between these variables and others. The researchers point out that motivation in this case interacted in complex ways with gender, but also with other



variables, such as elective vs. required course status, field of specialisation, etc.. In respect of gender, Nyikos's study on the link between socialisation and memory factors (1990) showed that motivation was "gender-hued" when a particular learning strategy was chosen. In this study, male learners proved superior to female learners when they chose the particular mnemonic strategy of picture + colour treatment for word recall. This suggests that these learners were particularly receptive to this approach. This receptivity is possibly dependent on the attention of the learner, which in turn is dependent on his/her interest and motivation (Nyikos 1990, p.277). Motivation in this case would appear to be related to an intrinsic factor which is neither of the instrumental nor of the integrative kind and which appears to facilitate the learning; the relation is with the gender of the learner. This intrinsic factor is akin to Sperber and Wilson's (1986) principle of relevance which posits that individuals will

'produce as small as possible a processing effort [in Nyikos's study acquisition of new words by the use of a visual/spatial strategy, reflecting the learning style] in order to obtain as great a contextual effect as possible [recall of as many words as possible]' (1986, p.141).

Let us now return to the strategy choices made by the 1,200 students. It appears that gender had an important role to play in the formal rule-related practice strategy, the general study strategy and the conversational input elicitation strategy; females reported more frequent use of these strategies than males; males did not report any more strategy use than females on any factor. The strategies chosen by the female undergraduates concur with the traditional view that women are more willing to conform to conventional norms, that they wish to obtain good grades, and that they use conversational input elicitation strategies, reflecting social interaction, just as they do in their L1.

Another study, exploratory in nature and conducted by Ehrman and Oxford (1988), analysed the effects of gender differences, career choice, and psychological types - cognitive styles and aspects of personality - on adult language learning strategies. The researchers used a sample of sophisticated adult language learners; for our purpose we shall focus on two of the variables, namely gender differences and psychological types.



The MBTI (Myers-Briggs Type Indicator) instrument was used to elicit personality and cognitive features, while the SILL (Strategy Inventory for Language Learning) provided self-reports of preferred language techniques. MBTI theory, based on Jung's work, proposes that

‘individuals have preferences that affect what they pay attention to and how they draw conclusions or make decisions about what they perceive’ (1988, p.256).

It also accepts the notion that the attention preferences of an individual are ‘underlying, stable and unchanging for certain ways of functioning’ (1988, p.256). However, the flexibility and adaptability of individuals are not dismissed.

The MBTI measures four indices:

- Extraversion - Introversion:

Extraversion relates to the relationship between the individual and the outerworld of people and events.

Introversion is one's involvement with solitary activities together with the concepts and ideas of one's innerworld.

- Sensing - Intuition:

Sensing relies on data collected through the five senses. The world is seen in a practical and factual way.

Intuition is the initial awareness of relationships, possibilities and meanings, and translates into the innovative and the theoretical.

- Thinking - Feeling:

Thinking results in decisions made on impersonal, objective, cause and effect criteria.

Feeling takes into account personal and social values together with the personal relationships and the feelings of others.

- Judging – Perceiving:



The Judging preference apprehends the outside world through Thinking or Feeling (the judging process), and expects a planned, organised and controlled life, seeking closure.

Perceiving relies on Sensing or Intuition (the perceiving process), and values spontaneity, flexibility, freedom and autonomy, adaptability and open-ended situations (1988, p.257).

The SILL results gave rise to ten factors listed as follows: general learning strategies, authentic language use, searching for and communicating meaning, independent strategies, memory strategies, social strategies, affective strategies, self-management, visualisation strategies and formal model building. The aforementioned factors are analysed as dependent variables of the MBTI. The MBTI indices are independent of gender and career choice.

The most interesting findings in respect of this study relate to the differences in the psychological types and their strategy choices. Extraverts appear to prefer visual strategies, and make greater use of affective strategies. Introverts are mostly concerned with searching for and communicating meaning. Interestingly, Intuitives appear to make use of an Extravert's choice of strategies combined with those of an Introvert's. Searching for and communicating meaning emerged as the most significant finding in statistical terms. Additionally, the Intuitive Extravert uses memory strategies, and general strategies. The researchers argue that the Intuitive learner exhibits 'interest in the whole' which translates into formal model building, visualisation, pattern building and affective strategies. He/she also shows a 'preference for the abstract, global thinking, alertness to patterns rather than details'. These features, they believe, contribute to the make-up of a good language learner, whose difficulties, when they occur, may be affective in nature. The Sensing types appear to have no significant relationship with the SILL factors. However, strategies which are not reported in the SILL are mentioned by Sensing individuals; these are close observation and expert mimicry. The researchers propose that the weaker student who prefers Sensing is likely to experience difficulty when recombination of memorised material or inference making are required. A point to note in relation to this study, is that the subjects were all sophisticated language learners. In the 1989 study previously reviewed, Oxford and Nyikos used a very large sample of inexperienced language learners, half of whom were majoring in technical subjects, a predominantly male specialisation. The SILL was also



used as a measure, and it was found that males did not report any more strategy use than females on any factor. It is therefore proposed that first, sophisticated male language learners are less likely to be of the Sensing type, and secondly, that inexperienced male language learners are perhaps more likely to exhibit Sensing type traits. Furthermore, if we recall Wong-Fillmore's (1979) observations among young learners, we note that one of the boys was very good at remembering formulaic expressions [observation + mimicry], but did not progress in his L2 because of his lack of flexibility and his resentment of change and modification [recombination + inference making]. This suggests that personality type and cognitive style appear to be established at a young age. In addition, other study reviews to follow stress the male propensity for humour; humour is itself made up of close observation and mimicry. This suggests that if a male language learner is to rely on this aspect of his cognitive make-up, he will experience difficulty in his language learning experience. However, if other aspects of his cognitive style are activated, namely the physical apprehension of the environment by the collection of data through the five senses – Sensing -, the will to understand 'how things work' (Haas 1979; Wong-Fillmore 1979) - formal model building strategies -, and visual/spatial abilities, it is possible to assume that successful language learning can be attained. In no manner does this observation imply that all male learners are of the Sensing type and female learners of the Intuitive kind. However, Ehrman and Oxford established that in their 78 subject sample, while 60% were Intuitive thinkers and 25% Sensing thinkers, females reported more use of strategies than men. Ehrman and Oxford propose that this may be due to the psychological type of the learner, as more women preferred Intuition to Sensing and men showed a lesser preference for Intuition. Women also expressed a very strong preference for Feeling while more men leaned towards Thinking. The former trait is socially oriented, while the latter trait shows a propensity for formal model building strategies.

Worthy of note is the concurrence of ideas between philosophical assumptions and psychological findings in relation to Intuition as a learning structure. In the theoretical framework developed in Chapter 2, the learner's quest for meaning [searching for and communicating meaning, the L2 strategy predominantly used by Intuitives], led to the activation of intuition as a learning structure. In philosophical terms the learner's intuition could follow two paths, one spatial/visual and the other temporal/aural. Coincidentally, Ehrman and Oxford touch on the visual and the aural qualities of a



learner. They report that the Extravert-Intuitive thinker appears to incorporate visualisation and memory strategies. Visualisation, in the researchers' definition, is the ability to form mental images, to link sound with visual images, to see spellings and draw pictures of new words. The memory strategies are written and aural in the shape of lists of new words which are embedded in memory through rhyming, repetition, phonetic markers, sound symbols and flash-cards. These learning strategies are reminiscent of La Garanderie's spatial thinker who achieved comprehension in the mapping of visual elements, and his temporal thinker who reached understanding in following an aural itinerary.



### 3.5.1 Summary table: third level students, young adults and strategy use

Study	L1/L2	n	Age	Focus of the study	Methodology	Results Male	Results Female
Oxford Nyikos [1989]	L2	1200	3rd level	Strategy use	SILL	No particular Interaction on any of the SILL factors. * Strong interaction between motivation and gender.	Formal rule-related practice strategy. General study strategy. Conversational input elicitation strategy.
Ehrman & Oxford [1988]	L2	78	Adults & 3rd level	Strategy use and personality type	SILL & MBTI	Personality type	Strategy use
						Extravert: Intuitive: Intuitive-Extravert: Sensing type: Feeling type: Thinking type:	Visual, affective. Search for and communicating meaning. Visual, affective. Search for and communicating meaning. As above+memory [aural] and general [visual] strategies. Close observation, expert mimicry. No interaction with SILL. Social strategies. Formal model building.
Oxford & Nyikos	L2	N.A	Adults	Gender differences in L2 acquisition	Review of studies	Male	Female Interactive social behaviour, [Politzer, 1983].

Points to note:

Female learners show an ability to suppress gender-specific strategies - functional practice strategies - in order to conform to the academic environment and its expectations. This confirms the conscientiousness factor.

Strong interaction between gender and motivation.

Intuitives and Intuitive-Extraverts use the widest variety of strategies - aural and visual. Sensing types do not use any of the SILL items, but use unlisted strategies - observation and mimicry; these strategies do not appear to facilitate L2 learning (see Wong-Fillmore



1979; Ehrman and Oxford 1988). It is suggested that inexperienced male language learners are likely to fall into this category (see Oxford and Nyikos 1989, and forthcoming review on male humour). It is also suggested that these personality types and cognitive styles are established at a young age (see Wong-Fillmore 1979).

### 3.6 Third-level students and adults: written peer reviews and L2 related questionnaires

Here, a summary of three studies focuses on the issue of attitude, first, in relation to written peer reviews at third level, and second in relation to L2 related questionnaires in two separate studies.

Roen and Johnson (1992) examined the relationships between female and male language use, and particular complimenting strategies in peer reviews. The raters' perceptions of the Interpersonal - the social, expressive and cognitive functions of language -, the Ideational - the function that language has of being about something -, and the overall effectiveness of the peer reviews were reported (1992, pp.436-49). 47 graduate students, 18 males and 29 females participated in this project. They were asked to write a mid-term paper, which was then read by their peers. The reviews incorporated an evaluation, specific comments, a letter explaining what they liked about the paper and suggestions for improvement. Four raters - 2 males, 2 females - were then asked to evaluate the overall effectiveness of the reviews, taking into consideration the addressee's affective needs and cognitive needs.

In an initial research survey, the authors refer first to the results of the National Assessment of Educational Progress published in 1980, where gender differences were investigated among 9, 13 and 17 year old students' writing in 1969, 1974 and 1979. The analysis of older groups' results revealed that females wrote better papers than males in three genres : narration, persuasion and explanation. The males distinguished themselves in humorous fiction. Other studies suggest that females' style is

‘tentative, personal and exploratory, the audience being the writer himself’ (1992, p.439).



Males on the other hand were more

‘intent on conveying a message or communicating with others with an assured, impersonal and reportorial style’ (1992, p.439).

Oral studies confirm these findings, and show females communicating in a social-emotional manner, and males being task-oriented in their interaction. Such differences have led some researchers to conclude that the male mode of rhetoric is probably better suited than the female mode for written discourse ( Farrell 1979). Furthermore, when speech incorporates female features, the speaker is viewed as warmer, more polite, but less competent, less intelligent, less commanding, less convincing. ( Aries 1987, Swearingen 1991). Equally revealing are Gilligan’s observations (1982), that early on, males define themselves through separation, individuation, individual achievement, as against females whose definition is shaped out of their relationships with others, through their connectedness and interdependence.

Roen and Johnson’s study focused on complimenting and the effectiveness of peer reviews of mid-term papers. With regard to complimenting, positive and negative strategies were identified. Positive politeness indicates solidarity while negative politeness suggests deference to the addressee. The authors found gender differences in the use of a closing compliment with 62% females against 28% males using the strategy. Furthermore, females complimented females (73%) to a much higher degree than when writing to males (29%). Previous research also shows that females appear to use intensifiers more often , e.g. ‘really good’. Hence, it was expected that the writer’s affective needs would be met more effectively by female reviewers (Roen and Johnson 1992, p.445). The results suggested a female-to-female complimenting style which was quite distinct from female-to-male, male-to-female, and male-to-male styles. The female-to-female style contained more positive evaluation, more intensifiers, more personal referencing, and more closing compliments. It follows that the sex of the addressee was taken on board in the reviewer’s evaluation (Roen and Johnson 1992, p.449). The raters’ evaluation took three forms of complimenting strategies into account:



- positive evaluation, or the number of positive terms used by the reviewers ('interesting', 'fascinating', etc.);
- intensifiers, or the number of positive evaluative terms which were intensified ('very interesting', 'really enjoyed...', etc.);
- personal involvement, or the use of the student's name, and first and second person pronouns ('I', 'you', 'we', 'us', etc.).

The ratings of interpersonal effectiveness in terms of the social, expressive and cognitive functions of language of the peer reviews show that female raters valued papers containing more personal and intensified compliments. Male raters responded to these papers in relation to their positive evaluation only. Ideational effectiveness - the function that language has of being about something -, received lower scores from the female raters when the reviews contained a high proportion of complimenting strategies - female-associated language. Men reacted similarly, but particularly so when there was a high frequency of personal referencing. Overall, the female raters gave lower ratings than the male raters when dealing with reviews containing female speech associated features. Striking similarities were found when the overall effectiveness of the reviews was assessed by the raters. The females tended to favour papers containing fewer personal references and fewer intensifiers; the males reacted similarly and particularly negatively to personal referencing. Roen and Johnson conclude that, in this academic context, ideational effectiveness contributed more to overall effectiveness than interpersonal effectiveness ( pp.451-5). Finally they also suggest that context is 'transcended', in that regardless of what or whom is being evaluated, the assessment is in favour of a speech containing male associated features (p.459).

Bucaille-Euler's study (1993), is part of an international enterprise and based on Irigaray's questionnaire on the role of the grammatical subject where the feminine and masculine occurrences in the speech of respondents are examined. The hypothesis is that women are less likely to bear the role of subject than men. In other words, in a woman's speech, the subject is more likely to be 'you' masculine or 'he', rather than 'I' feminine or 'she'. Research investigating the issue in French, Italian and English having been undertaken, Bucaille-Euler focused on German. 35 women and 31 men aged 16 to 74 years were asked to make simple sentences with sets of words, e.g. " Kleid - sich - sehen ". The results discussed here are not directly related to the original purpose of the



author. They represent a compilation of her personal observations in relation to the attitudes of the respondents. She noted that 62% of women had a positive outlook to the topic, with just 8% expressing negative feelings. Men, on the other hand, had more difficulty complying with the directives. They tried to be original, provocative; they did not make simple sentences but instead produced long and judgmental phrases. The inability to comply with the directives suggests a need to assert one's individuality. The interesting point in this study is that the need for individuation in men and the compliant/co-operative features in women emerge in an L2 context. Recall that such observations had been made in an L1 context ( Gilligan 1982, Haas 1979, Lasch 1994 ).

The third study is also part of Irigaray's international project mentioned above. SurrIDGE (1993) focuses on synonymy. The respondents, 187 in total (55% women and 45% men), were asked to provide as many synonyms as they could to words which included, neutralise, fear, state, feel... . The results show that the men produced a greater number of synonyms than the women. However, given the nature of the words, the political context - the Gulf war -, and the affiliation of some of the students surveyed - College Militaire Royal de Kingston -, this is hardly surprising. Once more, the relevance of the results does not apply directly to this chapter, but additional comments made by the researcher shed light on gender-related behaviours. SurrIDGE comments on the fact that some men gave answers which she described as 'jokes'. She interprets these as symptomatic of an aggressive and condescending attitude to the questionnaire or the person in charge.



### 3.6.1 Summary table: adults, young adults, and L1 written peer reviews and L2 related questionnaires

Study	L1/L2	n	Age	Focus of the study	Methodology	Results Male	Results Female
Roen Johnson [1992]	L1	47	3rd level	Attitude to male and female language use, and the rated effectiveness of the language used.	Reviews of mid-term papers, and evaluation of effectiveness by 2 male and 2 female raters.	Review: Reportorial, impersonal style. Evaluation: Negative when high frequency of personal referencing in the reviews.	Review: Compliments, intensifiers, personal referencing. Evaluation: Lower ratings than males when dealing with female associated speech features.
						Both genders rate male speech features more highly in an academic context.	
Bucaille-Euler [1993]	L2	66	16 -74y.o	The role of the grammatical subject; feminine and masculine occurrences in respondents' discourse	Irigaray's questionnaire	Difficulty in complying with directives, [original, provocative, long judgmental phrases].	Positive, compliant, cooperative.
Surridge [1993]	L2	187	Adults	The role of the grammatical subject; feminine and masculine occurrences in respondents' discourse	Irigaray's questionnaire	Jokes [symptomatic of aggressive condescending behaviour].	

Points to note:

Female compliance. Male-associated speech features are rated more highly and are perceived to be more effective in an academic context, by both genders. In an L2 situation, males have difficulty in complying with directives.



### 3.7 Males and females: L1 interactions

The four investigations which follow highlight similar gender-related behaviours to those outlined in the previous section, but serve to point out that L2 perceptions, use and attitudes appear to owe a lot to L1 behaviours, and further suggest the fact that these features are part of an individual's relationship with the world in general.

Johnstone, Ferrara and Mattson-Bean (1992) were interested in the relationship between gender, politeness and discourse management in opinion poll telephone interviews. The researchers recorded 48 telephone public opinion interviews between 15 and 45 minutes long, in order to elucidate politeness strategies and discourse management, in a predominantly female job. Positive politeness indicating support and understanding occurred slightly more frequently when the interviewees were men than when they were women. Interviewers joked more with men because men joked more with them. Negative politeness, when indicating deference, was used equally with both sexes, but, when expressing apology, the strategy was used more often with women; however, in interviews with men the apologies were more numerous. The discourse management techniques, incorporating explanations and demonstration of answer formats, occurred significantly more often in the management of male respondents - 88% males, 33% females. Rephrasing answers was also required more often with men - 11 men, 1 woman. In relation to the men's banter, this device appeared to be an attempt on the part of the male interviewee to depart from the script and to be less compliant. Interestingly, the men were managed more but less thanked. On the other hand, women were less managed but received more thanks. This trend indicates a willingness on the part of the women to co-operate, and to be temporarily powerless during the interview. This was not the case for men, who tried to redefine the situation as a game and a contest among equals (p.423). Finally, most interviewers are females, as it is estimated that they obtain more responses. The researchers suggest that women's ability to vary their speech appropriately is more successful in eliciting co-operation and information from men and women alike.

Now we turn to three studies, carried out by Nordenstamm (1992), Faraco (1993), and Rundquist (1992), respectively, which investigate audio-recordings of male/female dyads and their conversational styles.



Nordenstam argues that gender is 'a more central variable than age or class' (1992, p.75), on the grounds that men and women have different sets of moral concepts, and different norms of interaction. Testing this proposition, she asked six single-gender dyads - 2 men, 2 women x 6 -, and six mixed-gender dyads - 1 woman + 1 man x 6 - to record themselves in conversation. Firstly, she found that the tape recorder played a central role for the men involved, but was totally ignored by the women. The topics of conversation proved very different according to gender; men talked about their jobs, sports, cars, and women about children, personal relations and jobs. Mixed groups varied more. Women talked about men and women, men about men. Men appeared more insecure about choice of topics of conversation and less free in the recording situation. Their language was more formal and they seemed less interested in talk. Only men yawned. Women overall, in single-gender dyads, and in mixed-gender dyads, initiated more topics and uttered more words. Interruptions were used by men as a conversational strategy among themselves, but in mixed gender dyads this strategy occurred more often and was equally used by women and men. However, the type of interruption used by women appeared to be more co-operative and supportive. Males talked in longer turns among themselves, women appeared to be better listeners and to use a high involvement style. In mixed-gender dyads, women talked in longer turns; these dyads were competitive in style, less supportive and less enthusiastic, particularly with the men. Nordenstam even goes as far as describing men as 'enthusiasm constraints' on women in casual conversation ( 1992, p.96). Similar findings were reported by Fishman ( 1983). Fishman observes that men did not have to use special strategies to gain attention, e.g. question asking, but used minimal responses in order to resist contributing to topics developed by women. Fishman remarked that women were far less successful than men in getting their topics attended to.

Faraco compares Fishman's observations with her own findings and reaches a different conclusion. She found that men and women worked equally hard at conversation. However, her analysis was qualitative, focused on the nature of the interruptions, as opposed to Fishman's quantitative approach focused on the frequency of the interruptions. Faraco's study took place in Brazil and she suggests that cultural and sociological factors might also have come into play.

Other recorded situations analysed the role of indirectness in the speech of mothers and fathers talking to their children, and males and females without the presence of



children. The type of indirectness in the speech observed, is defined by Rundquist (1992), as ‘flouting Grice’s maxims’ (1989). The maxims are defined as follows:

- the maxim of quantity : make your contribution informative;
- the maxim of quality : do not say what you believe to be false, or that for which you lack adequate evidence;
- the maxim of relation : be relevant;
- the maxim of manner : be brief, orderly, avoid ambiguity.

Rundquist found that the fathers flouted the maxims twice as often as the mothers when talking to their children. A similar trend became evident in the adult-only groups, and Rundquist ventures to say that the women used indirectness because the men did. This type of speech was used by the men as a form of control over their children’s behaviour; it was also used for superficial self-criticism, putting others down and humour. When women flouted the maxims, it was to criticise the children, to put the spouse down and for humour. In all cases, men played a dominant role by initiating the flouting, and gaining attention.



### 3.7.1 Summary table: adults and L1 interactions

Study	L1/L2	n	Age	Focus of the study	Methodology	Results male	Results female
Johnstone, Ferrara, Mattson-Bean. [1992]	L1	48	Adults	Gender, politeness, discourse management.	Opinion poll telephone interviews	Called for more positive politeness. Banter, jokes. Deference, and apologies more numerous when offered. More discourse management required, less thanked. Less compliant. Situation re-defined as contest.	Deference and apologies offered more often. Less managed, more thanked. Co-operation. More female interviewers because of more effective variation of speech.
Nordenstam [1992]	L1	36	Adults	Norms of interaction.	Recorded conversations. Mixed and same-sex dyads.	Same sex dyads:	
						Tape recorder plays a central role. Talk about jobs cars, sport. Talk in longer turns.	Ignore tape recorder. Talk about children, personal relations, jobs. Better listeners.
						Mixed sex dyads: less	more competitive enthusiastic.
						Talk about men. Insecure in choice of topics. More formal language. Less interested in talk, yawn. Interruptions. Enthusiasm constraints.	Talk about men and women. Initiate more topics. Utter more words. Supportive interruptions. More co-operative.
Faraco [1993]	L1	4	Adults	Conversation strategies	Qualitative analysis.	Men and women work equally hard at conversation.	work equally hard
Rundquist [1992]	L1	7 families	Adults Children	Discourse deviations.	Recorded conversations, Grice's maxims	Flout maxims twice as often Humour, attention seeking.	Do not initiate the flouting. Do not initiate humour.

Points to note:

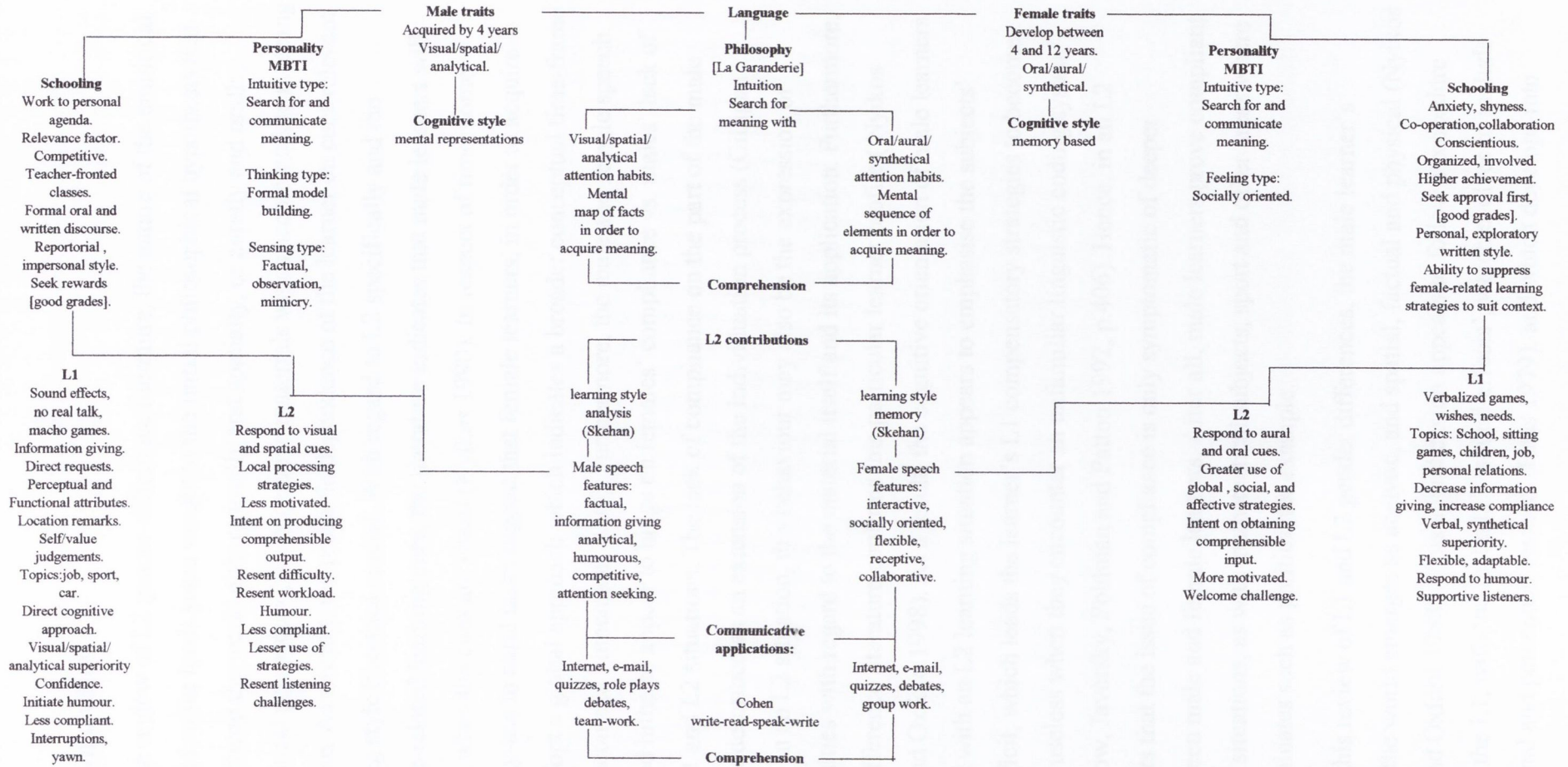
Patterns observed in L2 are also manifest in L1: less compliance from men, more co-operation from women; less 'real talk' from men, more insecurity in choice of topics,



interest in physical environment - tape recorder -, use of humour and interruptions as conversational strategies.



3.8 Towards a synthesis of relationships between traits emerging from various research strands.



Points to note:

<p><b>Male traits:</b>                  Hands-on, factual understanding of the world.                  Management of certainties.                  Conceptual time-frame: The Present</p>	<p><b>Intuition:</b>                  Temporal perspective: The Future  <b>L2 features:</b>                  Management of uncertainties in the Present, for possible and eventual success in the Future.                  Phonemic coding ability                  Memory (Skehan 1998)</p>	<p><b>Female traits:</b>                  Global understanding of the world.                  Management of uncertainties                  Broader conceptual time-frame</p>
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### 3.9 Conclusion

To summarise the review of L2 gender-difference literature, the nature of the empirical evidence provided so far lends some weight to the initial philosophical hypothesis that individuals apprehend the world either visually and spatially, or aurally and orally. From a philosophical perspective, the respective materials which accommodate meaning are space and time. As a result, the probable dependence of the learner on cues relevant to his/her learning style becomes crucial. With regard to L2 specifically and the question of space-related learning cues, the literature indicates that male learners will acquire meaning when the cues are visual (Nyikos 1990). In respect of time, some studies in strategy-use in aural tasks suggest that female learners, in order to acquire meaning, will adopt a global approach which indicates a broader conceptual time-frame (Bacon 1992; Bacon and Finnemann 1990). Furthermore, the male and female speech features described hitherto appear to hinge on females' compliance vs. males' lack of compliance in L1 and L2 situations. The lack of compliance on the part of the male subjects has been described as an extension of the individuation process (Gilligan 1982). However, in an L2 situation, this behaviour may also be the expression of perceived difficulties with regard to the material itself and its application. Furthermore, the L2 gender-difference literature confirms this particular learner profile ( Nyikos 1990; Ehrman and Oxford 1998). As a result, the cognitive orientation of male learners when confronted with an L2 learning situation appears to emphasise the subjects' phonological deficit, which leads the learner's L1 compensatory strategies to become 'less efficient or useless when they encounter an unfamiliar linguistic coding system' (Sparks, Ganschow, Javorsky, Pohlman and Patton 1992, p.406). Hence, in an L2 context, it appears that the issue of compliance is only symptomatic of deeper differences between male and female learners. After all, male learners prove compliant in other learning situations, as with mathematical subjects, sport and other areas where language predominates such as politics, for example.

In the course of this review of L1 and L2 gender differences, the male learner's apprehension of the world emerges as analytic, and spatial, factual and physical (Nyikos 1990; Ehrman and Oxford 1988) . This apprehension appears to follow a procedure which begins, in the L1, with 'no real talk', 'sound-effects', which evolves to include location, functional and perceptual remarks (Haas 1979), and which develops into



language used for information giving, in a formal and reportorial manner, and for humour (Roen and Johnson 1992; Nordenstam 1992; SurrIDGE 1993). In an L2 situation, the male subjects' learning procedure is described as a direct cognitive approach which uses local processing and bottom-up strategies (Bacon 1992). Furthermore, there are indications that male subjects incline towards the Sensing psychological profile, which sees the world in a practical and factual way and combines close observation and mimicry. Hence, on this basis, the learner who identifies with the above features is more likely to thrive in a world of certainties, in other words one which is factual, practical and with opportunities to apply the material learned; the time-frame for this learning style is possibly the Present, that is the 'here and now'.

Let us now consider an L2 classroom situation which promotes communicative strategies involving co-operation, collaboration - activities which Martin (1994) showed to be particularly appealing to girls. The L2 situation also demands a great deal of management of uncertainties towards eventual attainment of the L2; finally, the application of the knowledge in a real communication situation is often perceived as deferred or remote. In this case, the learner will probably require the ability to operate in a time-frame which is oriented towards the Future. In most cases, the L2 situation proposes 'eventual' attainment and deferred application, in communication situations which are not perceived as real or even as corresponding to the male form of interaction ( see the co-operation issue).

In contrast to male learners, we discern that female learners apprehend the world in a global, synthetic manner, while verbalising their understanding of the environment to a greater extent, and displaying compliance more readily (Haas 1979; Wong-Fillmore 1979; Graham and Rees 1995).

In an L2 situation, for the female learner, aural comprehension is achieved by resorting to global, synthetic strategies (Bacon 1992). In this respect the contrast in the temporal orientation of the female and male L2 learners emerges distinctly when one considers the aural task itself. While the males resort to local processing strategies, the female subjects are reported to plan, monitor, and evaluate their comprehension, while the male learners display a dependence on translation when confronted with difficulty (Bacon 1992). As a result, the pattern which emerges suggests that the latter strategy contains elements of a need to understand the 'here and now' of the situation; the time-frame, in this case, is the Present. The former strategy suggests a propensity to operate in a wider



time-frame, which as well as the Present and the Past - monitoring, evaluating - includes an orientation towards the Future - plan. Tentatively, one could say that, for a female L2 learner, understanding the 'here and now' may not be the end in itself, the end being comprehension of the whole.

Further exploration of the gender-difference issue in L2 aural tasks suggests that differences in learner style may not only affect the **apprehension** and **perception** of a particular problem, but also impact on **the resourcefulness** of the learner in using particular strategies to solve problems. Bacon's study (1992), indicates that the conceptual time-frame appears to be different according to the gender of the learner: in order to solve a problem, the male learner, when confronted with L2 difficulty, appears to depend on the 'here and now' or the Present, and the female learner's management style appears to rely on elements of the Past, Present and Future. On this basis and with regard to L2 learning, one can tentatively suggest that temporal orientations of this kind will also affect learners' expectations in respect of the **application** of L2 knowledge.

Where

- style is visual, spatial,
- understanding of the world is practical and factual,
- reliance on the 'here and now' is latent,
- definition is articulated around the individuation process,

it may be that in an L2 situation, application of L2 knowledge will have to occur in a relevant and immediate manner. Relevance of application, in this case, should possibly include instances of communication which correspond to the male learner's definition and language usage. His definition is one of individuation, his language usage is reported to include information giving, formal and reportorial style, and humour. In this respect and for these learners, an L2 formal context based on the communicative approach may not be perceived as an appropriate environment in which to express one's style.

Where

- style is aural/oral,
- the conceptual time-frame is broader,



- definition within the world is in terms of one's connections with others,

it may be that application of L2 knowledge finds immediate relevance in an L2 communicative situation in a formal context.

Despite the differences which arise in female and male L2 learning styles, the L2 as well as the gender differences literature suggests that there are grounds for reconciliation. Skehan (1998) proposes that the notion of two learning styles is more attractive than that of aptitude, because a style reflects 'a personal preference rather than innate endowment' (p.237). This also implies that

'there is the possibility that with style, even though there may be a continuum of some sort with more or less of an attribute being possessed, all the advantages may not accrue to only one end of the continuum' (Skehan 1998, p.237).

Skehan stresses the fact that the concept of learning style does not mean that some people may have greater abilities than others, but rather, that differences lie 'in the way different people interact with the world and with the ways in which they perceive and organise information' (1998, p.239). The present study is in keeping with this view and Chapter 9 highlights differences in apprehension, perception, learner resourcefulness as well as learners' level of interaction in the L3 classroom; however, here, these differences are related to gender. Bialystok's work defines L2 processing as comprising two components, namely the analysis component and the control component (1986, 1990). The analysis component would appear to contain elements which are pertinent to the male learning style; these include the ability to organise knowledge into networks and schemata with a particular focus on meaning, whilst the control component is concerned with co-ordinating form and meaning and evokes the female learning style. Therefore, it becomes possible to assume that L2 comprehension can be achieved, in part, by means of analytic, decoding, visual and spatial strategies provided the control component is integrated into the L2 development. Hence, L2 application situations could be devised to accommodate the male speech features described in L1 and L2 situations, as well as those of female learners, so that L2 stimuli and L2 interactive opportunities can be recognised and interpreted meaningfully by the two learner styles.



In a recent review of studies on language and gender in second and foreign language education, Sunderland (2000) questions the concept of gender *differences* and proposes instead the concept of gender *identities*. Twelve of the sixteen sections under review are underpinned by theories of gender differences; the sections include achievement and subject choice, L2 learning and ability, the four skills, motivation and investment, teacher perceptions, language learning styles and strategies, classroom interaction, non-sexist language, teaching materials, language testing, teachers and professional organisations, teacher actions and teacher education. With the exception of motivation and more particularly investment, Sunderland suggests that gender differences promote theories of deficit, disadvantage, dominance and cultural differences. Furthermore, gender differences tend to become fixed because contextual factors are not always considered in gender studies. In respect of motivation or investment (the long term view of motivation), Sunderland proposes that boys' lack of L2 motivation may be the result of negative perceptions of future language use and careers traditionally associated with women; in addition, gender identity itself may be at the root of boys' motivational problems in that rejection of practices associated with femininity is part of the process of 'becoming a man' or perceptions of masculinity. This view suggests that gender is constructed both socially and linguistically in an ongoing manner as is reflected in the concept of gender *identity*; the latter also encompasses the notion of multiple and fluid identities, the social representation of gender in teaching materials, the importance of self-determination, choice, sexual identities and discourses as social practices. Hence, on this view, gender in foreign language learning becomes as much a matter of study for sociolinguists as it is for psycholinguists. Furthermore, on the basis that gender differences in achievement and performance are minimal (Ekstrand 1980), Sunderland rejects the notion of biological differences as a satisfactory explanation for gender differences in L1 / L2 performance and / or achievement.

Interestingly, while emphasising the role of culture and society in shaping gender identity, the review article alludes to two additional formative factors in the learner's identity: perception and experience. This view is in keeping with the phenomenological perspective adopted in the present theoretical framework:

'The problem [of gender and L2 learning] may be the wider perceptual and crucially social one of what is *experienced* [author's italics] (by boys and girls,



women and men) as masculine and what is not, and how and with what conditions this varies' (2000, p.216).

Hence, boys in particular, are described as perceiving the phenomenon of gender as 'a binary opposition': masculinity is what femininity is not and vice versa (p.216). This observation leads Sunderland to describe the mixed-sex language classroom as :

‘ ‘an already-gendered’ site from which boys try to escape as soon as possible in order to distance themselves from the femininity by which they see it [the language classroom] characterised’ (p.216).

Sunderland suggests that Nilan’s recommendation concerning drama as a curricular subject, may be somewhat relevant to the language classroom:

‘the adamant display of masculinity might be considered critically necessary in a subject that belongs in the ‘feminine’ half of the gender bifurcated secondary school curriculum’ (Nilan 2000, p. 53).

The gender differences literature also advocates the accommodation of two representations of the world in the classroom. Although the recommendations do not apply to L2 learning specifically, one can integrate these views in a formal L2 learning context. Halpern (1992) proposes ‘a biopsychosocial framework’ on the grounds that some data demand that we consider biological hypotheses, psychosocial views, as well as cognitive differences.

With regard to biological findings, spatial and verbal abilities consistently emerge as strong indicators of gender differences. These findings correlate with left and right-handedness tests which suggest that left-handed males have an advantage over right-handed males on tests of verbal ability. Conversely, left-handed females display superior spatial abilities over right-handed females. This indicates that psychosocial arguments are irrelevant in this context, since left-handedness or right-handedness in individuals does not depend on a different socialisation process.

In respect of psychosocial arguments, it appears that values and attitudes attributed to academic and career choices have also a large role to play; changes in female



participation in the work force, females' higher scores in school, even in subjects in which males excel, would suggest that biological arguments alone are insufficient to account for gender-differences.

With regard to cognitive abilities, Halpern argues that gender differences may equally find justification in biological as well as in psychosocial views. For example, gender differences are most frequently observed in timed tests; the biological hypothesis may invoke differences in responsiveness of the central nervous system; however, the psychosocial argument may stress females' more cautious disposition when responding to stimuli. (Halpern 1992, pp.238-44).

The biopsychosocial model proposes that while biology affects individuals' psychological and social make-up, the converse is also true: psychological and social factors can also influence biologically based differences. Much of the research in gender differences has been conducted by experts in the area of sex differences; however, Halpern argues, these findings do not tell us anything about the nature of these differences. A cognitive approach to gender difference research through the analysis of cognitive processes is advocated by Halpern (1992, p.251). This view concurs with Skehan's cognitive approach to L2 learning which integrates two learning styles, one based on analysis and the other on memory. Finally, on the basis that spatial skills are trainable, Halpern recommends that spatial skills training should take place from the early years of schooling through to college. In addition, various ways of presenting materials, the promotion of verbal and spatial problem solving skills are encouraged, in order to develop 'flexible cognitive strategies and multiple modes of representations' (1992, p.255). We propose that a learning environment of the kind described above is conceivable in an L3 learning situation, at the beginning levels of L3 learning, within the particularly fertile environment of an integrated curriculum at primary level.