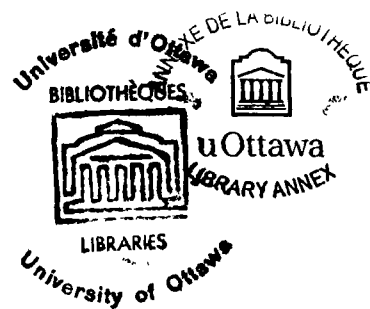


AN EMPIRICAL STUDY OF THE RELATIONSHIP  
BETWEEN ACHIEVEMENT IN A SECOND LANGUAGE,  
INTEGRATIVE ORIENTATION AND ALIENATION  
FROM THE SECOND LANGUAGE REFERENCE GROUP  
A TEST OF LAMBERT'S THEORY

by Marc Laplaine

Thesis presented to the School of Graduate  
Studies of the University of Ottawa as  
partial fulfillment of the requirements for  
the degree of Doctor of Philosophy



Ottawa, Canada, 1974

UMI Number: DC53657

### INFORMATION TO USERS

The quality of this reproduction is dependent upon the quality of the copy submitted. Broken or indistinct print, colored or poor quality illustrations and photographs, print bleed-through, substandard margins, and improper alignment can adversely affect reproduction.

In the unlikely event that the author did not send a complete manuscript and there are missing pages, these will be noted. Also, if unauthorized copyright material had to be removed, a note will indicate the deletion.

**UMI<sup>®</sup>**

---

UMI Microform DC53657  
Copyright 2011 by ProQuest LLC  
All rights reserved. This microform edition is protected against  
unauthorized copying under Title 17, United States Code.

---

ProQuest LLC  
789 East Eisenhower Parkway  
P.O. Box 1346  
Ann Arbor, MI 48106-1346

## ACKNOWLEDGMENTS

This thesis was prepared under the supervision of Professors Virginia M. Keith, Ph.D., Marvin W. Boss, Ph.D., Phillip Patsula, Ph.D., and Martin Cooper, Ph.D., of the Faculty of Education, University of Ottawa. The writer wishes to thank them for their scholarly guidance and sincere concern.

The writer is also indebted to the "Commission Scolaire Régionale de l'Outaouais", in particular to D. Mourre, "Conseiller pédagogique d'Anglais", to A. Léveillé, Principal, and to the teachers and students of the Polyvalente de Gatineau who contributed to the success of the study. Special mention must be made of Daniel and Claire Macauley for their generous assistance.

To my wife, Molly Tara, with whom I was able to discuss ideas at every stage of this project, I express my love and appreciation.

## CURRICULUM STUDIORUM

Marc Laplaine was born May 14, 1945, in Ottawa, Ontario. He received the Bachelor of Arts degree in 1967 and Master of Education degree in 1970 from the University of Ottawa. The title of his upgrading paper for the doctoral program was: Construction and Validation of a Likert-Type Questionnaire to Measure French-Speaking Students' Alienation From the English Culture and People in Canada.

## TABLE OF CONTENTS

Chapter	page
INTRODUCTION .....	vi
I.- REVIEW OF THE LITERATURE .....	1
1. Lambert's Theory of Second Language Learning and Bilingualism	1
2. The Concept of Alienation	9
3. Empirical Studies	14
4. Statement of the Problem	33
II.- EXPERIMENTAL DESIGN .....	35
1. The Subjects	35
2. The Measuring Instruments	37
3. Collection and Description of the Data	49
4. Plan of the Statistical Analysis	55
III.- PRESENTATION AND DISCUSSION OF RESULTS .....	57
1. Presentation and Discussion of the Results of Testing the First Hypothesis	57
2. Presentation and Discussion of the Results of Testing the Second Hypothesis	65
SUMMARY AND CONCLUSIONS .....	71
BIBLIOGRAPHY .....	77
 Appendix	
1. THE COMPREHENSIVE RESEARCH QUESTIONNAIRE .....	81
2. ABSTRACT OF <u>An Empirical Study of the Relationship         Between Achievement in a Second Language, Integrative         Orientation and Alienation From the Second Lan-         guage Reference Group - A Test of Lambert's Theory</u> .....	90
3. CONSTRUCTION AND VALIDATION OF THE ALIENATION QUESTIONNAIRE .....	94

## LIST OF TABLES

Table	page
I.- Product-Moment Correlation of Scores on the Four Alienation Dimensions (N = 113).....	44
II.- Frequency and Percentage of Students in Each of the Seven Classes of the Blishen Scale (N = 200) .....	52
III.- Pearson Correlation Coefficients Between Socioeconomic Status and the Other Research Variables (N = 200) .....	54
IV.- Means, Standard Deviations and Maximum Range of the Four Alienation Subscales (N = 200) .....	56
V.- Alienation Means, Standard Deviations and Number of Students for Each of the Cells of the 2 x 2 x 2 Crossed Factorial Design (N = 80) .....	59
VI.- Multivariate Analysis of Variance for Testing Achievement in English (A) Integrative Orientation (B) and Sex (c) when the Criteria are Alienation Dimension Scores .....	60
VII.- Scheffé Simultaneous Confidence Intervals Following the Multivariate Test of Significant Differences Between the Alienation Means of High and Low Achievers in English .....	61
VIII.- Scheffé Simultaneous Confidence Intervals Following the Multivariate Test of Significant Differences Between the Alienation Means of High and Low Integrative Orientation Groups .....	67

## INTRODUCTION

The last decade has witnessed an increasing emphasis on second language learning. Some attempts have been made to propose theories in this area but these are still in the formative stage; nonetheless they have generated numerous ideas for research. So far, considerable attention has been devoted to experimentation in teaching methods and development of material but very little investigation has been carried out to determine the socio-psychological effects on the learner.

A significant recent contribution in this area has been the socio-psychological theory of second language learning and bilingualism proposed by W. E. Lambert. His theory maintains that the mastery of a new language is conducive to the learner's closer identification with the second language reference group; it also maintains that an integrative type of orientation (i.e. a motive to have stronger ties with the other reference group) toward the learning task is related to identification. Lambert's concept of identification or "acculturation" has been assumed to be the opposite of "alienation" as defined by Seeman.

Lambert's theory has suggested the problem and research hypotheses of the present study. Its purpose is to determine empirically the relationship between a) achievement and alienation and b) integrative orientation and alienation from the second cultural group. Its contributions

are primarily theoretical in that it seeks to extend and verify important aspects of the theory. The findings are expected to have implications for educational practice particularly for setting objectives and designing curricula for low achievers.

The research report is organized into three chapters. The first presents a review of the pertinent literature together with the theoretical rationale which leads to the statement of the problem and the research hypotheses. The second chapter on the design of the study includes a description of the subjects, measuring instruments, data and the outline of the statistical analysis. The results of testing each hypothesis are presented and discussed in the third chapter. This is followed by a summary of the research and the statement of conclusions. An annotated bibliography, appendices of the data-collecting instruments and an abstract of the thesis conclude this report.

## CHAPTER I

### REVIEW OF THE LITERATURE

The purpose of this chapter is to furnish the essential background information for the present research project. The theoretical framework will be provided by the description of Lambert's theory<sup>1,2,3</sup> of second language learning and bilingualism. The concept of alienation will also be discussed as it relates to Lambert's views on membership in a second linguistic group. This will be followed by a review of pertinent empirical studies. The chapter will end with a summary of the literature and the statement of the research problem and hypotheses.

#### 1. Lambert's Theory of Second Language Learning and Bilingualism.

Early studies on bilingualism concentrated chiefly on the relationship between knowledge of a second language and intellectual capacity. Investigators soon related bilingualism to a great variety of variables including emotional stability, maturity, scholastic achievement and personality traits. However, on the basis of an exhaustive review of the literature

---

1 W. E. Lambert, "Psychological Approaches to the Study of Languages; Part II: On Second Language Learning and Bilingualism", The Modern Language Journal, Vol. 47, No. 3, 1963, p. 114-121.

2 Idem, "A Social Psychology of Bilingualism", Journal of Social Issues, Vol. 23, No. 2, 1967, p. 91-109.

3 R. C. Gardner and W. E. Lambert, Attitudes and Motivation in Second Language Learning, Rowley, Massachusetts, Newbury House, 1972, Vol. III, 316 pages.

Jensen concluded:

It is difficult to generalize from the findings to date, for the authors have used varying definitions of bilingualism, have analysed subjects which were too few and too atypical, and have employed greatly varying procedures in gathering the data.<sup>4</sup>

What was obviously lacking was an overall theory of bilingualism that could explain, integrate and give direction to research in the area of second language learning.

One such theory was initially proposed by Lambert in 1963<sup>5</sup> and was further elaborated in 1967<sup>6</sup> and 1972<sup>7</sup>. This theory consists of two major dimensions: 1) a Psychology of Bilingualism and 2) a Social Psychology of Second-Language Learning. The first deals with the systematic study of "how one acquires a second language and how certain individuals are able to make efficient use of two or several languages".<sup>8</sup> The focus is on such issues as the measurement of bilingual skill, second language teaching methods, intellectual functioning of bilinguals, etc.

In contrast, the second dimension approaches bilingualism from a perspective "characterized not only in its interest in the reactions of

---

4 J.V. Jensen, "Effects of Childhood Bilingualism, Part II," Elementary English, Vol. 39, No. 4, 1962, p. 366.

5 Lambert, Op. Cit., 1963.

6 Lambert, Op. Cit., 1967.

7 Gardner, and Lambert, Op. Cit., 1972.

8 Lambert, Op. Cit., 1963, p. 118.

the bilingual as an individual but also by the attention given to the social influences that affect the bilingual's behavior and to social repercussions that follow from his behavior."<sup>9</sup> Attention is thus shifted from the traditional aptitude variables to the socio-psychological factors that are related to successful learning of a second language. This dimension has come to be known as Lambert's Social-Psychological Theory of Second-Language Learning and will provide the framework for the present study.

In connection with this theory, a distinction will be made between (a) factors which account for and (b) factors which result from successful learning of a second language.

a) Factors which Account for Success in Second Language Learning

Lambert explains the learning of a second language "in much the same way as Mowrer<sup>[10]</sup> interprets the child's learning of his first language".<sup>11</sup> Just as the latter believes that language learning stems from a child's desire to be like valued members in his environment (first home, then community) so too does Lambert state that prospective second language learners "must be both able and willing to adopt various aspects

---

9 Lambert, Op. Cit., 1967, p. 91.

10 O. H. Mowrer, Learning Theory and the Symbolic Processes, New York, Wiley, 1960, p. 70-162.

11 Lambert, Op. Cit., 1963, p. 115.

of behaviour, including verbal behaviour which characterize members of the other linguistic cultural group."<sup>12</sup> The idea that both attitude-motivational and aptitude variables are relevant to second language learning is noteworthy. Indeed, language aptitude and verbal intelligence have been the most reliable predictors of achievement in Lambert's studies. However, as its name implies, the Socio-Psychological Theory of Second-Language-Learning is chiefly concerned with societal or group related variables that influence the individual's achievement in a second language. The learner's attitudes and motivation have therefore received special emphasis.

The socio-psychological viewpoint concerning attitudes is that the "learner's ethnocentric tendencies and his attitudes toward the members of the other group are believed to determine how successful he will be, relatively, in learning the new language."<sup>13</sup> This quotation contains two elements which require further clarification:

Ethnocentrism is an impeding element and refers to a form of "rigid and stereotyped thinking about in-groups and out-groups, or about own groups in contrast to foreigners."<sup>14</sup>

A non-ethnocentric person would therefore be tolerant, non-prejudicial toward foreign people and ideas and would allow relatively little importance to the in-group out-group distinction.<sup>15</sup>

---

12 Idem, Op. Cit., 1967, p.102.

13 Idem, Op. Cit., 1972, p.3.

14 Idem, Op. Cit., 1967, p.106.

15 W. E. Lambert and O. Klineberg, Children's Views of Foreign Peoples, New York, Appleton-Century-Crofts, 1967, p.78.

Attitude is defined as... an organized and consistent manner of thinking, feeling and reacting with regard to people, groups, social issues, or more generally any event in one's environment. Its essential components are thoughts and beliefs, feelings (or emotions), and tendencies to react.<sup>16</sup>

Based on the two definitions above, it is justifiable to consider ethnocentrism as a special form of attitude. Such a consideration is supported by Kretch and Crutchfield.<sup>17</sup> Finally, Lambert interprets the concept of attitude as a component of motivation in the sense that it is believed to be partly responsible for the student's level of motivation toward the learning process.<sup>18</sup>

Regarding motivation, Lambert's theory proposes that the student learns a second language with various aims in mind and pursues these with varying degrees of drive strength.<sup>19</sup> He employs the terms "orientation" (which refers to two main purposes for learning) and "intensity of motivation".

Orientation... is said to be instrumental in form if the purposes of language study reflect the more utilitarian value of linguistic achievement, such as getting ahead in one's occupation. In contrast, the orientation is integrative if the student wishes to learn more about the other cultural community because he is interested in an open-minded way, to the point of eventually being accepted as a member of that other group.<sup>20</sup>

---

16 W. W. Lambert and W. E. Lambert, Social Psychology, Englewood Cliffs, New Jersey, Prentice-Hall, 1964, p.50.

17 D. Kretch et al., Individual in Society, New York, McGraw-Hill, 1962, p. 213.

18 Lambert, Op. Cit., 1967, p. 102.

19 R. C. Gardner and W. E. Lambert, "Motivational Variables in Second Language Acquisition", Canadian Journal of Psychology, Vol. 13, No. 4, 1959, p. 267.

20 Gardner and Lambert, Op. Cit., 1972, p. 3.

Intensity of Motivation has most often been operationally defined by indices of interest in learning a language and is determined by both attitudes and orientation.

It follows from the first definition that both the instrumentally and integratively oriented students view second language learning as part of self-fulfillment but that the latter will display a greater concern for the culture and people whose language they are learning. In fact, the integrative orientation is believed to be at the roots of the long term motivation needed to master a second language.

b) Factors which Result from Successful Learning of a Second Language

Up to this point attention has been confined to factors that account for second language learning. The present section is devoted to the consequences of learning a new language.

The theory stipulates that second language learning is followed by changes in the learner's attitudes. In the first place, the successful student is said to hold more favorable attitudes toward the other group than the person who has not studied the second language. Furthermore, with respect to one's own group, Lambert suggests that as one learns another language he is likely to become "especially sensitive to and leery of ethnocentrism".<sup>21</sup>

---

21 Lambert, Op. Cit., 1967, p. 107.

The overall picture is therefore that of a person who has developed a more flexible outlook towards his own and other groups.

Gradually mastering a new language is also believed to affect the learner's relations to the two cultural-linguistic groups. However, this is often accompanied by stressful or conflicting demands on the learner. Lambert believes that various sorts of social pressures originate "from those who don't want him to enter too intimately into their cultural domains and from others who don't want him to leave his 'own' domain".<sup>22</sup> In addition, such pressures are said to have potential effects on the learner's self-concept, his sense of belonging, and possibly even lead to anomie, experienced as dissatisfaction, uncertainty, or as feelings of not belonging comfortably to one group or to the other. A number of such individual reactions have been recognized but have so far remained unexplored.

The idea that learning a new language is conducive to a closer association with the community represented by that language however occupies a central place in the theory and deserves further attention.

---

22 Idem, Ibid, p. 105.

Over and above aptitude, one would then anticipate that a really serious student of a foreign or second language who has an open, inquisitive and unprejudiced orientation toward the learning task might very likely find himself becoming an acculturated member of a new linguistic and cultural community as he develops a mastery of that other group's language.<sup>23</sup>

The above quotation is of vital importance in that it has generated the research hypotheses of the present study. It inter-relates the three main variables under investigation, namely, "Integrative Orientation", "Acculturation" and "Achievement". In accordance with the definition of kinds of orientation presented earlier, it is apparent that the initial part of the quotation refers to the integrative type. This variable is described as antecedent to acculturation within the second linguistic community. Another variable which is shown to be related to acculturation is achievement in a second language. The specific research hypotheses based on these relationships and the underlying theory will be formulated later.

Of the three variables, integrative orientation has already been defined and achievement requires no conceptual definition. However, the third variable "Acculturation" necessitates further clarification and will be dealt with in the section immediately following.

---

23 Gardner and Lambert, Op. Cit., 1972, p. 2.

## 2. The Concept of Alienation.

## a) Anomie, Alienation and Acculturation

According to the theory, anomie is one of a number of possible outcomes of language study and is believed to stem from conflicts of group allegiance. It is experienced as deep-seated, vague feelings of dissatisfaction and uncertainty about society as a whole. The exact conditions which will trigger its onset have not yet been made explicit, but it is clear from the theory that it is not an unfailing correlate of "acculturation" within a new linguistic group. Consequently, anomie cannot be used as an index of "acculturation".

In contrast to Lambert's anomie, the concept of alienation could probably serve as a more direct and reliable indication of the individual's lack of "acculturation" to a second linguistic group. As conceived by Lambert the term "acculturation" refers to the process of becoming a member of a second linguistic cultural group. It is often used as a synonym for group "belongingness", "allegiance" and "identification". Conversely, as defined by Kurt Lang in the Dictionary of the Social Sciences, "Alienation ... denotes an estrangement or separation between parts or the whole of the personality and significant aspects of the world of experience".<sup>24</sup> Accordingly the concept of alienation will be used to represent a lack of "acculturation".

---

<sup>24</sup> K. Lang, "Alienation" in J. Gould and W. L. Kilb (Eds.), A Dictionary of the Social Sciences, New York, Free Press, 1964, p.19.

Defined in terms of estrangement and separation, alienation would be expected to have a consistently strong negative relationship with "acculturation" as used by Lambert. Furthermore, whereas anomie is considered by many as deep-seated and vague, alienation need not involve the whole of the individual's personality and can be focussed on specific aspects (i.e. the second language community as opposed to the whole of society) of the person's experience. It is therefore suggested here that alienation theory could provide the conceptual framework for an exact and demanding test of Lambert's theory.

b) Seeman's Classification of Alienation

In an effort "to make more organized sense of one of the great traditions in sociological thought; and to make the traditional interest in alienation more amenable to sharp empirical statement"<sup>25</sup>, Seeman has proposed a five-fold categorization which encompasses both the historical and contemporary usages of the term. This classification has gained widespread acceptance in the socio-psychological literature and will contribute to the basis for the alienation questionnaire in the present study.

The first variant of alienation Powerlessness - was based on the writings of Marx and Weber.<sup>26</sup> Seeman conceived it as "the expectancy or probability held by the individual that his own behavior cannot determine the occurrence of the outcomes, or reinforcements, he seeks."<sup>27</sup>

---

25 M. Seeman, "On the Meaning of Alienation", American Sociological Review, Vol. 24, No. 6, 1959, p. 783-791.

26 Ibid., p. 784.

27 Ibid., p. 784.

This definition contains three major implications; Seeman writes:

In this version of alienation, the individual's expectancy for control of events is clearly distinguished from (a) the objective situation of powerlessness as some observer sees it, (b) the observer's judgment of that situation against some ethical standard, and (c) the individual's sense of discrepancy between the expectations for control and his desire for control.<sup>28</sup>

The above quotation emphasizes that alienation is not: a) based on the objective facts of a situation but rather on the subjective interpretation of this situation; b) determined by an outside observer's evaluation of a situation against the standards of specific ideologies; c) synonymous with frustration resulting from the discrepancy between one's desire for control and the actual probability of control.

In the light of the above quotations an individual who is "powerless" is one who believes that he has no direct control or influence over the attainment of goals or objectives which he values.

From the writings of authors<sup>29</sup> such as Adorno, Cantril, Hoffer, and Mannheim, Seeman identified a second variant of alienation as Meaninglessness. This dimension refers to the person's lack of understanding of the situation in which he is involved. In Seeman's words, meaninglessness is experienced "when the individual's minimal standards for clarity in decision-making are not met."<sup>30</sup> Operationally defined, meaninglessness is "characterized by a low expectancy that satisfactory predictions about future outcomes of behavior can be made".<sup>31</sup>

---

28 Ibid., p. 784.

29 Ibid., p. 786.

30 Ibid., p. 786.

31 Ibid., p. 786.

An example of a "meaningless" situation is that of a student who does not fully understand the reasons for learning a particular subject and who therefore cannot predict with confidence its usefulness in the future.

Durkheim's and Merton's theories of anomie<sup>32</sup> led Seeman to identify a third dimension of alienation, i.e. Normlessness. It is characterized by "a high expectancy that socially unapproved behaviors are required to achieve given goals".<sup>33</sup> This is likely to occur when social norms lose their regulative force. In such a social condition a person's effort to achieve his goal might necessitate the use of unapproved means. For example, "Normlessness" is manifested in the situation where a student is willing to increase his marks (a valued goal) by cheating (socially unapproved behavior). Seeman places no restrictions on the range of goals that are valued by the individual and maintains that this variant of alienation is conceptually independent of the first two.

A fourth component of alienation is called Isolation and stems largely from the writings of Nettler and Merton.<sup>34</sup> In this case, the alienated "are those who, like the intellectual, assign low reward value to goals or beliefs that are highly valued in the given society."<sup>35</sup> The idea of detachment or estrangement from the values of society which is central to this definition does not imply that an individual is incapable of sharing the warmth, security, or intensity of the more intimate forms

---

32 Ibid., p. 787.

33 Ibid., p. 788.

34 Ibid., p. 788-789.

35 Ibid., p. 788-789.

of social interaction. The intellectual who is aloof from the standards of popular culture is often used to illustrate the meaning of this definition. As intended here "Isolation" means "apartness from society". Seeman did not expand on the relationship of this dimension to the other three but suggested that it be used with the others for a more complete analysis of a given problem.

The fifth aspect of alienation was derived in large part from Eric Fromm.<sup>36</sup> Self-Estrangement refers to the person's inability to find self-satisfying activities. The student who works simply to accumulate credits for a degree, the worker who performs his job solely as a means of earning a living are good examples of this form of alienation; in both cases the activities fail to provide intrinsically meaningful satisfactions. Operationally defined "Self-Estrangement" is "the degree of dependence of the given behavior upon anticipated future rewards, that is, upon rewards that lie outside the activity itself."<sup>37</sup> Seeman did not specify the relation of this variant to the other four dimensions.

In conclusion, Seeman's categorization has been widely acclaimed since its appearance in 1959. One great advantage is that the author recognized the possibility that alienation may focus on a wide variety of social events: "the five variants of alienation discussed here can be applied to as broad or as narrow a range of social behavior as seems useful."<sup>38</sup> The concept has been studied in various social contexts including the school situation.

---

36. Ibid., p. 789.

37. Ibid., p. 790.

38. Ibid., p. 788.

As was discussed under the heading "Anomie and Alienation" (section 2a), alienation is relevant to Lambert's views on membership in a second linguistic group. He postulated that as a student becomes more proficient in a second language, he will develop stronger membership ties with the group represented by that language. The concept of alienation can therefore be used to extend and verify this dimension of Lambert's theory. A useful by-product of the present research will consist of the construction and validation of a scale to measure the alienation concept as it applies to a particular second language community.

### 3. Empirical Studies.

Having described the theoretical background for the present thesis, it is now essential to review the pertinent empirical research. It has already been seen that Lambert has related both orientation and achievement in a second language to the learner's attitudes and to his integration within the second language community. Accordingly, relevant studies are those which have focussed on these aspects of the theory. Furthermore, since investigators have limited themselves mainly to exploratory research, analysing a great number of variables simultaneously, it was judged appropriate to review the studies chronologically. A synthesis of the findings will conclude this section.

One of the earliest studies to contribute to Lambert's theory was reported by Gardner and Lambert<sup>39</sup> in 1959. This research aimed primarily

---

<sup>39</sup> R. C. Gardner and W. E. Lambert, "Motivational Variables in Second Language Acquisition", Canadian Journal of Psychology, Vol. 13, No. 4, 1959, p. 266-272.

at determining the relative importance of linguistic aptitude and certain motivational variables in second language learning. Seventy-five Montréal grade eleven English-speaking students with an average of seven years of formal training in French were administered a battery of tests designed to measure second language achievement, foreign language aptitude, motivational intensity, orientation, attitude towards French-Canadians, authoritarianism, sex and audience sensitivity. The test score intercorrelations were calculated and factor analysed (Thurstone's centroid method - with orthogonal rotations).

Findings of importance for the present study are four-fold:

1. Achievement in French was found to be related to orientation, in the sense that subjects with the highest achievement ratings tended to be integratively rather than instrumentally oriented.
2. The achievement scores were not related to attitude toward French-Canadians.
3. Integratively oriented students were found to hold more favorable attitudes toward French-Canadians than those who were instrumentally oriented.
4. Girls were found to hold more favorable attitudes toward French-Canadians than boys, but were also more authoritarian.

Although the authors have not reported validity or reliability estimates for their various attitude scales, it must be remembered that the study was meant to be exploratory, and that as such, it has given rise to a number of experiments dealing with attitude-motivational aspects of second language learning.

A study designed to replicate and extend the findings of the previous research was reported by Gardner<sup>40</sup> in the following year. Eighty-three grade ten English-speaking Montréal high school students were administered a more comprehensive battery of tests intended to measure achievement in French, language aptitude, home background characteristics, type of orientation, and a variety of attitudes including anomie, ethnocentrism, authoritarianism and favorable-unfavorable opinions about French-Canadians.

Most of the aptitude and achievement measures met acceptable standards for validity and reliability but the validation of the various attitude scales remained unreported: as in the previous research, most were either adapted from standardized instruments or developed for the purposes of the study without prior validation. A total of thirty variables were intercorrelated and factor analysed.

Relevant findings are as follows: achievement in French was again related to orientation (seven significant<sup>41</sup> correlations out of a possible eight) with the integratively oriented students displaying greater success. As in the previous study, the achievement scores did not correlate consistently with those for positive-negative attitudes toward French-Canadians (one significant correlation from a possible sixteen). None of the eight achievement measures was related to ethnocentrism and there was one negative correlation with authoritarianism. Of special

---

40 R. C. Gardner, Motivational Variables in Second Language Acquisition, unpublished doctoral thesis presented to the Faculty of Graduate Studies and Research, McGill University, 1960, 71 p.

41 Unless otherwise stated the significance level in the reviews will be  $P < .05$ .

importance to the present study is the finding that four of the achievement tests were significantly related to a semantic differential scale intended to measure identification with French-Canadians. Findings relating integrative orientation and sex to the various attitude scales were negligible.

Though the limited size of the sample coupled with the lack of evidence for reliability and validity of the measuring instruments limit the confidence in the results, the findings of this study nonetheless point in the direction indicated by the theory: achievement in a second language appears to be related to students' closer identification with the second reference group.

The following year, a study by Anisfeld and Lambert<sup>42</sup> applied the experimental technique to the Montréal Jewish parochial school setting. The seventy-seven subjects were selected from six grade eight and grade nine Hebrew classes in three schools of the Outremont and Westmount districts. The children represented a wide range of proficiency since the schools from which they were selected offered different levels of training and had different experience and attendance requirements.

The subjects were administered aptitude and attitude-motivational measures of the same nature as those reported in the previous studies with slight modification made for the Jewish culture. In this case, however, an effort was made at validating the orientation index. Evidence for content validity was provided through the usual judgemental classification procedures.

---

42 M. Anisfeld and W. E. Lambert, "Social and Psychological Variables in Learning Hebrew", Journal of Abnormal and Social Psychology, Vol. 63, No. 3, 1961, p. 524-529.

The way in which the index was utilized is however open to criticism: a person was classified as being either instrumentally or integratively oriented on the basis of the difference between his total score for each of the two dimensions. No empirical evidence can be found to indicate that the two forms of orientation are at opposite extremes of the same continuum or to the effect that similar scores on each dimension represent equivalent degrees of attitude.

The instruments used to collect data on the other variables of the study are also open to criticism. The attitude and aptitude measures were nearly all adapted from standardized instruments without further validation. In addition achievement scores were in most instances obtained via single teacher ratings of the subjects' proficiency in Hebrew.

Separate correlational analyses were carried out for each of the six participating classes. The hypothesis that achievement is negatively related to antisemitic attitudes was borne out on five of the ten possible correlations. The relationship between orientation and the latter variable could not be determined from the data. Moreover, the expected relationship between orientation and achievement was not supported: instrumentally oriented subjects tended to obtain higher achievement scores in Hebrew than those who were integratively oriented. This finding was explained with reference to the socioeconomic background characteristics of the different samples together with the idea that Jewish individuals who are learning Hebrew are in fact studying their mother tongue and that integration within the Jewish culture is already "fait accompli", hence not a pertinent issue. Such an explanation raises doubt about the actual problem and

design of the study. Inconsistencies in findings could probably be better explained with reference to the limited size of the samples (N's varied from 9 to 16) together with the psychometric qualities of the instruments.

The following year, Lambert, Gardner, Olton and Tunstall<sup>43</sup> conducted a study which aimed at extending previous findings to an area outside the Montréal region. Three areas of the United States were selected to put the theory to the test: Louisiana, Maine and Connecticut. The first two were selected on the basis of their bicultural English-French atmosphere, rendering them somewhat comparable to the Montréal community. The third area, Connecticut was intended as a stricter test of the theory in that it was essentially a unicultural setting with no sizable French-speaking population.

The research procedures closely approximated those reported for earlier exploratory studies. From an original set of fifty-four variables, forty-one were selected in each setting, intercorrelated and factor analysed. Four main types of measures were included: a) motivation and attitude (i.e. orientation index), b) language aptitude, c) French language achievement (i.e. standardized proficiency tests, self ratings, grades, judges' ratings...) and d) personal characteristics (i.e. I.Q., sex...). The sample and the results for each experimental situation will be described under their appropriate headings.

#### The Louisiana Study

The sample in this initial study consisted of ninety-six first and

---

43 W. E. Lambert et al., A Study of the Roles of Attitudes and Motivation in Second-Language Learning, McGill University, 1962, mimeographed; also in Gardner, R. C. and Lambert, W. E., Op. Cit., 1972, p. 19-96.

second year English-speaking high school students who were studying French as a foreign language. All schools in Lafayette Parish participated in the experiment which was conducted in two separate sessions with an interval of five months separating the attitude and achievement measures.

The Louisiana setting gave limited support to Lambert's theory. Indeed only 10.6 percent of a possible 187 intercorrelations between relevant achievement ( $k=17$ )<sup>44</sup> and attitude ( $k=11$ ) variables reached significance. Where other than chance correlations were obtained, achievement was negatively related to authoritarianism, anomie and to preference of American-English over American and European-French peoples. It should however be stated that the two (positive-negative) attitude scales toward French-Americans were not found to be related to achievement and that (contrary to Lambert's expectations) high French proficiency scores were associated more often with instrumental than with integrative orientation.

Results linking orientation to attitudes were also inconclusive and often conflicting. Sex differences on attitudes were not prominent in the sense that only two of a possible eleven boy-girl differences were found indicating that both preference of America over France and anomie were associated more often with boys than with girls.

The psychometric properties of the instruments could account for the inconclusive findings but a sampling error could also have contributed heavily; subjects were classified as American (in contrast to French-American)

---

44 Expressions such as ( $k=17$ ) refer to the number of variables included to measure a particular student characteristic or performance.

on the basis of home language use with no restrictions placed on the French ancestry from which many might have stemmed. This study might therefore bear resemblance to the previous Anisfeld and Lambert experiment where the attitude motivational variables also failed to reach significance.

### The Maine Study

The sample for the second study consisted of 145 English-speaking Brunswick and Lewiston public high school students in their first, second, or third year of French. As in the Louisiana setting the criteria for inclusion were not based on cultural background but rather on home language use. Testing was also divided into two separate sessions with a five month interval (December 1960 - April 1961).

Results approximated those of the initial study. Eighteen out of a possible one hundred and sixty-five (10.9%) correlations between the various relevant achievement ( $k=15$ ) and attitude measures ( $k=11$ ) reached significance. High achievement scores were associated more often with instrumental than with integrative orientation. However, there was a negative relationship between the latter orientation and ethnocentrism, authoritarianism and preference of America over France. Achievement was generally not related to favorable or unfavorable attitudes toward French Americans, nor to anomie.

Results linking either orientation or sex to the various attitude measures revealed no consistent trends. Inconsistencies in the scoring of the various scales could be responsible for the conflicting results.

The Connecticut Study

The sample for the third American study consisted of 142 students at the first or third year level of high school French. The Hartford Connecticut public school system was of particular interest since French was being taught by new oral-aural methods and also since the community itself was judged as representative of large multi-ethnic urban areas with no exclusive concentration of French-Americans.

In this setting results were relatively more favorable to Lambert's theory. Thirty-one percent of the possible 144 correlations between pertinent achievement ( $k=16$ ) and attitude ( $k=9$ ) variables reached significance. Within these limitations, achievement was related positively to ratings for integrative orientation and negatively to those for instrumental orientation. In addition, achievement was also negatively related to authoritarianism, ethnocentrism and preference for America over France. However, the relation between achievement and (positive-negative) attitudes toward French-Americans was not consistent and, contrary to theoretical expectations, anomie once more correlated negatively with achievement in French.

Findings relating orientation to the various forms of attitude were also more encouraging. Six of a possible eighteen correlations were significant. Only the rating for instrumental orientation correlated positively with the scores for anomie, authoritarianism, ethnocentrism and with (positive-negative) attitudes toward French-Americans. On the other hand, integrative orientation was associated with low scores for preference of America over France.

Sex differences were few but still indicated that favorable attitudes toward French-Americans and low scores for preference of America over France were mainly characteristic of girls.

In summary, the above triad of studies offers only scanty and indirect evidence in support of Lambert's claim that second language learning is related to the learner's closer association with members of a second ethnolinguistic group. The most that can be concluded is that achievement in a second language is negatively related to an "ethnocentric syndrome", composed mainly of feelings of anomie, authoritarianism and preference of America over France. Variations from setting to setting are difficult to interpret and cast doubt on the generalizability of the results.

Results linking student orientation to the various measures of attitude were on the whole inconclusive. The Connecticut study alone made a distinction between the correlates of instrumental and integrative orientation. Sex differences were few but nevertheless indicated that girls were more favorably disposed toward their second reference group than boys. More rigorously designed investigations are required before definite conclusions can be reached.

The same year a better controlled study by Peal and Lambert<sup>45</sup> examined the bilingual issue from a new perspective. While previous studies had generally applied the factor analysis technique to samples located at various undefined points on the bilingual continuum, this

---

45 E. Peal and W. E. Lambert, "The Relation of Bilingualism to Intelligence", Psychological Monographs: General and Applied, Vol. 76, No. 27, Whole no. 546, 1962, p. 1-23.

experiment focussed on the characteristics of subjects at opposite extremes of the proficiency scale.

The subjects consisted initially of 364 French-speaking ten year olds from the Catholic School Commission of Montréal. Three objective tests of bilingualism and one self-rating questionnaire were used to split the sample into two extreme groups: balanced bilinguals (students with equal skill in French and in English) and unilinguals (pupils with little or no knowledge of the English language). The groups were matched on age, sex, ethnicity and socio-economic background. Of the forty-six variables involved in the study, twelve were related to student attitudes toward the French or English communities. The experiment made use of both Likert and semantic differential scales.

The data were collected from a total of 164 subjects and analyzed with and without matching on the socio-economic status (SES) variable. When SES was controlled (N =110) results indicated that bilinguals held more positive stereotypes and attitudes toward English-Canadians and less favorable opinions about their own group than the unilinguals. There were, however, no significant differences between the two groups on semantic differential scales intended to measure identification with either French or English-Canadians. Altogether, three of the twelve "t" tests involving attitudes reached significance. Without matching on SES, there were eight significant differences on attitude instead of three indicating that SES may be a confounding variable if left unattended in further research involving attitudes and second language learning.

A final comment is directed at the design of this study. The use of forty-six separate "t" tests seems unwarranted. A three-way multivariate analysis of variance with language, SES and sex as factors would have provided a more powerful test of the hypotheses together with an insight into the possible interaction effects of the three factors.

The following year Lambert et al.<sup>46</sup> reported a study which extended the findings to samples from an older age group and in a different learning context.

In this case, the subjects were 192 graduate and undergraduate students, the large majority from the United States, who were enrolled in an intensive six-week French summer course at McGill University. The sample was dichotomized into elementary and advanced groups on the basis of level of previous study of the French language.

Pretest and posttest scores were obtained on the following variables: antidemocratic and ethnocentric prejudice of an authoritarian nature, anomie, attitude toward French people (Francophilia) and orientation; semantic differential profiles were also obtained for similarity of meanings of French and translated-equivalent English concepts. All of these variables were measured either by adapting existing measures or by developing new ones. Unfortunately, there is little evidence to support the reliability of the attitude scales since stability estimates were based on the lack of significant differences between pretest and posttest means of a control group. Class grades were used as a measure of achievement. The statistical analysis included correlation, factor analysis and "t" tests.

---

46 W. E. Lambert, et al., "Attitudinal and Cognitive Aspects of Intensive Study of a Second Language", Journal of Abnormal and Social Psychology, Vol. 66, No. 4, 1963, p. 358-368.

At the elementary level, achievement in French was correlated with positive attitudes toward French-Canadians ("Francophilia") and was associated mainly with integrative orientation. Achievement was not related to either anomie or to authoritarianism. At the advanced level, achievement correlated negatively with francophilia and also with distinctiveness of separate French and English meaning patterns. The absence of a relation between achievement and either anomie or authoritarianism at the elementary level was again observed at the advanced level. Results obtained at the elementary level indirectly support Lambert's contention that foreign language learning is correlated with closer association with the second language reference group. It is difficult to explain the results obtained at the advanced level.

The data on meaning and attitude change from beginning to end of the course are listed below in point form:

1. Both groups became more socially dissatisfied (anomie). (The increase in anomie in the above sentence is really a reduction in social satisfaction since posttest scores on anomie were still located on the positive end of the satisfaction-dissatisfaction continuum).
2. Neither group experienced a change on the francophilia scale.
3. Both groups experienced an increase in the similarities of French and English meanings.
4. The elementary group became more authoritarian.
5. The advanced group experienced greater changes in the meaning of French than English concepts.

The above findings suggest that students engaged in a concentrated immersion language course undergo a cognitive but not an attitudinal "rapprochement" with the second language reference group. Lambert's theory would predict

that there would be attitudinal ("Francophilia") differences between introductory and advanced groups at the beginning of the course and also for each group from beginning to end of the course; no such differences were observed. In addition, it is impossible to attribute pretest-posttest differences on anomie to the language learning process "per se" in view of the characteristics of the "control group" which was used: students in this group belonged to a totally different population and were not involved in an intensive training program. More rigorously designed experiments are needed before definite conclusions can be reached in this area.

A more recent study by Feenstra<sup>47</sup> further verified Lambert's theory and added the dimension of home influence in second language study. The subjects for this experiment were fifty-nine male and sixty-five female grade nine students in a London, Ontario high school. The sample was at the level of its first contact with second language study in a social context that does not allow ready association with the members of a substantial French-speaking community.

The variables included measures of language aptitude, general intelligence, verbal reasoning and facility with English words. The attitude scales were essentially the same as those used in the Lambert et al. study (except for modifications for the sample of parents) and scores were obtained from both the students and their parents. Unfortunately,

---

47 H.J. Feenstra, Aptitude, Attitude, and Motivation in Second Language Acquisition, unpublished doctoral thesis presented to the Faculty of Psychology, University of Western Ontario, 1968, vii - 109 p.

48 Lambert et al., Op. Cit., 1962.

the author did not undertake satisfactory validation of these scales. Achievement in French was measured by standardized objective tests, teacher ratings for oral proficiency and by first and second term course grades. The complete set of forty-seven variables were intercorrelated and later factor analysed.

From a total of sixty-four relevant correlations between achievement in French and student attitudes, thirty reached significance. Achievement was positively related to favorable attitudes toward French people and to integrative orientation; it was negatively related to anomie, ethnocentrism, cultural allegiance and to authoritarianism.

Concerning the relation between orientation and student attitudes, the following results are of interest here:

1. Both integrative and instrumental orientation were related to:
  - a. favorable attitudes toward learning any foreign language;
  - b. favorable attitudes toward French-speaking people.
2. Only integrative orientation was:
  - a. positively related to favorable attitudes toward learning French;
  - b. negatively related to anomie, ethnocentrism and cultural allegiance.
3. Only instrumental orientation was positively related to authoritarianism.

Sex differences were few: high scores for ethnocentrism and cultural allegiance were associated more often with boys than with girls. To the extent that these findings are valid and reliable, Lambert's theory has

received considerable support.

One of Lambert's latest projects<sup>49-52</sup> is the longitudinal evaluation of a bilingual education program that began in September 1966, when a group of English speaking children were enrolled in a French immersion grade one class in Montréal. The "home-school language shift" program is still in operation and Lambert has evaluated the progress of the initial experimental - pilot group (N=26), a subsequent follow-up group (N=33) - and two control groups of monolingual French (N=26) and English (N=48) youngsters from schools in the St.-Lambert district.

Each year the available subjects are administered a large battery of tests designed to measure six separate domains: 1) English language skills, 2) French language skills, 3) Arithmetic skills, 4) intelligence and creativity, 5) sensitivity to foreign sounds and 6) attitude toward selected ethnolinguistic groups. Many measures were developed for the

---

49 W.E. Lambert and J. Macnamara, "Some Cognitive Consequences of Following a First-Grade Curriculum in a Second Language", Journal of Educational Psychology, Vol. 60, No. 2, 1969, p. 86-96.

50 Lambert et al., "Some Cognitive Consequences of Following the Curricula of Grades One and Two in a Foreign Language", Georgetown Monograph Series on Languages and Linguistics, Vol. 23, 1970, p. 229-279.

51 Lambert et al., Cognitive and Attitudinal Consequences of Following the Curricula of the First Three Grades in a Foreign Language, McGill University, 1970, (Mimeographed), 99 p.

52 Lambert et al., Cognitive and Attitudinal Consequences of Following the Curricula of the First Four Grades in a Second Language, McGill University, 1971, (Mimeographed), 53 p.

specific needs of the program, but, more recently, standardized tests were also utilised. Attitudes were measured by semantic differential scales which were partially validated but had no reported reliability. No attempt was made to equate participating classes on the basis of quality, efficiency, or teacher personality. However, covariance procedures were used to render the experimental and control groups comparable on intelligence and socio-economic factors.

At the cognitive level, five years of evaluation revealed no deficits in the experimental groups' native language or in school subject matter. There is no evidence for any intellectual retardation and the children have mastered the French language at a level far beyond that of more traditional foreign language classes.

Of greater significance to the present study are the findings concerning the students' change of ethnic attitudes since the start of the program. At the end of grade two the experimental group was already more democratic and open toward French-Canadians than was the English control group. The experimental group subjects were described as less ethnocentric and less biased in favour of their own group and held healthy views of themselves.

At the third grade level, evaluation of the subjects' attitudes was hampered by a major confounding variable: the experimental class was transferred to another school which contained French-speaking students from a lower social class and of generally lower level of school achievement.

It was thus no longer possible to separate changes in attitudes due to age from differences attributable to the new social environment. Furthermore, the follow-up group was of little value in checking the reliability of the findings due to differences in experience. Findings based on visual inspection of the data are summarized below:

1. The experimental group rated the concept "English-Canadians" higher than the concept "French-Canadians".
2. The experimental group rated the concept "Me" higher than the concept "French-Canadians" on six of eight scales and higher than the concept "English-Canadians" on only three of the eight scales.
3. Compared to the English controls, the students in the experimental group had a more balanced, less ethnocentric outlook about their own cultural group and also held more favorable attitudes toward French-Canadians.

Lambert interpreted these results as an indication that something "very much like identification and emulation may be a consequence of the program". <sup>53</sup>

At the end of the fourth grade the attitude profiles revealed no deterioration in the experimental students' self-concept or in their evaluation of their own cultural group. However they indicated that these students had reverted to more biased and unfavorable stereotypes of French-Canadians which previously characterized the unilingual English controls. These results were explained with reference to changes in the youngsters themselves as well as in their school and social environments. More rigorously designed longitudinal experiments are needed to verify and also to extend the findings of this important exploratory study.

---

53 Lambert et al., Op. Cit., 1970. p. 84.

The review of the literature will now conclude with a synthesis of empirical findings as they relate to Lambert's theory. Firstly, studies dealing with achievement in a second language have in a limited way given support to Lambert's viewpoint that success in a second language is associated with the learner's integration within the second language reference group. However, this relationship must still be inferred from attitude scales which were not designed to tap this dimension directly. More powerful, comprehensive measures are needed before definite conclusions can be reached.

Secondly, the studies also indicate that students with a highly integrative orientation display an attitude pattern which should predispose them toward closer association with the second language community. Compared to the instrumentally oriented, they often hold more sympathetic attitudes toward the second linguistic community and are more flexible about the value of their own culture when contrasted to that of the second group.

A note is required on the orientation issue. Even though Lambert's theory conceives the two dimensions of orientation as extremes of a single continuum, it is doubtful that the existing index can adequately differentiate students who are instrumentally from those who are integratively oriented. Studies in which the Likert-type version has been used have generally found a sizable positive correlation between the two dimensions. As Lambert himself suggests: "It is time now that this very useful index be expanded and elaborated in order that a genuine dimensional scale or continuum may be used to explore more comprehensively this aspect of motivation."<sup>54</sup>

---

54 Gardner and Lambert, Op. Cit., 1972, p. 15.

Pending these modifications, researchers should probably treat each dimension of orientation as separate variables. The present study will therefore be restricted to the integrative motive since Lambert's theory gives only slight attention to the instrumental motive and makes no predictions about its effects on alienation.

Thirdly, sex and socio-economic differences have not displayed a consistent pattern of influence in the language learning process. However, since these variables were relevant in some studies, it is wise to control them until definite conclusions can be reached.

#### 4. Statement of the Problem,

The purpose of this study is to clarify and extend that part of Lambert's theory concerned with the socio-psychological outcomes of second language learning. The theory holds that success in a second language results in the learner's acculturation to the people and the culture represented by that language. To the extent that acculturation and alienation express opposite ideas it is logical to expect a strong negative relationship between achievement in a second language and feelings of alienation from the second language group. A highly proficient student would therefore experience less alienation on all dimensions than a less proficient student. This situation applies particularly to integratively-oriented students. If a student is motivated to learn a new language because he wishes to have closer associations with the people then he would experience less alienation than if he were not so motivated. It follows that integrative orientation is negatively related to feelings of

alienation.

The above reasoning is translated into the following research hypotheses:

1. Students at high levels of achievement in a second language will have significantly lower alienation scores than those at low levels of achievement.
2. Students with high integrative orientation will have significantly lower alienation scores than those with low integrative orientation.

## CHAPTER II

### EXPERIMENTAL DESIGN

The present chapter is composed of four sections. The first will describe the subjects for the experiment; the second will be devoted to the instruments used to test the hypotheses. The third will deal with the collection and description of the data; the fourth will present the plan of the statistical analysis.

#### 1. The Subjects.

Though Canada's two major ethnolinguistic groups have contributed to the formulation of Lambert's theory, a greater proportion of studies have used English rather than French-speaking subjects. In an effort to help correct this imbalance and to enhance the generalizability of the theory, the subjects for the present study were selected from a French rather than from an English-speaking population.

The Outaouais region was also particularly appropriate to test the theory in view of the high proportion of French and English speakers in that area and also since Lambert's findings originate from such bicultural contexts. Furthermore, with respect to the problem of the present thesis, only a bicultural setting could provide the language student with the opportunity to actually experience either "acculturation" or alienation from the second language community.

The subjects were selected from a French-language comprehensive high school ("école polyvalente") under the jurisdiction of the "Commission Scolaire Régionale de l'Outaouais" (CSRO). The school serves a geographic area of approximately forty square miles including both urban and rural districts. The urban area could be classified as mainly industrial since pulp and paper plants provide a major part of the labour market. At the time of the study (Spring 1973) school enrolment was approximately three thousand students.

The population consists of all French-speaking students who were taking English at the grade eleven ("Secondaire IV") level (N=375 approximately). Following consultation with school authorities, "Secondaire IV" was selected in preference to lower grades because of higher social and emotional maturity and more prolonged experience with the English-Canadian culture. "Secondaire IV" pupils have been engaged in the study of the English language for a minimum of four years, since, according to Québec school regulations, English is a compulsory subject from "Secondaire I" to "Secondaire IV" inclusively. At the time of study, a total of fifteen classes were studying English as a second language. Of these, five were classified by the school as weak, seven as average and three as strong.

Students who were included in the study were those

- a) for whom marks were available on at least two "Secondaire IV" regional English examinations i.e. December 1972 and March 1973 (N=263).
- b) who were willing to take part in the project by completing the research questionnaire (N=206).
- c) for whom French is the mother tongue and also the usual language for communication in the home (N=200).

Complete information was available for a total of 200 students. Of these 107 were girls and 93 were boys. The mean age for girls was 16.35 years ( $\sigma = 0.70$ ) and that for boys was 16.52 years ( $\sigma = 0.80$ ). Age differences were not significant.

The average socioeconomic class for the subjects was 4.26, a value which corresponds to a middle occupational class on the Blishen<sup>1</sup> scale. The standard deviation was 1.52.

## 2. The Measuring Instruments.

Whereas the above section described the students for the experiment the present one will be devoted to the four instruments used to collect the data for the study.

### a) The English Achievement Test

The instrument<sup>2,3</sup> used to measure proficiency in English was that developed by the school board from which the subjects were selected. In 1970, the English Department of the CSRO undertook the construction of survey-type<sup>4</sup> objective tests to systematically evaluate their students' performance in English at each of the five levels of high school. For each

---

1 B. R. Blishen, "The Construction and Use of an Occupational Class Scale", in Blishen et al., Canadian Society, Toronto, McMillan of Canada, 1965, p. 449-58.

2 Commission Scolaire Régionale de l'Outaouais, Hull, Québec, English Grade 11, December, 1972, 5 p.

3 Idem, Ibid, March, 1973, 5 p.

4 R. L. Thorndike et E. Hagen, Measurement and Evaluation in Psychology and Education, New York, Wiley, 1969, p. 654.

grade level a separate battery consisting of four different tests was constructed for consecutive administration during the school year, namely October, December, March and May. On each occasion a forty-five minute test is administered. Each test contains sections on pronunciation, accent, vocabulary, reading comprehension and grammar; each section is composed of ten items and students receive a total score for the fifty items.

The CSRO test was selected over other instruments to measure achievement in English (as a second language) largely on the basis of its high applicability to the sample in the present study. Test content is based on the subject matter taught in the English classes of the CSRO. In fact, teachers took part in the construction of an initial item pool for the tests.

The present study will make use of the December and March tests administered to the "Secondaire IV" classes during the 1972-73 school year. The mean of scores on two examinations instead of the total on one will be used in order to get a more representative sampling of student behavior. The December and March results were preferred (to those for the October and May exams) since test administration at these times corresponds to periods of greater stability on the part of the student population. It was not necessary to use the results for all four tests administered during

the year for two main reasons: first, the purpose of testing was not to diagnose student weaknesses in any particular area of second language study but simply to separate high from low achievers - two fifty-item tests were judged sufficient for this purpose; second, use of the complete set of "Secondaire IV" exams would have greatly increased the rate of experimental mortality.

Internal consistency reliability was calculated for each of the two exams from the responses of the two hundred students in the sample. The Kuder-Richardson (formula 21) reliability estimates were  $r_{tt} = 0.819$  and  $r_{tt} = 0.864$  for the December and March exams respectively. When the two exams were combined, the reliability estimate was 0.915. The correlation between the two sets of test scores was 0.833 and can be taken as one indication of the stability of the marks.

b) The Orientation Questionnaire

In 1962 Lambert and his associates developed an instrument to obtain ratings of integrative and instrumental orientation.<sup>5</sup> This measure is composed of eight statements expressing reasons for studying French as a second language. Four statements reflect integrative (people oriented) motives and four others express instrumental (utilitarian) reasons. The eight statements are usually presented together in one questionnaire and arranged in alternating order. Students are required to express their degree of agreement with each statement, in some cases according to a five-point scale, and in other cases, according to a

---

<sup>5</sup> R. C. Gardner and W. E. Lambert, Attitudes and Motivation in Second-Language Learning, Rowley, Massachusetts, Newbury House, 1972, p.148.

seven-point scale ranging from "Not my feeling at all" to "Definitely my feeling". The greater the score for any statement, the more relevant is that motive for the individual. Responses are then summed for each type of orientation. The two total scores thus obtained serve either as separate ratings for each orientation or are simply used to classify students as integratively or instrumentally oriented on the basis of the greater score value.

Lambert's scale has been used in a number of studies but few authors have devoted time to examining its validity or reliability. Furthermore, in its original form the index was of little use to the present situation since it is intended for English-speaking students engaged in learning French as a second language. The eight items of the scale were consequently translated by the thesis author for use with French students and made to reflect motives for learning the English language.

Steps were then taken to check on validity and reliability. In the first place, the translation itself was verified by five professors and three graduate students at the Faculty of Education who were competent in both French and English. Once the appropriate corrections had been made, the eight statements were presented to sixty-two Faculty of Education French-speaking students enrolled in the Research Methodology course. These judges were given relevant background information together with Lambert's definition of each kind of orientation.<sup>6</sup> They were then asked to classify

---

6 These definitions are stated on page 5 of the present report.

each statement as measuring either an integrative or an instrumental motive for learning English. Each of the eight items met a criterion of seventy-five percent agreement.

Reliability estimates for the final seven-point French adaptation entitled "Indice d'Orientation" were based on a subsample of three classes with a total of sixty grade eleven students who took part in the study. The stability estimate (one-week interval) was 0.74 for the four integrative orientation items; the internal consistency estimate (via Cronbach's Alpha) was 0.66. The instrumental orientation items were used as fillers only.

For reasons of face validity and consistency with Lambert's scale, the "Indice d'Orientation"<sup>7</sup> was administered as an eight-item instrument. However, since the research problem was limited to the study of integrative orientation, only the data on this dimension were included in the final analyses.

c) The Alienation Questionnaire

The questionnaire used to measure student alienation from English-Canadian people and culture was constructed by the author<sup>8</sup> for the specific

---

<sup>7</sup> A copy of this instrument appears as Questionnaire I in Appendix 1, p. 83-84.

<sup>8</sup> M. Laplaine, Construction and Validation of a Likert-Type Questionnaire to Measure French-Speaking Students' Alienation from the English Culture and People in Canada, unpublished Interim Report presented to the Faculty of Education of the University of Ottawa, Ontario, 1973, VIII-182 p. An abbreviated version of the report has been included as Appendix 3 of the present thesis, p. 94-130.

requirements of the study. The rationale and procedures for developing this instrument were formulated only after a thorough review of alienation scales in other areas had been completed<sup>9</sup>. The validation was conducted in the Fall of 1972 on "Secondaire V" students (N=113) at the school from which the subjects were selected for the experiment. The following paragraphs will provide a summarized description of the instrument together with the data on its validity and reliability.

#### Description of the Instrument

The "Questionnaire d'attitudes envers la culture et les personnes de langue anglaise au Canada"<sup>10</sup> is a forty-nine item Likert-type instrument based on four of Seeman's<sup>11</sup> dimensions of alienation. As applied to the context of a second culture, these were defined as<sup>12</sup>:

Normlessness: Persons who manifest a high degree of normlessness expect that displaying socially unapproved behaviors toward another ethnic group is required to achieve their personal and/or group goals.

Powerlessness: High powerlessness refers to the expectancy held by a member of one ethnic group that he cannot determine or control the outcomes or reinforcements he seeks within another ethnic group.

Meaninglessness: Individuals who experience a high degree of meaninglessness have a low expectancy that they could make predictions about the future outcomes of their contact with a second ethnic group.

Isolation: Persons who exhibit a high degree of isolation tend to assign a low importance to the values and goals held by a second culture.

---

9 Idem, Ibid.

10 A copy of this instrument appears as Questionnaire II, in Appendix 1, p. 85-89.

11 M. Seeman, "On the Meaning of Alienation", American Sociological Review, Vol. 24, No. 6, 1959, p. 783-91.

12 Laplaine, Op. Cit, p. 10.

Seeman's Self-Estrangement dimension was not included in the final form of the questionnaire since it failed to appear as a separate factor during the developmental stages. Moreover the relation to other scales was not specified by Seeman.

The subscales designed to measure the four dimensions in the above paragraph contain eleven, ten, twelve and sixteen items respectively. Table I reports the correlations among the four alienation scales. With the exception of the correlation between the meaninglessness and normlessness dimensions, all intercorrelations are beyond chance level ( $r = 0.181$ ,  $p = .05$ ,  $N = 113$ ) and vary from low to moderate in size.<sup>13</sup> Furthermore, as should be expected from Seeman's writings, the four alienation dimensions are positively related to each other.

The time required to administer the questionnaire is from twenty to thirty minutes. The students respond to each item by circling the answer which best describes their reaction to the statement; the standard Likert response format is utilized.<sup>14</sup>

Responses are assigned a score from one to five, with the latter indicating the highest level of alienation. Three scoring schemes are utilized: a) 5, 4, 3, 2, 1 (b) 1, 2, 3, 4, 5 and (c) 1, 3, 5, 3, 1. The first two procedures are used with all items except those for Meaninglessness

---

13 J. P. Guilford, Fundamental Statistics in Psychology and Education, New York, McGraw-Hill, 1956, p.145.

14 Subjects indicate their responses by circling one of five possible choices: FA - "Fortement d'Accord" [Strongly Agree], A - "d'Accord" [Agree], I - "Indécis (e)" [Undecided], D - "en Désaccord" [Disagree], F.D. - "Fortement en Désaccord" [Strongly Disagree].

Table I.-

Product - Moment Correlation of Scores on the  
Four Alienation Dimensions (N=113)<sup>15</sup>

	I	N	M	P
Isolation	1.000			
Normlessness	0.494	1.000		
Meaninglessness	0.270	0.101	1.000	
Powerlessness	0.450	0.352	0.235	1.000

<sup>15</sup> Laplaine, Op. Cit., p. 53.

and the choice between them is dictated by the direction (positive = 1 to 5, negative=5 to 1) of individual statements. Meaninglessness items are scored according to the third procedure only. In this case no attention is paid to the direction of the statement in view of the definition of this dimension which is restricted to the ability to make predictions about outcomes of behavior.

Scores on the forty-nine items may be added to give an overall index of alienation but, as in the present study, may also be calculated separately for each dimension for a more detailed analysis of student attitudes. In this study only those questionnaires containing a minimum of ninety percent of the responses were used in the final analysis. Any unanswered item was counted as an undecided response.

#### Validity and Reliability of the Instrument

The development of the alienation questionnaire required a period of approximately one year. Complete information about the construction and validation of this instrument is provided in the author's interim report <sup>16</sup>.

Evidence was obtained for content, construct and **crit**erion-related validity as defined by the American Psychological Association<sup>17</sup>. Content

---

16 Laplaine, Op. Cit.

17 National Committee on Test Standards, Standards for Educational and Psychological Tests and Manuals, Washington, D.C., American Psychological Association, 1966, 40. p.

validity was achieved through judgemental procedures (i.e.: asking a select group of judges to classify randomly assigned items to their corresponding definition). Item analysis was also performed by computing item-subscale correlations. These were then corrected by Cureton's formula<sup>18</sup> for spuriously inflated correlations resulting from the overlap between item and scale scores.

Evidence for construct validity was provided through factor analysis. Four of Seeman's dimensions (Powerlessness, Isolation, Meaninglessness and Normlessness) were identified as separate factors. The absence of a clearly distinguishable Self-Estrangement factor was likely due to the tentative nature of Seeman's definition as well as to the social context of the sample (i.e.: close and regular contact with English-speaking people).

Evidence for criterion-related validity was obtained by comparing scale and teacher classifications of students as high or low alienated. On two separate occasions scale and teacher classifications agreed for seventy percent and ninety percent of the twenty students involved. Teacher stability was highly satisfactory since there was ninety percent agreement between her classifications over a twenty-seven day interval.

Estimates were obtained for two forms of reliability: stability

---

18 E. E. Cureton, "Corrected Item - Test Correlations", Psychometrika, Vol. 31, No. 1, 1966, p. 93-96.

and internal consistency. Stability estimates were obtained by the retest method (three-week interval) on a sample of forty-six "Secondaire V" students. The stability index for each subscale as well as for the complete questionnaire is listed below<sup>19</sup>:

Isolation	$r_{\text{tt}} = 0.889$
Normlessness	$r_{\text{tt}} = 0.900$
Meaninglessness	$r_{\text{tt}} = 0.861$
Powerlessness	$r_{\text{tt}} = 0.870$
Total	$r_{\text{tt}} = 0.932$

The statistic used for internal consistency was coefficient alpha, the general form of the Kuder-Richardson Formula 20. Results for the 113 "Secondaire V" students in the validation sample are listed below<sup>20</sup>:

Isolation	$\alpha = 0.836$
Normlessness	$\alpha = 0.812$
Meaninglessness	$\alpha = 0.726$
Powerlessness	$\alpha = 0.820$

The findings allow for the conclusion that each of the four subscales is composed of a set of internally consistent items.

#### d) Biographical Data

The instrument to collect information on the socioeconomic characteristics of the subjects was that developed by Blishen<sup>21</sup>. This instrument

---

19 Laplaine, Op. Cit., p. 70-71.

20 Idem, Ibid.

21 Blishen, Op. Cit., p. 449-58.

was selected since it offered the distinct advantage of having been developed on data obtained from the Canadian population.

Working from information reported in the 1951 Census of Canada Blishen grouped occupations according to income and years of schooling. The average income and average years of schooling were determined for each occupation and these values transformed into Z scores. The two standard scores thus obtained were then combined and the occupations were ranked accordingly. The resulting list of 343 occupations was then grouped into seven classes, with class 1 expressing the highest standing.

The use of the scale requires only that a stated occupation be determined on the scale and assigned a class value. In the present study students were asked to state and also to give a short description of their parents' occupation in order that it may be identified with greater certainty. When both parents held full-time employment the student was assigned to the class which included the parent with the higher class standing. When students could not be unambiguously assigned to one social class or the other (i.e.: students who were not living with their parents...) they were assigned to the class representing the mean standing for the subjects of the study. Twelve students were thus assigned to class four.

Other biographical data included name, age, sex, student number,

mother tongue and home language use. Students were asked to state this information together with their parents' occupation on the first page<sup>22</sup> of the research questionnaire on guarantee of strict confidentiality.

### 3. Collection and Description of the Data.

The instruments described in the preceeding section (with the exception of the two English tests) were grouped together to form a comprehensive research questionnaire and were administered by the author (May 1973) to each of the "Secondaire IV" English classes during the regular forty-five minute class periods. Each of the classes had previously been contacted by the researcher in order to solicit cooperation, to guarantee confidentiality of responses and to explain the method of answering the different questionnaires. All contacts were, of course carried out in the French language. Confidentiality of responses was demonstrated by providing students with envelopes in which to seal their responses and also by allowing them to return their completed questionnaires directly to the author, thus bypassing all school authorities (classroom teacher included).

The data on achievement in English were obtained directly from the records of the school board. At no time during the experiment were students made aware that the researcher intended to relate their scores on the regional English examinations to their responses on the research

---

<sup>22</sup> A copy of this information sheet has been placed in Appendix 1, p. 82.

questionnaire. This approach was adopted in order to minimize the possibility that students would invalidate their alienation responses by relating them to their English achievement scores.

#### Scores on the English Achievement Test

On the December exam, the range of scores varied from ten to forty-eight with a mean of 27.61 and a standard deviation of 7.91. On the March exam, the 200 students also obtained a wide range of scores, i.e. from nine to the maximum of fifty. In this case, the mean was 25.15 and the standard deviation 9.02.

The final English score for each student was the average of his marks for the December and March exams. In order to test the first hypothesis of the study, only the data of those students having the highest or lowest thirty percent of the marks in English were retained for further analysis.

#### Scores on the Orientation Questionnaire

There was a wide range of scores on the items measuring Integrative Orientation. Of the 200 students in the study, the lowest score was six and the highest was the maximum of twenty-eight. The mean and standard deviation were 18.21 and 4.91 respectively.

The scores on Instrumental Orientation varied from ten to the maximum of twenty-eight. The mean and standard deviation were 20.01 and 3.79 respectively. The Pearson correlation coefficient between the scores for the two scales was 0.47 ( $N=200$ ,  $P.<.01$ ), indicating that the

two kinds of orientation are not independent or mutually exclusive (at least, as these dimensions are measured by the existing index). It should also be noted that the observed relationship between the two dimensions of the French orientation index is consistent with that which is often obtained with the English version.

In order to test hypothesis two of the present study, it was necessary to select extreme integrative orientation groups. Only the data for students having the highest or lowest thirty percent of the integrative orientation scores were retained for the final analysis.

#### Scores on the Socioeconomic Status (SES) Scale

The frequency and percentage of students in each of the seven classes of the Blishen scale are given in Table II. A study of this table reveals that a large part of the students originate from families where parents are employed in skilled and semi-skilled occupations (Class 5). This corroborates the findings (30.6 percent) reported for Blishen<sup>23</sup> in 1965 for the whole of the French-Canadian working force. However, whereas Blishen's study had reported that 49.8 percent of the French working force belonged to the lowest two classes, i.e. classes six and seven, only 18.5 percent of the present group occupied this position. Another distinction between the French population studied by Blishen and the students in the present research is the proportion of individuals occupying Class 2. By contrast to the 9.5 percent reported by Blishen, 22.5 percent of the subjects occupied that

---

23 Blishen, Op. Cit., p. 458.

Table II.-

Frequency and Percentage of Students in Each of the Seven Classes  
of the Blishen Scale (N=200).

Class	Frequency	Percentage
1	00	00.0
2	45	22.5
3	16	08.0
4	33	16.5
5	69	34.5
6	25	12.5
7	12	06.0

category, which is characterized by professionals, business men and highly skilled workers.

These differences can probably best be explained with reference to the geographical location from which the subjects were selected and to changes in the occupational characteristics of the French-Canadian population. As stated earlier in the chapter the urban part of the selected area is heavily dependent on the pulp and paper industry which employs mostly highly skilled workers. It should also be mentioned that a substantial number of residents of the area are employed as skilled personnel by the Federal Government.

The Pearson product-moment correlation coefficient was calculated between the seven SES classes and all the other variables in the study (except sex, which is a dichotomous variable) in order to determine its usefulness in the final analyses. Table III presents the resulting correlations. The limited size of the correlations indicated that little was to be gained by including the SES variable in future analyses. SES was consequently omitted from the study.

#### Scores on the Alienation Questionnaire

The total scores on the alienation questionnaire varied from 68 to 184. The total range possible was 49 to 245. Though the obtained distribution was slightly positively skewed, a chi square test nonetheless did not indicate departure from normality.

Table III.-

Pearson Correlation Coefficients Between Socioeconomic Status and the Other Research Variables (N=200).

Research Variables	Socioeconomic Status
Age	0.140
Integrative Orientation	0.009
Instrumental Orientation	0.072
Achievement in English	-0.317
Isolation	0.022
Powerlessness	0.200
Normlessness	-0.046
Meaninglessness	0.076

$r = 0.138, P = .05$

The mean and standard deviation for the 200 students in the experiment were 130.25 and 20.94 respectively. Similar statistics for each of the four subscales are presented in Table IV.

#### 4. Plan of the Statistical Analysis.

The plan of the analysis is as follows: To carry out a least-squares multivariate analysis of variance<sup>24</sup> on the four alienation subscales in a 2 x 2 x 2 crossed factorial design with performance in English, Integrative Orientation and Sex as independent variables. This analysis allows the verification of the main effects of the three factors as well as any interaction effects on the dependent variable.

Post hoc simultaneous Scheffé confidence intervals were used to determine which of the independent variables contributed to the rejection of the null hypotheses at the .05 level of significance. This procedure was employed in view of the unequal number of subjects in the cells of the design, which resulted from the deletion of students in the upper or lower thirty percent of the English achievement and Integrative Orientation groups who did not satisfy both of these experimental conditions.

The purpose of this chapter was to present the design of the study. The chapter began with a description of the subjects involved in the experiment. The various instruments which were used to collect the data were then described and evidence was presented concerning their validity and reliability. A third section was devoted to the collection and description of the data. The chapter concluded with the plan for the statistical analyses, the results of which are presented and discussed in the next chapter.

---

<sup>24</sup> J. D. Finn, Multivariate A Fortran IV Program, Toronto, Ontario, Ontario Institute for Studies in Education, Version 4, 1968, ii-109 p.

Table IV.-

Means, Standard Deviations and Maximum Range of the Four Alienation Subscales (N = 200).

Subscales	Means	Standard Deviations	Maximum Range	
			From	To
Isolation	41.90	9.52	16	80
Powerlessness	24.49	6.55	10	50
Normlessness	31.96	7.22	11	55
Meaninglessness	32.05	6.83	12	60

## CHAPTER III

### PRESENTATION AND DISCUSSION OF RESULTS

The data were analysed according to the plan described in the preceding section. In this chapter a separate section will be devoted to the presentation and discussion of the results of each of the two research hypotheses. Each section will report the results of the multivariate analysis of variance together with those for the post hoc analyses. In each case, a discussion of results particularly in relation to Lambert's theory will conclude the section.

#### 1. Presentation and Discussion of the Results of Testing the First Hypothesis.

##### Multivariate Analysis of Variance Results for the First Hypothesis

Stated in the null form the first hypothesis of the study was as follows:

There is no significant difference between the alienation scores of students with high achievement in English and those with low achievement.

The original plan of the study had called for socioeconomic status (SES) and sex to act as blocking variables. Only sex was retained for final analysis since, as described earlier, a preliminary check of the SES variable indicated that it would not affect the outcomes of the final analysis. The theory did not predict any interaction effects among the factors of the design.

Table V identifies each of the eight cells of the design with the corresponding numbers of students. The means and standard deviations for each of the alienation dimensions in each cell can also be found in the same table. From the initial selection of 120 students (upper-lower thirty percent of the English and integrative orientation scores taken separately) 40 could not be included in the analysis since they did not satisfy both conditions.

The multivariate F tests for the main effects as well as for the interaction effects are presented in Table VI. A study of this table indicates that the null hypothesis could be rejected at the .05 level of significance for the first as well as for the second hypothesis of the study. There were no sex differences on alienation and no significant interaction among the three factors of the design.

#### Post Hoc Analyses of the First Hypothesis

Simultaneous Scheffé confidence intervals were used to determine which of the alienation dimensions contributed significantly to the differences indicated by the multivariate F test in Table VI.

The results of the post hoc analyses for the first hypothesis are given in Table VII. A study of this table indicates that two alienation dimensions, namely Powerlessness and Normlessness contributed most to the significant multivariate F. Low achievers in English therefore experience

Table V.-

Alienation Means, Standard Deviations and Number of Students for Each of the Cells of the 2 x 2 x 2 Crossed Factorial Design (N=80).

Cell	N'S	Factors and Levels <sup>a</sup>			Alienation Dimensions							
		English	Integrative Orientation	Sex	Isolation		Powerlessness		Normlessness		Meaninglessness	
					M	SD	M	SD	M	SD	M	SD
1	14	1	1	1	36.29	6.56	19.29	5.01	30.29	7.96	31.43	6.10
2	07	1	2	1	50.57	8.16	18.71	3.15	30.86	9.67	27.71	5.59
3	07	1	1	2	33.00	8.68	17.00	4.12	22.71	6.45	29.71	9.05
4	10	1	2	2	41.90	9.63	25.40	9.09	30.20	8.15	32.40	5.56
5	13	2	1	1	40.31	5.82	26.62	6.98	35.08	4.68	31.23	9.71
6	10	2	2	1	48.50	10.41	29.40	6.79	34.40	6.26	30.60	6.26
7	10	2	1	2	37.50	5.10	25.40	3.24	30.70	4.60	34.20	6.49
8	09	2	2	2	53.78	14.33	31.22	8.06	35.22	8.56	29.33	8.37

<sup>a</sup> Level 1 of English corresponds to high achievers and level 2 to low achievers, Level 1 of Integrative Orientation corresponds to high integration and level 2 to low integration.  
Level 1 of Sex corresponds to boys and level 2 to girls.

Table VI.-

Multivariate Analysis of Variance for Testing Achievement in English (A)  
Integrative Orientation (B) and Sex (C) when the Criteria are Alienation Dimension Scores.

Source of Variation	d.f.	F	P
A	4,69	8.65 *	<.0001
B	4,69	9.31 *	<.0001
C	4,69	1.36	<.2584
AB	4,69	0.50	<.7379
AC	4,69	1.26	<.2935
BC	4,69	1.50	<.2110
ABC	4,69	1.73	<.1538

\* Significant at the .05 level.

Table VII.-

Scheffé Simultaneous Confidence Intervals Following the Multivariate Test of Significant Differences Between the Alienation Means of High and Low Achievers in English.

Alienation Dimension	$\hat{\psi}$ a	$\sigma_{\hat{\psi}}$ b	Confidence Interval	
			Lower Limit	Upper Limit
Isolation	-4.58	6.47	1.89	-11.05
Powerlessness	-8.06	4.67	-3.39	-12.73 *
Normlessness	-5.34	5.25	-0.09	-10.59 *
Meaninglessness	-1.03	5.41	4.38	- 6.44

$$a \quad \hat{\psi} = M_1 - M_2$$

$$b \quad \sigma_{\hat{\psi}} = \sqrt{MS_e \frac{N_1 + N_2}{N_1 N_2} \frac{(N_1 + N_2 - 2)p}{N_1 + N_2 - p - 1} F_{1 - \alpha, p, N_1 + N_2 - p - 1}}$$

\* Significant at the .05 level.

a significantly greater degree of Powerlessness and Normlessness than students who obtain high marks in English. The results on the isolation scale came close to significance and were in the direction of the research hypothesis. The differences on the Meaninglessness scale were not significant.

#### Discussion of the Results of the First Hypothesis

The first hypothesis stemmed directly from Lambert's statement that students who master another group's language have made a crucial step in becoming acculturated members of that group. The rationale for the first hypothesis was that acculturation would be reflected in feelings of alienation. If Lambert's statement is true, then it should be expected that French-speaking high school students who obtain high scores in English would feel less alienated from English Canadians than students who obtain low scores in English.

The test of the hypothesis supported the theory in that the multivariate test revealed that high achievers obtained significantly lower alienation scores than low achievers. Post hoc procedures indicated that Powerlessness and Normlessness contributed significantly to the differences.

The fact that the Powerlessness scale contributed significantly to the differences means that compared to low achievers, high achievers feel

better able to obtain valued objectives within the second language community. Also the contribution is understandable in view of the importance for French speakers to master English in order to communicate with the members of that group. Though many English speakers in the National Capital Region are presently making sincere efforts to learn the language and to understand the grievances of the French people, bilingualism has long been and, for most French Canadians, still remains largely one-sided, with the French speaker more likely to learn the English language. Furthermore, the major industries of the Outaouais region (e.g. Canadian International Paper Company, E.B. Eddy Company etc.) are for the most part English owned and operated so that learning English is of extreme importance for French Canadians who strive for success and advancement at work.

The results for the Normlessness scale indicate that high achievers are less willing to resort to socially unacceptable means to obtain desired outcomes within the second language community. The fact that this group also feels more powerful when among English speakers suggests that high achievers simply do not need to resort to unapproved means to obtain their objectives. Further research should be devoted to this issue.

Post hoc analyses indicated that the Isolation scale did not contribute significantly to the differences on alienation between high

and low achievers. Closer examination of Table VII however reveals that the mean differences on Isolation came close to significance at the .05 level. Furthermore, the results were in the direction of the research hypothesis that low achievers would obtain higher alienation scores than high achievers. Isolation differences might be significant if the study were replicated with a greater number of subjects.

Table VII also reveals that alienation differences on Meaninglessness were clearly not significant. The rationale for this hypothesis was that high achievers in English would have a greater understanding of the second culture because of greater knowledge of the language. This better understanding of English Canada would then lead to greater confidence in making predictions about their relations to the second language community.

The following explanation can be suggested for the lack of significant differences. As intended by Seeman and as measured by the present scale, the definition of Meaninglessness is restricted to the ability to make predictions and it excludes the direction of the prediction. The five response categories which follow each item in effect measure only the person's confidence in making predictions and no credit is given for the direction (i.e. positive or negative). For example students who answer either "Strongly Agree" or "Strongly Disagree" to an item such as "My

contact with English culture will make me more open minded" will be given the minimum alienation score (i.e. 1) for that item.

It could well be that high and low achievers have the same strength of conviction about the value of second culture contact even though these convictions could be in the opposite direction. This is suggested by the finding that high achievers feel more powerful, less normless and tend to be less isolated than low achievers. It indicates that high achievers view language learning as rewarding while low achievers might experience mainly frustration.

Since the direction of prediction was not taken into account in Seeman's definition, it can be proposed that his definition is not applicable to the present research situation. Seeman himself admitted that of his five dimensions of alienation, Meaninglessness and Self-Estrangement were the most unclear in their meanings. This seems a justifiable explanation of the failure to find significant differences and does not reflect on the validity of Lambert's theory.

## 2. Presentation and Discussion of the Results of Testing the Second Hypothesis.

### Multivariate Analysis of Variance Results for the Second Hypothesis

The second hypothesis, stated in the null form, was:

There is no significant difference between the alienation scores of students with high integrative orientation and those with low integrative orientation.

Since the data were analysed in a single three-way design, the results of testing this hypothesis are presented in Table VI, together with those for the first hypothesis. The multivariate F test indicated that the null hypothesis could be rejected at the .05 level of significance. Students with high integrative orientation therefore obtained significantly lower alienation scores than those with low integrative orientation. These results give support to Lambert's theory.

#### Post Hoc Analyses of the Second Hypothesis

As for the first hypothesis, simultaneous Scheffé confidence intervals were used to determine which of the four alienation dimensions contributed significantly to the multivariate F test of the second hypothesis. The results of the analyses are presented in Table VIII. In the present case, Isolation was the only scale which contributed significantly to the multivariate differences on alienation for the two orientation groups. Students with high scores for integrative orientation feel less isolated from English Canadians than those with low integrative orientation scores. It should be noted, however, that the differences on two other scales, namely Powerlessness and Normlessness were in the direction of the research hypothesis and close to significance.

#### Discussion of the Results of the Second Hypothesis

The nature of the integrative orientation concept suggested a negative relationship with alienation. As seen in Chapter I, Lambert described

Table VIII.

Scheffé Simultaneous Confidence Intervals Following the Multivariate Test of Significant Differences Between the Alienation Means of High and Low Integrative Orientation Groups.

Alienation Dimension	$\hat{\psi}^a$	$\sigma_{\hat{\psi}}^b$	Confidence Interval	
			Lower Limit	Upper Limit
Isolation	-11.91	6.47	-5.44	-18.38 *
Powerlessness	- 4.11	4.67	0.56	- 8.78
Normlessness	- 2.98	5.25	2.27	- 8.23
Meaninglessness	1.63	5.41	7.04	- 3.78

$$a \quad \hat{\psi} = M_1 - M_2$$

$$b \quad \sigma_{\hat{\psi}} = \sqrt{MS_e \frac{N_1 + N_2}{N_1 N_2} \frac{(N_1 + N_2 - 2)p}{N_1 + N_2 - p - 1}} \quad F_{1 \quad \alpha p, N_1 + N_2 - p - 1}$$

\* Significant at the .05 level.

integratively oriented students as unprejudiced, non-ethnocentric and as viewing the second language learning situation as a means of becoming more closely associated with the second language community. Empirical studies revealed that integrative orientation was positively related to favorable attitudes toward the second language reference group and that it was negatively related to ethnocentrism and authoritarianism. The definition of the concept coupled with the empirical findings led to the hypothesis that students who professed to study a second language for purposes of integrating into the second language group would feel less alienated from that group than students who do not endorse such motives.

The test of the hypothesis supports the theory in that students with high integrative orientation obtained lower alienation scores than those with low integrative orientation. Post hoc analyses revealed that the Isolation scale contributed significantly to the differences. The differences on Powerlessness and on Normlessness were in the direction of the research hypothesis and tended toward significance while those for the Meaninglessness scale were clearly not significant. A discussion of these results follows immediately.

The fact that the Isolation scale contributed significantly to the multivariate differences on alienation means that students with high integrative orientation experience a stronger sense of belonging to English Canada than subjects with low integrative orientation. This finding is in

the direction of Lambert's prediction that students with an integrative orientation may eventually identify with the speakers of the second language to the point of developing membership ties with that group. The above findings should not be taken to mean that subjects with high integrative orientation have actually become members of the second language group but simply that compared to students with low integrative orientation they feel stronger ties with that group. It should also be noted that no statement is made or implied about the learner's position vis-à-vis his first language reference group. This is an area for further research.

Regarding Powerlessness the trend is certainly in the direction predicted by Lambert. The finding that students with high integrative orientation tend to feel more powerful vis-à-vis the second cultural group is not surprising in view of the relationship between feelings of Isolation and those for Powerlessness ( $r= 0.45$ ). Logically, belongingness could certainly be viewed as a basis for feelings of greater power. It is also probable that if the study were repeated with a greater number of subjects that the results would be significant.

Concerning Normlessness, it is only natural that students with high integrative orientation (i.e. people oriented) and low feelings of isolation would refrain from using socially unacceptable means to obtain desired outcomes within the second language group. This interpretation is enhanced by Lambert's findings that integrative orientation usually bears a positive

relationship with favorable attitudes toward the second reference group. Students who have a strong desire for integration within a second language group, who have positive attitudes toward that group and who also feel less isolated from it should be expected to foster lower feelings of Normlessness toward that community than students who do not display these characteristics.

The explanation already put forward for the findings on the Meaninglessness scale in the first hypothesis can also be suggested in the present situation. Since students with high integrative orientation felt less isolated and also tended to feel more powerful and less normless than those with low integrative orientation it is probable that the former group of students would have predicted positive outcomes of language study and that the latter would have stressed the negative polarity of the scale. Seeman's definition of Meaninglessness is inadequate in this situation since it is limited to the confidence in making predictions and does not take into account the direction of the prediction.

## SUMMARY AND CONCLUSIONS

The purpose of this study was to provide an empirical test of an important aspect of Lambert's theory. He postulated that an integrative orientation toward learning a second language as well as mastery of the learning task are related to the learner's "acculturation" within the second language group.

The test of the theory involved two general hypotheses:

1. Students at high levels of achievement in a second language will have significantly lower alienation scores than those at low levels of achievement.
2. Students with high integrative orientation will have significantly lower alienation scores than those with low integrative orientation.

The subjects for the experiment were two hundred "Secondaire IV" French-speaking high school students who had been learning English for a minimum of four years. A student's score for success in English was the average of his marks for two school board English examinations. Integrative orientation was measured by a pre-tested French adaptation of Lambert's scale to measure this concept. A student's alienation toward English Canada was taken as an indication of lack of "acculturation".

The data obtained were analysed by means of a 2 x 2 x 2 crossed, multivariate factorial design with sex as a blocking variable. The

conclusions based on the testing of the hypotheses are as follows:

1. Achievement in English and Alienation.- French-speaking "Secondaire IV" students with high achievement in English have significantly lower alienation scores than students with low achievement in English. The former group of students feels significantly more powerful and less normless with respect to the English-Canadian community than the latter; there is also a tendency for high achievers to feel less isolated from the second language community than low achievers. The findings give empirical support to Lambert's claim that achievement in a second language is related to the learner's acculturation.
2. Integrative Orientation and Alienation.- French-speaking "Secondaire IV" students with high integrative orientation toward learning the English language have significantly lower alienation scores than students with low integrative orientation. High integratively oriented students feel significantly less isolated from English people and culture than students with low integrative orientation. There is a marked tendency for the former group of students to feel more powerful and less normless with respect to English Canada than the latter. These findings support Lambert's theory.
3. Seeman's Definition of Meaninglessness.- The post hoc analyses of the two research hypotheses failed to indicate significant differences on Meaninglessness. It is proposed that Seeman's definition of this concept be reconsidered in order to include the direction (positive and negative) of the prediction together with the confidence in making predictions.
4. Sex and Interaction Effects on Alienation.- The present study did not reveal any sex differences on alienation nor did it find any interaction among the three factors of the design.

The above conclusions indicate that the two major hypotheses of the thesis have been supported and that Lambert's theory has withstood an empirical test of its validity. It is of extreme importance that the conclusions of this study be taken with caution, since, in a strict sense, they are applicable only to the specific conditions of the research. No attention has been devoted to the second language learner's first membership

group; accordingly no implications of this nature can be made from the present study.

Furthermore, the design of the study does not allow for the conclusion of cause-effect relationships and therefore it is impossible to assert that either lack of integrative orientation or low achievement in English is responsible for feelings of alienation. The conclusions simply state that these variables are related to alienation. In addition, the design does not permit an explanation of the sequence of variables; consequently it is not known whether language learning or integrative orientation is followed or preceded by alienation.

The limitations of the study suggest further areas of research. This project should be replicated with samples of different age groups and in various geographical areas. Also, a study of French-speaking children's alienation from English Canada, before they begin learning the second language would determine the sequence between the variables in the research.

Of enormous theoretical and practical importance would be an analysis of the effects of second language learning on the student's position vis-à-vis his first language group. In a similar vein, it would also be highly worthwhile to test Lambert's predictions with English-speaking students engaged in the study of French as a second language; the findings of this study are necessarily restricted to the learning of a

a dominant group's language by non-dominant group members. Different results might be obtained were the learning contexts reversed.

A more comprehensive study of the relationship between kind of orientation and alienation from the second language group would constitute a logical follow-up to the present study. Lambert has made the distinction between two main kinds of orientation: integrative and instrumental. It is highly possible that each of these forms of orientation could be differently related to the learner's position vis-à-vis his two language reference groups. Alienation theory could certainly make considerable contributions to this aspect of the theory.

The concept of integrative orientation alone could provide avenues for further research. For instance, Lambert has identified at least two underlying bases for an integrative type of orientation: 1) dissatisfaction with one's own group; 2) simple genuine interest in a second cultural group. Little work has so far been undertaken on this aspect of the theory. It could well be that these two motives could differentially affect a learner's feelings of alienation from either his first or his second language reference group.

A number of ideas for further research have emerged in the process of conducting this study. Although the variables involved were not considered in any depth they are nonetheless pertinent to the problem of language learning and its effects. Some examples of these research suggestions

include parental attitude toward the second language group as it affects the learning of children; relationships between stereotypes of and attitude toward a second language group ; comparison of traditional and immersion methods of teaching as they affect "acculturation". Another fruitful research area is the determination of the relationship between relevant personality traits (i.e. authoritarianism and ethnocentrism) and alienation or orientation.

Were the suggested research carried out, an important contribution would be made to Lambert's Social-Psychological Theory of Second Language Learning. Only experimentation can yield unbiased information about the personal and sociological effects of language learning on students.

From an educational standpoint the findings of the recommended studies could be applied to improve instructional programs in language learning and personal development. For example, the research results might well suggest ways for optimizing types and strength of motivation in order to promote achievement; also, a better understanding of alienated behavior would enable teachers to equip their students to cope with such problems not only in the school context but also in their larger social and work environments.

In addition to the elaboration of Lambert's theory a practical contribution would be made at the national level. Further understanding of second language learning and bilingualism, particularly for adult learners,

would provide the federal government with a sound basis for formulating and designing programs pertaining to national bilingualism issues.

## BIBLIOGRAPHY

Anderson, B. D., Bureaucratization and Alienation: An Empirical Study in Secondary Schools, unpublished doctoral thesis presented to the School of Graduate Studies, University of Toronto, Ontario, 1970, xvi-299 p.

This research was devoted to the study of the relationship between bureaucratization and alienation from school. The report includes a scholarly analysis of Seeman's five dimensions of alienation together with a comprehensive, critical review of the means by which alienation has been measured in the literature. Many of the techniques described by Anderson in the construction of his own scale to measure alienation from school were useful for the validation of the alienation questionnaire developed for the present thesis.

Anisfeld, M., and W. E. Lambert, "Social and Psychological Variables in Learning Hebrew", Journal of Abnormal and Social Psychology, Vol. 63, No. 3, 1961, p. 524-529.

This study examined the role of various attitude and intellectual variables as they affect Montréal Jewish high school students' learning of Hebrew as a second language. Intellectual variables such as verbal intelligence and language aptitude were found to be more stable predictors of success than those measuring attitude which were more dependent on the social class characteristics of the subjects. A basic study on Lambert's theory.

Feenstra, H. J., Aptitude, Attitude, and Motivation in Second Language Acquisition, unpublished doctoral thesis presented to the Faculty of Psychology, University of Western Ontario, London, Ontario, 1968, vii-109 p.

This study was intended as a verification of Lambert's theory but also focussed on the home influence on second language acquisition. The attitudes of parents were measured directly and included in the analysis with the data from grade nine English-speaking adolescents studying French in a London, Ontario high school. The results supported Lambert's position as to the importance of both an intellectual and an attitude-motivation factor in second language acquisition. It was also discovered that parents who held favorable attitudes toward French-speakers gave more encouragement to their children in learning the French language than did parents with less positive attitudes. Some of the findings from this study were useful in formulating the research hypotheses of the present thesis.

Gardner, R. C., and W. E. Lambert, "Motivational Variables in Second-Language Acquisition", Canadian Journal of Psychology, Vol. 13, No. 4, 1959, p. 266-272.

This research aimed at studying the factors which account for second language acquisition. The data were obtained from English-speaking

Montréal high-school students who were learning French as a second language. It was discovered that two distinct factors were related to achievement: the first was composed of measures of verbal intelligence and language aptitude and the second included measures of motivation, type of orientation toward the learning task and social attitudes toward French-Canadians. This research served as the foundation for the building of Lambert's theory.

Gardner, R. C., Motivational Variables in Second-Language Acquisition, unpublished doctoral thesis presented to the Faculty of Graduate Studies and Research, McGill University, Montréal, Québec, 1960, 71 p.

A verification and extension of the previous study of the same title. Aptitude and attitude-motivation variables again appeared on separate achievement factors. However, whereas the former were related mostly to traditional school-taught skills in French, the latter were associated with skills developed mainly through active use of the language in communication (e.g. expressive skills). This thesis was a major contribution to Lambert's theory.

Gardner, R. C. and W. E. Lambert, Attitudes and Motivation in Second-Language Learning, Rowley, Massachusetts, Newbury House, 1972, viii-316 p.

The results of twelve years of work on Lambert's theory are synthesized and reported in this book. Previously unpublished studies are included together with selected readings, measuring instruments and important references. An essential book for anyone who intends to carry out research on the learning of a second language.

Kolesar, H., An Empirical Study of Client Alienation in the Bureaucratic Organization, unpublished doctoral thesis presented to the [Faculty of Educational Administration], University of Alberta, Edmonton, 1967, xvii-244 p.

The author extended the concept of alienation to the school as a bureaucratic organization. Institutions with contrasting organizational structures were compared for differences on student alienation. His description of the validation of his alienation questionnaire which supported the multidimensionality of Seeman's classification was useful as background for the construction of the alienation questionnaire used in this research.

Lambert, W. E., "Psychological Approaches to the Study of Languages; Part II: On Second Language Learning and Bilingualism", The Modern Language Journal, Vol. 47, No. 3, 1963, p. 114-121.

The first section of this paper - "A Social Psychology of Second-Language Learning" - provided the starting point for the present research. The author exposes his ideas about the role of society or group related variables in second language learning. The socio-psychological determinants and consequences of second language study are discussed in the light of research undertaken from 1959 to 1962. This article generates a number of ideas for further research.

Lambert, W. E., "A Social Psychology of Bilingualism", Journal of Social Issues, Vol. 23, No. 2, 1967, p. 91-109.

This article is a further elaboration of Lambert's theory. The author deals with the effects of language switching on ethnic stereotypes and discusses several aspects of second language learning with reference to past and ongoing research. This article generated the problem for the present thesis.

Lambert, W. E., et al., A Study of the Roles of Attitudes and Motivation in Second-Language Learning, McGill University, Montréal, Québec, 1962, mimeographed; also in Gardner, R. C. and W. E. Lambert, Attitudes and Motivation in Second-Language Learning, Rowley, Massachusetts, Newbury House, 1972, p. 19-96.

This study tested major aspects of Lambert's theory in non-Canadian cultural contexts, namely, Louisiana, Maine and Connecticut in the United States. In addition to partially replicating the findings of the Canadian studies this research produced a number of measuring instruments which are still being used in testing the theory. The Orientation Index developed in this project served as the basis for the "Index d'Orientation" used in the present thesis.

Lambert, W. E., et al., "Attitudinal and Cognitive Aspects of Intensive Study of a Second Language", Journal of Abnormal and Social Psychology, Vol. 66, No. 4, 1963, p. 358-368.

This research was designed to explore the attitudinal and cognitive correlates of studying French as a second language in the context of an intensive six week summer course session. Results partly supported Lambert's theory that achievement in a second language is related to an appropriate pattern of attitudes toward the second language reference group and also to an integrative type of orientation toward the learning task. Also included in the report is a practical summary of Lambert's theory.

Lambert, W. E., and J. Macnamara, "Some Cognitive Consequences of Following a First-Grade Curriculum in a Second Language", Journal of Educational Psychology, Vol. 60, No. 2, 1969, p. 86-96.

Lambert, W. E., et al., "Some Cognitive Consequences of Following the Curricula of Grades One and Two in a Foreign Language", Georgetown Monograph Series on Languages and Linguistics, Vol. 23, 1970, p. 229-279.

Lambert, W. E. et al., Cognitive and Attitudinal Consequences of Following the Curricula of the First Three Grades in a Foreign Language, McGill University, Montréal, Québec, 1970, mimeographed, 99 p.

Lambert, W. E., et al., Cognitive and Attitudinal Consequences of Following the Curricula of the First Four Grades in a Second Language, McGill University, Montréal, Québec, 1971, mimeographed, 53 p.

The preceding four references report the findings from a bilingual education program that began in the fall of 1966 when a group of Montréal English-speaking children were enrolled in a French immersion grade one class. Though initial emphasis focussed mainly on the cognitive outcomes of the program, more recent evaluations also included measures of attitude toward selected ethnolinguistic groups. Results at the end of the fourth grade did not reveal any intellectual or scholastic drawbacks as a result of the program. Attitudinal characteristics, on the other hand, showed less stability from year to year depending on the socio-cultural experiences of the subjects. This is one of the important studies contributing to the theory of second language learning.

Laplaine, M., Construction and Validation of a Likert-Type Questionnaire to Measure French-Speaking Students' Alienation From the English Culture and People in Canada, unpublished Interim Report presented to the Faculty of Education of the University of Ottawa, Ottawa, Ontario, 1973, viii-182p.

This report contains a step by step description of the construction and validation of the alienation questionnaire used in the present thesis. A critical review of the techniques employed to construct various other alienation scales throughout the literature is also included. The alienation questionnaire could be of immense value in researching alienation of Francophones from English-speaking Canadians.

Peal, E., and W. E. Lambert, "The Relation of Bilingualism to Intelligence", Psychological Monographs: General and Applied, Vol. 76, No. 27, Whole No. 546, 1962, p.1-23.

The purpose of the study was to compare the intellectual functioning and the ethnic attitudes of French unilingual and bilingual ten year olds in the Montréal area. Of the forty-six variables of the study, twelve were intended to measure either student attitudes, stereotypes or identification with English or French cultural groups. Of importance to the present thesis was the finding that bilingual children held more favorable attitudes and stereotypes about English Canadians than the unilinguals. One of the better controlled studies of the series.

Seeman, M., "On the Meaning of Alienation", American Sociological Review, Vol. 24, No. 6, 1959, p. 783-791.

The author reviews the historical and contemporary interpretations of the concept of alienation and operationalizes them into more researchable statements. The resulting five-fold classification provided the basis for the definition of alienation together with the starting point for the questionnaire used in the present experiment.

APPENDIX 1

THE COMPREHENSIVE  
RESEARCH QUESTIONNAIRE

APPENDIX 1

RENSEIGNEMENTS PRELIMINAIRES

1. Nom: \_\_\_\_\_
2. Age: \_\_\_\_\_
3. Sexe: Masc.  Fém.
4. Classe: \_\_\_\_\_
5. No. d'étudiant: \_\_\_\_\_
6. Langue la plus souvent parlée à la maison: français  anglais  autre
7. Ma langue maternelle: français  anglais  autre
8. Emploi du père:
  - Pour qui (e.g. nom de la compagnie, du gouvernement, etc.) travaille-t-il?
  - Quel est son métier ou sa profession?
  - Décrivez en quelques mots en quoi consiste son travail:
9. Emploi de la mère:
  - Pour qui (e.g. nom de la compagnie, du gouvernement, etc.) travaille-t-elle?
  - Quel est son métier ou sa profession?
  - Décrivez en quelques mots en quoi consiste son travail:

## APPENDIX 1

### QUESTIONNAIRE I INDICE D'ORIENTATION

Vous trouverez ci-après huit raisons qui sont fréquemment invoquées pour étudier l'anglais. Lisez attentivement chaque énoncé et encerclez la lettre (une seule par numéro) devant la réponse qui exprime le mieux votre opinion personnelle. Veillez répondre à tous les énoncés.

ETUDIER L'ANGLAIS PEUT ETRE IMPORTANT POUR MOI PARCE QUE :

1. J'en ai besoin pour compléter l'école secondaire.

- a - tout à fait mon opinion
- b - décrit assez bien mon opinion
- c - quelque peu mon opinion
- d - indécis(e)
- e - pas tellement mon opinion
- f - décrit très peu mon opinion
- g - pas du tout mon opinion

2. Cela me permettra de faire plus facilement de bons amis parmi les gens de langue anglaise.

- a - tout à fait mon opinion
- b - décrit assez bien mon opinion
- c - quelque peu mon opinion
- d - indécis(e)
- e - pas tellement mon opinion
- f - décrit très peu mon opinion
- g - pas du tout mon opinion

3. On a besoin d'une bonne connaissance d'au moins une langue étrangère si l'on veut s'attirer la considération sociale.

- a - tout à fait mon opinion
- b - décrit assez bien mon opinion
- c - quelque peu mon opinion
- d - indécis(e)
- e - pas tellement mon opinion
- f - décrit très peu mon opinion
- g - pas du tout mon opinion

4. Cela m'aidera à mieux comprendre les anglophones ainsi que leur façon de vivre.
- a - tout à fait mon opinion
  - b - décrit assez bien mon opinion
  - c - quelque peu mon opinion
  - d - indécis(e)
  - e - pas tellement mon opinion
  - f - décrit très peu mon opinion
  - g - pas du tout mon opinion
5. Je crois que cela me sera utile un jour pour obtenir un bon emploi.
- a - tout à fait mon opinion
  - b - décrit assez bien mon opinion
  - c - quelque peu mon opinion
  - d - indécis(e)
  - e - pas tellement mon opinion
  - f - décrit très peu mon opinion
  - g - pas du tout mon opinion
6. Cela me permettra de rencontrer et de converser avec un plus grand nombre et avec une plus grande variété de personnes.
- a - tout à fait mon opinion
  - b - décrit assez bien mon opinion
  - c - quelque peu mon opinion
  - d - indécis(e)
  - e - pas tellement mon opinion
  - f - décrit très peu mon opinion
  - g - pas du tout mon opinion
7. Je crois que personne n'est vraiment éduqué à moins de pouvoir parler couramment l'anglais.
- a - tout à fait mon opinion
  - b - décrit assez bien mon opinion
  - c - quelque peu mon opinion
  - d - indécis(e)
  - e - pas tellement mon opinion
  - f - décrit très peu mon opinion
  - g - pas du tout mon opinion
8. Cela devrait me permettre de penser et d'agir comme les gens de langue anglaise.
- a - tout à fait mon opinion
  - b - décrit assez bien mon opinion
  - c - quelque peu mon opinion
  - d - indécis(e)
  - e - pas tellement mon opinion
  - f - décrit très peu mon opinion
  - g - pas du tout mon opinion

APPENDIX 1

QUESTIONNAIRE II  
INDICE D'ATTITUDES<sup>a</sup>

NOTEZ BIEN

- Travaillez sérieusement, sans perdre de temps.
- Encerclez une seule réponse par énoncé (item).
- Répondez à tous les énoncés (items).
- Vos réponses seront traitées avec la plus stricte discrétion.

CODE

FA: Si vous êtes fortement d'accord.  
A : Si vous êtes d'accord.  
I : Si vous êtes indécis(e).  
D : Si vous êtes en désaccord.  
FD: Si vous êtes fortement en désaccord.

REPONDEZ AUX EXEMPLES SUIVANTS:

1. Plus tard je saurai davantage comment faire accepter mes idées et mes suggestions par un groupe d'anglophones. FA A I D FD
2. Lorsque je suis parmi un groupe de Canadiens anglais je peux déterminer à part égale les activités du groupe. FA A I D FD
3. Je m'intéresserais à la politique du Canada anglais seulement si j'en retirais un profit personnel. FA A I D FD

---

<sup>a</sup> This questionnaire is not to be used without written permission from the author.

- (I)<sup>b</sup> 1. Je ne fais aucune distinction entre anglophones et francophones lorsqu'il s'agit de me fier à quelqu'un.  
FA A I D FD
- (I) 2. Pendant mes vacances j'aimerais passer quelque temps à visiter certains lieux historiques du Canada anglais.  
FA A I D FD
- (I) 3. J'aimerais passer un été avec une famille de langue anglaise simplement pour apprendre à mieux connaître les Canadiens anglais.  
FA A I D FD
- (P) 4. Je n'arrive pas à me faire accepter par les Canadiens anglais.  
FA A I D FD
- (I) 5. Je n'hésiterais pas à faire des plaisanteries aux dépens des Canadiens anglais si cela pouvait amuser mes amis (es) de langue française.  
FA A I D FD
- (I) 6. Je suis fier (e) des réalisations du Canada anglais.  
FA A I D FD
- (N) 7. C'est justifiable de violer les droits des Canadiens anglais si cela accélère le développement du Canada français.  
FA A I D FD
- (M) 8. Je crois que j'aurai plus tard un nombre croissant d'amis (es) de langue anglaise.  
FA A I D FD
- (I) 9. J'accepterais d'aller voir un film sur la vie des premiers colons anglais au Canada seulement si je me sentais obligé(e) d'y aller.  
FA A I D FD
- (M) 10. Mon contact avec les Canadiens anglais va modifier ma perception de la société canadienne.  
FA A I D FD
- (N) 11. Avec les Canadiens anglais l'on devrait prendre tous les moyens qui sont à notre disposition (justes ou injustes) pour obtenir ce que l'on veut.  
FA A I D FD
- (I) 12. Je suis irrité(e) lorsque j'entends des commentaires défavorables à l'égard des Canadiens anglais.  
FA A I D FD

---

b The letters I, P, N and M represent Isolation, Powerlessness, Normlessness and Meaninglessness respectively.

- (P) 13. Je ne réussis pas à faire accepter mes idées et mes suggestions aux personnes de langue anglaise.  
FA A I D FD
- (N) 14. Plus tard je participerai davantage aux activités culturelles des Canadiens anglais.  
FA A I D FD
- (N) 15. J'exagérerais intentionnellement les réalisations du Canada français si je m'attirais ainsi un plus grand respect de la part des Canadiens anglais.  
FA A I D FD
- (I) 16. Lorsque je me distrais par la lecture je m'arrête assez régulièrement sur des questions qui ont trait au Canada anglais.  
FA A I D FD
- (M) 17. Mon contact avec la culture anglaise ne fera pas de moi une personne plus éduquée.  
FA A I D FD
- (P) 18. Je suis capable de m'amuser parmi des personnes d'expression anglaise si je le veux.  
FA A I D FD
- (N) 19. Il n'y a pas de mal à faire de fausses promesses si cela nous assure la coopération des anglophones.  
FA A I D FD
- (P) 20. Lorsque je suis seul(e) à regarder la télévision je regarde assez régulièrement un poste du Canada anglais.  
FA A I D FD
- (N) 21. Je retire une plus grande satisfaction de ma lecture de romans du Canada anglais que des notes que j'obtiens dans mes cours d'anglais.  
FA A I D FD
- (I) 22. Je ne veux pas en apprendre davantage sur la culture anglaise que ce qui est strictement essentiel pour la vie quotidienne.  
FA A I D FD
- (P) 23. Si je me proposais d'aller seul(e) au cinéma, je ne serais pas déçu(e) si la mise en scène représentait le Canada anglais.  
FA A I D FD
- (N) 24. J'encouragerais l'établissement de liens plus étroits avec les Canadiens anglais seulement si cela accroissait les possibilités d'emploi pour les Canadiens français.  
FA A I D FD

- (M) 25. Je crois que je vais devenir plus sûr(e) de moi lorsque j'aurai affaire aux Canadiens anglais.  
FA A I D FD
- (P) 26. Je serais capable d'être intéressant(e) pour une personne de langue anglaise si je l'accompagnais à une soirée.  
FA A I D FD
- (N) 27. J'encouragerais des plans pour le développement social du Canada français même si ceux-ci devaient être exécutés aux dépens des Canadiens anglais.  
FA A I D FD
- (I) 28. Je ne me soucie guère de l'avenir des entreprises commerciales des Canadiens anglais dans la communauté où je demeure.  
FA A I D FD
- (P) 29. Je peux facilement intensifier mes relations avec les gens de langue anglaise si je le veux.  
FA A I D FD
- (M) 30. J'aurai l'esprit plus ouvert à la suite de mon contact avec les Canadiens anglais.  
FA A I D FD
- (I) 31. Au cours d'une discussion je défendrais mon identité en parlant français même si je devais être impoli(e) envers ceux qui ne comprennent pas ma langue.  
FA A I D FD
- (I) 32. Je peux prendre part à l'appartenance culturelle du Canada anglais si je le veux.  
FA A I D FD
- (N) 33. Je voyagerais de par le Canada anglais seulement si mon emploi l'exigeait.  
FA A I D FD
- (P) 34. Je suis capable de m'attirer des amis(es) fidèles qui sont de langue anglaise si je le veux.  
FA A I D FD
- (M) 35. Je peux prédire certains problèmes que je devrais affronter si j'avais quelques amis (es) de langue anglaise.  
FA A I D FD
- (N) 36. Lorsque j'ai affaire aux anglophones, l'important c'est d'obtenir ce que je veux et non pas comment je l'obtiens.  
FA A I D FD
- (P) 37. Je peux facilement me tirer d'affaire lorsque je suis avec des personnes de langue anglaise.  
FA A I D FD

- (I) 38. Si j'étais intéressé(e) aux affaires culturelles, j'encouragerais aussi les organisations qui sont vouées au développement d'artistes du Canada anglais.  
FA A I D FD
- (N) 39. Dans un tournoi athlétique je ferais concurrence aux Canadiens anglais moins pour le plaisir de la compétition que pour me mesurer à eux.  
FA A I D FD
- (P) 40. Lorsque je suis parmi des Canadiens anglais je ne suis pas capable d'interpréter leur réaction à mon égard.  
FA A I D FD
- (I) 41. J'aimerais partager dans l'apport culturel du Canada anglais.  
FA A I D FD
- (M) 42. Mes réalisations ne seront pas mieux reconnues par les Canadiens anglais à l'avenir.  
FA A I D FD
- (N) 43. La contribution du Canada anglais dans le domaine artistique ne me touche pas.  
FA A I D FD
- (M) 44. Mon expérience avec les Canadiens anglais fera de moi un(e) meilleur(e) citoyen(ne).  
FA A I D FD
- (I) 45. Pendant mes vacances j'aimerais passer quelque temps à visiter certains endroits qui reflètent la façon de vivre des Canadiens anglais.  
FA A I D FD
- (M) 46. Je crois que je fréquenterai plus régulièrement des filles (garçons) de langue anglaise plus tard.  
FA A I D FD
- (N) 47. J'exagérerais intentionnellement les aspects positifs de la culture canadienne-française afin d'amener les Canadiens anglais à l'apprécier davantage.  
FA A I D FD
- (I) 48. J'étudierais l'histoire du Canada anglais seulement pour satisfaire aux exigences de mon programme d'études.  
FA A I D FD
- (P) 49. Je peux facilement gagner la confiance des Canadiens anglais.  
FA A I D FD

APPENDIX 2

ABSTRACT OF

An Empirical Study of the Relationship Between  
Achievement in a Second Language, Integrative  
Orientation and Alienation From the Second Language  
Reference Group - A Test of Lambert's Theory

## APPENDIX 2

### ABSTRACT OF

An Empirical Study of the Relationship Between  
Achievement in a Second Language, Integrative  
Orientation and Alienation From the Second Language  
Reference Group A Test of Lambert's theory<sup>1</sup>

The purpose of the study was to provide an empirical test of Lambert's Socio-Psychological Theory of Second Language Learning. The theory holds that an integrative type of orientation toward the second language learning task and that success in learning are related to the learner's closer association or 'acculturation' to the second language reference group. On the premise that 'acculturation' and alienation express opposite ideas, Lambert's theory was put to the test by relating both integrative orientation and achievement in a second language to the concept of alienation as defined by Seeman.

The research hypotheses were:

1. that students at high levels of achievement in a second language would have significantly lower alienation scores than those at low levels of achievement.
2. that students with high integrative orientation would have significantly lower alienation scores than those with low integrative orientation.

The subjects were two hundred "Secondaire IV" (grade eleven) students engaged in learning English at a French composite high school in the

---

<sup>1</sup> Marc Laplaine, doctoral thesis presented to the School of Graduate Studies of the University of Ottawa, Ontario, July. 1974, 93 p.

Québec sector of the Outaouais Region.

The measuring instruments consisted of a pretested French-language version of the Orientation Index, two "Secondaire IV" English Examinations, Blishen's Occupational Class Scale, and a validated French-language multidimensional alienation questionnaire.

A least squares multivariate analysis of variance was carried out on the alienation dimension scores in a 2 x 2 x 2 crossed factorial design with achievement in English, integrative orientation and sex as independent variables. Age and occupational class were also considered in the experimental design.

The conclusions of the study are listed below:

1. French-speaking "Secondaire IV" students with high achievement in English have significantly lower alienation scores than students with low achievement in English. High achievers feel significantly more powerful and less normless with respect to the English-Canadian community than low achievers. There is also a tendency for high achievers to feel less isolated from the second language community than low achievers.
2. French-speaking "Secondaire IV" students with high integrative orientation toward learning English have significantly lower alienation scores than students with low integrative orientation. Students with high integrative orientation feel significantly less isolated from English people and culture than students with low integrative orientation. The former group of students also tends to feel more powerful and less normless with respect to English Canada than the latter.
3. Neither achievement in a second language nor an integrative type of orientation toward the learning task showed any significant relationship to Meaninglessness as defined by Seeman.

4. No sex differences were found on alienation nor did the analyses reveal any interaction effects among the variables of achievement in English, integrative orientation and sex on the alienation dimension scores.

Suggestions for future research included:

1. replicative studies with samples from different age groups and different geographical areas;
2. examination of the effects of second language learning on the student's position vis-à-vis his own or first membership group;
3. examination of the alienation effects of second language learning when the contexts are reversed, that is, when English speakers learn the French language;
4. in depth analysis of the different types of orientation as they relate to the second language learner's alienation from his first and/or second reference groups;
5. comparison of various teaching methods in relation to learner alienation from first and/or second language reference groups.

APPENDIX 3

CONSTRUCTION AND VALIDATION  
OF THE ALIENATION QUESTIONNAIRE

### APPENDIX 3

#### CONSTRUCTION AND VALIDATION OF THE ALIENATION QUESTIONNAIRE

The purpose of this appendix is to summarize pertinent information on the construction and validation of the alienation questionnaire in the present thesis. The complete, unabridged edition has been reported in the author's Interim Report<sup>1</sup> together with a critical review of other selected scales in the alienation literature.

The construction and validation of the alienation questionnaire followed a stepwise procedure and information on its development will be provided accordingly. Step one will first apply Seeman's<sup>2</sup> five alienation dimensions to the context of a second culture and will then describe the construction of an item pool relating to these dimensions. Step two will deal with the scale's initial content validity and step three will be devoted to the preliminary factor analysis of the questionnaire. Step four will conclude by providing the final validity and reliability of the instrument.

---

1 M. Laplaine, Construction and Validation of a Likert-Type Questionnaire to Measure French-Speaking Students' Alienation from the English Culture and People in Canada, unpublished Interim Report presented to the Faculty of Education, University of Ottawa, Ontario, 1973, viii-182 p.

2 M. Seeman, "On the Meaning of Alienation", American Sociological Review, vol. 24, No. 6, 1959, p. 783-791.

Step 1A - Adaptation of Seeman's definitions

In developing the instrument attention was initially devoted to the focussing of Seeman's<sup>3</sup> five alienation dimensions on the context of a second culture. The five definitions of alienation as used in this study are:

Powerlessness: High powerlessness refers to the expectancy held by a member of one ethnic group that he cannot determine or control the outcomes or reinforcements he seeks within another ethnic group.

Meaninglessness: Individuals who experience a high degree of meaninglessness have a low expectancy that they could make predictions about the future outcomes of their contact with a second ethnic group.

Normlessness: Persons who manifest a high degree of normlessness expect that displaying socially unapproved behaviors toward another ethnic group is required to achieve their personal and/or group goals.

Isolation: Persons who exhibit a high degree of isolation tend to assign a low importance to the values and goals held by a second culture.

Self-Estrangement: Persons who manifest a high degree of self-estrangement are strongly dependent on extrinsic future rewards of second culture contact as opposed to its intrinsic rewards.

The term "ethnic group" is used in accordance with the definition provided by Melvin M. Tumin in the Dictionary of the Social Sciences:

The term is most frequently applied to any group which differs in one or several aspects of its patterned, socially-transmitted way of life from other groups, or in the totality of that way of life or culture. Frequently, the group in question formerly enjoyed or still enjoys a separate-national identity as well ...<sup>4</sup>

---

<sup>3</sup> Idem, Ibid.

<sup>4</sup> Melvin M. Tumin, "Ethnic Group", in J. Gould and W.L. Knobb, A Dictionary of the Social Sciences, New York, Free Press, 1964, p. 243.

The term "culture" is used to mean:

The pattern of all those arrangements, material or behavioral, which have been adopted by a society as the traditional ways of solving the problems of its members. Culture includes all the institutionalized ways and the implicit cultural beliefs, norms, values, and premises which underlie and govern conduct.<sup>5</sup>

The term "second culture" is used in the Canadian context. Specifically, the questionnaire is intended for use with French-speaking Canadians as they relate to the English culture in the Ottawa region. Obviously included in the English-Canadian culture are English Canadians themselves.

#### Step 1B - Construction of an Item Pool

The first step also included the development of a preliminary form of the questionnaire. For this purpose, a large pool of items was constructed based on the literature as well as on ideas and suggestions of colleagues. In selecting statements care was taken to adhere to the criteria set forth by Likert<sup>6</sup> :

1. All statements were expressions of attitude and not statements of fact.
2. Each proposition was written in clear, concise and straightforward style.
3. Statements were worded so that the modal reaction tended toward both ends of the attitude continuum.
4. Approximately half the items expressed positive and half expressed negative attitudes.
5. The response alternatives involved only a single attitude variable.

---

<sup>5</sup> D. Krèch et al., Individual in Society, New York, McGraw Hill, 1962, p. 380.

<sup>6</sup> R. Likert, "The Method of Constructing an Attitude Scale", in M. Fishbein (ed.), Attitude Theory and Measurement, New York; Wiley, 1967, p. 90-91.

In constructing the scale the standard five-point weighting scheme was adopted for all items except those measuring Meaninglessness. Since the questionnaire is intended as a measure of alienation (as opposed to integration) from a second culture, positive statements with a "strongly agree" response were assigned a score of one and "strongly disagree" response a score of five. The "agree" and "disagree" responses were counted as two and four respectively and the "undecided" alternative was assigned a score of three. The scoring was reversed for negatively worded items.

For the Meaninglessness items the "strongly agree" and "strongly disagree" responses were counted as one (high predictability - low alienation), the "agree" and "disagree" alternatives as three (moderate predictability - moderate alienation), and the "undecided" as five (low predictability - high alienation). These weights were applied regardless of the direction (positive or negative) of the statement and were adopted only after having considered several other approaches which could have preserved uniformity in scoring. This procedure can be justified theoretically in that the definition of Meaninglessness takes into account only the ability to make predictions and ignores their direction. It

is also statistically sound in that the range of scores i.e. one to five, remains uniform for all dimensions with the exception that Meaninglessness is scored as a three-point scale as opposed to a five-point scale.

### Step 2 - Initial Evidence for Content Validity

The second step consisted in refining the instrument together with obtaining initial evidence for its content validity. Two separate groups of judges were used for this purpose.

On the first occasion six English-speaking professors and graduate students from the Faculty of Education, University of Ottawa, were provided with the original and adapted Seeman definitions and with the one hundred and one initially developed items. A brief description as to the nature and purpose of the questionnaire was also included and the judges were required to check independently for item ambiguity, strength and content validity; comments and suggestions were also invited<sup>7</sup>. As a result, many items were modified, a few were discarded and new statements were constructed. The resulting one hundred and ten item questionnaire<sup>8</sup> was then

---

7 Laplaine, Op. Cit, Appendix I.

8 Idem, Appendix II.

translated into French<sup>9</sup> by the author and no further use was made of the English version.

The second group of judges consisted of five French-speaking graduate students and professors in the same faculty who were given the following materials:<sup>10</sup>

1. Background information on the nature of the questionnaire.
2. Definitions (in English) and brief descriptions (in French) of the five alienation dimensions.
3. A French copy of the questionnaire in which the items had been randomly arranged.

They were encouraged to comment and were asked to read each item carefully before matching it with its corresponding definition.<sup>2</sup> An item was retained when four out of five judges agreed with its classification; corrections were also made on the basis of evaluator comments. Ninety-two items (83.6%) met the classification criteria and altogether twenty-two were modified. The corrected one hundred and ten item questionnaire was later used in step three.

### Step 3 - Initial Empirical Evidence for Construct Validity

The next phase in the development of the questionnaire consisted in using factor analysis to eliminate inadequate items and to provide preliminary evidence for

---

9 Idem, Ibid, Appendix III.

10 Idem, Ibid, Appendix IV.

construct validity. It should be noted here that item analysis was not carried out before the final factor analysis in step four. This sequence was preferred since it does not restrict an item to its subjective classification but exposes it to an empirical test. Moreover, this order is also recommended by Nunnally; with reference to summative scales he writes:

If one hypothesizes a number of factors relating to a particular attitude, or, lacking hypotheses, if one suspects that an item pool harbors a number of "strong" factors, there is nothing wrong with factor analysing the item pool initially rather than proceeding directly to the construction of a homogeneous scale, as was outlined previously.<sup>11</sup>

This idea is repeated by Nunnally when he states:

The use of factor analysis with item pools relating to attitudes is the major exception to the principle that it is usually unwise to start an item analysis with factor analysis.<sup>12</sup>

Finally, for the sake of clarity and simplicity, step three will be described under the following headings: a) description of the sample, b) the testing procedures, c) the factor analytic techniques and d) summary of the results.<sup>13</sup>

---

<sup>11</sup> J.C.Nunnally, Introduction to Psychological Measurement, New York, McGraw Hill, 1970, p. 437.

<sup>12</sup> Idem, Ibid, p. 438.

<sup>13</sup> See Laplaine, Op. Cit., p. 19-33 for a detailed presentation of the results.

Step 3A - Description of the Sample

When deciding on an appropriate sample care was taken to elicit the cooperation of a school where the students were characterized by a wide range of proficiency in English. The selected school was a large French comprehensive high school on the Québec side of the Outaouais region which serves both urban and rural districts. At the time of testing (May 1972) the school enrolment was slightly above three thousand and all students were required by Québec school regulations to study English for the obtention of the high school certificate.

On the recommendations of the thesis committee and the head of English in the school only grade twelve students were used for the first trial of the questionnaire. Altogether 241 young men and women varying in age from sixteen to twenty-one (Mean = 17.62, S.D. = .83) and representing a wide range of proficiency in English answered the questionnaire. According to the school classification, 41 students were described as strong, 134 as average, and 66 as weak in English.

Step 3B - Testing Procedures

The school's forty-five minute class schedule necessitated that the scale be split into two parts. Form A<sup>14</sup> was

---

14 Idem, Ibid, Appendix V.

composed of the forty-six Meaninglessness and Self-Estrangement items while Form B<sup>15</sup> contained the sixty-four statements pertaining to Powerlessness, Isolation and Normlessness. In each form the items were randomly distributed and there were approximately equal positive and negative statements.

The questionnaire was administered during regular class meetings by the teachers who were supervised by the author and who had previously been given relevant information<sup>16</sup>. In each class Forms A and B were randomly assigned to the students. In both forms the top sheet asked for preliminary information such as age, sex and mother tongue, and provided a summary of the method of answering. No time limit was set and every student had sufficient time to finish. A total of 122 students completed Form A and 119 completed Form B. Eleven questionnaires were discarded either because the respondent's mother tongue was not French, or because the student had not answered seriously. The final tally was 119 pupils answering Form A and 111 answering Form B.

### Step 3C - Factor Analytic Techniques

The factor analysis program used is the University of

---

15 Idem, Ibid, Appendix VI.

16 Idem, Ibid, Appendix VII.

California BMDX72 package<sup>17</sup>. A general description of this program - reproduced from the publisher's manual - is provided in the Interim Report.<sup>18</sup> The options specified on the problem card are included in the same appendix.

Oblique factor rotations were used for two major reasons. First, from a theoretical viewpoint, past research supports Seeman's claim that the different alienation dimensions are not entirely independent. Orthogonal rotation would have imposed an artificial independence on the various factors. Second, the approach is in line with other studies which have made use of factor analysis in developing alienation questionnaires, namely, Kolesar<sup>19</sup> and Anderson<sup>20</sup>.

The choice of a factor loading large enough to be considered significant was determined from the literature. Various measurement textbooks pointed to the non-existence of a generally acceptable value for significant factor loadings. However, a number of authors have used a loading of 0.30 and this was accepted as the cut-off point in the present study. The factor analytic procedure consisted in successive factorings of the correlation matrices and discarding items with poor construct validity.

---

17 W.J.Dixon, (Ed.), BMD Biomedical Computer Programs, X-series Supplement, University of California Publications in Automatic Computation, No. 3, 1970, p. 90-103.

18 Laplaine, Op. Cit., Appendix VIII.

19 H. Kolesar, An Empirical Study of Client Alienation in the Bureaucratic Organization, unpublished doctoral dissertation, presented to the University of Alberta, 1967, xvii-244p.

20 B. D. Anderson, Bureaucratization and Alienation: An Empirical Study in Secondary Schools, unpublished doctoral thesis presented to the University of Toronto, 1970, xvi-299 p.

A major complication resulting from using factor analysis in scale validation is that one cannot be sure that the analysis will yield the same subscales for which items were originally intended. However, since the whole purpose behind factor analysis in this case is to provide an empirical validity check for the classification of items, it is logical to give precedence to the results of the analysis as long as these are interpretable. This viewpoint was adopted by Kolesar and by Anderson and will also be accepted here.

#### Step 3D - Summary of the Results of Factor Analysis

Since Forms A and B were analysed separately, the results will be summarized in different paragraphs. Three successive factor analyses led to the rejection of thirteen of the forty-six items of Form A. At this stage in the development of the alienation scale the Meaninglessness dimension contained twenty items and the Self-Estrangement thirteen. All items belonged clearly to one or the other dimension and all had acceptable factor loadings. In addition the subjective and empirical scale classifications complemented each other on every item.

The screening of Form B closely followed the procedure adopted for Form A, the only difference being that three factors were rotated instead of two. Three successive factor analyses reduced the number of items from sixty-four to forty-three. In this case the subjective and empirical classifications of statements did not agree in every case but the factor structures

were nonetheless sufficiently clear to allow easy labelling. The Isolation, Powerlessness and Normlessness dimensions contained twenty, fifteen and eight items respectively. It became apparent that the latter scale lacked sufficient statements for it to be of value in the final study. Consequently a total of nine new items were constructed in accordance with the definition of Normlessness and patterned on those statements which had the highest loadings on that factor.<sup>21</sup> They were then combined with the remaining thirty-three items from Form A and the forty-three in Form B. These were then arranged as to avoid set effects and printed on a single composite questionnaire<sup>22</sup> intended for step four.

#### Step 4 - Final Validity and Reliability

A lapse of approximately four months separated steps three and four. Final validation of the scale was carried out in the fall of 1972 on a sample of students similar to those in step three. Final validity and reliability will be presented under separate sections: the first will examine construct, content and criterion-related validity while the second will report the instrument's internal consistency and stability estimates.

---

21 Laplaine, Op. Cit., Appendix XV.

22 Idem, Ibid, Appendix XVI.

Step 4A - Final Validity

At this point a description of the subjects and the testing procedures from which the final data were obtained is warranted. The sample was composed of grade twelve students in the same school as those in step three (see p. 102). Whereas the subdivision of the questionnaire into two forms had required that all grade twelve English classes be used in the initial validation, only five classes were needed for providing a similar sample for the combined form.

A total of 120 students answered the questionnaire. The school classification, based on teacher ratings, identified 26 pupils as strong, 71 as average and 23 as weak in English.

The alienation scale was administered during regular (45 minute) class meetings by the teachers under the supervision of the author who had previously visited each participating class in order to explain the method of answering as well as to establish rapport. The top sheet was essentially the same as that described in the initial validation (see p. 103). In two classes subjects were asked to sign their paper (for purposes of test-retest stability) under guarantee of strict confidentiality. This was

highlighted by providing students with envelopes in which they sealed their answers before handing them directly to the author at the end of the session. No special time limit was set and students had no difficulty completing their assignment in the regular class period. Only seven questionnaires had to be discarded either because the student's mother tongue was not French or because he had obviously not answered seriously. The analyses were thus performed on 113 respondents, including 67 girls and 46 boys, varying in age from 15 to 21 years with a mean of 16.97 and a standard deviation of 0.97.

#### CONSTRUCT VALIDITY

The techniques and procedures to determine final construct validity were similar to those in the initial validation (step 3C-3D) except that only one composite form of the questionnaire was subjected to successive screenings and that more factors were rotated.

Four successive factor analyses resulted in the deletion of thirty-six items which did not conform to the selection criteria. As in the initial validation through factor analyses the subjective and empirical scale classifications did not correspond for every item but, as seen in Table 1, the factor structures were sufficiently clear to identify

Table I.-

Significant Loadings of the Items on the Four Rotated  
Factors in the Final Analysis (k= 49).<sup>a</sup>

Item No.	Factor I	Factor II	Factor III	Factor IV
5		.32 I		
7		.56 N		
8				-.53 P
12	.44 I			
13		.40 SE		
16	.52 I			
17		.41 N		
19	.34 I			
23			.37 M	
24				-.44 P
26	.36 N			
27			.41 M	
28	.38 I			
29		.73 N		
30			.35 M	
31		.32 SE		
32	.52 I			
34			.38 M	
35	.31 SE			
37		.59 SE		
38		.75 N		
39				-.48 P
40			.39 M	
42			.60 M	
44		.37 N		
47	.34 I			
49				-.44 P
52				-.48 P
53		.37 SE		
54	.65 I			
55			.57 M	
56	.48 SE			
58			.50 M	
60			.46 M	
61				-.62 P
62		.46 N		
64	.37 I			
65				-.51 P
68				-.44 I

Table I.--(Cont'd)

Item No.	Factor I	Factor II	Factor III	Factor IV
69			.42 M	
70				-.49 P
72	.50 I			
73				-.69 P
75	.59 SE			
78	.37 P			
79	.35 N			
81	.33 I			
85				-.51 I
86		.36 N		

<sup>a</sup> The letters M, N, P, I, SE are abbreviations for Meaninglessness, Normlessness, Powerlessness, Isolation and Self-Estrangement respectively.

four factors as Isolation, Normlessness, Meaninglessness and Powerlessness.

The vanishing of a separate Self-Estrangement dimension was unexpected and occurred during the first of the four factor analyses. In the hope of recovering it the factor analysis was repeated with a greater number of factors rotated. This technique was unsuccessful. The following explanations were put forward. At the theoretical level, Seeman himself has emphasised the tentativeness of this dimension. He concludes:

I am aware that there are unclarities and difficulties of considerable importance in these five varieties of alienation (especially, I believe, in the attempted solution of "self-estrangement" and the idea of "meaninglessness"). But I have attempted, first, to distinguish the meanings that have been given to alienation, and second, to work toward a more useful conception of each of these meanings.<sup>23</sup>

It is also plausible that the vanishing of Self-Estrangement is a function of the context of the questionnaire. Studies where this dimension was evidenced focussed on the school as object of alienation. In this situation students are captive clientèle and more likely to seek rewards which are extrinsic to those of the institution. However, where the object of alienation is a second culture the individual is not compelled to interact with persons of that group and

---

<sup>23</sup> M. Seeman, "On the Meaning of Alienation", American Sociological Review, Vol. 24, No. 6, 1959, p. 791.

and his contacts are therefore more likely to be motivated by intrinsic rewards. Perhaps the phenomenon of Self-Estrangement does not exist in this particular cultural context and consequently, individual items become associated with other alienation dimensions depending on their overtones.

Table II gives the Product - Moment intercorrelations of the alienation dimensions. As in Kolesar's<sup>24</sup> questionnaire, all coefficients are positive and vary from small to moderate. Similar results were also obtained by Anderson,<sup>25</sup> with the exception that the dimensions were more highly related to each other. In addition, the four factors in the present study accounted for thirty per cent of the total variance. This figure is comparable to that reported by Kolesar<sup>26</sup> (21.7) and by Anderson<sup>27</sup> (38.9) for five factors. Factors I to IV accounted for 16.32, 5.78, 4.34 and 3.30 per cent respectively of the total variance. The following information can be obtained in Appendix XXII of the author's Interim Report:

- i) The correlation matrix for the forty-nine items;
- ii) Eigenvalues;
- iii) Item communalities;
- iv) Complete rotated factor matrix.

---

24 Kolesar, Op. Cit., p. 103.

25 Anderson, Op. Cit., p. 223.

26 Kolesar, Op. Cit., p. 222.

27 Anderson, Op. Cit., p. 212.

Table II.-

Product - Moment Correlation of Scores on the  
Four Alienation Dimensions (N=113)

	I	N	M	P
Isolation	1.000			
Normlessness	0.494	1.000		
Meaninglessness	0.270	0.101	1.000	
Powerlessness	0.450	0.352	0.235	1.000

CONTENT VALIDITY

In the initial validation a first form of content validity was determined by subjective procedures, i.e., judges were asked to match statements with their appropriate definitions and to make suggestions that would improve the questionnaire; grade twelve students who took part in the initial validation were also encouraged to comment and to provide new ideas. It is impossible to specify how well the universe of content - which consists of all pupil attitudes, within the defined boundaries, toward the English culture in Canada - has been sampled since this universe is indeterminable. However, the forementioned procedures enhance one's confidence that an adequate range of student attitudes has been measured.

The final validation will provide empirical support for content validity by subjecting the statements to item analysis. When constructing a Likert scale there are several methods of analysing items for final selection. Likert<sup>28</sup> suggests two: item analysis (i.e. item-total correlation) and internal consistency (i.e. difference between the average score of the highest individuals and the lowest individuals). Of the two the latter is recommended but only because of computational simplicity. However, access to high speed computers has since modified this situation drastically.

---

28 Likert, Op. Cit., 1967, p. 93-95.

With reference to the method of summated ratings used by Likert, Edwards writes:

Other methods of item analysis, such as correlational methods, may be used in evaluating the individual statements instead of the t test described above. It is doubtful, however, whether any of the methods of item analysis in current use would result in an ordering of the statements that is essentially different from the ordering we obtain in terms of t values. Indeed, often a simpler procedure than the t test will prove to be sufficient.<sup>29</sup>

In this study item analysis will be performed by correlating scores on each item with those for the total subscale. Modern computer programs have solved the computational difficulties and this method has the advantage of selecting statements from the complete sample of subjects as opposed to small extreme groups.

#### - Computational Procedures

The computer program used for obtaining the item-total correlations was the BMD02D Correlation with Transgeneration package.<sup>30</sup> The data cards were the same as those for factor analysis and the items included under each subscale were also those selected earlier through factor analysis. In this

---

<sup>29</sup> A.L. Edwards, Techniques of Attitude Scale Construction, New York, Appleton-Century Crofts, 1957, p. 155.

<sup>30</sup> W.J. Dixon, (ed.), BMD Biomedical Computer Programs, Berkeley, University of California Press (University of California Publications in Automatic Computation No. 2), 1970, p. 49-59.

program scores on each item are correlated with those for a progressively increasing number of other items in the same subscale until scores for each item are correlated with total subscale scores. The following output was obtained:

1. Sums
2. Means
3. Cross-product deviations
4. Standard deviations
5. Variance-covariance matrix
6. Correlation matrix (Original and transgenerated variables).

It is widely known that item-scale correlation are spuriously inflated due to the inclusion of item scores in the total for the subscale. In this study obtained item-total correlations were corrected by the use of Cureton's Formula.<sup>31</sup> This formula was devised in response to problems generated by earlier correction techniques consisting in correlating an item with the remainder of the scale.<sup>32</sup> Cureton's solution consists in calculating the "correlation between an item and a test in which that item has been replaced by a rationally equivalent item."<sup>33</sup> When applied to multipoint items in a fact-orally homogeneous test he demonstrates that one need not actually replace the item and that the formula may be written

---

31 E.E. Cureton, "Corrected Item-Test Correlations", Psychometrika, Vol. 31, No. 1, 1966, p. 93-96.

32 J.P. Guilford, "The Correlation of an Item with a Composite of the Remaining Items in a Test", Educational and Psychological Measurement, Vol. 13, No. 1, 1953, p. 87-93.

33. Cureton, Op. Cit., p. 93.

in the form:<sup>34</sup>

$$r_{it}' = \frac{R_t - \sqrt{R_t^2 - 4R_t S_i (r_{it} - S_i)}}{2S_i} .$$

where

$r_{it}'$  is the corrected item-scale correlation

$R_t$  is the reliability of the scale (alpha)

$S_i$  is item sigma/scale sigma

$r_{it}$  is the uncorrected item-scale correlation.

#### - Results

The results of item analysis are presented in Tables III to X. Tables III to VI provide the psychometric properties of each item on the four subscales. A study of these tables indicates that the items were appropriate for the grade twelve sample. The average score for the forty-nine items in the questionnaire was 2.65. Item means varied from 1.89 to 3.55 and standard deviations ranged from 0.83 to 1.55. On the other hand, subscale means varied from 24.82 to 40.85 and the sigmas ranged from 7.00 to 9.65.

Tables III to VI also disclose that with the exception of a single item (No. 35) each of the forty-nine statements was significantly correlated with the total for its corresponding subscale at the  $p < .01$  level. An attempt was

---

<sup>34</sup> Idem, Ibid, p. 94.

Table III.-  
Item Analysis Statistics for the Isolation Scale<sup>a,b</sup>  
(k = 16, N = 113)

Item No.	M	S.D.	Item-Scale Correlation	Corrected Correlation	Direction of Statement
12	2.81	1.21	0.61	0.53	+
16	2.75	1.09	0.67	0.61	+
19	2.68	1.20	0.54	0.45	-
26	2.62	1.28	0.50	0.39	-
28	2.43	0.94	0.44	0.36	+
32	2.75	1.06	0.69	0.63	+
35	2.75	1.22	0.28	0.16	-
47	3.47	1.15	0.46	0.36	+
54	2.27	1.11	0.60	0.52	+
56	2.21	1.14	0.55	0.46	-
64	2.22	1.06	0.57	0.49	-
72	2.17	1.07	0.55	0.47	+
75	2.44	1.17	0.58	0.49	+
78	2.58	0.83	0.53	0.47	+
79	2.69	1.26	0.55	0.45	-
81	2.01	1.08	0.55	0.47	+

<sup>a</sup> Scale statistics were: M = 40.85, s.d. = 9.65.

<sup>b</sup>  $r = .236$ ,  $p < .01$ ;  $r = .181$ ,  $p < .05$ .

Table IV.-  
Item Analysis Statistics for the Normlessness Scale<sup>a,b</sup>  
(k = 12, N = 113)

Item No.	M	S.D.	Item-Scale Correlation	Corrected Correlation	Direction of Statement
5	2.68	1.28	0.51	0.38	-
7	2.48	1.40	0.62	0.50	-
13	2.63	1.34	0.55	0.42	-
17	2.72	1.09	0.50	0.39	-
29	2.35	1.25	0.71	0.63	-
31	2.47	1.22	0.52	0.40	-
37	2.88	1.24	0.65	0.56	-
38	2.20	1.23	0.75	0.69	-
44	2.02	0.93	0.46	0.36	-
53	2.98	1.21	0.43	0.30	+
62	3.19	1.21	0.54	0.42	-
86	3.20	1.19	0.40	0.27	-

<sup>a</sup> Scale statistics were: M = 31.79, s.d. = 8.12.

<sup>b</sup>  $r = .236$ ,  $p < .01$ ;  $r = .181$ ,  $p < .05$ .

Table V.-  
Item Analysis Statistics for the Meaninglessness Scale<sup>a,b</sup>  
(k= 10, N= 113)

Item No.	M	S.D.	Item-Scale Correlation	Corrected Correlation	Direction of Statement
23	2.84	1.40	0.47	0.30	+
27	3.05	1.55	0.62	0.47	+
30	2.86	1.06	0.46	0.34	-
34	3.55	1.42	0.51	0.35	+
40	3.00	1.28	0.54	0.40	+
42	2.95	1.32	0.57	0.44	+
55	2.63	1.30	0.60	0.49	-
58	3.35	1.42	0.57	0.42	+
60	3.35	1.32	0.57	0.44	-
69	2.96	1.39	0.47	0.30	+

<sup>a</sup> Scale statistics were: M= 30.55, s.d.= 7.27.

<sup>b</sup>  $r = .236$ ,  $p < .01$ ;  $r = .181$ ,  $p < .05$ .

Table VI.-  
Item Analysis Statistics for the Powerlessness Scale<sup>a,b</sup>  
(k = 11, N = 113).

Item No.	M	S.D.	Item-Scale Correlation	Corrected Correlation	Direction of Statement
8	1.90	0.94	0.65	0.57	-
24	2.37	1.22	0.62	0.50	+
39	2.28	0.94	0.54	0.44	-
49	1.93	1.02	0.55	0.44	+
52	2.78	1.11	0.57	0.45	-
61	1.89	0.92	0.66	0.58	+
65	2.16	0.88	0.57	0.48	+
68	2.33	1.11	0.54	0.42	+
70	2.55	0.93	0.59	0.50	+
73	2.22	1.12	0.72	0.64	+
85	2.41	1.42	0.62	0.47	+

<sup>a</sup> Scale statistics were : M = 24.81, s.d. = 7.00.

<sup>b</sup>  $r = .236$ ,  $p < .01$ ;  $r = .181$ ,  $p < .05$ .

made to remove item 35 but analysis revealed that the different factor structures would be adversely affected. Since this item was the only exception and since the corrected correlation was so near to the .05 level of significance (the uncorrected correlation was significant at the  $p < .01$  level) it was not deemed essential to delete it and to undertake a second series of factor and item analyses.

These same four tables also indicate that there are approximately equal numbers of positive ( $k = 26$ ) and negative ( $k = 23$ ) statements in the questionnaire. However, this situation does not hold for individual subscales and it would be unwise to administer any one of them out of context because of possible set effects. This problem is not relevant to the intended doctoral thesis in that the final form of the scale will be composed of the forty-nine randomly distributed items.

Finally, Tables VII to X provide the correlation matrix for the items in each of the four subscales. It can be observed that the various items are interrelated but not to the extent of duplicating one another. This was interpreted as further evidence for content validity.

#### CRITERION-RELATED VALIDITY

Evidence for criterion-related validity was obtained in the following manner. At the start of the second validation (step four), the head of English in the school was asked to

Table VII.-  
Correlation Matrix of the Items in the Isolation Scale (k=16, N=113)<sup>a</sup>

Items	12	16	19	26	28	32	35	47	54	56	64	72	75	78	79	81
12	1.00															
16	.464	1.00														
19	.247	.288	1.00													
26	.355	.302	.205	1.00												
28	.223	.340	.076	.093	1.00											
32	.297	.489	.382	.187	.324	1.00										
35	.130	-.013	.086	.161	.032	.104	1.00									
47	.150	.193	.285	.176	.165	.317	.242	1.00								
54	.245	.424	.212	.209	.136	.353	.253	.188	1.00							
56	.290	.266	.227	.148	.246	.364	.180	.237	.224	1.00						
64	.278	.319	.345	.220	.270	.377	-.075	.185	.330	.361	1.00					
72	.212	.312	.294	.229	.140	.330	.128	.204	.444	.308	.267	1.00				
75	.345	.387	.241	.178	.180	.471	.096	.176	.513	.210	.309	.247	1.00			
78	.325	.414	.141	.248	.418	.448	-.069	.219	.133	.228	.138	.272	.332	1.00		
79	.300	.346	.271	.241	.121	.310	.066	-.022	.295	.252	.326	.251	.226	.248	1.00	
81	.384	.358	.319	.240	.276	.291	-.052	.226	.184	.238	.303	.146	.117	.351	.401	1.00

<sup>a</sup>  $r = .236, p. < .01; r = .181, p. < .05.$

Table VIII.  
 Correlation Matrix of the Items in the Normlessness Scale ( k=12, N=113) <sup>a</sup>

Items	5	7	13	17	29	31	37	38	44	53	62	86
5	1.00											
7	.387	1.00										
13	.133	.176	1.00									
17	.230	.342	.153	1.00								
29	.315	.375	.310	.315	1.00							
31	.292	.198	.211	.209	.174	1.00						
37	.257	.334	.374	.251	.471	.447	1.00					
38	.293	.438	.361	.271	.489	.336	.498	1.00				
44	.103	.311	.271	.040	.264	.072	.088	.359	1.00			
53	.135	.238	.188	.132	.263	.042	.189	.346	.160	1.00		
62	.140	.221	.218	.236	.369	.224	.229	.328	.355	.124	1.00	
86	.002	.038	.182	.210	.366	.199	.108	.272	.208	.009	.159	1.00

<sup>a</sup> r = .236, p. < .01; r = .181, p. < .05.

Table IX.-  
Correlation Matrix of the Items in the Meaninglessness Scale ( $k=10, N=113$ )<sup>a</sup>

Items	23	27	30	34	40	42	55	58	60	69
23	1.00									
27	.167	1.00								
30	.270	.179	1.00							
34	.115	.377	.099	1.00						
40	.197	.216	.237	.177	1.00					
42	.148	.299	.173	.149	.148	1.00				
55	.181	.277	.169	.228	.365	.363	1.00			
58	.082	.268	.271	.168	.216	.219	.305	1.00		
60	.222	.342	.164	.239	.233	.319	.120	.296	1.00	
69	.124	.084	.118	.137	.201	.252	.231	.242	.105	1.00

<sup>a</sup>  $r = .236, p < .01$ ;  $r = .181, p < .05$ .

Table X.-

Correlation Matrix of the Items in the Powerlessness Scale (k=11, N=113)<sup>a</sup>

Items	8	24	39	49	52	61	65	68	70	73	85
8	1.00										
24	.244	1.00									
39	.296	.266	1.00								
49	.294	.317	.265	1.00							
52	.324	.286	.447	.081	1.00						
61	.452	.276	.285	.506	.272	1.00					
65	.452	.227	.139	.242	.237	.385	1.00				
68	.237	.298	.192	.297	.146	.315	.201	1.00			
70	.392	.364	.210	.184	.267	.325	.319	.257	1.00		
73	.483	.438	.289	.361	.307	.484	.445	.257	.366	1.00	
85	.286	.289	.234	.188	.365	.247	.269	.305	.311	.338	1.00

<sup>a</sup>  
 $r = .236, p. < .01; r = .181, p. < .05.$

solicit the cooperation of a teacher who displayed exceptional interest in her work and whose classes were to participate in the study. At the last stages of validation students in two of her classes (n = 46) were divided into upper (n = 10) and lower (n = 10) alienation groups on the basis of data obtained from the final forty-nine item form of the questionnaire. Acting as criterion the teacher was then presented with the list of twenty names in alphabetical order and was required to classify each pupil in one of two groups: alienated or non-alienated. She was discouraged from using marks in English as a possible indicator so that her classification depended on general descriptors of alienation centering on the four dimensions identified by factor analysis, i.e. alienated students are those who might feel that they don't belong in the English-Canadian culture, those who might feel uncertain as to the future of their relationship with English Canadians, those who might feel helpless when in an English environment, etc. This procedure was carried out a second time in order to get an estimate of rater stability but also allowed for a second measure of agreement between the test and the criterion.

Because of the limited size of the extreme groups, agreement was measured by percentages. On the first occasion teacher and test agreed on 70 per cent (14 out of 20) of the cases; on the second, they agreed on 90 per cent of the

classifications. Learning effects based on feedback did not occur since such information was not given until final results had been computed. Teacher stability was highly satisfactory since there was 90 per cent agreement between her two classifications (27 day interval).

The results were interpreted simply as an indication of the questionnaire's criterion-related validity. The choice of the criterion was dictated by practicality as well as by necessity. Indeed, since valid and reliable measures of attitude toward English Canadians could not be found for a sample of French Canadians, and also since no objective classification criteria could be devised, teacher ratings offered the only means of providing an indication of validity. Results are therefore regarded as tentative and further validation would be required if the instrument were to be used for other than research purposes.

#### Step 4B - Reliability of the Instrument

As mentioned at the beginning of this paper, estimates for two types of reliability were obtained: stability and internal consistency. These are presented below.

##### - Stability

Stability estimates were obtained by the test-retest method (three-week interval) on the same sample of forty-six subjects which served for criterion-related validity. The

stability indices for each subscale as well as for the complete questionnaire are listed below:

Isolation	$r_{tt} = .889$
Normlessness	$r_{tt} = .900$
Meaninglessness	$r_{tt} = .861$
Powerlessness	$r_{tt} = .870$
Total	$r_{tt} = .932$

- Internal Consistency Reliability

The statistic used for internal consistency was coefficient Alpha, the general form of the Kuder-Richardson Formula 20. Scores for the complete sample of grade twelve students (N=113) were used in this case. The results are listed below:

Isolation	$\alpha = .836$
Normlessness	$\alpha = .812$
Meaninglessness	$\alpha = .726$
Powerlessness	$\alpha = .820$

These findings allow for the conclusion that each of the four subscales is composed of a set of internally consistent items. These results could have been anticipated in that items were assigned to each subscale on the basis of factor analysis.

## SUMMARY AND CONCLUSIONS

The construction and validation of the alienation questionnaire took place over a period of approximately one year ( autumn 1971 - 1972) and required two consecutive testing sessions. Responses were obtained from a total of 354 French-speaking grade twelve students in a comprehensive high school on the Québec side of the Outaouais region. Items for the final form of the questionnaire were selected firstly on the basis of judgemental procedures and then by the statistical techniques of item and factor analyses.

Evidence was presented for content, construct and criterion-related validity. Reliability estimates included both stability over a three-week interval (correlations ranging from .861 to .932) and internal consistency (Alphas varying from .726 to .836). The final product<sup>35</sup> was a forty-nine item Likert-type questionnaire incorporating four of Seeman's alienation dimensions (Isolation, Normlessness, Meaninglessness and Powerlessness) with satisfactory psychometric properties. This instrument will be used in the author's doctoral thesis to measure French-speaking students' alienation from English-Canadian culture.

---

35 See Appendix 1, p. 85-89.