

et qu'il n'y a qu'un processus central qui s'établisse. Certains parlent de la linéarité du phénomène d'apprentissage probablement parce qu'ils entrevoient la nécessité d'organisation de notre système d'intégration.

À mon avis, ce qui compte avant tout dans l'apprentissage, c'est le domaine affectif et je suis d'accord avec l'idée de filtre affectif tel que présenté par Bialystock. En effet tout enseignement doit passer par le filtre affectif de l'apprenant pour pouvoir devenir un acquis, si ça ne passe pas, il ne peut pas y avoir acquisition. Je me demande si ce filtre affectif fonctionne en quelque sorte comme un aimant qui retient des parcelles d'information pour ensuite les inclure dans un procédé "établisseeur de sens." Il me semble évident que dans le sens de la production l'on pourrait parler de l'activité d'une sonde "chercheuse de sens" qui fonctionnerait comme un faisceau électrique qui balaie une surface, qui serait la plage porteuse de sens, jusqu'à ce qu'il s'arrête, ou en quelque sorte reste accroché ou éclaire sur cette plage tous les items qui ont trait à ce que la sonde recherche et puis tous ces items s'acheminent vers une voie à l'entrée de laquelle se fait un tri et à partir de laquelle se fait un acheminement plus précis. J'aimerais enfin rappeler une notion qui m'a toujours paru intéressante bien qu'incomplète. Le premier professeur d'allemand que j'ai eu à l'âge de 15 ans expliquait toujours l'apprentissage par des "tiroirs". Il avait bien compris que dans une situation d'apprentissage l'attention porte toujours sur un objet, de là l'idée du tiroir comme l'objet. Il avait en outre ajouté qu'il y avait une certaine linéarité dans le phénomène d'apprentissage en disant qu'il fallait ouvrir le "bon tiroir." De plus il s'était rendu compte que les notions acquises étaient mises en blocs, car il disait que l'ensemble des règles relatives à tel ou tel aspect de la langue se trouvait dans un "tiroir précis," et il attribuait les erreurs au fait que l'apprenant avait ouvert le mauvais tiroir.

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Kimberly A. Noëls and Richard Clément

Orientations to Learning German: The Effects of Language Heritage On Second-Language Acquisition

Motivational processes related to the dynamics of second-language acquisition have received much attention from social psychologists. For political, social and educational reasons (see Cummins 1984a, 1984b), researchers have recently become interested in the acquisition and retention of heritage languages among minority ethnic groups. This study explores the extent to which social psychological concepts shown to be important within the context of the acquisition of official languages as second languages may be applicable to the investigation of heritage language fluency.

A central social psychological concept proposed by Gardner and Lambert (1959, 1972) to explain second language achievement is motivation. Within the context of second language acquisition research, the individual's motivation is said to be sustained by the attitude toward the second language group, as well as by the goals sought through the acquisition of a second language. Initially, two classes of goals or orientations were proposed. The first orientation was labelled an integrative orientation and was said to correspond to learning the second language in order to identify with the valued members of the target language community. The second orientation was identified as an instrumental orientation, which is a more utilitarian, non-interpersonal approach to the second language, whereby the second language would serve as a tool to achieve practical goals, such as career advancement. Because the integrative orientation was linked to positive attitudes toward the target language group, Gardner and Lambert (1972) felt that language learners with this orientation would be better motivated to learn the second language than would those learners with an instrumental orientation.

Many of the early studies of attitudes and motivation in second language learning focused on these two orientations. While several studies supported the existence of the integrative and instrumental orientations and the expected relations between attitude, motivation, and proficiency, the results of other studies of second language acquisition were not always consistent with Gardner and Lambert's theorizing. Some researchers found that instrumentally-oriented language learners were more proficient in the second language (Lukmani 1972; Gardner and Lambert 1972). Others discovered that both orientations were associated with high levels of proficiency (Gardner and Santos 1970). Negative

relations were reported to exist between the integrative orientation and second language proficiency (Oller, Hudson and Liu 1977), while at other times (Chihara and Oller 1978), no significant relation was obtained between either orientation and proficiency.

In an attempt to reconcile these divergent findings, Clément and Kruidenier (1983) examined the orientations of eight groups of students: francophones and anglophones, living in multicultural and unicultural environments, studying English or French or Spanish as a second language. Four orientations were obtained which were common to all eight groups of learners: "Students learned a second language to achieve pragmatic goals (i.e., the instrumental orientation), to travel, to seek new friendships, and to acquire knowledge" (Clément and Kruidenier 1983: 286). Five other orientations were specific to certain subsets of language learners, and two aspects were proposed to influence the appearance of these factors. The first aspect was related to the relative dominance or nondominance of the language learner's group in comparison to that of the target language group. The second aspect was related to the opportunity for immediate contact with the target language group. Kruidenier and Clément (1986) further showed that the four orientations common to all groups were significant predictors of the individual's motivation to learn a second language.

Although Clément and Kruidenier (1983) emphasized the importance of contextual variables in second language acquisition, they did not consider an apparently important aspect of that context: the ethnolinguistic background of the learner. In some cases, students of a second language are learning the parents' or ancestors' mother tongue (Danesi 1986). Some studies have indicated that within this subset of learners the patterns of integrative and instrumental orientations may not appear as clearly as originally defined (Gardner and Lambert 1972). For example, Anisfeld and Lambert (1961) found that Jewish learners of Hebrew who responded to items indicative of an instrumental orientation to learn the language for instrumental reasons achieved greater proficiency. It was suggested (Anisfeld and Lambert 1972) that an "instrumental orientation" of second language learning such as employment may, in fact, be an integrative orientation, since entering into the target language group or community requires extensive participation in the target language group.

In another study, Teitelbaum, Edwards, and Hudson (1975) found that students of Spanish with a Spanish-speaking background who were required to use their Spanish skills to use through employment in the local Spanish community did more poorly on a Cloze test designed to measure proficiency than students who studied Spanish for other reasons. Given the results obtained in these two studies, the first purpose of the present study is to compare the orientations of students learning a "heritage" language with those of students learning the same language as a second language.

The second purpose of this study is to investigate the orientations of

the acquisition of a particular non-official minority language: German. The German community in Canada represents the second largest minority language group in Canada (Statistics Canada 1987). Studies on the orientations of German language learners have produced conflicting conclusions. While an early study (Bausenhart 1971) suggested that more instrumentally-oriented students were enrolled in German Language Schools, a later study (Bausenhart 1984) indicated that more integratively-oriented students were enrolled in university courses of German. If Clément and Kruidenier's (1983) conclusions regarding the effect of context are accurate, the contradictory results may be due to the fact that the two studies involved students living in different contexts. In the present case it may be, for example, that students with a German family background would be more "pragmatically" oriented than students with no German background. Also, for the former students, the instrumental orientation may be more related to motivation and second language achievement than for the latter. This study is meant to assess these hypothetical relationships.

A final purpose of the present study regards the theoretical status of orientations as constructs related to second language fluency. Contemporary research and theorizing on the social psychology of second language acquisition have upheld the central role which they were once attributed. For example, Kruidenier's (1985) model focuses on the determining role of attitudes on motivation and second language achievement, while Clément's (1984) model stresses the importance of frequency and quality of inter-ethnic contact, communication networks, and self-confidence in one's ability to use the second language. Therefore, the present study is meant also to examine the relation of orientations to other variables which are currently considered to play an important role in the second language learning process, such as attitudes, self-confidence, motivation, and aspects of inter-ethnic contact.

In summary, the purposes of the present study are threefold: to delineate the orientations of another population of language learners, to compare the motivational characteristics of students with a German background to those students without such a background, and to examine the relations between orientations and those aspects which have been found to have gained importance, such as attitude, motivational strength, aspects of inter-group contact, and self-confidence.

One hundred and fourteen (114) students registered in first-year German classes at the University of Ottawa and at Carleton University participated in the study. Women and men comprised 62% and 38% of the sample, respectively. They ranged in age from 17 to 50 years, with a mean age of 22 years. Sixty-six percent of the students claimed English as the language which they spoke most often. Forty-one percent indicated that either one or both

heritage and non-heritage language learners on orientation, motivation, attitude, quality of contact, frequency of contact, and self-confidence scores. Finally, a second factor analysis of these elements was computed to explore their relations to each other. These analyses are reported, hereafter, under separate headings.

Factor analysis

In order to delineate the orientations present in the sample, a factor analysis was performed on the correlation matrix of the orientation items using a principal component extraction procedure, rotated to simple structure via Varimax. Upon application of the Scree test (Cattell 1966) a five-factor solution, accounting for 43% of the variance, was retained (see Table 1).

Varimax Rotated Factor Matrix:
Orientations to Learning German

Items	Orientations				
	I	II	III	IV	V
1. be more at ease with fellow Canadians who speak German	06**	32*	04	28	09
2. find out how people live in German-speaking area	09	22	04	11	38*
3. necessary in future educational plans	68*	08	-06	01	15
4. useful someday in getting a good job	83*	05	13	14	-12
5. travel to Germany	22	19	56*	06	-02
6. necessary for future career	85*	-01	01	11	-08
7. become member of the German Canadian community	16	44	-08	49*	07
8. necessary if I study another language later	04	05	-09	11	43*
9. help me to understand German Canadians and their way of life	00	13	02	35	47*
10. travel to Austria and/or Switzerland	06	02	60*	06	-02
11. make me a more knowledgeable person	-01	01	40*	06	39
12. meet some German people	26	60*	30	23	23
13. appreciate the problems that German people have in a predominantly English-speaking society	00	20	-08	45*	44
14. understand own language better	03	-05	-14	02	52*
15. make friends with some German-speaking people	17	76*	28	02	-04
16. appear more cultured	03	-01	38*	33	03
17. help me to be successful in business	38	05	24	42*	-05
18. useful to me after I leave school	61*	15	27	-11	19
19. no one is really educated unless they are fluent in German	12	01	17	19	37*
20. help me if I should ever travel	-01	24	54*	02	-08
21. get a job where I could use my German	67*	13	12	-04	14
22. gain good friends more easily among German-speaking people	-04	63*	16	40*	20
23. because other people will respect me more if I have knowledge of another language	18	00	44*	29	29
24. help me to get to know German-speaking people	-04	67*	16	18	17
25. become an influential member of my community	07	28	16	51*	19
26. participate more freely in the activities of other cultural groups	-11	26	-40	05	34*
27. acquire new ideas and broaden my outlook	02	35	26	-17	50*
28. get a better paying job	62*	01	24	31	05
29. learn about myself	05	03	14	23	54*
30. gain influence over German Canadians	03	07	09	61*	12
31. meet and converse with more and more varied people	15	41	44*	-12	17
32. think and behave like German Canadians	01	07	02	64*	19
33. travel to a German-speaking area	16	20	74*	05	-12
34. understand and appreciate German art and literature	31	24	-08	-19	40*

*This item was used in the computation of the orientation index.
**Decimal points have been omitted on all loadings.

Table 1

Factor I accounted for 19.4% of the variance and had an eigenvalue of 6.60. It received appreciable loadings (i.e., greater than .30) from eight variables (items 6, 4, 3, 21, 28, 18, 17, and 34). All of these variables indicated an interest in learning German in order to achieve career or educational goals, and was, therefore, identified as an *Instrumental* orientation.

Factor II accounted for 8.8% of the variance, with an eigenvalue of 3.00. Appreciable loadings came from eight variables. Students who learn German in order to meet and gain the friendship of German-speaking people (items 16, 24, 22, 11, 1 and 31), also learn German in order to become a member of the German Canadian community (item 7), and to acquire new ideas and to broaden their outlook (item 27). Because the heaviest loadings on this factor came from those items expressing a strong desire to develop a friendship with German-speaking people, this cluster of reasons was termed a *Friendship* orientation.

Factor III accounted for 6.4% of the variance and had an eigenvalue of 2.16. This factor received appreciable loadings from nine variables. The composition of this factor suggests that students who learn German in order to facilitate travel, particularly travel to a German-speaking area (items 33, 10, 5, and 20), also learn German in order to meet and converse with more and varied people, including German-speaking people (items 11 and 31). Also characteristic of this dimension is a desire to learn German in order to be more knowledgeable, to appear more cultured, and to gain respect from others (items 23, 11, and 16). The major loadings appear to best identify this factor as a *Travel* orientation, with the qualification that this type of activity is also related to the pursuit of social prestige.

Factor IV accounted for 4.7% of the variance, and had an eigenvalue of 1.61. It received appreciable loadings from ten variables. The composition of this factor indicates that students interested in identifying and making friends with German-speaking Canadians (items 32, 7, 9 and 22), are also interested in gaining influence over the German-speaking community, and understanding the problems of German-speaking people in a predominantly English community (variables 24, 43, 36, and 18). As well, these students indicate that they believe that a knowledge of German will contribute to success and better pay in business (items 28 and 17). Because this desire to identify with the target language group is tempered by the desire to exert influence over that community, this dimension is termed an *Identity-Influence* orientation.

Factor V accounted for 3.6% of the variance, with an eigenvalue of 1.24. This factor received appreciable loadings from eleven variables. It suggested a desire to learn German in order to learn about oneself, to help one to understand one's own language and/or another language later on, to become truly educated through a knowledge of German, to acquire new ideas and to be more knowledgeable (items 29, 15, 8, 19, 27, and 11). Furthermore, it indicated (items 9, 2, 34, 13, and 26) that a desire to learn German in order to become

acquainted with how people live in German-speaking areas, was related to a desire to become familiar with this group's art and literature, to a desire to speak German in order to understand the problems which these people may experience as a minority ethnic group, as well as to a desire to participate more freely in other cultural groups. This factor seems best described as a *Knowledge orientation*.

Following the factor analysis of orientation items, indices of each of the five orientations were compiled for each individual. This computation was done by averaging the scores obtained on the items which uniquely identified each factor. This procedure was followed, rather than computing factor scores, in order that each orientation score would correspond to a specific sub-set of items. Asterisks in Table 1 identify the items included in the computation of the respective orientation indices. The remaining analyses were meant to assess the relationship between orientations and the other constructs involved in this study. As a first step, a multivariate analysis of variance was computed to compare students with and without a German-speaking background.

Multivariate Analysis of Variance

The results of a multivariate analysis of variance comparing students with and without German background on the orientation indices and the scores on the attitude, motivation, quality and frequency of contact, and self-confidence measures revealed a significant difference between those students learning German who did not have a German heritage and those who did have a German-speaking background [Wilks = .739, $F(11,94) = 3.02$, $p = .002$]. Examination of the univariate results suggested that students with a German-speaking background had more contact with speakers of German outside the school situation ($M = 2.91$) than did students without such a background [$M = 1.79$; $F(1,104) = 23.28$, $p < .001$]. They were also more likely to learn the second language in order to identify with and/or to influence members of the target language group ($M = 2.73$) than were the other students [$M = 2.38$; $F(1,104) = 5.10$, $p = .026$]. As well, they experienced greater self-confidence when using the second language [$M = 13.790$; $F(1,104) = 8.86$, $p = .004$].

Factor Analysis

In order to delineate the relationships between the orientations and the other constructs, the corresponding indices were included in a second factor analysis. In addition, for theoretical interest as well as because of the results obtained in the previous multivariate analysis, German background, coded as a dichotomous variable (with or without), was included in the analysis. In this analysis, a principal components extraction procedure was again used, followed by a Varimax rotation. As can be seen in Table 2, four factors emerged, accounting for 47.5% of the variance.

Varimax Rotated Factor Matrix: Students Learning German

Items	Factors			
	I	II	III	IV
1. Attitude Toward German-speaking people	.79*	-.00	.11	-.03
2. Quality of Contact	.65	-.07	-.00	.33
3. Motivation	.39	.12	.15	.66
4. Self-Confidence	-.09	.39	.10	.10
5. Frequency of Contact	.20	.76	.15	.06
6. German Background	-.06	.64	.02	-.10
7. Instrumental	.11	.11	.37	.03
8. Friendship	.68	.13	.31	.11
9. Travel	.12	.10	.89	.03
10. Identity-Influence	.51	.41	.15	-.32
11. Knowledge	.55	-.08	.08	-.13
12. German Proficiency	-.10	-.00	.00	.44

* Decimal points have been omitted for all loadings

Table 2

The first factor accounted for 23.3% of the variance, and had an eigenvalue of 2.80. It received appreciable loadings (i.e., greater than .3) from six variables (items 1, 8, 2, 11, 10, and 3). This factor indicated that a positive attitude toward the target language group, a desire to learn the language for reasons of friendship, high quality of contact, and a desire to learn German for knowledge and identity-influence purposes would be predictive of higher motivation. Because of the inclusion of attitudinal and motivational properties in this cluster, along with the desire to identify with the second language group for socio-affective reasons, this factor was considered to reflect an *Integrative Motive*.

The second factor accounted for 11.1% of the variance, and had an eigenvalue of 1.33. It evidenced appreciable loadings from four variables (items 5, 6, 10, and 4). Those students who experience high frequency of contact with the target language group were more likely to have a German-speaking background. They were also more likely to be learning German for reasons of identity and influence. As well, self-confidence loaded substantially on this factor. Because of the strong influence of the German culture and contact with German, this cluster of variables was labelled a *German Environment* dimension.

The third factor accounted for 7.1% of the variance, with an eigenvalue of .86. It received appreciable loadings from three variables (items 9, 8, and 7). It was most strongly defined by *Travel* and *Instrumental* orientations, and less strongly by the *Friendship* orientation. This combination suggested a pragmatic element, and was, therefore, labelled as a *Pragmatic Orientation* dimension.

The fourth factor accounted for 6% of the variance, and had an eigenvalue

of .716. It received appreciable loadings from four variables (items 3, 12, 2 and 10). While the loadings received from the motivation, proficiency, and quality of contact indices were positive, a negative loading was evident from the *Identity-Influence* orientation index. Because of the relationship between motivational strength and achievement, this factor was taken to reflect an *Achievement/Motivation* dimension.

Discussion

The present study was conducted to delineate orientations to learning German as a second language, to investigate the relationships between these orientations and variables which have been associated with second language acquisition, and to assess the effects of language heritage on the learning process.

The results of the first factor analysis revealed the existence, in the present context, of five orientations to second language learning. It appears that students learn German in order to develop a skill meant to be useful in pragmatic endeavours, to gain friendships, to identify with and influence the target language group, to travel, and to broaden their knowledge. Four of these orientations — the instrumental, travel, friendship, and knowledge orientations — closely resemble the orientations which were found to be common to all groups of language learners in the Clément and Kruidenier (1983) study. This replication of the earlier results supports the proposition that these orientations are characteristic of all groups of language learners, and underscores Clément and Kruidenier's (1983) recommendation that they be recognized and assessed as independent orientations in future studies.

The pairing of influence and identity reasons, characteristic of the fifth orientation, has already appeared in other studies (e.g. Clément and Kruidenier 1983; Bolger 1980). In one of the earliest theoretical statements on the matter of motivation and second language acquisition, Ervin (1954), borrowing from Mowrer's (1950) theory of first language acquisition, suggested that identification with the target language speaker might be a prime determinant of language competence. In the present case, it is associated with a desire to become influential in the target language community. This combination suggests that the expression of the desire to become an influential member of the community need not necessarily be regarded as a desire to manipulate the target language group to achieve self-serving ends. The desire to influence the second language community may be a reflection of a wish to participate actively in and contribute to the target language community. This goal may be accomplished through such avenues as business or politics, aspirations which have typically been classified as instrumental or machiavellian (see Gardner and Lambert 1972) goals. Thus, seeking identification may be served, rather than hampered, by the pursuit of personal influence and prestige.

The above orientations are related to attitude, motivational strength, aspects of contact, and self-confidence along lines that at once replicate and extend conclusions drawn from previous results (Gardner and Lambert 1972; Gardner

and Smythe 1975; Gardner 1985; Clément 1984). In line with a fundamental principle of current formulations, motivation was found to be associated with achievement in the second language. Furthermore, motivation was related, together with quality of contact, to a cluster of variables which have in the past been identified as reflecting an integrative motive. Thus, supporting Clément's (1980, 1984) proposition, learning the language of a group relatively weakly represented in the community seems primarily dependent upon an affective process.

The sample participating in this study also included, however, a group of students who had ready access to germanophone family members. In their case, Clément (1984) would predict a relationship between achievement, motivation, self-confidence, and frequency of contact. As shown by the results of the second factor analysis and the multivariate analysis of variance, students with a German-speaking background did tend to demonstrate a higher incidence of contact, higher self-confidence, and a stronger endorsement of the identity-influence reasons for learning German. They did not, however, evidence stronger motivation or higher achievement.

The results obtained for students with a German family background are, therefore, at variance with the theoretical expectations. For this group of "heritage" language learners, frequency of contact is related to a higher level of self-confidence, but the hypothesized relationship to motivation and achievement is not supported. The reason for this incongruity may be related to the orientation which is characteristic of learners with a German language heritage. Although contact with germanophones might be advantageous for these students, this advantage may be reduced by their endorsement of goals (i.e. *identity-influence*) which are adverse to proficiency in German, at least as it is measured in the context of university language courses.

Two *post hoc* explanations may be proposed to account for these results. First, it may be that the core language courses available in the university situation are not conducive to encouraging development of language skills among these individuals. These students already have a German language background, a fact which may explain their general self-confidence in their own ability to use that language. At the same time, however, their identity-influence orientation, which may concord with their life situation, may be contrary to goals addressed by the written exercises of the German class context. Thus, from a motivational point of view, the heritage language learner finds him/herself in an environment which does not fulfill his/her particular needs.

Second, the problem of reduced interest may be compounded by one of language skills. Driedger and Hengstenberg (1986) have indicated that among those Mennonite speakers of German who experience greater urbanization and education, "the standard variety (of German) is not so much a vehicle of in-group communication, but rather becomes an 'educational asset', while the dialect variety retains its traditional function" (Driedger and Hengstenberg

1986: 100). In the present setting, it is possible that the language which is being taught in school is not the same dialect used by the students in interactions with germanophones. These students with a German-speaking background appear to be learning the language to increase the intensity of their interaction with the target language group, i.e., for reasons of identification and influence. If the immediate language group does not speak the standard dialect, the language taught in the school setting may not be relevant to the students' purposes. They may still rate themselves highly on their fluency but their perception of themselves is unrelated to their knowledge of the formal style as assessed by classroom tests and exercises.

Within the particular context of learning one's ancestral language, it is possible that because of the learner's orientation, he/she may be inclined to concentrate on the development of particular language skills at the expense of others. Research has shown that in instances where immediate contact with speakers of an ancestral language is possible, those students who express a desire to live and work within that community may exhibit a lower level of competence in written aspects of the second language (Teitelbaum, Edwards, and Hudson 1975). In the present case, the desire to identify with and to influence the second language community may be reflected in a heightened ability to use one's listening comprehension and verbal expression skills, while neglecting to develop one's writing and reading skills.

The results of the present study indicate that the language context in which second-language learning occurs may influence the dynamics of the motivational processes which contribute to successful second language acquisition. While in non-heritage language learners motivation may be seen to stem from an integrative motive, the motivation to learn a heritage language may be subject to different constraints. Higher incidence of contact with members of the target language group may lead to increased self-confidence, which may in turn serve as the fountainhead of motivation for the heritage language learners. In their particular context, motivational orientations and skill development might not, however, correspond to what is generally expected in university German classes.*

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