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ABSTRACT

A study explored the relevance of acculturation theory to language fossilization in the advanced stages of second language learning. Case studies of two native Japanese speakers with long experience living in an English-speaking environment are examined. First, the model of acculturation is outlined: it proposes that socio-psychological factors, particularly social and psychological distance, are central to second language learning success and draws a parallel with the development of pidgins and creoles in language contact situations. Second, the research methodology is described and the two subjects are introduced, focusing on their language use patterns and social-psychological profiles. The third section reports results of several English usage analyses (morphemes, negatives and interrogatives, complex syntactic structures, lexis and comprehension, pronunciation) and social-psychological analyses (social distance, status, size, attitudes, cultural congruence, integration patterns, cohesion, enclosure, relations with the expatriate community, psychological distance). It is concluded that acculturation theory does not account for two important factors, language aptitude and language needs, or for fossilization, and that a broader approach is needed. (MSE)

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Acculturation theory and
linguistic fossilization:
a comparative case study

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**Acculturation theory and linguistic
fossilization:
a comparative case study***

by

Emu Ushioda

0 Introduction

According to Selinker, absolute success in learning a second language is achieved by a very small minority of people — “perhaps a mere 5%” (Selinker 1974, p.116). Fossilization of the acquired linguistic system before the terminal stages of development are reached is a common phenomenon for most non-native speakers exposed to the target language after childhood. John Schumann’s acculturation model seeks to explain this phenomenon as the product of social and psychological distance from the target language community.

This paper aims to explore the relevance of acculturation theory to fossilization in the advanced stages of second language acquisition, with particular reference to a comparative case study of two adult Japanese subjects who have been living in an English-speaking environment for thirty years. The first section consists of a detailed examination of Schumann’s theoretical model and a review of related literature; the second section introduces the subjects of this study and outlines the research methods adopted; and the third section presents the research findings in terms of language and social-psychological profiles of the subjects, and discusses whether acculturation theory may provide a satisfactory explanation for the data obtained.

* This paper is an amended version of the author’s M.Phil. dissertation, submitted to the Centre for Language and Communications Studies, Trinity College, Dublin, in Michaelmas term 1991. A sincere debt of thanks is owed to David Singleton for his valuable advice and comments on the original version, as well as to Dr and Mrs Ushioda for making the whole research study possible.

1 Schumann's acculturation model

1.1 Introducing Schumann's theory

The theory we are about to examine is set against a background of a considerable body of research on the social psychology of second language acquisition. Studies of affective factors, attitudes and motivation and their relationship to differential language learning success have been quite widespread since the 1970s (e.g., Gardner and Lambert 1972, Gardner *et al.* 1979, Gardner 1985, Krashen 1982a, Burstall *et al.* 1974, Hermann 1980). What is particular to Schumann's theory is the degree of significance which he ascribes to social-psychological factors as determinant causal variables in the language learning process. Schumann minimizes the significance of aptitude and intelligence since his theory is specifically concerned with natural exposure to language:

While aptitude certainly plays a role in second language learning, it seems to be more important for language learning through formal instruction rather than through direct exposure to the second language environment. (Schumann 1975, p.209)

To support this claim, he draws on evidence from Gardner *et al.*'s research findings (*ibid.*, pp.218ff.) and concludes:

Intelligence and aptitude, as already discussed, contribute more to formal language training because classroom instruction tends to focus on academic skills (grammar, translation, rote memorization of vocabulary, etc.) which more directly tap the abilities associated with these two characteristics. (*ibid.*, p 220)

While intelligence and aptitude are fixed characteristics, social and psychological factors are dynamic and function quite independently. If they are the causal variables which determine the degree of language learning success, a better understanding of their nature, operation and control may according to Schumann have much to offer to the field of applied linguistics (*ibid.*, p.220).

1.2 Social distance

Central to Schumann's theory are the concepts of social distance and psychological distance. Social distance "pertains to the individual as a member of a social group which is in contact with another social group whose members speak a different language" (Schumann 1976b, p.396). For Schumann,

the greater the social distance between two communities, the fewer opportunities there are for contact and thus the more difficult it is for members of the 2LL (second language learning) group to acquire the language of the TL (target language) group. In analysing the factors which control the degree of social solidarity between two groups, he draws on literature on bilingualism, second language acquisition, sociolinguistics and ethnic relations, and identifies eight continua which together determine the social distance between language communities (*ibid.*, pp.396f.):

1. dominance — non-dominance — subordination;
2. assimilation — acculturation — preservation;
3. degree of enclosure of both groups;
4. degree of cohesiveness of 2LL group;
5. size of 2LL group;
6. degree of congruence of the two cultures;
7. inter-group attitudinal evaluations;
8. intended length of residence of 2LL group members.

Continuum 1 refers to the hierarchical relationship between the two groups according to relative political, cultural, technical and economic status. Social distance will prevail if either group is perceived as having a higher modal status than the other, which Schumann defines in terms of standard of living, level of education, degree of technical development and political power (Schumann 1976a, p.136). Equality of modal status or a situation of non-dominance on the other hand should engender inter-group contact and the acquisition of the target language by the 2LL group. Schumann points out that the relative perceptions of both groups must be taken into account in assessing the dominant/non-dominant/subordinate dimension since there may not always be mutual agreement (*ibid.*, p.136).

Continuum 2 constitutes the possible integration patterns of the 2LL group. At one end of the continuum, assimilation implies giving up their own lifestyle and values in favour of those of the TL group. At the other extreme, preservation implies a complete rejection of the lifestyle and values of the TL group and deliberate maintenance of the 2LL group's own cultural pattern. Social distance is thus minimized by assimilation and maximized by preservation, and decreases in proportion to the degree of acculturation (*ibid.*, pp.136f.). Once again, Schumann underlines the importance of considering the perceptions of both communities:

It should be noted that conflicting goals are likely to generate hostility between the two groups. Such hostility would perhaps foster even greater social distance than would be caused by both parties being comfortable with the 2LL group choosing preservation as its integration strategy. (*ibid.*, p.137)

In defining enclosure, Schumann refers to Schermerhorn's framework for studying comparative ethnic relations (Schermerhorn 1970), whereby the term is used to denote those structural aspects of integration such as endogamy, institutional separation and associational clustering. The level of enclosure maintained by each group affects the level of mutual contact. The cohesiveness and size of the 2LL group also contribute to the amount of inter-group contact there is, since members of a large and highly cohesive community are more likely to socialize among themselves and minimize external contacts. Integration between the two groups is moreover affected by the degree of congruence or similarity between the respective cultures.

With reference to the seventh continuum Schumann writes:

Attitudinal orientation refers to the cultural expectations maintained by the 2LL group towards the TL group and vice versa. Such expectations involve ethnic stereotypes by which one community either positively or negatively values the other. (Schumann 1976a, p.138).

Mutually favourable community attitudes are likely to engender a positive outlook in members of the 2LL group and promote acquisition of the target language. Schumann underlines the strength of the influence which the existing expatriate community's attitudes will have on the language learning prospects of a new arrival in the target language area:

If the views are positive and bilingualism is an accepted fact of life the new learner's chances of success in second language acquisition are greatly enhanced. However, if negative attitudes are communicated to the learner, his task will be made more difficult. (Schumann 1975, p.217)

In this connection, Schumann also draws attention to the way that the cultural expectations and attitudes to the TL community which parents communicate either directly or indirectly can similarly serve to promote or hinder second language development in children (*ibid.*, pp.215ff.). He recognizes however the difficulty of accurately assessing attitudes, and stresses the complicating fact that the positive attitudes of the 2LL group may not necessarily be reciprocated by the TL community (Schumann 1976a, p.138).

The final continuum pertaining to social distance is the intended length of

residence of members of the 2LL group. Clearly the longer the planned period of residence, the more extensive the contacts made with the host community are likely to be.

Schumann qualifies his discussion of the factors governing social distance by emphasizing their interdependent and relative nature (1976a, p.138). He also offers examples of particular 2LL communities to illustrate various combinations of points on the continua which give rise to potentially good or bad language learning situations (*ibid.*, pp.139-42). The lower modal status and general subordination of the Navajo Indians living in the American southwest, coupled with their high enclosure and cohesiveness, the dissimilarity of their culture and their desire to preserve it, as well as largely negative inter-group attitudes, combine to place the Indians at considerable social distance from the Anglo community and inhibit their acquisition of English. In sharp contrast, strong social solidarity characterizes the situation of American Jewish immigrants settling in Israel, a situation which Schumann rates in favourable terms on each of the continua discussed, and which he concludes is highly conducive to the acquisition of Hebrew by the Americans.

While these two examples illustrate opposite extremes on the scale of social distance, most situations of contact between communities fall into intermediate stages on the various continua. As far as Schumann's overall view is concerned, it would seem that given generally favourable conditions on most of the continua, an integration strategy of complete assimilation to the TL community is not a necessary condition for successful language acquisition. Referring to research data, he compares for example the largely negative situational profile of lower class Latin American worker immigrants in the U.S. with the largely positive situational profile of upper-middle class Latin American professional immigrants. He suggests that while the latter group choose not to assimilate because their stay is usually confined to a period of postgraduate education, their acculturative integration pattern, recognized equal modal status, cultural congruity and also low enclosure, cohesiveness and numbers contribute to social solidarity with the local community and favourable conditions for learning English (Schumann 1976b, pp.397-401).

1.3 Psychological distance

The second variable in Schumann's theory which complements social distance is psychological distance. The learning of a language is ultimately an individual phenomenon, and within the context of the various conducive, unfavourable or intermediate social conditions in which he finds himself, the learner can "violate the modal tendency of his group" and "learn the target

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language where he is expected not to, and not learn the language where successful acquisition is expected" (*ibid.*, p.401). Success then becomes a function of the psychological distance or proximity between the learner and the TL group. Schumann discusses five affective factors which foster psychological distance (Schumann 1975, pp.210-28):

1. language shock;
2. culture shock;
3. culture stress;
4. motivation;
5. ego permeability.

Referring to a discussion of language learning difficulties written by the Freudian psychoanalyst Stengel (1939), Schumann describes language shock as the disorientating phenomenon experienced by the learner when confronted with unfamiliar words to express familiar concepts and entities, words whose meanings he is unsure of and which may for him carry strange images and associations. Language shock is also caused by the sense of shame and embarrassment felt about appearing inadequate and comic in front of other people (Schumann 1975, pp.211f.).

Disorientation may result too from the experience of culture shock, whereby normally routine procedures and minor problems suddenly become transformed into major obstacles that require great energy to overcome, creating stress, anxiety, fear and depression. Even if the new arrival's coping mechanisms succeed in surmounting the practical difficulties leading to initial culture shock, the prolonged effects may persist and result in the more serious state of culture stress. Homesickness, excessive concern for his children's welfare and education, questions of personal identity and inadequacy, and problems of identification with or alienation from the target culture, the learner's own culture, or the organization by whom he is employed — all these may contribute to this deep-seated condition of stress (*ibid.*, pp.212ff.). Such a depressive mental state may "produce a whole syndrome of rejection which diverts attention and energy from second language learning" (Schumann 1976b, p.402). Moreover, where social distance also prevails between the two communities, second language learning is virtually doomed to failure, since negative influences "are especially likely to find fertile soil in a new arrival who is already feeling uncomfortable and disoriented due to culture shock and culture stress" (Schumann 1975, p.217).

In discussing motivation and attitudes, Schumann turns to the research

carried out by Gardner and his associates which he reviews in some detail (1975, pp.214-20). In subsequent publications, he suggests that whereas an instrumental motivation involves a whole range of psychological distance commensurate with the learner's instrumental goals, an integrative motivation implies minimal psychological distance from the TL community (Schumann 1976b, p.402; 1978a, p.91).

The final affective factor contributing to psychological distance concerns the empathic capacity of the learner, or the psychoanalytic concept of ego permeability. Schumann refers to experimental research conducted by Guiora and his colleagues at the University of Michigan to examine the relationship between empathy and language learning abilities (e.g., Guiora *et al.*, 1972a, 1972b). Following Guiora, he describes the psychological construct of language ego as "the development of language boundaries" and suggests that in "the early formative stages of ego development the language boundaries fluctuate, but once ego development is completed, the permeability of the boundaries is sharply restricted" (Schumann 1975, pp.222f.). Some individuals however may possess ego permeability which enables them partially and temporarily to give up their separateness of identity from target language speakers and thus achieve successful acquisition (*ibid.*, p.223). While Schumann points out the weakness and inconclusive nature of Guiora *et al.*'s research and speculations, he admits to the generally intuitive appeal of the concept of empathy and ego permeability in relation to psychological distance and hence to language learning. With particular reference to an experiment testing foreign language pronunciation where quantities of alcohol were administered to subjects to lower inhibitions and induce ego permeability, Schumann sees interesting potential in the notion that ego flexibility may be inducible:

[...] it would not be unreasonable to assume that given the right concatenation of natural psychological factors, permeability of ego boundaries might be possible for everyone. (*ibid.*, p.226).

The ideal concatenation of natural factors would constitute "those conditions which make the learner less anxious, make him feel accepted and make him form positive identification with speakers of the target language" (*ibid.*, p.227).

Much like the continua underlying the creation of social distance, the various affective factors which foster psychological distance are then also very much interdependent. In their worst state, they produce a vicious circle of negative effects:

[...] just when inhibitions must be reduced in order to learn the second language. the anxiety caused by language and culture shock increase inhibition and reduce ego flexibility. (*ibid.*, p.226).

While Schumann regards the affective factors which generate psychological distance as inevitable concomitants of the process of maturation, social-psychological maturation, unlike biological maturation, is in his view not unalterable (Schumann 1978a, p.107). Accordingly, instances of successful second language acquisition by adults "might be explained by the fact that under certain conditions adults can overcome the social and psychological barriers of their learning" (Schumann 1975, p.230).

1.4 The pidginization analogy

Schumann's theory of second language acquisition in terms of social and psychological factors which operate as causal variables determining eventual levels of success gains its strength from a detailed analogy which he draws with situations of language contact and the development of pidgins and creoles. His analogy has two related dimensions: the external social constraints affecting language development; the cognitive constraints affecting structural and linguistic aspects of early language development.

With regard to social constraints, Schumann considers the typical situations in which pidgins evolve:

A pidgin is a language that develops to meet the communication needs of two or more groups of people who speak different languages and who are in a contact situation. A typical example is that of traders (generally of European origin) speaking language X who come in contact with a group of people (usually indigenous natives of non-European origin) speaking language Y. In order to communicate, a pidgin (language Z) develops. (Schumann 1974, p.137).

He emphasizes the restriction in function which characterizes pidgins:

Through the communicative function information is exchanged among persons. The integrative function serves to mark one's identity within society and the expressive function is designed to allow the expression of certain psychological needs. Pidgin languages are generally restricted to the first function -- communication. That is, their purpose is merely to convey information. Since pidgins are always second languages, the integrative and expressive functions are maintained by the speakers' native languages. (*ibid.*, p.140).

Moreover, he adds that in most cases considerable social distance separates pidgin speakers from speakers of the superstrate language:

Pidgins are often thought of as developing in situations where one of the languages involved is spoken by a socially or economically dominant group and the other language or languages by a substrate group. (*ibid.*, p.143).

The parallel with the social constraints restricting access to TL speakers and thus affecting second language acquisition as discussed earlier is clear, although Schumann adds to these the constraints of psychological factors:

[...] restriction in function can be seen as resulting from social and/or psychological distance between the speaker and addressee. Placing this within the framework of second language acquisition, we would argue that the speech of the second language learner will be restricted to the communicative function if the learner is socially and/or psychologically distant from the speakers of the target language. (Schumann 1976b, p.396).

The other dimension of the analogy with the formation of pidgins is at the process level in terms of cognitive constraints which lead to structural simplification and reduction in the linguistic system developed. In his preliminary 1974 paper in which he speculates on the parallels between pidginization and second language acquisition, Schumann compares data from varieties such as West African Pidgin English, Neo-Melanesian, Hawaiian English-Japanese Pidgin, American-Indian Pidgin English and Jamaican Creole, with some second language acquisition data. He identifies a number of features common to both kinds of data (Schumann 1974):

- simplification in morphology;
- word order replacing inflectional morphology;
- deletion of certain grammatical transformations;
- deletion of redundant features and structures;
- closer relationship between deep and surface structure.,
- reduction in lexicon;
- absence of tense markers.

Speculating that pidginization processes might characterize all early second language acquisition through natural exposure, he points to the need for

detailed longitudinal SLA studies to test his theory (*ibid.*, pp.148ff.). His subsequent publications of his pidginization hypothesis (Schumann 1976b, 1978a) present just such research evidence in terms of a ten-month study on a Spanish-speaking Costa Rican adult immigrant in the United States.

1.5 Schumann's case study and the pidginization hypothesis

The subject of Schumann's study, Alberto, was one of six Spanish-speaking subjects whose untutored acquisition of English was monitored by Schumann and his colleagues Cazden, Cancino and Rosansky. Schumann's interest in Alberto lay in the fact that the 33-year-old Costa Rican showed very little progress during the course of the research period and remained at an early stage of linguistic development.

Using recorded spontaneous and experimentally elicited speech data, the researchers traced the developmental patterns in the acquisition by their subjects of a small number of grammatical sub-systems — negatives, wh-questions, auxiliaries (Schumann 1976b, pp.391ff.). Four stages were identified in the acquisition of the negative: *no* before the verb; unanalysed *don't* before the verb; auxiliary before the negative particle; analysed forms of *don't*. The acquisition of wh-questions fell into two stages: undifferentiation, where the learner first produces both simple and embedded wh-questions with no inversion, a process that is later also extended to some embedded wh-questions; differentiation, where the learner distinguishes correctly between simple and embedded wh-questions. Of the auxiliaries, the copula *is* seemed to be acquired first, followed by *do* and *can*, while the other auxiliaries showed no identifiable developmental sequence.

In relation to these developmental patterns, Alberto failed to progress beyond stage one of the acquisition of negatives, and the early part of stage one of the pattern for wh-questions, while also producing few inversions for yes/no questions. Of the auxiliaries, on the basis of equating acquisition with 90% appearance in obligatory contexts, Schumann reports that only the copula *is* reached this criterion, while *can* and *do* were supplied 80% of the time. Little growth was evinced in the acquisition of the possessive, past tense, plural and progressive inflectional morphemes (1976b, pp.393f.).

Referring again to specific data from pidgins, Schumann lists the features which Alberto's English shares with these languages (1976b, pp.394f.):

- (a) use of the uniform negative *no* for negative utterances;
- (b) lack of inversion for questions;
- (c) lack of auxiliaries;

- (d) tendency not to inflect for the possessive;
- (e) use of the unmarked form of the verb;
- (f) deletion of subject pronouns.

Noting that the other five subjects under study also went through the same early stages of simplification and reduction in inflectional morphology and grammatical transformations, Schumann suggests that "pidginization may be a universal first stage in second language acquisition" (*ibid.*, p.404) which is caused by cognitive constraints:

[...] early second language acquisition would be characterized by the temporary use of a non-marked, simple code resembling a pidgin. This code would be the product of cognitive constraints engendered by lack of knowledge of the target language. (*ibid.*, p.406)

He adds that such a code, characterized by "utterances relatively unmarked by inflections, permutations and functors" may "reflect a regression to a set of universal primitive linguistic categories" whereby "unmarking is not seen as a deficiency, but as a positive cognitive strategy to which a language learner turns at certain development stages and under certain social conditions" (*ibid.*, pp.405f.).

Pidginization as a cognitive process then is in Schumann's view characteristic of all early natural second language acquisition. What his *pidginization hypothesis* seeks to explain is why certain learners fail to progress beyond this pidginized stage, and it is in this connection that he draws upon the other dimension of this analogy with pidgin languages — namely the social constraints restricting access to input and causing linguistic development in contact vernaculars to stabilize at a basic functional level of communication:

The pidginization hypothesis predicts that where social and psychological distance prevail we will find pidginization persisting in the speech of second language learners. (1976b, p.406)

In support of this hypothesis he presents the case of Alberto, emphasizing his subject's social and psychological distance from the English-speaking community. While inter-community attitudes and intended length of residence do not seem to have been ascertained, Schumann describes the social situation of Latin American worker immigrants such as Alberto as highly unfavourable for language learning: their modal socio-economic status is lower; their integration pattern tends towards preservation, while American society expects them to integrate without facilitating the process for them; living in

immigrant neighbourhoods and sharing schools, churches and associations with other immigrants of low socio-economic status foster enclosure and cohesiveness; apparent cultural congruity may be undermined by the "culture of poverty" label attached to these worker immigrants (1976b, p.400).

To assess Alberto's psychological distance from English-speakers, Schumann administered a short questionnaire at the end of the research period. It comprised fifteen questions relating to the subject's reasons for wanting to learn English (instrumental or integrative, etc.), his attitudes to Americans and to the English language, and the number of American friends he had (Schumann 1978a, pp.179ff.). However, Schumann admits that Alberto may not have been "entirely candid" (Schumann 1976b, p.403), since the generally positive attitudes and motivation expressed in his answers were not matched by his lifestyle. Although Schumann writes elsewhere that attitudes usually cannot be accurately assessed by observation but must be measured by means of social-psychological instruments such as semantic differential scales which he employs on the questionnaire (Schumann 1976a, p.138), he bases his confirmation of his subject's psychological distance on general observation of Alberto's tendency to socialize with Spanish-speaking friends and listen to Spanish music, while making little effort to get to know English-speaking people, watch television or attend English classes (Schumann 1976b, p.403).

Schumann dismisses age-related biological or neurological explanations for his subject's poor linguistic progress on the grounds that research evidence concerning a critical period for language acquisition is inconclusive, and also discounts cognitive deficiency as a reason since Alberto performed satisfactorily on a Piagetian test of adaptive intelligence (Schumann 1976b, p.394). Concluding that "Alberto's lack of development in English is the result of his social and psychological distance from native speakers of English" (*ibid.*, p.391), he offers this case study as evidence in favour of his pidginization hypothesis accounting for instances of fossilization in second language acquisition. In subsequent publications, the hypothesis is reformulated as *acculturation theory*:

Second language acquisition is just one aspect of acculturation and the degree to which a learner acculturates to the target language group will control the degree to which he acquires the second language. (Schumann 1978b, p.34)

1.6 Other research evidence and some questions

Schumann's acculturation theory has generated much research and dis-

cussion among scholars in both the SLA and pidgin/creole linguistics fields. In further pursuit of the analogy between early SLA stages and pidginization, Andersen for example presents a detailed comparison of data from Schumann's study on Alberto and Bickerton's research on Hawaiian Pidgin English and confirms what he believes to be the validity of the analogy (Andersen 1981b).

There has however been considerable debate and difference of opinion as to the respective roles of simplification, first language transfer, and language universals in the cognitive processes constraining both second language acquisition and pidginization. Schumann emphasizes simplification while maintaining an open theoretical position with regard to transfer and universalism (Schumann 1978c, p.373; 1983, pp.292ff.). Bickerton on the other hand describes pidginization as a process of relexification rather than simplification, a point of difference underlined by Gilbert in his discussion of Andersen's 1981 comparative analysis:

Bickerton seems to be claiming that all (natural) second language acquisition, including the formation of pidgins as a special case, is a process of piecemeal relexification, with gradual modification of (surface) syntax in the direction of L_1 ; the *only* strategy involved is transfer. This renders Schumann's pidginization hypothesis unnecessary, since pidginization is now seen to be a subcategory of second language acquisition generally, with a strategy of transfer being used throughout. (Gilbert 1981, p.210)

Meisel however takes issue with Bickerton's view, arguing that there is little evidence that learners rely heavily on first language syntax, and stressing instead the role of specific strategies applied to the target language (Meisel 1983, pp.128ff.).

With reference to the pidginization analogy, Bickerton points out a significant difference between second language learning and pidgin situations in terms of access to target language input. He argues that pidgins tend to stabilize in a form almost unintelligible to speakers of the base language because they operate in multilingual situations:

[...] the feedback received by the pidgin speaker is predominantly non-native — since the pidgin speaker uses *his* variety of English, not so much to native speakers (since these are very rare and socially distant in the classic pidgin situation) as to speakers of other foreign languages who are in a social situation similar to his own. (Bickerton 1981, p.202)

In response to criticisms of the analogical foundation of acculturation theory, however, Schumann is careful to distinguish between product and process. Following Whinnom's three-part analysis of linguistic hybridization

in terms of the amount of contact available with target language speakers (Whinnom 1971), he argues that while a true pidgin may evolve only through tertiary hybridization (i.e., when the hybrid language is used solely as a *lingua franca* between multilingual speakers with no access to the target language), pidginization as a process is evident in stages of secondary hybridization (i.e., when there is restricted contact with speakers of the target language). Thus he does not claim "that Alberto spoke a pidgin but only that his speech was characterized by aspects of pidginization and that the social (and psychological) context in which he was acquiring English was similar to pidginogenic social (and psychological) contexts" (Schumann 1978c, pp.368f.).

Within the SLA framework, acculturation theory has found support in two major research projects studying immigrant workers in Germany and a further case study of a 25-year-old Spanish-speaking female subject from Guatemala acquiring English without formal instruction in the U.S. (Shapira 1978). Like Alberto, Shapira's subject Zoila makes little progress. Shapira suggests that affective factors may account for Zoila's poor progress, since she did not come to the U.S. out of choice and may have built up negative feelings about the move, the country and all things American:

Under these circumstances it may be likely that she developed a negative attitude to learning English beyond the level of communication. (Shapira 1978, p.253).

Shapira indicates that despite now more positive feelings about living in America, Zoila seems content with a level of English that is simplified and reduced to essentials because it is sufficient for her needs (*ibid.*).

The Heidelberg Research Project for Pidgin German (reviewed in Stauble 1980, pp.45f.) and the Wuppertal Study (ZISA) (Meisel 1977, 1983; Meisel *et al.* 1981) are both concerned with social-psychological dimensions to the acquisition of German by immigrant workers. In these projects, significant relationships have been established between linguistic development and social-psychological factors such as contact with Germans at work and during leisure hours, attitudes to and ties with Germany, lifestyle and social ambitions. Like Schumann, Meisel describes social-psychological orientation in terms of a continuum, ranging from segregation to integration:

[...] a possible alternative for the learner might be to tend either toward segregation from an often hostile "host" society or toward integration that in turn could range from instrumental to assimilative. (Meisel 1983, p.151)

Meisel however proposes a relationship between orientation and linguistic

development that is more complex than the unidimensional cause and effect approach of Schumann's acculturation theory:

[...] it is argued that social-psychological factors, as well as individual conditions, influence the choice of learner strategies, among them simplifying strategies which result in predictable structural changes [...]. Although the relation is not one of simple cause and effect, conditional predictions are possible. (*ibid.*, p.123)

The simplifying strategies to which he refers relate to both the acquisition and the use of the linguistic system. His prediction is that a learner with a segregative orientation is likely to choose "cognitively less complex solutions to problems" (*ibid.*, p.143), relying on strategies of restrictive simplification when speaking:

In other words, a more simplified version of the language is used than what might be expected at a given stage of grammatical development in L2 acquisition. (*ibid.*, p.127)

Reliance on restrictive simplification means that a learner may "stay below" what he has already acquired (*ibid.*, p.145) and fossilize at a level that includes "a high percentage of nonstandard constructions" (*ibid.*, p.151). In contrast, a learner with an integrative orientation is more likely to use strategies of elaborative simplification, revising his internalized grammar by adjusting what has just been acquired to what has been acquired before and rendering the internalized system more complex, even if it remains a simplification of the TL system (*ibid.*, p.127).

While thus agreeing with Schumann that "an integrative orientation leads to interlanguage varieties closer to the target norm, whereas segregative orientation favors the use of reduced and simplified speech varieties" (*ibid.*, pp.122f.), Meisel does raise the question of whether there is a simple one-to-one cause and effect relationship between acculturation and second language acquisition, a question that is similarly posed by Stauble (1980, p.44).

Another question is the relative weight that should be attributed to the respective variables of social distance and psychological distance. With reference to specific research data Stauble, for example, suggests that "in the general process of acculturation a hierarchy of acculturative influences may exist in which psychological factors — especially motivation — are more influential than social factors in varying one's degree of acculturation" (Stauble 1980, p.48). This is a view expressed too by McLaughlin who argues that "considerations of social distance reduce to questions of psychological distance" since "it is not objective conditions but what the learner perceives that forms the learner's reality" (McLaughlin 1987, p.126). Other writers

however maintain that social distance factors may have more influence (e.g., Cooper 1981, p.133).

Ultimately, the theoretical problems of determining cause and effect and of weighing the relative importance of social and psychological factors reduce to the single underlying problem of how the variables fundamental to acculturation theory are to be accurately identified and measured, a problem to which Schumann does address himself (Schumann 1976b, pp.406f.), but for which he provides no definitive answers, relying instead on personal observations in his own case study.

1.7 The depidginization/decreolization analogy

Acculturation theory is founded then on an analogy between early second language acquisition and pidginization, according to which it is hypothesized that learners who fail to acculturate will fossilize at a pidginized developmental stage. By implication it is also hypothesized that those who do acculturate will continue to progress through the developmental stages of the interlanguage continuum and approximate to the TL system. The notion of an evolving series of approximative systems which are revised and restructured is of course well established in interlanguage theory:

[...] as part of a definition of "learning a second language", "successful learning" of a second for most learners, involves, to a large extent, the *reorganization of linguistic material* from an IL to identity with a particular TL. (Selinker 1974, p.127)

In the framework of acculturation theory, the original analogical basis is extended so that progression through the developmental continuum at advanced SLA stages is analogized to the processes of depidginization and decreolization, whereby the breakdown of social stratification permits increased contact with speakers of the superstrate language:

When this happens a series of lects ranging from the Creole to the standard language develops. The lect closest to the creole is called the basilect, the one closest the standard language is called the acrolect, and those in the middle are referred to as the mesolect. The degree to which the individual has contact with the standard speakers will determine which lect he speaks. Hence, varying degrees of acculturation to the standard language group produces the continuum of lects. (Schumann 1978c, p.374).

As in the pidginization analogy, the decreolization analogy constitutes a comparison not only of the social dimensions but also of structural features of the developing linguistic systems. Stauble for example presents a detailed

comparison between the acquisition of English negation by two Spanish speakers who acculturate well to life in the U.S., and the decreolization of Guyanese negation as documented by Bickerton (Stauble 1978). She discovers strong similarities between the two sets of data, identifying in particular the same processes of replacement and restructuring in both.

As with the early SLA-pidginization analogy, however, there has been considerable discussion of the late SLA-depidginization paradigm in terms of the accuracy and relevance of the analogical basis. Much of the debate centres on questions of definition and terminology, as Andersen describes in his lengthy introduction to the 1983 collection of papers (Andersen 1983b), including the issue of whether the pidginization-depidginization continuum rather than the creolization-decreolization continuum may serve as a more accurate model for second language acquisition.

In view of the problems of defining terminology and of choosing between the pidgin and creole continua as a more accurate model for acculturation theory, Schumann underlines once again his primary concern with matters of process rather than product:

[...] it is not clear that there is any difference between depidginization and decreolization, at least at the process level. Both phenomena are the result of speakers' increased access to TL speakers, and both phenomena seem to be characterized by the processes of replacement and restructuring. (Schumann 1981, p.200)

Rather than commit himself to one or the other, he draws attention instead to the strength of the analogy with both that underlies his theory:

[...] it is this notion of acculturation or degree of contact with TL speakers that unites all three processes. SLA, depidginization and decreolization are linguistic phenomena that are the automatic consequences of social and psychological forces of acculturation. (Schumann and Stauble 1983a, p.273)

1.8 Extensions or replacements?

Concerning matters of process, however, one particular criticism of the theoretical foundation of the late SLA-decreolization analogy deserves attention since it indirectly points to an important aspect of fossilization. Rickford describes what he perceives to be a significant difference between the processes of advanced second language acquisition and decreolization:

[...] while movement along the continuum may involve language acquisition in both cases, decreolization involves *extensions* of one's

linguistic repertoire from an earlier stage while normal SLA involves *replacements*." (Rickford 1983, p.304)

He explains that decreolizing speakers retain their competence in the lower lects while acquiring competence in a higher lect, whereas second language learners seem to progress through the continuum by replacing earlier interlanguage systems with new systems which approximate more closely to the target language (*ibid.*, pp.304f.). He adds that the decreolizing speaker may want to retain his basilect for use with close friends or relatives as an important means of expressing solidarity (*ibid.*, p.305). With reference to sample data from Guyanese speakers, Rickford suggests that decreolizing speakers have a broader interlanguage competence than the average second language learner since they control lectal ranges up and down the continuum and have room for stylistic adaptation, adjusting their choice of lect according to the status of the interlocutor (*ibid.*, pp.308-11).

However, Rickford is open to the possibility that second language learning may indeed similarly involve interlanguage extensions rather than replacements, and incorporate stylistic variation, and he invites Schumann and Stauble to investigate (*ibid.*, p.315). Variability in interlanguage is of course a widely attested phenomenon. Interlanguage variability nevertheless seems a somewhat different phenomenon from the kind of stylistic variation exhibited by decreolizing speakers, for whom the use of a range of lects serves a sociolinguistic function: "language use is a definite act of identity, with social, psychological and political connotations" (*ibid.*, p.310). For the second language learner, on the other hand, variation seems less a matter of choice and expression of identity and more a by-product of degree of attention paid to form (Tarone 1983, pp.151-5).

Aside from the issue of stylistic control, however, the question of whether second language acquisition is characterized by a process of interlanguage replacement or not seems a little less clearcut. In their brief commentary on Rickford's discussion, Schumann and Stauble draw attention to the phenomenon of backsliding and speculate that it may provide evidence of retention of earlier interlanguages (Schumann and Stauble 1983b, p.321). Backsliding has been described by Selinker as "this regular reappearance or reemergence in L₂ productive performance of linguistic structures which were thought to be eradicated" (Selinker 1974, p.119). He suggests that the phenomenon is usually to be observed "when the learner's attention is focused upon new and difficult subject matter or when he is in a state of anxiety or other excitement, and strangely enough, sometimes when he is in a state of extreme relaxation" (*ibid.*, p.119). Backsliding then is a feature of interlanguage

variability and as such is a function of degree of monitoring exercised.

According to Selinker, the interlanguage structures to which the learner backslides in certain circumstances are those which have become fossilized and which "tend to remain as potential performance" (1974, p.119). He points out that these fossilizable linguistic phenomena do not seem to be replaced or eradicated "no matter what the age of the learner or amount of explanation and instruction he receives in the TL" (*ibid.*, pp.118f.). For Selinker then, intrinsic to the concept of fossilization is the notion of regression in performance to an earlier interlanguage stage, despite a measure of acquired competence at a more advanced level. He illustrates this with the example of Indian English interlanguage, commenting that even when the subcategorization rules of verbal complementation have been learned by the Indian speaker of English, "this type of knowledge is the first he seems to lose when his attention is diverted to new intellectual subject matter or when he has not spoken the TL for even a short time" (*ibid.*, p.119).

The notion that a learner may in performance stay below what he has already acquired is one that we have already met in the earlier discussion of Meisel's theory of simplification strategies. Meisel offers examples of this phenomenon from studies carried out to investigate whether learners could detect mistakes they themselves had made in previous recording sessions. He concludes that "it is quite certain that learners are able to detect deviances from the target norm even if they continue to use these erroneous forms" (Meisel 1983, p.146). Similar evidence of this phenomenon may be found in a follow-up to Schumann's study on Alberto, in which he investigated the effects of a seven-month programme of instruction on his subject's acquisition of English negation. Comparing elicited negatives and negatives in spontaneous speech before and after instruction, Schumann concludes that radical improvement is manifest in artificial, highly monitored elicitation tasks, but virtually no change from the original pidginized stage is evinced in spontaneous speech (Schumann 1976b, pp.403-4).

Returning to the question posed by Rickford as to whether second language acquisition constitutes interlanguage replacements or extensions, it may be that both processes occur. While the learner progresses through the developmental continuum, revision and restructuring of the internalized system take place, with new forms replacing earlier approximative forms, as documented by Stauble (1978). In the terminal period of interlanguage development, however, whether this is at a pidginized, intermediate or advanced level of acquisition, the process of replacement and restructuring appears to cease. There are signs nevertheless that at this fossilized point in the interlanguage continuum, the learner continues to extend his competence

to incorporate more complex rules which approximate more closely to the target language system. Under conditions of conscious attention to form he may be able to apply these rules correctly. But in spontaneous performance where attention is focused on meaning and communication, the learner regresses to the rules of his fossilized system, "even in cases where the more complex ones lie within the range of possibilities of the internalized grammatical system" (Meisel 1983, p.146).

1.9 Conclusion

The question to be posed of course is why the developmental process of interlanguage revision and replacement gives way to a fossilized plateau where extensions to competence do not lead to the total restructuring of the interlanguage system. The purpose of this section has been to review one particular theoretical approach to answering this question, whereby the "learner's degree of development toward the target is motivated by his degree of acculturation to the target-language group" (Schumann and Stauble 1983a, p.266) The discussion of the comparative case study that follows is an attempt to assess the relevance of this approach to an understanding of fossilization at advanced levels of second language acquisition.

2 Subjects and research methods of this study

2.1 Introducing the subjects: biographical profiles

The subjects of this comparative case study are the parents of the researcher. Dr and Mrs Ushioda are both Japanese nationals, aged 61 and 59 respectively, who have been living in Dublin, Ireland, for the last thirty years. Born and educated in Japan, they graduated from university in Tokyo in the early to mid-1950s. Dr Ushioda majored in organic chemistry, obtaining his doctoral degree at Tokyo University, while Mrs Ushioda qualified in Japanese literature and worked briefly for a major Japanese publishing firm before the birth of her first child in 1958.

The family's move to Ireland in 1960 was prompted by the opportunity of a fellowship scheme sponsored by ICI, whereby Dr Ushioda took up a teaching and research post in the Department of Chemistry at University College Dublin. Shortly afterwards their second child, the present researcher, was born. Apart from a two-year period of residence (1965-67) in Cambridge, Massachusetts, during which time Dr Ushioda was engaged in postdoctoral research at Harvard University, the couple have been permanently resident in Ireland, where their two children have been reared.

Dr Ushioda has continued to work at the university in his full-time capacity as lecturer and researcher in the Department of Chemistry. Mrs Ushioda did not take up any employment in Ireland until the late 1960s when she began giving evening classes in Japanese at a language institute in Dublin, and also private Japanese lessons to a small number of Irish diplomats and their wives awaiting assignment to posts in Japan. In the early 1970s, she took up additional employment, assisting once a week at an oriental art gallery in Dublin, and a few years subsequently gave up language teaching in favour of increasing her hours and responsibilities at the gallery, where she has since been working regularly on a half-time basis as curator of the Japanese art collection. In recent years she has also been invited to give occasional lectures and tutorials on Japanese art and cultural history to students of Modern History at Trinity College Dublin.

Return visits to their home country by the couple were rare until the late 1980s. The first was made in 1965, when Mrs Ushioda brought the children to Japan for a few months' holiday to meet their grandparents and relatives. The next visits did not take place until the mid-1970s, with husband and wife making individual trips of two or three weeks over two successive summers to pay their respects to parents and relatives. Since the 1980s, Mrs Ushioda has travelled more frequently to Japan, perhaps once every other year, her trips occasioned by conferences, exhibitions, etc., connected with her work at the gallery, as well as by personal circumstances such as family bereavement. In the summer of 1989 the couple visited Japan together for the first time.

2.2 Formal instruction in English

Both subjects received several years of formal instruction in the English language at secondary school and university in Japan. Instruction was through Japanese, and specific pedagogic attention was paid to the principles and features of English grammar, with emphasis on practising verb paradigms, syntactic structures and grammatical rules, as well as on memorizing vocabulary. Opportunities for practical or communicative use of the language with native speakers seem to have been almost non-existent, limited to a few anecdotal occasions such as brief attempted exchanges with soldiers of the American occupation forces stationed in Japan in the late 1940s. Of the two, Dr Ushioda pursued his study of English more extensively, given the number of additional years spent in postgraduate education and the need to be able to read scientific papers, journals, etc., published in English. During this time he also undertook to learn some German. Since moving to Ireland, neither subject has pursued any further formal study of English, or any other language.

Retrospective self-assessment of their English language ability and

assessments of each other's language ability upon arrival in Ireland suggest a marked difference in early levels of communication and comprehension. Dr Ushioda clearly experienced much less difficulty than his wife in making himself understood and understanding others in an English-speaking environment, and through his work was brought into immediate daily contact and regular interaction with English-speaking colleagues, students and administrative staff at the university. Mrs Ushioda reports that she had very poor communicative ability in those early stages, despite the years of formal instruction she had undergone in Japan. Some evidence of the limitations of her ability may be found in a notebook still in her possession which she brought with her on that initial journey from Japan in 1960, a journey which she made separately from her husband a few months after his arrival in Dublin. The notebook contains carefully transcribed English phrases for possible personal requests she might need to make during the long flight. She recounts also memorable incidents such as her first personal shopping expedition to purchase bread and milk at a local shop, a communicative task that required conscious preparation and rehearsal before its execution. The kinds of difficulties experienced then by Dr Ushioda on the other hand seem to relate more to handling bureaucratic matters, legal contracts, health care arrangements, etc., as well as to comprehending colloquial idiom and local accents.

2.3 Patterns of language use inside and outside the home

The language of communication between the subjects themselves has always been Japanese, although their informal spoken Japanese idiom is now characterized by a substantial proportion of lexical items borrowed from English, items which relate to a wide range of general everyday vocabulary and regular usage, as well as to specific lexical fields and topical issues. In this respect the morphological structure of the Japanese language lends itself very readily to patterns of relexification and coinage, and the process of lexical borrowing particularly from English is a noticeable popular trend in the evolution of the Japanese language since the post-war years and the growth of cultural westernization in Japan. Borrowed words are of course subject to the phonological and phonotactic rules of the Japanese language and frequently undergo distortion and abbreviation in form.

The degree of lexical borrowing exhibited by the research subjects in their informal Japanese idiom is, however, much greater than normal Japanese usage. Communication between them is moreover characterized by frequent through brief instances of code-switching to English, with the insertion of routine phrases such as "are you sure?", "is that okay?", "never mind",

"middle of next week", etc.. Code-switching may be influenced by the fact that communication between the subjects and their children has tended to be a mixture of Japanese and English from the very early years. The children have been educated entirely through English at local schools and colleges and have had no formal instruction in Japanese, except for the sporadic teaching by their parents of basic literacy skills, including the mastery of the Japanese syllabaries and a small number of essential Chinese characters. While the subjects have tended to address the children in Japanese, the children's speech to their parents has been characterized by heavy code-switching to English to overcome communication and lexical word-finding problems, while their language of communication to each other has always been solely English, their dominant language.

Outside the home, by far the greater proportion of the subjects' interactions in Ireland has been in English with native English speakers. In the early 1960s, Japanese residents in Ireland numbered fewer than ten. Thirty years later, with the gradual establishment and expansion of economic and commercial links with Japan, the size of the resident Japanese community has grown to an estimated five hundred. This community however is largely a floating population, since most of its members, whether business professionals and diplomatic staff with their families, or young students attending courses, are resident in Ireland for a few years only, or less, before being transferred to other destinations or returning to Japan. A more detailed examination of the Japanese community in terms of considerations of social distance will be undertaken in the third section of this paper. In the context of this introductory profile of the subjects, it suffices to say that the most frequent and regular contacts outside the home have tended to be with native English speakers, especially those associated with the place of work and everyday routine environments such as shops, children's schools, post offices, etc., as well as general social occasions.

Patterns of receptive language use similarly reveal substantially greater and more regular access to English language input in Ireland than Japanese through both aural and visual channels, especially through radio and television, newspapers, magazines, correspondence and the printed word in general. Collections of back editions of Japanese newspapers are occasionally received from local Japanese residents, but these tend to be skimmed through at one or two sittings rather than read in detail. In terms of writing production, the bulk of the correspondence, reports and papers written in connection with the subjects' spheres of work is in English, although the nature of Mrs Ushioda's profession necessitates a certain amount of Japanese language correspondence and paperwork.

2.4 Research methodology

The empirical investigation falls into two complementary parts: firstly, a comparative analysis of levels of linguistic fossilization exhibited by the subjects; secondly, the establishment of detailed social-psychological profiles in terms of the possible variables specified by acculturation theory.

2.5 Data collection

With regard to the first part, it is important initially to state that the focus of research is not on tracing developmental patterns of acquisition as characteristic of early SLA research. The language data has been collected from subjects who have been acquiring and using English for thirty years in an English-speaking environment following several years of formal learning in Japan. The object of obtaining the data is then to characterize the English language competence of each subject at this particular point in time after long exposure to and formal grounding in the language, and to search for evidence of persistent fossilized structures and features which have not been eradicated in productive performance even after this considerable period of time.

In view of this aim, methods of data collection have been restricted as much as possible to naturalistic observation techniques of the kind recommended by Labov (1972, pp.180-8) and Tarone (1983), whereby the subject's attention is focused on meaning and communication rather than on form, and the language samples obtained constitute the vernacular style — "the style in which the minimum attention is given to the monitoring of speech" (Labov 1972, p.181). In the context of SLA empirical research, the vernacular style is the primary area of investigation since it is least permeable and most internally consistent and systematic (Tarone 1983, p.155). With specific regard to the study of fossilization, the vernacular style offers the clearest evidence of the regular reappearance of those linguistic phenomena highlighted by Selinker in his account of backsliding discussed earlier:

Many L2 linguistic structures are *never* really eradicated for most second-language learners; manifestations of these structures regularly reappear in L2 productive performance, especially under conditions of anxiety, shifting attention, and second-language performance on subject matter which is new to the learner. (Selinker 1974, p.124)

Language data for analysis has been obtained largely through unobserved recording of the subjects engaged in interactions with English-speaking friends in the ordinary course of everyday life. The recordings of varying lengths have been made over a five-month period on a pocket-sized microcassette recorder, and have been subsequently transcribed by hand by

the researcher. Permission for use of the data collected for research purposes has been obtained from the subjects. In the transcribed extracts and utterance samples quoted, some personal names have been omitted and replaced accordingly by the capital letter X. Utterances which are not clearly identifiable as meaningful English words have been transcribed in phonetic notation.

The recorded data have been supplemented with further short instances of speech data from natural interactions with native speakers based on field notes made by the researcher during the five-month observation period. Since, as previously indicated, this project does not aim to trace developmental patterns, it has not been considered necessary or relevant to maintain a regulated schedule for the collection of data at specific periodic intervals. The object of observing the subjects engaged in natural communicative situations with minimal monitoring of speech has favoured a process of collecting data that has been guided by opportunity rather than by regularity.

2.6 Data analysis

In terms of analysing the body of data obtained, it has not seemed meaningful to organize the language samples in strict chronological sequence, given the research purpose of characterizing the existing competence of the subjects at the end of a thirty-year period of exposure to an English-speaking environment. The samples obtained have therefore been treated collectively.

Schumann's acculturation theory pertains specifically to the development of the learner's linguistic system or grammatical competence, rather than other communicative aspects of second language competence:

[...] the extent to which a speaker will approximate the grammar of the target language is determined by his/her degree of acculturation to the target-language group. (Schumann and Stauble 1983a, p.264)

In view of this focus, the principal approach to analysing the data here is that of examining structural and linguistic aspects which show evidence of fossilization. Selected language samples have been subjected to an analysis of levels of accuracy in the use of grammatical morphemes commonly studied in SLA research, and fossilized structural, linguistic and phonological features have been identified in the performance data. However, some consideration of the subjects' general communicative abilities has also been undertaken, based on observation and the performance data obtained, in an effort to characterize fluency levels and relate these to levels of linguistic development.

Finally, in order to confirm the phenomenon of backsliding to earlier fossilized forms and structures evidenced in unmonitored performance data,

an attempt has been made to determine whether the correct target forms and structures lie within the grammatical potential of the subjects under conditions of conscious attention to form. Methods adopted in this respect include grammaticality judgements and introspective techniques, as well as reference to collected samples of written English produced by the subjects over the last few months in connection with their professional work.

2.7 Establishing social-psychological profiles

The second part of the empirical investigation constitutes an analysis of the social-psychological profiles of the subjects in order to test the predictions of acculturation theory. As already mentioned, there are difficulties in identifying and quantifying social and psychological variables and establishing an accurate objective profile. In view of the dangers of subjective response bias in attitudinal questionnaires, it has been decided that a more observationally oriented approach should be adopted, as recommended by Skehan (1989, p.72), and in effect employed by Schumann in his assessment of Alberto. In this respect the present researcher has the advantage of being able to draw on many accumulated years of personal experience of living with the subjects and recognizing and understanding typical behavioural patterns and attitudes.

In order to avoid the risk of subjective interpretation on the part of the researcher, however, specific issues, feelings, motives and attitudes concerning social and psychological distance, both currently and retrospectively, have been explored with the subjects through open discussion, rather than elicited by means of questionnaire-type instruments.

While it cannot be claimed that the methodology adopted has any scientific validity in terms of systematic analysis through test administration, as Ellis describes (1985, p.123), it seems nevertheless that this kind of qualitative approach based on techniques of observation, interview and introspection may usefully supplement the quantitative studies, and lend itself more readily to the examination of social-psychological variables which cannot easily be isolated and measured in any objective or systematic fashion.

2.8 Some remaining methodological questions: age and aptitude

Schumann's dismissal of age-related biological and neurological explanations of adult language learning difficulties has already been mentioned. In the context of this comparative case study, since both subjects began their formal learning of English after puberty and were exposed for the first time to an English-speaking environment in adulthood, considerations of age-related explanations to account for eventual differential acquisition levels are irrelevant.

With regard to aptitude, as discussed earlier Schumann minimizes the role of this factor as a significant variable in the acculturation model because it is claimed to relate more to formal language learning in an instructional setting (Schumann 1975, pp.209 and 220; 1978b, p.48). Since this present study aims to test the predictions of acculturation theory, aptitude has accordingly not been empirically investigated. It is possible of course that differences in aptitude may have accounted for differential levels of language ability following the years of formal instruction received in Japan prior to arrival in Ireland. However, the impossibility of accurately establishing each subject's respective competence at the time beyond impressionistic recollection thirty years later would render the results of any aptitude tests administered difficult to interpret. In the broader context of general cognitive ability and intelligence, it is assumed that neither subject is deficient in these respects in view of their educational record and professional standing.

2.9 Conclusion

This section has set out to introduce the subjects of this comparative case study in terms of relevant biographical details and language learning background, as well as to indicate the research methods employed in obtaining the language and social-psychological data for purposes of analysis. The third section will examine the linguistic and social-psychological profiles of the subjects, and discuss these findings in the context of acculturation theory.

3 Research findings

3.1 Language profiles

3.1.1 Morpheme analysis

The analysis of the subjects' linguistic profiles begins with an examination of levels of accuracy in the use of nine basic grammatical morphemes commonly studied in research into the acquisition of English as a second language (e.g., Krashen 1982b). Accuracy levels have been calculated on the basis of the percentage by which the morphemes have been correctly supplied in a selected sample of obligatory contexts taken from the performance data.

Table 1 reveals a marked difference in levels of accuracy between the two subjects, with lower levels exhibited by Mrs Ushioda in almost all the categories investigated. Although generally controlling the copula and auxiliary *be*, she occasionally makes omissions particularly under conditions of anxiety

Table 1 Percentage of morphemes correctly supplied in obligatory contexts

Morphemes	Dr Ushioda	Mrs Ushioda
Copula <i>be</i> (70)	100%	90%
Progressive/gerundial <i>-ing</i> (31)	100%	90%
Auxiliary <i>be</i> (28)	100%	86%
Past irregular (32)	100%	100%
Noun plural <i>-s</i> (34)	100%	91%
Third person singular <i>-s</i> (21)	100%	43%
Definite/indefinite article (72)	76%	46%
Possessive <i>-s</i> (12)	100%	100%
Past regular <i>-ed</i> (25)	100%	100%

(Number of obligatory contexts counted per subject in parentheses)

or emotional involvement:

I more worried

I think now too late for X to say anything

I trying my best

I nervous about it

No such omissions are to be observed in Dr Ushioda's performance data. Based on the standard criterion adopted by Schumann and many other researchers of equating acquisition with 90% appearance in obligatory contexts, it is evident that two morphemes in particular, the present tense third person singular *-s* and the article, fail to reach acquired status in Mrs Ushioda's performance by a considerable margin, while the article also proves problematic for Dr Ushioda. In fact the figure of 76% calculated here may overstate the case, since the counting of obligatory contexts does not satisfactorily reveal the differences in the distribution of the definite and indefinite articles, and in particular the more subtle functional and semantic nuances pertaining to the two forms. Whereas Mrs Ushioda tends to omit the article altogether and hence attains a very low percentage count, Dr Ushioda seems to overgeneralize by supplying the definite article where it is not incorrect (and hence the much higher percentage count), but where the indefinite article may be more semantically appropriate in the context, as in the following examples (although the absence of relevant situational and non-verbal cues in the transcriptions may not make this especially apparent):

that's the much more compact printer
it's the [A:] cathode ray oscilloscope
it uses the thermal printer
whether he can make a photograph for the passport

The article of course is perhaps the most problematic morpheme for most Japanese learners of English, since it has no lexical counterpart in the Japanese language, where definite/indefinite marking is expressed only for emphatic purposes by the use of demonstratives or topicalization. In his longitudinal study of a five-year-old Japanese girl learning English, Hakuta discovered the article to be one of the morphemes acquired significantly later than normal in comparable research cases, for which he posited mother tongue influence as the underlying cause (Hakuta 1978). For both Dr and Mrs Ushioda, it would seem that in terms of accurate form/function distribution and use, the articles indeed prove problematic and fail to reach fully acquired status, since even under conditions of conscious attention to form both subjects show uncertainty and tend to overgeneralize the use of the definite article. The following are examples from Mrs Ushioda's written correspondence:

It is the time for me think about ...
despite the huge amount of the work I do

With regard to the third person singular *-s* morpheme, on the other hand, Mrs Ushioda's frequent failure to supply the inflectional form in her spontaneous speech clearly demonstrates a case of backsliding in performance to a fossilized level of competence, since in her written production and with conscious attention to form, she has no difficulty in accurately supplying the morpheme and regularly does so. The fossilization of the unmarked form of the verb in her vernacular style is even more emphatic if one discounts irregular verb forms such as *does* or *has*. The percentage of correctly supplied inflectional morphemes then drops further to 29%, or only 5 occurrences out of 17 obligatory contexts for regular verbs.

Although the nine morphemes investigated constitute only a very partial picture of the subjects' grammatical competence, the unmistakable evidence of differential degrees of fossilization between the subjects which it indicates is very much representative of their overall relative linguistic levels, as further examination of other structures and features will serve to confirm.

3.1.2 *Negatives and interrogatives*

With reference to two of the grammatical sub-systems commonly

investigated in acculturation theory research, no differences have been established between the subjects in their production of the negative structure in English, over which both exhibit complete control, while substantial levels of fossilization are evident in Mrs Ushioda's production of interrogative structures.

The acquisition of English negation by Japanese speakers has often been shown in SLA research to demonstrate certain differences from the pattern of development followed by learners from other mother tongue backgrounds:

In general, Japanese speakers do not have the same degree of difficulty with English negation as do native speakers of many other languages. (Schmidt 1983, p.173)

No instances of preverbal negation or unanalysed *don't* before the verb are to be found in the performance data of the subjects, for both of whom the formation of the negative structure and control of the auxiliaries in declarative and imperative contexts appear to present no problems, even in the vernacular style.

The formation of interrogative structures and especially wh-questions on the other hand has in Mrs Ushioda's performance fossilized at an early developmental stage, with frequent instances of non-inversion as well as omission of *do*-support, as in these typical examples:

Why this building was used by U.C.D?

What Mrs X was doing this afternoon?

Anybody from department was in at the meeting?

Why she said so?

In a selected sample of wh-questions from her performance data, out of 25 obligatory contexts only 8 instances of correct inversion were noted. However, since 6 of these 8 instances of correct usage comprise the formulaic phrase *what's* with the contracted copula or auxiliary, as in "What's the name?" or "What's she doing?", the percentage of accurate usage may in fact be much lower, with virtually no inversion produced in simple wh-questions in the vernacular style. Under conditions of conscious attention to form, nevertheless, the inverted structure is clearly within Mrs Ushioda's competence, a feature which suggests that, like her regular omission of the third person singular inflectional morpheme, non-inversion may be a simplification strategy to facilitate production. Again it is to be noted that no such instances of non-inversion are to be found in Dr Ushioda's data.

3.1.3 *Complex syntactic structures*

The acquisition of English relative clauses has frequently been shown to pose problems for Japanese speakers. Relative pronouns do not exist in Japanese, and the language's phrase structure is characterized by head-last parameters whereby the relative clause precedes the noun it modifies. Bertkau observed significantly poorer rates of comprehension of relative clauses by Japanese students than by Spanish students of comparable ability (Bertkau 1974), while Schachter effectively demonstrated the tendency of Japanese speakers to avoid the use of relative clauses (Schachter 1974). Instances of relative clause structures in the performance data gathered from Dr and Mrs Ushioda are perhaps infrequent. Neither, however, admits to being conscious of any particular difficulty with the structure, and errors in those few instances observed are indeed rare, non-existent in Dr Ushioda's case and limited in Mrs Ushioda's case to the occasional omission of prepositions or failure to delete the subject pronoun:

you know the lady whom I had a discussion yesterday

the letter which I have it here

With regard to other subordinate clause structures, a prominent feature in Mrs Ushioda's performance data is her frequent use of direct quotation rather than indirect constructions when reporting speech, and her consequent avoidance of embedded clauses and grammatical changes to tense and time deixis:

she said I think it's [ə] don't worry I can look after it

my daughter told her my mother won't be back until four

she told me yes I heard about you but I didn't know your name

and I said well just I'm sorry I have no letter with me now

that time she asked what's going on about the newspapers

The use of direct quotation is of course a source of vivid expressiveness when relating anecdotes and personal experiences, and Mrs Ushioda often heightens the effect by her use of appropriate tone and intonation to convey the speaker's original manner of expression. Yet its frequency of use and evidence from her written production both suggest that she has some difficulty in handling complex embedded syntactic structures, whether in the case of reported speech or of verbs requiring sentential complements. The following are examples of slightly awkward constructions in her written correspondence:

I have been very much concerned about that sort of conflict will happen sooner or later

But I really feel now that this my duty to you giving some information

Related to this difficulty is her occasional tendency to lapse into the kind of simplified telegraphic style characterized by Schumann as typical of pidginized speech, whereby inflectional morphology, certain grammatical transformations, syntactic elements, and connectors give way to paratactic juxtapositions of utterances, and the communication of meaning depends largely on semantic connections, tone, context, and the interlocutor's background knowledge. It is not surprising perhaps that this phenomenon occurs under conditions of least monitoring when the subject is highly emotionally involved or anxious:

for this lady/ it's [ə] difficult for/ going to the bed and breakfast/ so she I think immediately/ you know supper/ she went to bed/ I think nine/ and [ə] she [ə] deadly tired/ and so upset of course

I need/ want to have something/ fix something/ very important/ even that you know/ matter of you know teaching/ even if slightly

but I think it's [ə] you know/ most you know/ he and other/ the doctor/ afraid that is a new/ because of the new cancer cells

but I think at least/ you know/ if move out everything/ you know/ out of room/ I think people start working/ but no carpet

There is no evidence of these kinds of telegraphic stretches of speech in Dr Ushioda's performance data, or indeed of any difficulty in handling complex syntax or embedded structures. Brown (1981) has drawn attention to the influence of the written language on the spoken language, especially among highly educated literate members of society and those in academic circles. In her view, the more complex syntactic structures, richer lexis, and density of information-packaging characteristic of written English are often reflected in the forms of spoken language produced by speakers from educated and academic backgrounds, who control and come into regular contact with this mode of English in their everyday life. Those in academic circles typically spend a larger proportion of time producing extended preplanned transactional monologues than most people, and in this respect it is perhaps not surprising that Dr Ushioda demonstrates considerably greater facility in encoding thoughts and facts in complex, well-formed syntactic

structures than his wife. He displays firm control over planning the conceptual units of his speech, which is frequently punctuated with pauses, hesitations, draws and the effective use of prefabricated fillers and idiomatic expressions such as "the main point I wish to make is this" or "well you see on the other hand", devices which hold the attention of the interlocutor and allow time for careful formulation and linguistic encoding of the next ideational unit (Ellis and Beattie 1986, pp.117ff.).

In contrast, Mrs Ushioda's characteristic style of delivery is superficially far more fluid and unbroken, but the effect of fluidity is achieved largely through the rapid concatenation of relatively short utterances in which semantic connections play a more significant role than syntactic relations, as in the more extreme examples of telegraphic speech cited earlier or the following typical illustration:

but I think she's very very you know proud of herself/ and her you know pride of her own research and [ə] study/ and she achieved for her degree and everything/ I think really I think she is

While she frequently employs verbal fillers in her speech, they consist largely of "you know" and idiosyncratic variations of the isolated phrase "I think it's really that ..." which rarely have any syntactic connection with what follows or any semantic purpose, functioning rather as a means of sustaining the flow of talk:

and [ə]/ I think it's [ə] really [zətə] you know/ she heard about collection several times

but I think it's [ə] you know really [zətə] you know I think/ yesterday she tried three times

Interestingly, however, although Dr Ushioda clearly exhibits much greater control, flexibility and facility in handling the more complex syntax typical of discursive language, the pauses and hesitations which signal his internal processing and planning of linguistic units become a more salient and obtrusive feature that contribute to an impression of slight disfluency in his casual spontaneous speech and shorter turns:

What did/ what did he say?

What is/ what is his name?

and then the/ well this is/ I mean that's [Λ:] the calendar

this is using the [Λ:] VDU/ and [Λ.] visual display unit/ it's the [Λ:]

cathode ray oscilloscope/ I mean television screen/ whereas [Λm] the
cheap one and earlier one/ most of them are [Λ:] only LCD/ I mean
liquid crystal display

This regular habit of stopping and starting and rephrasing his utterances is reflected too in his Japanese language production though to a less marked extent, and in both languages his conversational turns are frequently precluded by a few seconds of hesitations and drawls, with occasional prolonged or repeated articulation of the opening vowel, particularly in the first person pronoun in English. Such tentativeness is also reflected in his handling of the social exchanges of small talk in English, when he is much less likely to initiate and sustain interactions than his wife, and sometimes appears not to have the ready formulaic expressions and topics to hand which she produces with comparative ease and spontaneity.

As a final note on structural aspects of the subjects' performance, there is evidence in the data from each of them of regular use of topic/comment structures characteristic of many Japanese speakers of English and usually attributed to mother tongue influence:

(Dr Ushioda)

Well this, I think it's probably IBM compatible

Well chemical, it's not easy/ I mean/ well it's not too difficult

(Mrs Ushioda)

That [ə], she said same thing

But everything, I'm sure it's okay

3.1.4 Lexis and comprehension

As indicated in the preceding section, the speech of Dr Ushioda is punctuated with frequent hesitations and pauses which sometimes may indicate difficulties in retrieving lexical items and the formulas of social interaction. It should be added however that breaks in the flow of speech are not uncharacteristic of his Japanese language performance. Pauses for lexical retrieval may also be a general reflection of his discriminating sensitivity and attention to subtle differences in nuances and the semantic and cultural associations of English words and concepts, in particular in relation to their nearest Japanese translation equivalent. This kind of sensitivity and concern for precision often manifests itself in careful and deliberate selection of words and phrases, as well as expressed interest in encountering and acquiring new items of vocabulary, or new shades of meaning to familiar items. In terms of

lexical retrieval, it may also be significant that in his spoken Japanese Dr Ushioda exhibits considerably more lexical borrowing from English than his wife, even in formal situations outside the home. Word-finding may in effect be as much of a problem in his Japanese language production as it is in his English production, if not more so in certain domains.

In Mrs Ushioda's performance data, there are similarly signs of problems in retrieving lexical items, with her search for content words often indicated by brief stretches of verbal fillers, especially her characteristic [zətə], possibly a variant of "that":

but I think it's [ə] some time/ I think it's/ you know [zətə] scholar is
[əm] is [zətə] difficult

Quite often, however, she seems to resolve her lexical access difficulties simply by omission, relying on context and the background knowledge and intuitions of the interlocutor to communicate her meaning, a strategy that results in a significant proportion of utterances which are left unfinished:

and then she didn't say how many people are going/ what sort of ...
well I think it's [ə] you know/ beginning of her time wasn't too bad/
but getting .../ surely she find it [zətə] work is not ... you know

It should be pointed out however that reliance on tacit understanding between interlocutors is a common feature of Japanese interactional behaviour, where implicit rather than explicit communication is favoured. Speakers frequently terminate utterances with the Japanese equivalent of "but", indicating the existence of unspoken but tacitly understood thoughts which modify what has just been said. The feature of lexical suppression in Mrs Ushioda's English production may thus partly be a carry-over from her Japanese speech habits.

The habit of relying on tacit understanding may possibly help to explain Mrs Ushioda's remarkable ability to anticipate, read between the lines and interact effectively when engaged in interpersonal communication. Although no specific data is available in this regard, her colleagues often attest to this quality in her receptive competence, and comment also that it seems to have developed particularly rapidly over the last five or six years, during which time major administrative crises at her place of work have exposed her to strained working relationships and frequent situations of tension and conflict among members of staff.

Fossilization of receptive competence may thus be less of a reality than fossilization of productive competence and certainly much more difficult to assess and identify. Both subjects claim to notice sustained progress in their

comprehension abilities. In acquiring new ranges of interests over the years and access to varied input largely through television and radio, they clearly continue to expand their lexical knowledge and receptive skills. Television and radio news bulletins, current affairs programmes, documentaries, films and drama are understood, regularly watched and enjoyed with little difficulty, while interest over the last few years in some comedy programmes has made verbal humour, wit and satire increasingly accessible and comprehensible to both subjects. If there is any domain where their receptive competence may be deficient, it is likely to be in the recognition and understanding of many proverbial expressions, colloquial and regional idiom and slang, and in the awareness of the vulgar connotations of some familiar lexical items. Both subjects find for example the humour and language of most stand-up comedians on television virtually impenetrable.

3.1.5 Pronunciation

Pronunciation has often been highlighted in SLA research as the area of second language competence in which fossilized features are most often salient and most difficult to eradicate. In this respect, the subjects of this case study are no exception, and neither would be taken for a native speaker of English in terms of accent and pronunciation, despite their long years of exposure to an English-speaking environment. Comparatively speaking, however, there are obvious differences in their respective phonological skills, since Mrs Ushioda has retained a more marked Japanese accent and is sensitive in her performance to fewer English phonemic distinctions than her husband. Her range of low front vowels and low and mid-low central and back vowels is very limited, no doubt owing to mother tongue influence since Japanese effectively has only one phoneme in this range. As a result, she usually makes little distinction in her pronunciation of words like *but* and *bat*, or *hurt* and *heart*. She also does not diphthongize the vowels in words like *boat* and *so*, which become indistinguishable from *bought* and *saw*, or the vowels in *name* and *rain*. This is a tendency sometimes displayed by Dr Ushioda in his casual speech, and while it probably reflects mother tongue influence, it should be added that in the Hiberno-English environment to which the subjects have been exposed, the vowels concerned are often not diphthongized.

Mrs Ushioda has difficulty too with three minimal pairs of phonemes commonly found to be problematic for Japanese speakers as the distinctions do not exist in their language. These are /l/ and /r/, /v/ and /b/, /f/ and /h/. With /l/ and /r/, the problem is usually that of confusing one with the other, a difficulty that affects her spelling memory as well as her pronunciation of even

very familiar words. Samples of mispronounced words from her performance data seem to show that substitution of the wrong phoneme (usually the /r/) commonly occurs in the environment of a following high front vowel, as in *listed*, *living*, and *please*. In this connection, it should also be pointed out that Mrs Ushioda generally substitutes a high front vowel /i/ for the mid-high front vowel common in English words like *is* and *if*, especially in accentuated syllables, as is typical of many Japanese speakers of English.

With regard to the two other pairs of phonemes mentioned, her principal difficulty lies in articulating the labio-dental fricatives /f/ and especially /v/ which do not exist in Japanese, and which she produces only with conscious effort and exaggerated labio-dental contact, and seldom in casual speech. Problems in articulating the voiced labio-dental fricative may account for her frequent suppression of the contracted auxiliary 've when followed by a voiced bilabial stop, as in "I been helping her" and "I been thinking of you". The other main English phoneme which she finds difficult to articulate in ordinary speech is the voiced dental fricative for which she often substitutes an alveolar /z/.

While the above analysis is by no means exhaustive, it serves to characterize the general extent of fossilization and mother tongue influence in Mrs Ushioda's English phonological system. By comparison, the phonemic distinctions which Dr Ushioda fails to make are very few, limited to much rarer instances of confusion between /l/ and /r/, the occasional substitution of a voiceless postalveolar for an alveolar sibilant in the environment of a following high front vowel (Japanese phonotactic rules do not permit /si/ combinations), and difficulty in pronouncing the palatal glide /j/ again before a high front vowel, so that *yeast* is not distinguished from *east*. These are problems which Mrs Ushioda also shares. In addition, there are instances of mispronunciation in Dr Ushioda's performance whose distribution seems to be purely lexical rather than a function of any phonological deficiencies. These usually occur in English words which have been absorbed into mainstream everyday Japanese language use, such as *news* which he characteristically pronounces close to Japanese fashion with a voiceless final consonant [nju:s].

Unlike many Japanese learners of English, neither subject has any great difficulty with consonantal clusters, and cases of epenthesis or vowel insertion are limited to a few lexical items, usually containing a dental and alveolar consonant, such as *width* (pronounced by Dr Ushioda with a schwa vowel separating the final two consonants), or *clothes* (indistinguishable from *closes* in Mrs Ushioda's pronunciation). Mrs Ushioda does however have a regular tendency to append a schwa vowel onto words ending on an alveolar

consonant, such as *but nai, and, is, it's*, although it is difficult to determine whether this is the result of phonological influence from Japanese syllabic structure, or whether the schwa simply functions as a drawl or filler before the next semantic unit. Another possible explanation is that the schwa may sometimes function as the equivalent of a Japanese topic marker:

but these [ə], I am not sure

That [ə], she said same thing

Other aspects of the phonological dimension to be commented on include Mrs Ushioda's difficulty in placing stress in less familiar polysyllabic words (all the syllables are usually left unaccentuated and are run together, much as in the pronunciation of Japanese words), and the generally good and expressive intonation displayed by both subjects, except in reading aloud, when both characteristically lapse into a monotone pitch and very stilted rhythm and intonation, and do not segment the text into meaningful tone-groups or information units. It is also perhaps interesting to note that neither subject seems to have any significant trace of Hiberno-English influence in their pronunciation, such as for example the sounding of postvocalic "r". Both admit to making conscious efforts to imitate standard British English pronunciation, and evidently have a keen receptive sensitivity to the phonological and intonational differences between the two accents, as well as to those of American English varieties.

3.1.6 Language profiles: a conclusion

Although the profiles delineated have necessarily presented only a partial rather than an exhaustive description of aspects of fossilization in the subjects' linguistic competence and performance, it is hoped that the comparative account has highlighted those principal features which provide insight into the differential levels of fossilization between the subjects. Much of the research evidence seems to show that in most of the grammatical, structural and phonological aspects examined, Mrs Ushioda exhibits considerably greater degrees of fossilization in unmonitored performance than her husband. In terms of general fluency and receptive competence, however, there appears to be no substantial difference between the two subjects, with Mrs Ushioda demonstrating if anything greater spontaneity and fluidity in interactional exchanges. Linguistic fossilization is nevertheless a reality for both subjects, and in an attempt to account for its persistence as well as the differential extent identified, it is to acculturation theory that we now turn, and to an examination of the social and psychological profiles of the subjects.

3.2 Social-psychological profiles

3.2.1 *Social distance*

In the introductory profile of the subjects given in 2.1-3 above, brief indication has already been given of the relative size and composition of the resident Japanese population in Ireland over the past thirty years, and of the predominant pattern of regular contact with native English-speaking rather than Japanese members of the local community displayed by the subjects. A more detailed examination now follows of the general relationship between the Irish and Japanese communities with reference to the various continua pertaining to social distance identified by acculturation theory, and more specifically of the stance adopted by the subjects themselves with regard to the expatriate community.

3.2.2 *Status, size, attitudes, cultural congruence*

The history of diplomatic ties between Japan and Ireland dates back to 1940, when a Japanese consular mission arrived in Dublin. Official diplomatic relations were established in 1957 on a non-residential basis and in 1964 on a fully residential basis, while a few years subsequently an Irish Embassy was set up in Tokyo. The expansion in numbers of the Japanese community in Ireland from the tiny handful resident in the 1960s to the estimated current figure of five hundred has largely been a direct result of the accelerated growth of Japanese investment in the country, with the rapid establishment of Irish subsidiaries of Japanese companies. These now total 34.

The pattern of Japanese investment in Ireland and the superior international status enjoyed by Japan as the world's leading creditor nation and second largest economy after the United States might suggest a position of dominance with regard to the host community, in terms of the first continuum affecting social distance discussed in 1.2 above. Ireland indeed has a clearcut policy to court Japanese investment and secure a significant share of the Japanese capital influx directed into the European Community, and so reap the rewards in terms of economic benefit and employment as well as gain from Japanese technological expertise through joint venture schemes and research projects. Among the latter are the Hitachi Dublin Laboratory at Trinity College and the Sumitomo Cement research project at the University of Limerick. In view of stiff competition from other EC member states to secure Japanese investment and the desire of the larger Japanese industries to locate where the most densely populated markets are, the current and highly effective strategy of the Industrial Development Authority in Ireland has been to attract

those smaller Japanese subcontracting firms which supply the component parts to service the major industrial plants being set up in Britain and elsewhere in Europe. This is an incentive which has been warmly welcomed by Japanese manufacturers as a means of avoiding the heavy tariff barriers to be imposed on non-EC nations after 1992 by locating parts and components factories as well as assembly plants within the EC.

Of course, economic relations with Japan stem not only from Japanese investment but also from trading and commercial links between the two countries which have developed over the past two decades. While the traffic of trade is not all unidirectional (Japan is the ninth largest purchaser of Irish goods and services), as with most of her international trading partners, Japan has a considerable trade surplus with Ireland, estimated at IR£435.9 million for 1990 according to the Central Statistics Office.

Despite the undoubted economic superiority of Japan, however, commercial relations between the two countries have traditionally been extremely friendly. In contrast with many fellow EC member countries as well as the United States, Ireland has openly supported free trade and entertained very liberal attitudes towards quota controls, local content rules, etc. In this respect Irish attitudes to Japan have been unmarred by any signs of tension or hostility arising from protectionist fears or the threat of economic invasion.

Moreover, at the level of inter-community contact and attitudes, it is highly doubtful whether Japanese superiority in terms of global economic status and technological advancement translates into any perceived sense of dominance over the host community or any sense of subordination by the host nation to the Japanese community. As individuals in their personal dealings with members of the host community, the Japanese characteristically retain a very deferential attitude. In terms of size, the Japanese community in Ireland can hardly be deemed to pose a threat despite its growth over the years. Ireland has a very homogeneous population with no substantial ethnic minority communities or history of immigrant population influxes, except those suffered as a consequence of British colonialism over the centuries. Foreign residents, including the Japanese, tend to be middle-class professionals or visiting students who live in ordinary neighbourhoods alongside the local community. Far from harbouring negative attitudes or feelings of suspicion, the Irish seem to extend a warm and friendly welcome to those foreigners who reside in their country.

The Japanese in particular seem to hold a certain curiosity value for the local people, reflected in numerous instances of friendly approaches and questioning by complete strangers recounted by many Japanese residents in and visitors to Ireland. On the level of closer personal and social contacts with

members of the local community, it is becoming almost commonplace for individual Japanese residents to express confirmation of the reputed kindness, friendliness and hospitality of the Irish people, and to relate countless anecdotes attesting to this from their own experience.

On a broader scale too, positive concerted efforts have been made by both communities to foster close and friendly relations, first with the establishment of a cultural organization, the Ireland Japan Society, in 1969, and then with the setting up of the Ireland Japan Economic Association in 1974 to promote business and commercial ties. In 1990 these two organizations merged to form the Ireland Japan Association, currently with over 250 corporate and individual members, and aiming to further commercial, economic and cultural links and mutual understanding between the two countries by sponsoring seminars and conferences on trade and investment, and arranging business lunches, cultural lectures and social events.

In terms of cultural congruence, the dissimilarities may appear to be more striking than the similarities as far as religious and moral traditions, customs, language and cultural heritage are concerned. However, the Western lifestyle poses no major problems of unfamiliarity to the modern-day Japanese in view of the swift and large-scale Americanization of the Japanese lifestyle, at least in superficial terms, since the Second World War — a trend that has been fostered by the traditional Japanese fascination with and receptivity to all things foreign, and by their natural penchant for importing new ideas and practices and adapting them to their tastes.

More specifically, a bond of cultural sympathy may extend between the Irish and Japanese in terms of a continued respect for a strong rural tradition and its values despite rapid urbanization. The mid-1950s witnessed a mass migration of young Japanese to the towns and cities in search of employment in the economic aftermath of the war, as a result of which there exist today many close family ties between town and country, much as in Ireland.

In terms of artistic culture, a steady tradition of Irish literary scholarship has been established in Japan, fostered by IASAIL-Japan (International Association for the Study of Anglo-Irish Literature), with interest in particular in the writings of W. B. Yeats and James Joyce, as well as those works of drama and poetry which reflect the pathos, subtle irony and humour characteristic of a national sensibility with which the Japanese readily identify and empathize. On a more popular level, Irish music has much appeal among Japanese listeners, and includes modern rock as well as those traditional airs which share with their Japanese counterparts the use of the pentatonic scale and the expression of moods that are melancholic and sentimental.

3.2.3 Integration patterns, length of residence, cohesion, enclosure

As indicated in 2.3 above, the Japanese community in Ireland is largely a floating population composed of business professionals and diplomatic staff with their families, as well as visiting students, for all of whom residence in the country is of temporary duration. In view of this, the predominant integrative pattern is not assimilation but falls somewhere along the continuum between acculturation and preservation. One of the chief driving forces in this respect is parents' concern for the education and future welfare of their children. Although the children attend local Irish schools and integrate well with members of their peer-group, and while the opportunity of learning and speaking English at a young age is viewed as a valuable asset for future instrumental purposes, in the home great stress is laid on keeping up Japanese language and other curricular studies to facilitate later re-entry into mainstream Japanese life and the highly competitive national educational system which determines future careers. It is quite common after a year or two of residence in Ireland for mothers to return to Japan with their children to prepare them for senior high-school entrance examinations, while their fathers remain behind until the termination of their overseas posting. A special Saturday School has been set up in Dublin organized by the parents to provide supplementary group tuition to expatriate children in the Japanese language and curricular subjects up to junior high-school level.

Although the Saturday School serves as a regular meeting-point for Japanese parents, the community in Ireland is on the whole not especially cohesive, with all-Japanese gatherings on a large scale restricted to one or two annual functions such as New Year celebrations at the ambassador's residence. All other social occasions involve a mixture of Japanese and Irish, such as those events arranged by the Ireland Japan Association and its precursor organizations.

With regard to structural aspects of integration, the small size of the Japanese community in Ireland and the fact that many of its members are dispersed across the south and west of the country hardly permit the fostering of high enclosure through institutional separation and associational clustering, a tendency which is noticeable among much larger expatriate Japanese communities.

3.2.4 The subjects' thirty-year perspective

Before any conclusions can be drawn about social distance, the analysis above must be qualified by a discussion of the subjects' own relations with the expatriate community. The discussion will show that in the case study

approach, generalizations about social distance in terms of group factors alone cannot really be made since the subject's own perceptions may differ or change. To repeat the earlier quotation from McLaughlin, "considerations of social distance reduce to questions of psychological distance" (McLaughlin 1987, p. 126).

The Japan which Dr and Mrs Ushioda left in the late 1950s was a country still in the process of economic recovery. With defeat in the Second World War, the subsequent American occupation, and virtual economic ruin facing the country, many Japanese looked to the West for hope and inspiration, believing that "American military superiority betokened moral and political superiority as well" (Christopher 1984, pp.21f.). Against such a background, the possibility of going abroad to the West in effect to seek one's fortune was perceived as the dream-like opportunity of a lifetime. For Dr and Mrs Ushioda, Ireland's historical association with and geographical proximity to Great Britain lent it an aura of prestige, wealth and promise.

Since then of course the couple have witnessed from a distance major economic changes in Japan and a dramatic role reversal in the respective statuses of the two countries, with consequent expansion in size of the Japanese community in Ireland. Their changing thirty-year perspective has however given them a unique and privileged position as the earliest and now among the oldest members of this small but growing community, and for this reason their well-respected insight, advice and assistance on various matters pertaining to Irish life and Irish-Japanese relations are valued and sought by other Japanese residents. Unofficially, they seem to act as cultural mediators, quietly fostering understanding and good relations between the two communities, and were of course original and later honorary members of the Ireland Japan Society. In this regard, Mrs Ushioda seems to have played a more active role in view of her professional interests in cultural affairs (she is a member of the Ireland Japan Association's cultural committee), and her handling of countless queries and problems from Japanese residents regarding schooling and education in particular, a sphere of concern in which Japanese women traditionally are more actively involved than men.

At the same time, given Dr and Mrs Ushioda's unique long-term residence in Ireland out of personal choice and their lack of direct ties with Japanese business and commercial affairs, they do not occupy a central position in the life of the Japanese community, maintaining a degree of detachment from the activities and concerns of the largely younger generations of which it is composed.

Permanency of residence coupled with the decision to educate their children entirely in Ireland has meant of course a much more acculturative

pattern of integration than that of the other Japanese residents, approximating towards assimilation, although unlike their son who was also born in Japan, neither has taken the ultimate step of seeking Irish naturalization. In this respect emotional ties with their home roots in Japan do remain, although as indicated in 2.1, return visits to the country have been infrequent over the thirty years and brief in duration. While such visits bring with them feelings of nostalgia and sentimental reunions with old friends and relations, both subjects confess to a sense of great relief upon arriving back in Dublin, and express doubts as to whether they could conceivably adapt to life in Japan and settle there again.

3.2.5 Psychological distance

With reference to the specific psychological factors highlighted by acculturation theory, some indication has already been given of the aspirations and attitudes of the subjects as voluntary emigrants leaving behind a Japan still in the throes of post-war economic recovery. Original motivation may be harder to pinpoint along the instrumental-integrative continuum, since the couple arrived in Ireland with little knowledge of what to expect or how long they might remain beyond Dr Ushioda's initial two-year contract. With the birth of their second child and the decision to settle permanently in Ireland, a strongly integrative motivation clearly began to dominate, while less importance came to be attached to instilling and preserving Japanese values and a Japanese identity in their children, in favour of encouraging social integration with their Irish peer-group and ensuring unimpeded progress through the Irish educational system.

With the mutual moral and emotional support they found in each other, as well as the welcome, warmth, kindness and hospitality received from new friends and helpful strangers, the couple experienced no significant disorientating symptoms of culture shock or culture stress. They coped with the early practical problems and minor frustrations of adaptation and communication through a process of trial and error that was spurred on by the spirit of challenge and an overwhelming feeling of eagerness, excitement, and in their words almost total infatuation with their new way of life and environment, which offered them freedom and material benefits not previously enjoyed in Japan.

Only subsequently, during the third and fourth year of their residence in Ireland, when the decision to settle permanently had been made, did the couple experience any serious doubts or anxiety. This was a state of affairs brought about not so much by any sense of dissatisfaction or discomfort with their life

in Ireland as by feelings of guilt with respect to their family ties in Japan. The traditional Japanese pattern of family life meant that, as the eldest son, Dr Ushioda should have been obligated with the responsibility of taking over the family business and looking after his parents in their old age. In fact this proved unnecessary since the task was eventually fulfilled by his younger brother, but for a time doubts were expressed, particularly by Mrs Ushioda, as to whether the right choice had been made, in view of her husband's filial duties and her own obligations as daughter-in-law. The reluctance to face the consequences of neglecting these responsibilities, coupled with financial constraints, may have accounted for Dr Ushioda's unwillingness to return to Japan for a visit until the mid-1970s, by which time of course his parents had abandoned all hope of the family's permanent return.

It should be emphasized that these early doubts have long since been completely dispelled, and that both Dr and Mrs Ushioda have no personal regrets about choosing to stay in Ireland, and harbour if anything serious reservations about the kind of life they might have led in Japan within the close-knit and perhaps claustrophobic family circle. For Mrs Ushioda in particular, the exciting and challenging opportunities made available to her through her professional career in Ireland have been especially valuable and rewarding.

With regard to language shock and inhibitions, both subjects recall generally low levels of anxiety about attempting to communicate in what they themselves have called their "broken English" or about making grammatical or pronunciation errors when speaking. In this respect they both seem to have exhibited a positive emotional and psychological response to the task of communicating and of improving their language skills through social interaction. Close friends, notably some of Dr Ushioda's colleagues and their wives, took it upon themselves to provide plenty of opportunities for social contact and interaction, by arranging informal get-togethers and parties, as well as play sessions and cookery demonstrations involving Mrs Ushioda and her children with other mothers and children. Although the couple did not elect to receive formal English instruction in Ireland, they did not hesitate to seek correction and informal instruction from native English-speaking friends and from their own children as they grew older, while also resorting regularly to bilingual dictionaries and making conscious efforts to expand and consolidate their lexical knowledge.

3.2.6 Social-psychological profiles: a conclusion

In terms of social and psychological distance, then, acculturation

theory would seem to predict successful acquisition of English by both subjects in view of the facilitative conditions fostered by friendly Irish-Japanese relations, and more specifically by the subjects' relatively detached perspective from the floating expatriate population, their unreserved commitment to and happiness with permanent residence in Ireland, and their highly acculturative pattern of integration, social and family life.

In an attempt to discover any differential degrees of social-psychological distance which might have significant bearing on the subjects' respective levels of linguistic fossilization, one is obliged to consider aspects of personality and behaviour as identified through long-term observation of the subjects in their day-to-day life in Ireland. An important factor in this regard seems to be that while neither subject tends towards extroversion or indeed introversion, in terms of social skills it is undoubtedly Mrs Ushioda who appears more at ease and less inhibited, especially when engaged in polite smalltalk at social gatherings or casual interactions with close friends. This is true of her Japanese language interactions also, and in this respect she does not typify the traditional behavioural pattern of women in Japanese society whereby "the modesty historically expected of Japanese women requires that when in company, they should speak only when spoken to — and then briefly" (Christopher 1984, p.59).

In contrast Dr Ushioda seems more inhibited about initiating casual conversations whether in Japanese or English, while his forte lies in engaging perhaps one or two interlocutors in prolonged and detailed informal discussion on topics of interest, such as current affairs or Japan. It is noticeable that during such discussions, whether they take place in Japanese or English, Mrs Ushioda participates little and her husband tends to hold the floor until the topic of conversation drifts to other matters.

Still with respect to social patterns of behaviour, it is also apparent that Mrs Ushioda maintains far more regular and frequent contact with circles of friends and acquaintances both Irish and Japanese, whether on a purely social basis or through her role as council member of the Ireland Japan Association. Dr Ushioda on the other hand shows a marked tendency to prefer not to stray outside the routine sphere of work and home life. As a result, his only regular contacts are with colleagues and students at the university, while any socializing tends to be undertaken largely at the instigation of his wife.

This difference in social behaviour and personality is similarly reflected in attitudes to handling matters such as household finances, transactions, bureaucratic procedures, telephone calls, form-filling, etc., tasks which Dr Ushioda tends to avoid if possible, and which his wife, while often remarking that her English ability is weaker, almost always undertakes to carry out.

Comparatively speaking, then, this element of diffidence in Dr Ushioda's character would seem to favour Mrs Ushioda in terms of the social-psychological continuum, since she demonstrates fewer inhibitions and has more regular access to varied opportunities for English language input and communication.

On an attitudinal plane too there is some evidence to suggest that on the whole Dr Ushioda maintains a slightly more critical perspective than his wife on certain aspects of life in Ireland and Western society. This ranges from occasional mild impatience with poor service, lack of punctuality or the so-called Irish temperament, to more critical perceptions of religious and moral issues, and the confrontation tactics traditional to the dialectic of Western thought and ideology. Such views are rarely voiced by Mrs Ushioda, who seems to exhibit a strongly empathic attitude to Irish people, an attitude which has been reinforced in the last ten years through her exposure on three occasions to life-threatening illness and her personal and deeply emotional experience of the skill, kindness and caring concern of senior medical staff and nurses, and the strong support of close friends.

3.3 Discussion

3.3.1 *Two questions*

There are clearly problems in applying the predictions of acculturation theory to an explanation of the present research findings. On the face of it acculturation theory would predict no significant social-psychological obstacles to successful second language acquisition by either subject, and marginally more favourable conditions in terms of greater psychological proximity in the case of Mrs Ushioda. Two questions are thus posed — firstly, why it is that Dr Ushioda demonstrates superior linguistic competence, and secondly, why neither subject has reached the end point of the interlanguage continuum.

3.3.2 *Factors independent of social-psychological distance*

With regard to the first question, it is probable that the search for an explanation of the differential linguistic levels must extend beyond social-psychological variables to a consideration of two other contributory factors: language aptitude and language needs. It has been suggested that differences in aptitude may have accounted for differential levels of English language ability following the years of formal learning in Japan, and it is possible that these early differential levels may have affected the subjects' subsequent rates of development during the years of direct exposure to English in Ireland. Aptitude may indeed have a more significant role to play even in conditions

of natural second language acquisition than Schumann speculates. There is obviously need for further investigation.

In terms of language needs, as indicated earlier the academic environment has exposed Dr Ushioda to a particular variety of English language input and made specific demands on the development of production skills, especially in the performance of longer transactional turns. His overall superior linguistic competence may thus partly be attributed to needs which are independent of social-psychological integration, as well as to the kind of input received and the particular domain of English language use to which he has been exposed in his professional capacity. By comparison, Mrs Ushioda's language needs have focused more on developing interactive and communicative skills, both in her social and professional spheres of activity. It is only in the last couple of years that participation in teaching a course on Japanese history at tertiary level has made new demands on her production skills.

3.3.3 *Fossilization and successful second language acquisition*

The second and perhaps more crucial question asks why fossilization itself has occurred. As mentioned in 2.7 above, no scientific validity can be claimed for the methods employed to obtain the subjects' social-psychological profiles; and since it has not of course been established that their social and psychological identity with the target language community is absolute, it might be speculated that unidentified affective factors may yet account for their current levels of fossilization. According to the acculturation model, however, an integration strategy of complete assimilation to the TL community is not a necessary condition for successful second language acquisition, as we saw in our earlier review of Schumann's theory (Schumann 1976b, pp.397-401).

One approach to answering the question in the context of acculturation theory may be to ask what is meant by *successful* second language acquisition. The acculturation model pertains specifically to the development of the learner's linguistic and grammatical systems. However, in seeking to establish a cause and effect relationship between social-psychological variables and linguistic development, the model overlooks the possibility that the development of *communicative competence* may also affect the degree to which a non-native speaker will revise his linguistic code. With reference again to Shapira's case study, it was indicated that despite much more positive attitudes to living in America, her subject Zoila does not progress beyond a reduced and simplified linguistic system:

By this time, however, Zoila has developed fluency in English to a level

that enables her to understand all she is interested in, and to make herself understood. She interprets her development as evidence of progress in the acquisition of English. Her daily interaction with English speakers constantly reinforces her feeling that her English is good enough since it is accepted, i.e., understood. Most, if not all, native speakers Zoila is in contact with are sympathetic and tolerant of her language problems. (Shapira 1978, p.253)

Shapira's study draws attention to the distinction between *fluency* and *linguistic* development. In terms of the non-native speaker's own psychological reality and personal needs, fluency is clearly of greater practical importance than the acquisition of a complex and accurate linguistic system. Once communicative skills sufficient to satisfy his or her needs have been mastered, further revision of the internalized grammatical code may not be deemed necessary.

Schumann's model does of course postulate just such a relationship between basic functional needs and linguistic development, and predicts that the latter will fossilize at a pidginized stage if social and psychological distance from the TL community restricts the language needs of the learner to the functional purposes of communication. However the model also predicts that reduction in social-psychological distance will lead to the gradual revision and restructuring of the linguistic system commensurate with the learner's more complex and demanding integrative needs. Although there is little doubt that linguistic development does take place (as demonstrated by the subjects of this case study), it is equally true that fluency and communicative skills also develop, combining with the acquired linguistic code to create a system that is highly efficient and successful, even if divergent from the native-speaker system. In other words, fossilization of linguistic rules may set in, not because of any perceived sense of ultimate even if minimal social and psychological distance from the TL community which cannot be bridged, but because of the non-native speaker's fluent command of an effective system of communication that is sufficient for all his needs and accepted and understood by the TL community.

According to Vigil and Oller, fossilization of linguistic rules may partly be a function of the kind of affective and cognitive feedback received from native speakers with whom the learner interacts (Vigil and Oller 1976). Where the non-native speaker's communicative output is intelligible, success in communication and positive affective feedback from native speakers may lead him to persist in using this effective and accepted system, even if it is linguistically and phonologically flawed. This pattern is demonstrated in the

case of Zorla, while the production strategies of Mrs Ushioda and the extent of fossilization in her unmonitored performance also seem to indicate reliance on a simplified yet effective system which eschews some communicatively redundant elements. Integration into the TL community does not necessitate total accommodation of the learner's grammatical system to the target language system, since native speakers do not demand or expect perfect linguistic assimilation for the purposes of social integration, and competent bilingualism is adequate for the needs of the non-native speaker (Preston 1989, pp.83-6).

Attributing linguistic fossilization in advanced SLA stages to social and psychological variables thus overlooks the highly relative nature of concepts such as success, fluency, proficiency, competence and bilingualism:

[...] one of our difficulties in attempting to understand the relationship between a variety of affective, as well as other, variables in second language learning is that we really don't have a very precise criterion measure of what it means to know a language or what it means to be able to function effectively in that language. (Tucker 1981, p.31)

3.3.4 Conclusion

While the findings of this comparative case study do not undermine the predictions of acculturation theory, they do point to the necessity of broadening the focus of attention beyond the linguistic code, and suggest a possibly more complex tripartite relationship between affective variables, linguistic fossilization and communicative skills. Social-psychological factors are clearly important in governing the range, amount and quality of target language input and interaction sought by the learner. However, language needs irrespective of social-psychological integration must be recognized as additional factors which also significantly determine the kind of input received, and control the development of an individual's linguistic competence and range of performance skills.

Ultimately, however, the restructuring and eventual fossilization of linguistic and phonological rules may be affected by the degree to which the non-native speaker develops a fluent, efficient and successful system of communication that is adequate for all his communicative, integrative and professional needs.

References

- Andersen, R. (ed.), 1981a: *New Dimensions in Second Language Acquisition Research*. Rowley, Mass.: Newbury House.
- Andersen, R., 1981b: "Two perspectives on pidginization as second language acquisition", in Andersen 1981a, pp.165-95.
- Andersen, R. (ed.), 1983a: *Pidginization and Creolization as Language Acquisition*. Rowley, Mass.: Newbury House.
- Andersen, R., 1983b: "Introduction: A language acquisition interpretation of pidginization and creolization", in Andersen 1983a, pp.1-56.
- Bertkau, J., 1974: "Comprehension and production of relative clauses in adult second language and child first language acquisition", *Language Learning* 24, pp.279-86.
- Bickerton, D., 1981: "Discussion of 'Two perspectives on pidginization as second language acquisition'", in Andersen 1981a, pp.202-6.
- Brown, G., 1981: "Teaching the spoken language", *Studia Linguistica* 35, 1-2 (AILA 81 Proceedings II), pp.166-82.
- Burstall, C., M. Jamieson, S. Cohen & M. Hargreaves, 1974: *Primary French in the Balance*. Slough: NFER.
- Christopher, R. C., 1984: *The Japanese Mind*. London: Pan Books.
- Cooper, R., 1981: "Language spread as a perspective for the study of second language acquisition", in Andersen 1981a, pp.130-45.
- Ellis, A., & G. Beattie, 1986: *The Psychology of Language and Communication*. London: Weidenfeld & Nicholson.
- Ellis, R., 1985: *Understanding Second Language Acquisition*. Oxford University Press.
- Gardner, R., 1985: *Social Psychology and Second Language Learning: The Role of Attitudes and Motivation*. London: Edward Arnold.
- Gardner, R., & W. Lambert, 1972: *Attitudes and Motivation in Second Language Learning*. Rowley, Mass.: Newbury House.
- Gardner, R., P. Smythe, & R. Clement, 1979: "Intensive second language study in a bicultural milieu: an investigation of attitudes, motivation and language proficiency", *Language Learning* 29, pp.305-20.
- Gilbert, G., 1981: "Discussion of 'Two perspectives on pidginization as second language acquisition'", in Andersen 1981a, pp.207-12.
- Guiora, A., R. Brannon & C. Dull, 1972a: "Empathy and second language learning", *Language Learning* 22, pp 111-30.
- Guiora, A., B. Bert-Hallahmi, R. Brannon, C. Dull & T. Scovel, 1972b: "The effects of experimentally induced changes in ego states on pronunciation ability in a second language: an exploratory study", *Comprehensive*

- Psychiatry* 13, pp.421-28.
- Hakuta, K., 1978: "A report on the development of grammatical morphemes in a Japanese girl learning English as a second language", in Hatch 1978, pp.132-47. First published 1974.
- Hatch, E. M. (ed.), 1978: *Second Language Acquisition: A Book of Readings*. Rowley, Mass.: Newbury House.
- Hermann, G., 1980: "Attitudes and success in children's learning of English as a second language: the motivational vs. the resultative hypothesis", *English Language Teaching Journal* 34, pp.247-54.
- Krashen, S. D., 1982a: "Accounting for child-adult differences in second language rate and attainment", in S. D. Krashen, R. C. Scarcella & M. H. Long (eds.), *Child-Adult Differences in Second Language Acquisition*, pp.202-20. Rowley, Mass.: Newbury House.
- Krashen, S. D., 1982b: *Principles and Practice in Second Language Acquisition*. Oxford: Pergamon.
- Labov, W., 1972: "The study of language in its social context", excerpts reprinted in J. Pride and J. Holmes (eds.), *Sociolinguistics: Selected Readings*, pp.180-202. Harmondsworth: Penguin Books. First published 1970.
- McLaughlin, B., 1987: *Theories of Second-Language Learning*. London: Edward Arnold.
- Meisel, J., 1977: "Linguistic simplification: a study of immigrant workers' speech and foreigner talk", in S.P. Corder and E. Roulet (eds.), *The Notions of Simplification, Interlanguages and Pidgins in their Relation to Second Language Pedagogy*, pp.88-113. Geneva: Librairie Droz.
- Meisel, J., 1983: "Strategies of second language acquisition: more than one kind of simplification", in Andersen 1983a, pp.120-57.
- Meisel, J., H. Clahsen & M. Pienemann, 1981: "On determining developmental stages in natural second language acquisition", *Studies in Second Language Acquisition* 3, pp.109-35.
- Preston, D., 1989: *Sociolinguistics and Second Language Acquisition*. Oxford: Basil Blackwell.
- Rickford, J., 1983: "What happens in decreolization?", in Andersen 1983a, pp.298-319.
- Schachter, J., 1974: "An error in error analysis", *Language Learning* 24, pp.205-14.
- Schmerhorn, R. A., 1970: *Comparative Ethnic Relations: A Framework for Theory and Research*. New York: Random House.
- Schmidt, R., 1983: "Interaction, acculturation, and the acquisition of communicative competence: a case study of an adult", in N. Wolfson &

- E. Judd (eds.), *Sociolinguistics and Language Acquisition*, pp.137-74. Rowley, Mass.: Newbury House.
- Schumann, J., 1974: "Implications of pidginization and creolization for the study of adult second language acquisition", in Schumann and Stenson, pp.137-52.
- Schumann, J., 1975: "Affective factors and the problem of age in second language acquisition", *Language Learning* 25, pp.209-35.
- Schumann, J., 1976a: "Social distance as a factor in second language acquisition", *Language Learning* 26, pp.135-43.
- Schumann, J., 1976b: "Second language acquisition: the pidginization hypothesis", *Language Learning* 26, pp.391-408.
- Schumann, J., 1978a: *The Pidginization Process: A Model for Second Language Acquisition*. Rowley, Mass.: Newbury House.
- Schumann, J., 1978b: "The acculturation model for second language acquisition", in R. Gingras (ed.), *Second Language Acquisition and Foreign Language Teaching*, pp.26-50. Arlington, VA.: Center for Applied Linguistics.
- Schumann, J., 1978c: "The relationship of pidginization, creolization and decreolization to second language acquisition", *Language Learning* 28, pp.367-79.
- Schumann, J., 1981: "Discussion of 'Two perspectives on pidginization as second language acquisition'", in Andersen 1981a, pp.196-201.
- Schumann, J., 1983: "Reaction to Eckmann and Washabaugh's Discussion of Schumann and Stauble", in Andersen 1983a, pp.290-7.
- Schumann, J., & A. Stauble, 1983a: "A discussion of second language acquisition and decreolization", in Andersen 1983a, pp.260-74.
- Schumann, J., & A. Stauble, 1983b: "Reply to Rickford's Discussion of Schumann and Stauble", in Andersen 1983a, pp.320-3.
- Schumann, J., & N. Stenson (eds.), 1974: *New Frontiers in Second Language Learning*. Rowley, Mass.: Newbury House.
- Selinker, L., 1974: "Interlanguage", in Schumann and Stenson 1974, pp.114-36. First published 1972.
- Shapira, R. G., 1978: "The non-learning of English: case study of an adult", in Hatch, pp.246-54.
- Skehan, P., 1989: *Individual Differences in Second-Language Learning*. London: Edward Arnold.
- Stauble, A., 1978: "The process of decreolization: a model for second language development", *Language Learning* 28, pp.29-54.
- Stauble, A., 1980. "Acculturation and second language acquisition", in R. C. Scarcella & S. D. Krashen (eds.), *Research in Second Language*

- Acquisition*, pp.43-50. Rowley, Mass.: Newbury House.
- Stengel, E., 1939: "On learning a new language", *International Journal of Psychoanalysis* 20, pp.471-79.
- Tarone, E., 1983: "On the variability of interlanguage systems", *Applied Linguistics* 4/2, pp.143-63.
- Tucker, G. R., 1981: "Discussion of 'Research on the measurement of affective variables: some remaining questions'", in Andersen 1981a, pp.28-32.
- Vigil, N. A., & J. W. Oller, 1976: "Rule fossilization: a tentative model", *Language Learning* 26, pp.281-96.
- Whinnom, K., 1971: "Linguistic hybridization of the 'special case' of pidgins and creoles", in D. Hymes (ed.), *Pidginization and Creolization of Languages*, pp.91-115. Cambridge University Press.

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