

SOME EVIDENCE FOR CONTRASTIVE ANALYSIS:
NEGATIVE QUESTIONS IN JAPANESE AND ENGLISH

by

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Some Evidence For Contrastive Analysis: Negative Questions

in Japanese And English

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ABSTRACT

The sources of learner errors in second language learning have historically been the centre of much discussion and contention in linguistics and education. The techniques of Contrastive Analysis (CA) and Error Analysis (EA) were developed to explain the sources of these errors. It has been stated, however, that a CA is felt to be only superficially predictive in its ability to predict errors other than phonological, and 'least predictive at the syntactic level'. In this study two languages are contrasted at the level of syntax, and an attempt is made to reassess the role that a CA should take in second language research.

The CA of the answering systems of Japanese and English as presented here indicates that they differ greatly and these differences can cause the Japanese learners of English difficulty as they attempt to answer English negative yes/no questions.

A questionnaire was administered to fifty subjects, native speakers of Japanese and English. The subjects were categorized according to the elicited variables of sex, native language, age, fluency, and the length of time that they had spent in an English speaking country.

The questionnaire included five positive and ten negative yes/no questions. A system of 'expected response errors' on the English negative questions was hypothesized for the Japanese sample, based upon the findings of the CA. Interference was

predicted from the Japanese answering system for the answering of English negative yes/no questions.

Significant relationships and correlations were discovered in the interactions between the dependent variable of the number of correct responses scored on the test items, and the independent variables of sex, age, language, fluency, and time spent in an English speaking country. Significant differences were shown between the two language groups and their abilities to answer English yes/no questions. Results showed a significant degree of support for the hypothesis that the answering system employed in Japanese appears to interfere with the Japanese learner's acquisition of the English answering system in certain predictable ways.

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I. BACKGROUND

Background and General Problem

An adequate explanation for learner errors in the acquisition of a second language has long been a central theme for discussion in linguistics, applied linguistics, and education. Competing linguistic systems must have an effect upon the learner and his/her propensity to make errors, but the degree and manner of these effects has been the cornerstone of much of the controversy.

The proponents of both Contrastive Analysis (CA) and Error Analysis (EA) tell us that a learner's native language will often interfere, in some manner, with the learning of the new or target language. One must only consult Greenberg (1963) to see how markedly the structures of the world's languages differ, and to see the great potential for the problems that may arise when two linguistic systems collide in the learner. Learners must not only internalize the structures of the target language, but also its deep and surface transformations and syntactic processes if they are to freely communicate in the language. It is tempting to get bogged down in a discussion of the learner's reasons for attempting to learn the target language, and the effect that these reasons may have upon his/her performance, but for the purposes of this study discussion of this sort is misleading,

for regardless of the learner's reasons the same problems of interference may be encountered.

The problem of interference can be called one of 'competing systems'. When speakers are confronted with a choice of two or more systems, or forms, they will, in cases of doubt, confusion, or ignorance of the correct form, choose the structures they are more comfortable with, probably the forms from their native tongue, unless they have clear guidelines not to. The prediction of these problems, and the stressing of these guidelines, is what Contrastive Analysis, at first glance, was reckoned to do.

Contrastive Analysis

The Strengths of the CA Hypothesis

Modern Contrastive Analysis was first developed by Lado and Fries, two structural linguists at the University of Michigan. It was in 1943 that their work, English Pattern Practices, contrasted the structures of English and Spanish. The premise behind this language teaching method was that for the first time a scientific method could be used to teach a second language. It was in 1945 that Charles Fries wrote:

The most effective materials are those that are based upon a scientific description of the language to be learned, carefully compared with a parallel description of the native language of the learner.
(Fries, 1945:9)

The student's native language and the target language could be

contrasted in terms of phonology and syntax, and the errors that the student would probably make could be anticipated and remedied before they developed into major problems. A great deal of difference between the target language and the native language would probably lead to problems for the learner. Lado felt that

...those elements that are similar to the
...learner's... native language will be simple for him,
and those that are different will be difficult.
(Lado, 1957:2)

This contrastive approach struck a nerve in the teaching world, and was soon expanded to deal with all aspects of language, not just phonology and syntax, and could deal with virtually any two languages that a learner could have as a native language or wish to learn. Proponents of this approach looked at two grammars, independent of the learner, and decided what sort of errors were most likely to occur should the two linguistic systems meet in the learner. The concept of interference developed where aspects of the native language would get in the way or 'interfere' with related aspects of the target language. From this grew the concept of transfer, detailing the type of interference to be expected from the native language. If the transfer were positive the native and target languages would share a similar structure for the form in question, and the existence of the form in the native language would only reinforce the learning of the form in the target language. If the transfer were negative the native and target languages would differ in the form and/or structure of the

linguistic entity in question, and the form in the native language would interfere with the learning of the new form in the target language. Zero transfer would occur when there was no relation between the two tongues for the form in question, or if the form had no similar corresponding form in the other language.

Bloomfield felt that the learner must start with a clean slate, the idealic 'tabula rasa' of the infant, for the

...sounds, constructions, and meanings of different languages are not the same.

The language student

...must learn to ignore the features of any and all other languages, especially of one's own.
(Bloomfield, 1942:1)

The old habits of the native language were to be ignored by the learner, but exploited by the pedagoques in search of better material and better teaching methods.

The change that has to take place in the language behaviour of a foreign language student can be equated with the differences between the student's native language and culture and that of the target language and culture. Differences between two languages can be established by contrastive linguistic analysis. What the student has to learn equals the sum of the differences established by contrastive analysis.

(Banathy et al, 1966:37)

In its conception CA was used to better equip teachers to teach English to native speakers of Spanish. It was wartime, and language research had access to almost unlimited funding. CA arose as an applied branch of linguistics and language education. It was at the practical classroom level where CA was originally to be used, and where, when used properly, it should

excel. Even so, CA at a practical level is more likely to be useful when used by the textbook writer and the curriculum developer, although its uses and practicality are made evident at the classroom level. The practical use of CA should be apparent from the ordeals of everyday language teaching experience.

Every experienced foreign language teacher knows that a substantial number of persistent mistakes made by his students can be traced to the 'pull of the mother tongue'.

(Sridhar, 1981:210)

The impetus behind the practical use of CA came from practical language teaching experience and research, as well as studies in language contact (See Weinrich, 1953:1), and theories of learning, originally psychological theories, from which stem the concepts of interference and transfer (See Jacobovits, 1969).

No proponent of Contrastive Analysis ever stated that a CA could predict all learner errors, but in the enthusiasm surrounding this new scientific approach some premature claims were made, and many believed that CA was the answer to most if not all language teaching problems (See Sridhar, 1981:211). This was undoubtedly due to confusion surrounding the aims of Contrastive Analysis. Many criticisms of CA show confusion between CA and the pedagogical presentation based upon the findings of CA. Soon after the conception of CA there evolved a subtle dichotomy within the field. Applied CA and Theoretical CA became distinct, yet little known, branches within the greater field of Contrastive Analysis. Theoretical contrastive studies

gave an objective and exhaustive account of the differences and similarities between the the two languages in question, and did not preclude a direction for which these differences and similarities would operate. There is no mention here of transfer, interference, or the learner. Theoretical studies operated within a specific linguistic model or system compatible to the descriptions of both languages, and it favoured discussion of language in general, and how the similarities and differences noted related to the discussion of 'language'. There are no judgements as to what would cause the learners trouble should they attempt to learn language A or B, but will merely document the two systems in contrast. Theoretical CA was concerned with speaker competence, and not the language's translation into learner performance.

Applied CA drew, in part, on the findings of the Theoretical CA. The Applied CA is what educators used, and it concerned itself with the manifestation of similar linguistic forms and entities in the different languages in question. One reason that many of CA's predicted errors failed to appear in the learners was that educators and applied linguists felt that a mere difference between the two languages, as expressed in the Theoretical CA, were grounds enough to predict interference and transfer errors, and in fact constituted a prediction of transfer errors (See Fisiak, 1981:5). It became apparent that mere differences and similarities did not constitute grounds for a prediction of interference and transfer errors in an Applied

CA framework.

At present it is felt that if a CA is based upon solid language data

...it can predict...potential...difficulties on a better than chance basis.
(Oller, 1971:79)

It was discovered, however, that interference errors were not the only errors being made by the learners.

The Weaknesses of the CA Hypothesis

The errors that were predicted with great certainty often failed to appear, while other unpredicted and unforeseen errors seemed to cause many learners great consternation. Areas where there was only a slight difference between native and target language often caused greater difficulty to the learner than areas which were markedly different.

It became apparent that one of the major problems with the CA approach, as it was practiced, was that it looked at two grammars, grammars written in the bias of a specific linguistic framework, and treated these grammars as entities independent of the learners and their performance errors, as well as independent of the pragmatics of the language.

There were other problems. The concept of linguistic universals, and of a universal grammar, were played down. The structuralists held language to be a set of habits, and the learning of a new language merely the replacement of new habits for old, so the strength of their stance lay in the differences

between languages, and not the similarities. The only universals of language which were allowed were those that fit into their definition of language. They then had to discuss the differences between languages using universals as a vehicle for comparison. For example, a discussion and contrast of the verbal systems of English and Japanese would show great differences, surely, but would also show the objective observer the systematicity and similarity of the two systems.

The discrepancies and apparent shortcomings of CA grew harder for many to live with.

CA is not only problematic, but also fraught with controversy.

(James, 1980:166)

It was the structuralists who first promoted CA, yet it was they who also espoused the doctrine of the 'uniqueness' of each and every language. Should two languages be unique and dissimilar, what criteria could be found to compare them, and by which theoretical vehicle were they to be contrasted?

Even from the start, the limitations of Structural linguistics were evident with regard to CA. The insistence on defining phonological and grammatical categories solely in terms of individual languages made detailed contrastive statements laborious, if not theoretically impossible, to phrase.

(Di Pietro, 1968:66)

The labels imposed upon phonological and grammatical entities in one language does not necessarily mean that these same labels imposed upon entities in another language are actually the same form or entity, or that they react and act in the same manner. For example, the traditional definitions of 'verb' and

'adjective' had to be revised in an attempt to discuss Japanese, for their adjectives can 'act' as verbs, and the traditional definitions did not work. The uniqueness of a language's internal forms rendered unequivocal contrastive comparison theoretically implausible. A 'degree of shared similarity' should not have, in the stance taken by the structuralists, constituted a basis for comparison. Even so, CA attempted to compare dissimilar tongues in light of their similarities.

With the advent of Chomsky's new school of linguistics scholars were presented with new concepts and new tools for analysis. In CA, however, should the contrast of languages now be described on the basis of the two grammars, the learner's competence, or the learner's performance? Should comparison now take place at the level of the deep structures or the surface structures of the languages, structures whose existence the structuralists had yet to acknowledge in the sixties?

Contrast and comparison was only possible when the languages in question actually shared a common grammatical system, one which only differed to a slight degree. CA was therefore rendered meaningless in an attempt to discuss, for example, the article system in English with the (absence of) the article system in Chinese or Japanese.

CA was therefore revised to fit a generative framework. James (1980) and Di Pietro (1971), among others, have adequately and successfully shown the use of CA within the scope of a transformational model of linguistic description. This was not

done to show that CA was merely a dated structuralist tool, but when the models or vehicles of linguistic description are the same, and independently each description gives more insight than a dated description, then there is little to stop comparison. It is felt that a generative description, and ultimately a CA within a generative framework, may go even further than the structuralist model in terms of describing the 'real' language. Selinker quotes Keith Sauer as saying that

...contrastive linguistics in a generative framework can provide insights into the nature and structure of language for the language teacher which are not available under Structural linguistics.
(Selinker, 1980:120)

Through CA language students were, at an extreme, becoming masters of an unapplied system, in that they often learned only the correct forms for the mistakes that they should have made, and not the daily workings of the language itself. If it be true, that

...what a person wants to do through a language is more important than mastery of an unapplied system,
(Wilkins, 1976:42)

then it was reasonable to expect a reassessment of CA.

Even after many abandoned it, however, much of what CA stood for, and much of its practical application remained.

It is time for people to recognise that it is still widely used without being acknowledged, by language teachers and textbook writers.
(Sanders, 1981:21)

So, although it is apparent that here in North America Error Analysis is greatly preferred to CA, CA is still being used, although now more so within the framework of a comprehensive

Error Analysis.

Error Analysis

The discovery of different and various sources for the abundance of learner errors rapidly led people away from CA. Interest in CA waned in North America, and few stayed with it to further explore its potential. Work was renewed on discovering the sources of learner errors, but using contrast between native and target languages as a last resort.

The learner, not the native language, was now treated as the dominant force in what became known as Error Analysis (EA). Error Analysis is ultimately the classification and documentation of how second language learners use the second language differently from native speakers. Where CA predicted errors based on the native language's differences from the target language, EA would observe and note the errors, and justify them using the learner, the native language, the target language, a contrast of the two languages, and the interaction of all the aforementioned variables.

Error Analysis attempted to deal with all aspects of language. It looked at the grammar and the sound system, as CA had done, but also at the internal irregularities in the target language (e.g. in the verb forms), sociolinguistic and psycholinguistic concerns, differences in teaching materials and methodology, and, finally, at first and second language transfer and interference. Contrastive Analysis really only dealt with

the last concern.

Richards cites three major types of learner errors; contrastive, intralingual, and developmental. Contrastive errors are those that CA dealt with. The latter two,

... rather than reflecting the learner's inability to separate two languages, ...reflect the learner's competence at a particular stage, and illustrate some of the general characteristics of language acquisition. Their origins are found in the structure of English itself, and through reference to the strategy by which a second language is acquired and taught.
(Richards, 1974:173)

Progress has been made in the quest to ascertain the sources of errors. It is generally acknowledged that errors will arise from several different sources, which include:

1. Interference.

Interference or language transfer is the phenomenon that CA dealt with in depth. Weinrich(1953) proposed something of this sort with his concept of 'Intersystemic Interference', which was quickly accepted by the proponents of CA in North America. These are errors resulting from the forms and strategies employed in the native language which hamper or interfere with the development of like forms and strategies in the target language.

2. Pedagogical Errors.

These are errors resulting from faulty teaching materials, methods, or techniques, which may leave the student confused or erroneously informed.

3. Generalization.

These are errors caused by the erroneous application of a

paradigm that may not apply. The learner will reduce the target language to a simpler form and system via a generalization of the application of the rules. Jain(1974) gives a good discussion of this phenomenon.

4. Strategies of Communication.

These are errors caused by the learner attempting to communicate above his/her proficiency level. They can be equated with Nemser's Approximative Systems:

An approximative system is the deviant linguistic system actually employed by the learner attempting to utilize the target language. Such approximative systems vary in accordance with proficiency level. (Nemser, 1971:115)

5. Markers of Transitional Competence.

These are the developmental errors which Richards discussed, often similar in nature to native language acquisition errors.

6. Performance Errors.

These are errors that are caused, in a first or second language, by physical variables such as memory limitations or shortcomings, physical slips and errors, false starts, etc.

Other factors that may come into play in the production of errors are the learner's sociolinguistic situation, age, means of exposure to the target language, and amount of exposure to the target language, for many errors are found to be caused by only a partial and incomplete exposure to the language being learned. There are surely numerous other sources for learner

errors, and the sources mentioned undoubtedly interact in ways as yet unknown.

Once the initial aversion to CA had ended, in the seventies, academics started to review CA in varying degrees to see what potential it still had as a teaching tool or helper, unwilling as many were to totally dismiss it.

CA as a method for predicting certain errors and points of difficulty is probably best regarded, at least for the present, as an experimental basis for research rather than a pedagogical panacea.
(Oller, 1971:79)

Taylor feels that, subsequent to its reappraisal, it is

...most often seen now as a subsection of...Error Analysis.
(Taylor, 1979:11)

Furthermore,

Error Analysis ...provides a check on ... (contrastive)... comparisons, and inasmuch as it does this, it is an important additional source of information for the selection of items to be incorporated into the teaching syllabus.
(Corder, 1973:275)

Contrastive Analysis has yet to be returned to the position of high status it once held, although even in its prime it was held to be only superficially predictive in its ability to divine potential interference other than phonological, although it was held to work quite well at the phonological level.

Studies of second language acquisition...have tended to imply that CA may be most predictive at the phonological level, and least predictive at the syntactic level.
(Richards, 1974:172)

This would seem apparent given the ostensible and relatively static nature of phonological systems, and the enigmatic and

obscure nature of most syntactic systems. Nonetheless, when confronted with different syntactic systems, and the various processes and transformations within these systems, it is possible, with some knowledge of the workings of the two tongues, and not merely a superficial look at two grammars, to divine and to some degree predict with 'better than chance accuracy' where a potential for problems may arise.

Rationale for Investigation

Japanese and English have markedly different syntactic systems, at least at the surface level. Japanese is a verb-final tongue, with a great native speaker preference for a SOV word order (See Kuno, 1973). Its relatively free word order is supplemented by a rigid case system. It is a left-branching and postpositional language. English, on the other hand, is a SVO language, with rigid constraints upon its word order. It is a right-branching, prepositional language. There are other obvious differences between the structure of the two tongues.

There are, for example, similarities and differences in the strategies employed for interrogation by the two. In English we can question via a rising intonation, via the insertion of an interrogative pronoun, via WH-movement, or, via aux-movement. There is a major categorical split, in English, between WH or constituent questions, which require a WH form and usually solicit a sentential reply, and the so-called yes/no questions,

most of which solicit a yes/no response. Many ostensibly simple yes/no questions are actually polite (or not so polite) requests, as in:

May I use the phone?

Can you turn that music down?

Japanese also uses simple questions as polite requests, but will occasionally use quite different methods for interrogation. The interrogative particle /ka/ is most often used, placed after the verb in sentence-final position. A rising intonation can be used, as it is in English. The interrogative pronouns, the Japanese equivalent of English WH words, do not have to be preposed to sentence initial position. There is no question movement in Japanese.

The two languages also differ in the types of answering systems they use. There are apparently two major types of answering systems employed by the world's languages, with certain languages making minor modifications to the systems they use (See Pope, 1973). English has a positive-negative answering system, whereby

...an answer is negative if it contains a sentential negation in its highest clause, and positive if it doesn't.

(Pope, 1973:482)

Japanese, on the other hand, employs an agreement-disagreement system, whereby

...an answer is agreeing if it matches the question with respect to negativity, and disagreeing if it doesn't.

(Pope, 1973:482)

The two languages differ in respect to their systems of interrogation, but are polar opposites in terms of the types of answering systems they use. This could lead to problems should the speaker of Japanese attempt to learn English, or vice versa.

The answering systems will, theoretically, treat positive questions in a similar manner. For example:

Have you eaten?

1. No, I haven't.
2. Yes, I have.

Tabemashita ka? (Have you eaten?)

1. Iie, tabemasen deshita. (No, I haven't.)
2. Hai, tabemashita. (Yes, I have.)

It is, however, when we are dealing with negative questions that the answering systems will show us the potential for problems.

For example:

Haven't you eaten?

1. No, I haven't.
2. Yes, I have.

Tabemasen deshita ka? (Haven't you eaten?)

1. Hai, tabemasen deshita. (*Yes, I haven't eaten.)
2. Iie, tabemashita. (*No, I have eaten.)

One can see the potential for confusion and misunderstanding should the differences not be impressed upon the learner. Even so, empirical confirmation of interference was needed before steps could be taken to place emphasis upon the teaching of this difference. The empirical confirmation would be

derived from an analysis of realized errors predicted through a Contrastive Analysis of the two syntactic systems.

The following discussion will centre around the processes involved in the two interrogative and answering systems, as well as discuss previous works and literature relevant to this study. An attempt will be made to investigate the hypothesis that Japanese learners of English will use Japanese question answering strategies in the answering of English negative questions until the time that they have mastered the correct English form. The learners will be using an 'Interlanguage' of their own devising, speaking in English with English syntax and vocabulary, but using Japanese transformations and processes (See Selinker, 1974).

We are not looking here at acquisition orders, or first and second language syntactic development, but at the alleged and predicted transfer between the different answering systems of an IndoEuropean and a non-IndoEuropean language. Empirical proof will be discussed justifying the claims made regarding the native English speakers methods and the Japanese learner's methods of dealing with questions of this type in English.

Finally, the implications of this study will be discussed. If the data gathered in this study supports the hypothesis, then it will strengthen the stance of a Contrastive approach, within an Error Analysis framework, as well as provide practical information that could lead to the revision of, and the incorporation of this information into, relevant curricular

material.

II. PROBLEM STATEMENT AND LITERATURE REVIEW

Coulthard (1977) says that Firth urged us to study conversation, for

...it is here that we shall find the key to a better understanding of what language is, and how it works. (Coulthard, 1977:1)

Discourse is not a series of unrelated remarks, but it is a cooperative effort. Both or all participants in a conversation agree to cooperate, and mutually accept a direction for the conversation, for at each stage of the conversation moves may be made that can be deemed unsatisfactory (Grice, 1975).

It seems that what a speaker says relates to the previous speaker's utterance and is relevant to it in both speakers' minds. Thus a speaker doesn't say just anything, or even anything that may be related in his mind to what the previous speaker has said, but makes sure his utterance will be relevant from the previous speaker's viewpoint too. (Vander Brook et al, 1980:58)

It is only through studying what learners actually say, in the context of situation, presupposition, and expectation, that we can divine the processes that brought them to the point of uttering what they did, and the way they did it. There are, however, problems that will arise when we try to perceive the processes that occur at a deeper level than that which we observe on the surface.

Much of language is hidden from the scientific observer, and linguistic forms and relationships can often only be ascertained in the context of discourse structure. Semantic

fields overlap and are often vague, and are often hard to assess or describe in their various manifestations. Pragmatics is context-bound, and can only reasonably be assessed in a sociolinguistic framework. The structure of the syntax of a language is often apparent, but it consists of processes and transformations whose complexities mere trees, diagrams, and rules often fail to capture. It is therefore not unreasonable to assume that a CA of the syntax of Japanese and English would fail to capture some unforeseen differences, and the errors resultant from these, as well as predict some errors that may well not be made manifest.

The understanding of the syntax of an utterance is primary to the understanding of the utterance itself, so if syntactic interference occurs, and syntactic difficulties arise for the learners, it will affect all aspects of their proficiency in the target language.

Questions

All sentences have both syntactic form and semantic content. Questions, being sentences, as well as logical components of a higher logical interrogative form, will have both syntactic form and semantic content too, as well as a social role, question asking being a social phenomenon. A discussion of questions, and answering systems, in the grammars of two different languages, must first look in depth at what, in fact, a question really is, at what an answer is, and how the

two relate. Questions are entities that are '...often assumed, but never defined' (Bolinger, 1957:1). We must, therefore, attempt a definition. A question is, fundamentally, a request for information. It has been called a sentence '...in an interrogative mood' (Aqvist, 1965:46).

If we ask a question, it is usually because we want to know the answer, so that a typical theme of an interrogative is a request for information.
(Halliday, 1970:161)

A question can also be a request for action.

I venture to say that a question is fundamentally an attitude, which might be called a 'craving' - it is an utterance which 'craves' a verbal or other semiotic (e.g. a nod) response. The attitude is characterized by the speaker subordinating himself to the hearer.
(Bolinger, 1957:4)

Aqvist (1965) and others consider questions to be 'epistemic imperatives', requests to remove speaker ignorance.

The questioner asks the listener to supply him with some information, to make him know a certain thing. Thus the logic of questions is a combination of the logic of knowledge, known as epistemic logic and of the logic of requests.
(Wachowicz, 1978:157)

Questions can be slotted into a multiplicity of category types. (Kearsley (1976) and Bolinger (1957) both discuss this in depth.) Questions can be verbal or non-verbal, non-verbal questions being either overt or covert. Verbal questions can be either direct or indirect, the latter exemplified by the statement

It's cold in here.

which may be, in reality, a request for the action of closing the window. Questions of this type can also be declaratives with

an embedded particle, such as

I wonder where John is.

Direct questions can be either open or closed. Closed questions can be one of three types; specified alternate,

Do you want milk or beer?

tag,

You're going, aren't you?

or intonation,

You're going?

Open questions, which include all WH questions, can be simple,

What did you eat?

complex,

You smoked what at whose place?

or embedded,

He said he went to whose place?

All questions can be expressed in a positive or a negative fashion, depending upon the situation, context, and presuppositions involved. All languages have the capacity to ask either negative or positive questions.

Kearsley (1976:169) cites the four functions into which questions can be classified.

1. The first function or question type is that of the echoic question, questions demanding repetition or confirmation of a previous utterance. These are questions such as

Pardon?

or,

You ate peas?

2. The second function is that of the epistemic function, questions asked to acquire information. These can be either referential or evaluative. Referential questions are asked to acquire information about the contexts involved, e.g. events, situations. Most WH questions are of this type.

How are you?

What time did you get here?

Evaluative questions are asked to gauge the hearer's knowledge of the answer. This question type is used in tests, interviews, questionnaires, etc., where the speaker already knows the answer, but is merely investigating the hearer's knowledge. These are commonly asked of children.

What colour is this book?

3. Questions of the third type, the expressive function, are ones in which an emotion or attitude is expressed in the asking of the question, and it is often asked independently of any search for information. An example of this type would be the impatient speaker asking

Are you coming or aren't you?

4. The final question function is that of the social control question, another type asked independent of any information seeking context. It is the question asked for the sake of getting attention,

Know what?

or for the sake of conversational politeness or verbosity, questions asked merely to sustain the conversation, as in

How was your trip to Moose Jaw?

The situation and context involved will determine the function and form of the question, as well as its mode and content. For example, most expressive questions are in the closed form.

Questions arise due to conceptual conflict, and serve to reduce uncertainty as well as 'relieve epistemic drive' (Berlyne, 1965). The questioner tries to maintain constant and consistent beliefs, and fills in the gaps in his/her cognitive model through the asking of questions. These 'gaps' are composed of the six basic reference frames; space, time, properties, causes, procedures, and roles. WH questions will attempt to select an appropriate reference frame, while closed form questions, yes/no questions for example, will attempt to elicit information from within a particular reference frame, as will specified-alternate questions.

Neither a question nor an answer is an autonomous linguistic unit. A question is an incomplete sentence without an answer (Hiz, 1978:211). Mishler (1975) extends this concept by stating that even the question-answer unit is not an isolated whole, but that there is a mode of authority exerted in the asking of a question, so the actual interrogative unit consists of question, answer, and finally, speaker confirmation. Asking a

question

...indicates a state of doubt, ordinarily, but a state of information as well.
(Aqvist, 1965:138)

So it is inconceivable that we can adequately discuss the concept of 'question' apart from that of 'answer', and we must do this in a language specific context. We will therefore discuss, in depth, the yes/no question as it is manifested in Japanese and English.

Yes/No Questions

The yes/no question will allow for only two major answer types to fulfill hearer responsibility, yes or no, a negative or a positive response. Partial hearer responsibility may be achieved through an adverbial response of 'maybe', 'possibly', 'sometimes', or a response of this type, or the hearer could choose not to respond at all. A response of this type, or no response at all, could, however, lead the speaker to believe either that the hearer does not know the answer, is not willing to disclose the answer, or that the hearer is not willing to participate in the conversation. Grice (1975) feels that the speaker and hearer in a conversation are co-operating by observing certain rules, or 'Conversational Postulates', laid out as follows:

1. QUANTITY.

Make your contribution as informative as is required (for the current purposes of the exchange).

Do not make your contribution more informative than is required.

2. QUALITY.

Do not say what you believe to be false.

Do not say that for which you lack evidence.

3. RELATION.

Be relevant.

4. MANNER.

Avoid obscurity of expression.

Avoid ambiguity.

Be brief. (Avoid unnecessary prolixity.)

Be orderly.

(Grice, 1975:46-47)

A partial response, or no response at all, could lead the speaker to believe that the hearer has violated either the maxim of Quality or of Quantity, and allow the speaker to opt out of the conversation. Even so, responses of this type, or no response at all, may be valid behaviour in certain circumstances.

Yes/no questions in English, also known as closed questions, polar questions, or general questions (Bolinger, 1957:87), can be formed by an auxiliary movement rule, or by raising speaker intonation at the end of a declarative. We are here interested in the former type. There is, with yes/no questions, what can be called a 'statement-question' pair or relationship. All yes/no questions will have a corresponding

declarative sentence, a sentence presupposing one of the possible responses to the question. An example of a 'statement-question' pair is:

DECLARATIVE - Yoichi can speak Spanish.

QUESTION - Can Yoichi speak Spanish?

Given a declarative sentence containing one or more helping verbs, a question can optionally be formed simply by moving the first such verb to the left of the subject.

(Baker, 1978:61)

This is known as 'auxiliary movement', probably the most common question marker. (Bolinger, 1957)

If there is no auxiliary verb,...we can...add an appropriate form of 'do' to the left of the verb. (Akmajian & Heny, 1975:14)

For example:

DECLARATIVE - Naoko ate.

QUESTION - Did Naoko eat?

Quirk et al(1972) call this 'do-periphrasis'.

In the teaching of English in a language class special emphasis must be placed upon the teaching of the placement of BE and AUX in questions, as well as on the do-periphrasis phenomenon. Question-statement pairs also exist in Japanese, although there is no question movement in Japanese, so this may pose a problem for the Japanese student of English.

For example:

DECLARATIVE - Anata wa gakusei desu. (You are a student.)

QUESTION - Anata wa gakusei desu-ka? (Are you a student?)

All questions presuppose one of their possible responses (Malone, 1978:67). A yes/no question will presuppose either the affirmation or negation of its corresponding declarative, the only informative alternatives. A question can be relevant, and it can be proper, but a question can never be 'true', only its corresponding statement can. An incorrect question is not a false question, but merely a question with an invalid presupposition. Every yes/no question must also presuppose that

A.) The speaker believes that the addressee knows whether S; and,

B.) The speaker wants the addressee to tell him S.
(Wachowicz, 1978:157)

In English, for a positive yes/no question a yes response means

Yes to your question statement,

a verbatim repeat of the question statement, while a no response means

No to your question statement.

The negation of a positive yes/no question, as well as the contradiction of a negative yes/no question, are entailed in the asking of the question.

Harris (1976) considers yes/no questions to be derived from a disjunctive source, involving the alternate forms of the statement and the negated statement in question. Thus the deep structure of

Will Charles come?

will actually be

Will Charles come or not?

or

Will Charles come or will Charles not come?

The entire response is predicated and the negation is presupposed along with the potential positive response to the question. This phenomenon is exhibited in the surface structure of languages such as Chinese, where a common question marker is the disjunctive question type.

For example:

Zhi shi hao buhao? (Is this good or not good?)

It apparently occurs in English as well, for otherwise we would have a variety of yes/no question and answer types.

Bolinger (1978) states that yes/no questions are not alternate questions, as Harris asserts, and uses semantic evidence as justification for this stance. There is, however, considerable and weighty opposition to Bolinger's stance, and yes/no questions are often considered to be '...syntactic degenerations of alternative questions' (Karttunen, 1978:165). Yes/no questions are questions that will give either the positive or negative aspect of the question as a statement. It is looking for one of these forms (Kuroda, 1979).

Katz and Postal (1964) insist on the existence of a Q-morpheme, which acts as a catalyst for interrogative structures. Semantically it is of the form

I request you to tell me whether ...X.

Thus,

Who is coming?

is constructed

Q-morpheme WH someone is coming.

and is similar in meaning to

I request you to tell me who is coming?

Regardless of the deeper structures of most question types, however, we still must deal with the surface phenomena that are central to this discussion.

Negation and Presupposition

Yes/no questions require a confirmation or denial of the assertion of the question. A question can be worded to express a negative, positive, or a neutral expectation, depending upon the context and intent involved. A positive statement X can be negated by the insertion of

It is not so that...

before statement X (Jackendoff, 1969:218).

Negation in discourse 'presupposes' an abundance of shared knowledge. It is a pragmatic function of language, not logically predictable, and is therefore different from negation in logic (Givon, 1978).

In natural language, there can normally be only one negative feature per predication.
(Leech, 1974:154)

Even so, this feature is not predictable outside of the pragmatics of the situation. Negation in language is used to correct or affirm beliefs, or to dispel ignorance. It is strongly marked for presupposition, where the presupposition of

of a negative statement is its corresponding affirmative. Negative questions are often not considered 'negative' in a logical sense, for even under negation they retain some positive truth value.

A presupposition is whatever has to be assumed to be true in order for an utterance to be meaningful. A statement is a presupposition of a question if the truth of the statement is a necessary condition of the question's having some true answer. Where an assertion can be questioned, and negated, a presupposition can't (Katz, 1972).

When a sentence is negated its presupposition is still valid. For example, whether we ask

Did John go into the room?

or

Didn't John go into the room?

the presupposition of John being out of the room is still valid. The negation of a sentence or statement is a denial of the truth value of the statement, but a validation of the presuppositions involved. This is what Leech calls the 'negation test'. (Leech, 1974:294)

There are three closely allied terms that warrant clarification before further discussion. These are:

1. ENTAILMENT.

Entailment is the relation between two assertions where -

- if X is true, Y must be true.

- if Y is false, then X must be false.

For example:

X - He married a blonde heiress.

Y - He married a blonde.

2. PRESUPPOSITION.

Presupposition is the relation between two assertions where anyone who utters X takes for granted the truth of Y. For example, question X,

Have you stopped beating your wife?

presupposes statement Y,

You used to beat your wife.

Katz (1979) however, considers that presuppositions are only valid for declarative sentences, not for questions. The line of reasoning behind a question of this type is therefore not a presupposition, but a predication upon which other predications are built. For the purposes of this paper, however, the definition of presupposition will stand as cited.

3. EXPECTATION.

Speaker expectation is a weaker form of belief than presupposition. It seems to

...derive typically from the principle that when an assertion is negated, some of its content ...can... remain positive.

(Leech, 1974:324)

For example, the sentence

If we were married, we would be happy.

expects that

We are not happy.

while the sentence

Few girls will come tonight.

expects that

Some girls will come tonight.

These then are the three major semantic categories behind speaker intent.

One of the ways in which questions differ from statements is that they cannot have entailments, only presuppositions. Thus,

'How's your wife?'

does not entail, in the normal sense,

'Your wife is well.'

or

'Your wife is ill.'

but as the question is normally uttered it does allow us to conclude that the speaker is under the definite impression that the hearer is married.

(Newton:48)

A statement can have an entailment, a presupposition, and an expectation, while a question can have only the latter two. A question, in itself, cannot be false. It can have an invalid presupposition, or even a valid yet 'risky and unsafe' presupposition, but a question, being a request for information, clarification, or action, cannot be false (Aqvist, 1965). All proper yes/no questions are logically equivalent, in that they all have only valid presuppositions.

The presupposition of a given entity is often shown by the nature of the syntax involved. If X presupposes Y, Y can be either negative or positive, and it can be an assertion or statement, a question, an exclamation, or a command. The level and type of presupposition will also decide the question type, negative or positive.

The context of a presupposition is the 'common ground' or 'shared knowledge' that is an essential component of discourse. In any conversation there is a body of speaker-hearer shared knowledge, knowledge which is not in dispute. There may be a problem concerning a participant's 'degree of commitment' to this body, or to invalid or 'risky' presuppositions, which may arise, but the shared knowledge remains nonetheless (Kempson, 1975).

Indirect Requests

An interesting aspect of questions is that they are often not questions at all, but indirect requests, or even invitations. Meaning, as Searle (1975) points out, consists in part of some intention to produce understanding in the hearer. This understanding may be a request for action. For example, when the guest says

It's cold in here.

he may actually mean

Please close the window.

an indirect request. Questions can also be used as requests,

indirect or otherwise. These can be positive questions, as in

Can you pass the salt?

or negative questions, as in

Can't you be quieter?

A positive request for action can be conveyed by a negative or a positive question, while it is impossible to convey a negative request with a question, as in

Don't do that.

(Gordon & Lakoff, 1975)

Davison (1975) disagrees, and states that negative questions cannot be indirect requests, because of the strong assumptions held by the speaker of a negative question. The hearer is usually expected to confirm or deny the assumptions held, and the negative question is therefore assumed not to be an applicable form of the indirect request.

These are instances of 'primary' and 'secondary' illocution, which often require a native-like ability in the language to fathom the intent behind the speech act (Searle, 1975). For example, the speaker of the above question doesn't doubt the hearer's ability to pass the salt, but the form of the question is a polite request, and gives the hearer a limited option of refusing the request. These indirect requests appear to be very language specific, and a request in English may be nonsensical as a request in Czech or Japanese.

In Japanese,

...forms which incorporate negatives, usually to be understood in a rhetorical sense, are felt to be on a

higher level of politeness than those without such negation.

(Miller, 1967:282)

Invitations are often expressed in a negative fashion in Japanese, to show deference to the hearer's wishes. The negatively phrased invitations will, however, most always have a presupposition of a positive answer or acceptance. They are answered in the same manner as a positive question.

Eiga ni ikimasen ka? (Won't you come to the movie?)

Hai, ikimasu. (Yes, (I will) come.)

Iie, ikimasen. (No, (I won't) come.)

(See Martin, 1962:364-365.)

It is appropriate to mention here the rhetorical yes/no question, found in both Japanese and English. These are questions where the question itself shows the correct or expected answer, questions like

Don't you want to grow up big and strong?

or

Is it necessary to shout like that?

(Pope, 1976)

In a certain sense, these questions are not even expecting an answer, but are merely spoken to point out the speaker's views.

Negative Questions

Semantic considerations weigh heavily in the speaker's decision to ask a negative question. Apart from polite invitations and indirect requests, the role of speaker expectation is deeply involved in the asking of these negative yes/no questions. There is, in discourse, a great connection

between speaker/hearer expectation, and a 'cancelled expectation' on the part of the speaker seems to be a major factor in the decision to ask a negative question.

Negative assertions have a 'cancelled expectation' as well as an 'actual expectation'.

For example, the assertion

'Few people died in the flood.'

has the cancelled expectation that

'Many people died in the flood.'

and the actual expectation that

'Some people died in the flood.'

(Leech, 1974:319)

Negative questions also have an actual expectation and a cancelled expectation. For example, the question

Aren't you eating dinner?

differs from its positive counterpart,

Are you eating dinner?

in more ways than its surface negation. It allows for a dual assumption on the speaker's part, in that the speaker thought that the hearer was going to eat dinner, but it now appears that the hearer won't eat it. There remains, however, the possibility of a negative or a positive reply to the question, or to any question asked, despite presuppositions and expectations, or the question would not have been asked. The phrasing of the question merely illumines the speaker's expectations. A direct negative yes/no question 'con conversationally implicates' the speaker in having, or once having, a definite opinion on the matter in

question.

In one sense, the negative question still reflects the original and cancelled expectation of the speaker, for one may ask

...a negative question if one expects that the answer to the corresponding affirmative question will be 'yes'.
(Langendoen, 1970:169)

For example, the question

Aren't you coming?

will suggest that the speaker originally expected the hearer to come, and this expectation was somehow modified to lead the speaker to believe that the hearer may now not be coming. The speaker will, however, still expect a forthcoming positive reply to affirm his/her original expectation. The original expectation or belief is that which was held prior to the event which prompted the asking of the question.

If the speaker expects a negative reply to a question, or has a neutral expectation, or no expectation, a positive question will, in most cases, be asked, as in

Can you babysit my tarantula tonight?

The negative counterpart to this question will only be asked if the speaker expected the hearer to babysit the tarantula, and had this erroneous expectation cancelled. Further proof of a substantial speaker expectation in the asking of a negative question can be found in the fact that many negative questions are actually leading questions, such as

Haven't I met you somewhere?

where the speaker is expecting an affirmative reply, or

Weren't you at the scene of the crime?

where the speaker is hoping for an affirmative reply.

Syntactically, English negative questions are considered to be closer to disjunct questions than their positive counterparts, in that only the positive aspect of the question has been omitted (Pope, 1971).

In Japanese it appears that it is not as important, in the asking of a negative question, to have the syntactic negation (-masen or -nai) as it is to have the syntactic negation coupled with a semantic negation. This system will allow the hearer more freedom in the interpretation of the speaker's intention than will the English system. For example, the Japanese speaker may ask

Tanaka-san wa, kimasen deshita-ka? (Didn't Mr. Tanaka come?)

1. If the question is interpreted as '(I thought he came, but) didn't Mr. Tanaka come?' then:

Hai, kimashita. (Yes, he came.)

Iie, kimasen deshita. (No, he didn't come.)

Positive presupposition.

2. If the question is interpreted as 'Mr. Tanaka did not come, right?' then:

Hai, kimasen deshita. (Right, he did not come.)

Iie, kimashita. (Wrong, he came.)

Negative presupposition.

(Soga & Matsumoto, 1978:65)

Kuno considers that the

...deciding factor is whether the questioner is expecting a negative answer from the hearer. Therefore, ... (example 1) ... is not, semantically speaking, a negative question, but an affirmative question with a tag at the end.
(Kuno, 1973:274)

Most English negative questions are of the former type, as exemplified in example 1, negative questions with a positive presupposition and a degree of modified speaker expectation, while negative questions in Japanese can be of the former or the latter type, and both are quite common.

This difference in the structure of negative questions between the two tongues will, however, cause only minor interference, for it is the answering systems, and the answers to these questions which turn out to be problematic for the learner. It is the answering systems which differ, and cause the learner confusion and problems when learning the new language. This is where the hypothesized negative transfer will occur.

Answering Systems

We will begin with a discussion of the English answering system, follow through with the Japanese answering system, and conclude with a comparison of the two.

English Answering System

A question is a request for information or action. A possible answer is 'one which would satisfy the questioner if it were true' (Hintikka, 1974). Yes/no questions can be either positive or negative, as can the answers to the yes/no

questions. There are, therefore, four possible categories of answers in English, with only two morphemes in operation at present, yes and no. We had, in 16th Century English, a more complicated four morpheme system, which has collapsed over time.

1. Yea was used in agreement with a positive question.
2. Yes was used in disagreement with a negative question.
3. No was used in agreement with a negative question.
4. Nay was used in disagreement with a positive question.

It is interesting to note that it is the answers to negative questions ('yes' and 'no') that have survived. (Pope, 1973:491)

Disagreement in an answer can be considered to be a form with semantic content, while agreement with a question is void of semantic content, and is merely a verbatim repeat of the question statement. We have collapsed the English answering system to a two morpheme system, where 'yes' is used as a positive answer to both negative and positive questions, and 'no' is used as a negative answer to both positive and negative questions.

A minimal answer is one in which there is a 'no' or a 'yes' with no qualifying tag.

Even though negative yes/no questions usually seem to expect a positive answer, the fact that they are negative takes precedence in determining the form of the possible minimal answers. (Pope, 1976:112)

Syntactically however, the form of the question in English, be it positive or negative, seems to be somewhat irrelevant in the answering of the question. It merely points out what the

speaker's presuppositions and expectations are in the asking of the question. If the action is positive, or past, we will answer 'yes'.

Have you eaten?
Yes, I have.

Haven't you eaten?
Yes, I have.

If the action of the verb is negative, or has not occurred, we will answer 'no', regardless of the negative or positive phrasing of the question.

Don't you drink?
No, I don't.

Do you drink?
No, I don't.

Akiyama et al (1979) suggest that questions may be simpler than statements, and that the 'underlying topic in question may be compared directly to knowledge'. We can therefore ignore the negative in an English negative question. The negation is deleted before we compare the question to knowledge. This is similar to a method employed in the teaching of English tag questions, where the students are told to ignore the tag, and answer the question as it is stated without the tag. Therefore,

You've eaten, haven't you?

would be treated like

Have you eaten?

or

You've eaten?

and

You haven't eaten, have you?

would be treated like

Haven't you eaten?

or

You haven't eaten?

The answer is a self-contained syntactic unit in English, and has only semantic reference to the question. All sentences have both syntactic form and semantic content, and what is considered 'semantic difficulty', for example, by the Japanese student of English attempting to answer an English negative question, is actually an incongruity between the perceived semantic content and syntactic form.

In English we practice a 'positive-negative answering system', whereby

...an answer is negative if it contains a sentential negation in its highest clause, and positive if it doesn't.

(Pope, 1973:482)

We will use:

1. Yes as an agreement with a positive question. (Positive agreement)
2. Yes as a disagreement with a negative question. (Positive disagreement)
3. No as an agreement with a negative question. (Negative agreement)
4. No as a disagreement with a positive question. (Negative disagreement)

Positive disagreement is semantically the most difficult answer

to produce, and it is specially marked in many languages, such as German, French, and Norwegian. Bellugi (1967) states that this category is the last of the four acquired by children learning their native English. Bellugi's research validated Pope's (1973) contention that the 'more semantically difficult a category is the later it will be acquired'. Bellugi goes on to state that children will use positive agreement and negative disagreement sooner than negative agreement, and especially positive disagreement. The results of experiments done by Akiyama et al (1979) seem to confirm this order.

A common view held is that English yes/no questions are answered via a verification of the statement form of the question (Clark & Chase, 1972; Akiyama et al, 1979). There are, in this 'Verification Model', four statement/question types.

1. True affirmative - A robin is a bird.
2. False affirmative - A robin is a rock.
3. True negative - A robin isn't a rock.
4. False negative - A robin isn't a bird.

Verification and question answering are considered to be identical processes, where verification is primary to question answering. In this model, addressing a negative will take longer than a positive because of a 'mismatch between the statement and knowledge'.

The 'Verification-Primary Hypothesis', an adaptation of the 'Verification Model' states that

- ...in order to answer a yes/no question we must
1. convert the question to a verification.

2. derive the underlying representation of the statement.
 3. retrieve the relevant knowledge.
 4. compare the two representations.
 5. convert the outcome of (4) from true or false to yes or no.
 6. respond yes or no.
- (Akiyama et al, 1979:367)

Sentence types are determined by the truth value of the underlying proposition.

Japanese Answering System

Japanese uses an 'agreement-disagreement answering system', whereby

...an answer is agreeing if it matches the question with respect to negativity, and disagreeing if it doesn't.
(Pope, 1973:482)

English has both sentential and noun-phrase negation, as do most languages using a positive-negative answering system.

Japanese has only sentential negation, the *-masen* or *-nai* forms attached to the main verb. Most languages with only sentential negation use an agreement-disagreement answering system.

The Japanese terms 'hai' and 'iie' correspond roughly to the English terms 'yes' and 'no', although they are better translated in the terms 'right' and 'wrong', or 'I agree with you that...' and 'I disagree with you that...'.
'

The words *hai* and *iie* are used to mean 'what you've said is correct' and 'what you've said is incorrect'. So if you state a question in a negative way, the standard Japanese answer turns out to be the opposite of standard English 'yes' and 'no', which affirm or deny the FACTS rather than the STATEMENT of the facts.

Kumamoto e ikimasen deshita ka?
(Didn't you go to Kumamoto?)

Hai, ikimassen deshita.

No, I didn't. (Literally:*Yes, not go did.)

Iie, ikimashita yo.

Yes, I did indeed. (Literally:*No, went indeed.)

(Martin, 1962:364-365)

Standard grammars have always translated 'hai' as 'yes' and 'iie' as 'no'. There is, however, a difference.

If the speaker's presupposition is positive, the use of hai 'yes' and iie 'no' are the same as in English. If the speaker's presupposition is negative the use of hai and iie are entirely different from English.

(Soga & Matsumoto, 1978:65)

Even so, when a speaker seeks information to substantiate his positive presuppositions, the answer may also be Hai, ...-masen, Yes, with a negative verb in the tag (Soga, 1973). Yes and no as an answer to a Japanese question 'are directed to an assumption about the propositional content held by the interrogator' (Shibatani, 1972).

The Japanese system is structured along the following lines:

1. Hai is used in agreement with a positive question. (Positive agreement)
2. Hai is used in agreement with a negative question. (Negative agreement)
3. Iie is used in disagreement with a positive question. (Negative disagreement)
4. Iie is used in disagreement with a negative question. (Positive disagreement)

This structure would appear to strengthen the stance of the 'Verification Model'. Agreement or disagreement with the

question is in reality an agreement or disagreement with the statement behind the question, and will account more fully for the speaker's stance in the asking of the question.

When a question is put negatively, the speaker of standard Japanese usually replies to the FORM of the question rather than the CONTENT. Accordingly, the answers to

Banana wa nai ka?
Don't we have bananas? (Do we lack bananas?)

are

Hai, banana wa nai.
No, we haven't. (Yes, we lack them.)

and

Iie, banana wa aru.
Yes, we have. (No, we don't lack them.)

...But, if the Japanese negative is just a formal device ...as in a rhetorical question (or polite request)...the underlying CONTENT is answered.
(Martin, 1975:368)

So it is not so much the existence of the syntactic negative (-masen or -nai) that the hearer addresses in the question, but the existence of the semantic negative, the presuppositional or expectational stance taken by the speaker in the asking of the negative question. When there is an apparent positive expectation or presupposition on the part of the speaker the negative question is answered as it would be in English, but when there is a negative or neutral presupposition or expectation the negative question is answered differently from English. Kuno(1970, 1973), Shibatani(1972), Soqa(1973), and Soqa & Matsumoto(1978) will all attest to this.

1. A negative question with an anticipation of a positive

answer will be answered 'hai' in the affirmative and 'iie' in the negative.

2. A negative question with an anticipation of a negative answer will be answered 'hai' in the negative and 'iie' in the affirmative.
3. A negative question with no anticipation of a positive or negative answer will be answered 'hai' in the negative and 'iie' in the affirmative.
4. All positive questions will be answered 'hai' in the affirmative and 'iie' in the negative.

In Japanese the answer is not really a self-contained syntactic unit, as it is in English, for the syntactic structure and semantic content of the question are both taken into account in the answering of the question. This is what Martin (1975) meant when he discussed the Japanese speaker addressing either the FORM or the CONTENT of the question.

The Japanese speaker will use:

1. Hai for positive agreement. (PA)
2. Hai for negative agreement. (NA)
3. Iie for positive disagreement. (PD)
4. Iie for negative disagreement. (ND)

These are, however, the forms used after the hearer has decided the presuppositional stance taken by the speaker, i.e. whether the speaker has a positive, neutral or negative presupposition.

There are, of course, exceptions to any rule laid down. A rule or law is proven to be valid by the existence of

exceptions. Intonation at the terminal string of a question, in Japanese or English, negative or positive, may infer a different sort of speaker intent and expectation, and bring about a positive or negative response. Intonation can manifest itself as a negative, neutral, or positive aspect of expectation in the asking of either a positive or a negative question in English or in Japanese.

Pertinent Studies on Acquisition

With the great interest in second language acquisition in the last two decades came renewed interest in first language acquisition as well. Burt & Dulay's L1-L2 Acquisition hypothesis states that

...the strategies of L2 acquisition are similar to those of L1 acquisition, e.g. the use of word order as the first syntactic rule, omission of functors.
(Burt & Dulay, 1974:108)

The hypothesis goes on to list the structures that have already been shown to be acquired in a similar order in L1 and L2 acquisition, forms including negation and yes/no questions.

It is therefore reasonable to assume that both first and second language acquisition research may be of use to the teacher of a second language.

Answering Systems

Pope (1973, 1976) and Bellugi (1967) point out the order of acquisition, for native English children, of answer types. It is

predicted, and to some degree validated by these studies, that the more 'semantically difficult' the form is the later it will be acquired by children. The research involved in the present study arrived at the same conclusions for adult Japanese students of English. The answer types, in order from the least difficult, and earliest to be acquired, are:

1. Positive agreement.
2. Negative disagreement.
3. Negative agreement.
4. Positive disagreement.

The first two categories are acquired simultaneously.

Hatch (1980) has discovered that when people talk to students of English they tend to use more yes/no questions, in lieu of WH questions, to make it somewhat easier for the students to answer. Because of this it is important for the student of English to be given an early grasp on the correct answer types to be used.

Negation and Contraction

Bahns & Wode (1980) found that negation is the first function to be associated with the different forms of 'do-support'. As 'do-support' is a very common means of forming a yes/no question, this study has some relevance to the present discussion. 'Don't' is acquired before 'do', and is the first form to be acquired for learners of English as a second language. The crux of their argument is that negative and

positive forms of the same auxiliary will be acquired in a different order, and not always the expected order of positive before negative. This will have a certain influence upon the learners' abilities to correctly handle negatives in the language, and to correctly handle negative questions when they are posed to them.

Maratsos & Kuczaj(1976) feel that the contracted form 'n't' is acquired before the form 'not' by native English children, and that children greatly prefer the contracted form with the auxiliary. To this end all negative questions used in this study were used with the contracted form of the negative.

Questions

Felix(1980) discovered that inverted forms of yes/no questions are acquired after yes/no questions which are marked suprasegmentally, for example, by tone. Thus,

You ate?

is acquired before

Did you eat?

She feels that both L1 and L2 learners will pass through this stage(Felix, 1980:104).

Vander Brook et al(1980), however, concluded that inversion in English yes/no questions is not optional, but dependent upon certain variables. The choice is not in a system or an interpretation of a system, but is found in the continuum of discourse. The speaker will try to be relevant to what he/she

has heard. The study arrived at no conclusion as to whether this was true for speakers of English as a second language as well.

Kearsley (1975) feels that, while WH questions are more frequent than yes/no questions in normal conversation, the percentage of yes/no questions exceeds that of WH questions in informal or one-to-one conversations, while the reverse is true in formal settings or in groups. In an analysis of discourse samples he found an average of 20% of conversation was composed of questions, while 70% to 80% of all questions asked were either WH or yes/no questions. To this end we can see the importance of teaching proper question asking and answering strategies to students of English, as interrogation and response play such an important role in every conversation.

Goody (1978) found that children are asked questions more frequently than adults. Questions to pre-verbal children are most often yes/no questions, or closed questions, where the mother or speaker

...need only interpret the general direction of her child's response as positive or negative.
(Goody, 1978:24)

It would be interesting to see if further research could fathom whether questions are asked more frequently to nonnative speakers and learners of English than to native speakers. Hatch (1980), cited previously, has already shown that people tend to use more yes/no questions than WH questions to nonnative speakers, much in the same way that mothers prefer this question type for their pre-verbal and infant children.

Akiyama's Study

An interesting and relevant study, for the purposes of the present research, was undertaken by Michihiko Akiyama at the University of Illinois in 1976. She operated on the assumption, as stated by Brown(1973) and Slobin(1973) that

...if a bilingual child acquires a particular mode of linguistic expression in one language earlier than in the other language, it implies that the linguistic form that is acquired earlier is simpler than the one acquired later.

(Akiyama, 1976:23)

Three groups were used in her study, English monolingual, Japanese monolingual, and English-Japanese bilingual children. She found that negative questions were harder than positive questions for both monolingual groups, although they were significantly harder for the Japanese monolingual children than for the English monolingual children. Also,

...when the bilingual children are asked questions in English they show poorer performance on the negative ones. When they are asked questions in Japanese, their performance on the negative ones falls below chance.

(Akiyama, 1976:28)

She therefore suggests that the bilingual children 'switch to the English answering system when they answer the negative questions in Japanese'. The answers they produced in Japanese were actually English answers, and therefore incorrect in Japanese. The children answered negative questions in the manner that is correct in English, but

...the same children have difficulty in answering the English negative tag questions, showing the effects of

knowing the Japanese language.
(Akiyama, 1976:29)

The conclusions drawn from this study are threefold:

1. The English answering system is more 'natural' to young children of age three to six.
2. Bilingual children answer Japanese negative questions using the English way, but have some difficulty in answering English negative tag questions.
3. The performance of bilingual children in the two languages is not consistent with that of monolingual children in their respective languages. This implies that two separate linguistic systems do not work in an additive way in bilingual children.

Akiyama's research relates to the present study in several ways. It stresses the important presence of native language interference in the acquisition of syntactic structures. It lends credence to the concept of 'competing systems', where the system that the speaker is more comfortable with, the simpler system for that speaker, will be used, in many cases, at the expense of the competing system. Her work also shows that the problems experienced by adult Japanese learners of English, as laid out in the present study, are also faced by children, monolingual and bilingual, when speaking either Japanese or English. Children will, when cognizant of the two systems, tend to confuse them in the answering of negative questions until, it would appear, they have sorted out the differences at a later stage.

Contrast and Comparison

It is a fact that language learners produce errors. The learner is an individual, surely, with areas of personal learning difficulty as well as areas of personal learning aptitude. Even so, the learner is still a learner, a speaker of another language attempting to break life-long linguistic habits in what usually constitutes an inordinantly small amount of time. The sources of this learner's errors have been proven to be various and diverse. Even after the wholesale abandonment of Contrastive Analysis few would have suggested that the learner's native tongue would have no effect on the learning of another language, or that there would be no 'negative interference' from the various systems within the learner's native tongue.

When a CA is used to predict all learner errors then it is being used improperly. This is clear from the evidence supporting the various sources for learner errors. But, even so, CA is still valid in predicting one of the major sources of learner errors, the transfer errors from native to target language. A foreign accent is the clearest proof of this, accents which are easily imitated, validated, and predicted by a study of the two phonological systems in question. Native phonological habits, once entrenched in the learner, manifest themselves as an inability to accurately produce the sounds of the new language on a consistent basis. This can be observed in virtually all adult language learners, which is proof of some

sort that there is such a phenomenon as 'negative transfer' that does occur in second language learning. To say, as some do, that this negative transfer may occur in phonology, but not in the other areas of the language, is a facile argument indeed. If the learner's native tongue will influence the production of the target sound system in such an obvious and predictable manner, there is nothing to stop it from influencing all other aspects of the target language as well. These negative transfer errors will occur in all aspects of the target language unless, in many cases, the correct form is taught early, either via an anticipation of the problem through a CA, an observation of the problem through an error analysis, or merely through the structure of the target language and the teaching methods and program.

Language students will always err, for failure and error are intrinsic components of learning. Systematic errors will, however, most often have a cause, or causes, from which they stem. We can classify two major types errors, interlingual and intralingual. Interlingual errors are those often experienced by beginning and intermediate speakers of the language, where they can be attributed in part to the interaction between the target and native languages. Intralingual errors are those often experienced by more advanced learners and speakers of the target language, and are found to be caused by inconsistencies within the target language itself, or within the learners, and are not due to the interactions between the two languages. There is, of

course, no evidence to support a clear cut division between interlingual and intralingual errors in the learner. Advanced and fluent learners of a second language will experience intralingual as well as interlingual errors, and the beginning and intermediate learners of a second language will experience both types as well. These labels represent two different sources for errors, but these sources interact in the learner in ways as yet unknown. It is the search for these sources of learner errors that both CA and EA are concerned with. It will be shown, however, that predicted errors decrease dramatically for the fluent and advanced speakers of English from the levels set by the beginning and intermediate learners.

Learners will tend to 'simplify' the target system to a system that they are comfortable with, Selinker's 'Interlanguage' being a good example of this (Selinker, 1974). To this end Meisel (1980) has developed a system of classification of simplification used by learners in acquiring the new grammatical system of the language. Simplification can be:

1. Restrictive simplification -

-whereby the new grammatical system is reduced to a simpler form, whether the learner be conscious of this or not.

2. Elaborative simplification -

-which is an elaborated restricted system, a further step towards the achievement of the grammatical system of the target language.

Meisel considers this to be one of the major sources of error

for the second language learner, and tends to agree with Felix(1980) that native language interference should be discounted, and is especially not a factor in the learner's production of second language syntax errors. This appears to be a major theoretical contradiction, for what will the learner simplify the target grammar to other than an approximated and modified version of his/her own native grammar. All steps in the simplification of the target grammar will be directly related to the structure of the native grammar, a system which the learner is more comfortable with and which is therefore much simpler for that learner. It may be, as Burt & Dulay attest, that a new system does develop, but it will still be closely related to the structure of the system in the learner's native language. Syntax errors can be predicted through a CA and comparison of the two grammars, and of the processes involved within these. Negative transfer can be hypothesized and validated in the arena of syntax.

A contrast of the answering systems of Japanese and English will predict no interference in the answering of positively phrased yes/no questions. The two systems will handle this type of question in a similar manner. However, the marked differences in the answering strategies for negative questions, as employed by the two tongues, will necessarily lead us to expect some negative interference from Japanese for the Japanese student of English, and from English for the English student of Japanese. There are, again, four answer types:

1. Positive agreement. (PA)
2. Negative disagreement. (ND)
3. Negative agreement. (NA)
4. Positive disagreement. (PD)

The answering systems will operate in the following manner:

1. A positive question in English will be answered by 'yes' for positive agreement and 'no' for negative disagreement.
2. A negative question in English will be answered by 'yes' for positive disagreement and 'no' for negative agreement.
3. A positive question in Japanese will be answered by 'hai' for positive agreement and 'iie' for negative disagreement.
4. A negative question in Japanese will be answered by 'hai' for negative agreement and 'iie' for positive disagreement.

It is apparent that the only real difference between the answering systems is in the method employed to deal with negative questions, which is where we would expect any negative transfer to occur.

Hypothesis under Investigation

We can therefore postulate an 'expected response error', an error predicted for the Japanese learner of English based on a comparison of the two answering systems. This error is the answer that, while it would be correct were the question asked and answered in Japanese, is incorrect in light of the workings of the English answering system. These are the 'negative agreement' and 'positive disagreement' forms used for answering

negative questions in Japanese. The Japanese system will use 'hai' for negative agreement, while the English system will use 'no'. Japanese will use 'iie' for positive disagreement, while English will use 'yes'. The 'expected response error' hypothesis will therefore state that the Japanese learners of English will answer English negative questions in the following manner:

1. Should the negative question demand a response with negative agreement, the Japanese speaker will respond with 'yes', an equivalent form to 'hai', while the native English speaker will respond 'no'. For example, to the question

Aren't you coming?

we will predict that the Japanese speaker will answer

Yes, I'm not.

and the English speaker

No, I'm not.

2. Should the negative question demand a response with positive disagreement, the Japanese speaker will respond with 'no', an equivalent form to 'iie', while the English speakers will respond with 'yes'. For example, to the question

Aren't you coming?

we will predict that the Japanese speaker will answer

No, I am.

and the English speaker

Yes, I am.

Speakers of a second language, or even of a native language, have the ability to understand far more than they can utter.

In any study of language, it is important to distinguish between what a speaker says and what he is capable of saying.

(Di Pietro, 1971:18)

This must be taken into account. What we inevitably end up testing in elicitation type research, or any research involving what a speaker actually says, is the speaker's performance rather than his/her competence in the language. A speaker's performance will, however,

...proceed only so far as understanding of underlying competence permits.

(Chomsky, 1965:10)

There may well be, especially for second language learners, a vast difference in their oral competence, and thus performance, and their written or formal competence and performance. We are not testing formal competence here though, but the oral performance as displayed by native speakers of Japanese in attempting to deal with and answer questions in an answering system diametrically opposed to their own.

The acquisition of the syntax of the questions is not an issue here, as an understanding of the questions is not an issue either, for without an understanding of the question the speaker would rarely attempt to answer it. The issue is whether a deep-rooted syntactic process in a native language will manifest itself as negative transfer in the speaker's attempt to use a similar yet different system in another language. To this end the following research was performed.

III. METHODS

Subjects

Fifty subjects participated in this study. Ten of these were native English speakers, used as a control group to better measure the effect that a person's native language has on his/her negative question answering ability. The ostensibly limited size of this control group can be accounted for in that, as has been discussed, it is apparent which processes are being used to answer negative questions in English. The control group served mainly as a means of validating statements made regarding methods used by native English speakers to deal with negative questions. The results of the control group, as will be shown, do tend to accentuate the differences between the two language groups in terms of question answering strategies employed in English.

The native English speakers were all unpaid volunteers, graduate and undergraduate students from Simon Fraser University. The youngest subject was under 19 years of age, while the oldest was 31. The average age was 23.5 years of age. There were 4 female subjects and 6 male. These ten subjects constituted 20% of the subjects tested.

Forty subjects, or 80% of the subjects tested, were native speakers of Japanese, all of them born in Japan and presently

attending classes in the Vancouver area. The youngest subject was under 19 years old, and the oldest was 37. The average age of the Japanese population was 23 years . There were 17 female subjects, representing 42.5% of the sample, and 23 male subjects, representing 57.5% of the sample. The average age of the English and Japanese groups were evenly matched, differing by only 0.5 years. While 42.5% of the Japanese population was female, 40% in the English group were also female, so again the two groups were relatively evenly matched for sex. Age and sex were originally not deemed to be overly pertinent variables in this study, and were therefore not as rigidly controlled as other variables. Even so, relative parity was achieved between the groups in the distribution of age and sex types. The Japanese sample were all foreign students, and all were unpaid volunteers. Most were enrolled in ESL classes at Columbia College or the University of British Columbia Language Institute, while others were foreign students enrolled at Simon Fraser University. Some were students at a Japanese 'Saturday School', children of visiting Japanese businessmen enrolled in English speaking schools who study Japanese and Japanese related courses to alleviate the inevitable hardships of their return to the Japanese school system. A cross-section of different students from different educational institutions was used to ensure that a particular teaching style, method, or group of materials did not come into play as a variable. Roughly 25% of the sample came from each of the four educational institutes

mentioned. All forty subjects had Japanese as their native language.

All participants were asked to state the length of time that they had resided in an English speaking country. A statement as to the length of time that they had known or studied English would not have been sufficient, as the Japanese school system starts English language training at an early stage, but students will generally acquire little other than a reading competence of the language. Length of time that the subjects had lived in an English speaking country, and been forced, to some degree, to use the language, was felt to be a more relevant and verifiable variable.

The research involved in this study was confronted by a problem of some theoretical magnitude, in that not only did the learners' oral competence far exceed their oral performance, as was to be expected, but, because of the rigours of the Japanese Educational System, and the underlying emphasis upon passing rather than learning, the learners have developed a formal written competence and performance which far outweighs any achievements in their oral competence or performance. Nonetheless, when asked to assess their own English speaking ability, an assessment that was found to be quite reliable, 28% assessed themselves as 'beginning' speakers of English, 38% 'intermediate', 23% 'advanced', and 10% 'fluent'.

The Vancouver area has a rather large Japanese population, including the Steveston fishing area, as well as the downtown

Powell Street business area. Only foreign students born and raised in Japan were used in this study, however. This was done to establish a more homogeneous sample, and to discount the effect of dialectal variations peculiar to the Vancouver Japanese community.

The sample used in this study is at once both a 'convenience sample' and a 'judgement sample'. It is a convenience sample in that only available Japanese and English students from the Vancouver area who were willing to participate have been used, while it is the latter type in that the cross-section to be sampled was subjectively chosen from an enormous potential sample size. This larger potential sample was not used, for it would have introduced variables outside the scope of discussion of this study. These variables include great dialectal idiosyncracies peculiar to sections of the local Japanese communities, as well as enormous sociolinguistic considerations, involving rural fishing and farming groups as well as urban businessmen and entrepreneurs. The local populations are filled with recent immigrants as well as third and fourth generation Japanese Canadians, so the amount of exposure to the English language would have been another variable impossible to gauge or to control for. All fifty subjects were students.

Questionnaire Design and Construction

The design and construction of a suitable questionnaire presented some problems. Care had to be taken to test only the desired linguistic phenomenon. A type of contextual analysis was ultimately used, whereby the subjects were given a short situation or context, followed by a question. They were given no clue as to the correct or appropriate answer other than what the context had suggested. They were then to answer the question as they would in normal conversation, and could potentially choose one of four answer types:

1. 'No', with a negative tag.
2. 'Yes', with a positive tag.
3. 'No', with a positive tag.
4. 'Yes', with a negative tag.

The subject's choice of answer, or method of dealing with negative questions in English, was the linguistic form in question, and the dependent variable for the analysis of the results. Each context/question would have these four potential response types, but only one would be correct if it were taken in context, and under the rules of English grammar. If, for example, in context we could only expect the tag 'I didn't' in the answer, the subjects would have the choice of saying 'Yes, I didn't' or 'No, I didn't'. If the question asked were a negative question, only one of these responses would be correct, again according to the rules of English grammar. In Japanese, on the other hand, according to the context, either 'Yes, I didn't' or

'No, I didn't' might be correct. What ultimately had to be determined was where, why, and how the native speakers of Japanese used the correct and incorrect linguistic forms when answering these negative questions in English. A contextual analysis of this phenomenon was deemed to be a relevant test.

Contextual analysis examines a linguistic form in order to determine where, why, and how frequently that form occurs indiscourse.

(Celce-Muria, 1980:41)

Using negative questions as the linguistic form in question, the frequency with which native Japanese used the correct and incorrect forms in answering compared with the English control group proved to be a major aspect of this research.

Care had to be taken to test oral competence rather than a formal written competence. The Japanese school system starts its training early in English grammar and literature, and the Japanese will generally know the formal rules. An earlier pilot study, using a different format, had the subjects choosing what they deemed a correct response from a list of four responses which they had in front of them. It became apparent that a more accurate assessment of their responses was one in which they had to decide upon an appropriate answer without the aid of a key, but merely using their own oral competence. A ten second time limit was imposed upon the answering of all questions to all subjects, and this in some way forced the subjects to respond in a manner not unlike they would had the pressures of a real conversation been imposed upon them.

It was important, in the construction of this questionnaire, to fabricate believable situations and contexts, and to follow through with questions, positive and negative, that would complement the contexts. The contexts had to be composed without resorting to a difficult syntax or difficult semantics, which could hinder the responses of the nonnative sample. The questions, negative and positive, had to be representative of those common in casual conversation, again without resorting to a difficult syntax or semantics. An infinite number of positive and negative yes/no questions is conceivable, but the conclusions drawn had to be applicable to the universe of these questions, and not merely to the specific corpus involved. Native intuition and extensive revision after several pilots were both used to arrive at a questionnaire form that had, in the end, no extensive interference from a burdensome syntax, semantics, or confusion arising from the contexts themselves.

The questions in this survey were limited to those with the auxiliary preposed to sentence initial position. Intonation questions and tag questions were not used, for that would have complicated the results and brought in variables outside the scope of this study. The preposing of the auxiliary form to sentence initial position is one of the fundamental question markers in English. This is the sole distinction of all non-intonational, non-tag yes/no questions, while at one level of deep structure it is the sole marker of all yes/no questions.

There are five major auxiliary types in English. These are:

1. Forms of BE.
2. Forms of DO.
3. Forms of HAVE.
4. Modal verbs.
5. Transitive and intransitive verbs.

The category of transitive and intransitive verbs consists of only archaic forms and fragments, so only the first four categories were used in the testing. Ten auxiliary forms were used:

1. do
2. did
3. will
4. would
5. is
6. are
7. can
8. could
9. have
10. should.

A few forms, such as 'shall' and 'may' were omitted from the corpus, for they are rarely used, even by native speakers, during interrogation, and are even more infrequent or obsolete when used in negative questions. The modals 'can, could, will, would, and should' were used, three of which are subjunctive modals. Other modals were excluded on the basis of their archaic

qualities, as well as their characteristics of slang or politeness, and because of the brevity of the final testing corpus. Forms of BE (is, are), DO (do, did), and HAVE were also used.

The test was originally used in a pilot with a corpus of thirty questions. The ten auxiliary forms were to be used three times each, twice in negative questions, soliciting both a positive and a negative response, and once in a positive question, soliciting either a negative or a positive response. It was found, though, that the questionnaire, with a corpus of thirty questions, was a heavy burden on the volunteer informants in terms of time and mental fatigue. The final pilot form and final questionnaire form were delimited to a corpus of fifteen questions. As the survey was designed to test the subjects' ability to answer negative questions, it was decided to use each auxiliary form once in a negative question, and use five of these auxiliary forms as the forms in positive questions. For the ten negative question forms, five were used to solicit negative responses, and five for positive. The choice of which answer type would be solicited for each auxiliary form, negative or positive, was achieved by a random sample of the items involved. Because of the limitation of question items, a testing of certain characteristics or manifestations of the auxiliary forms had to be sacrificed. Forms of BE, for example, may be derived from a copular, progressive, or perfective BE form. Only the copular and progressive forms were used in this study.

All tenses, past, present, and future, were used in the formation of contexts and questions, as tense is a major factor in the speaker's decision to use one form of question and of auxiliary over another. On this basis it was decided to include tense in the construction of questions and contexts.

Upon the completion of several pilots the final form of the questionnaire was constructed. This final form saw the use of all desired auxiliary forms, and took into account various aspects of the use of tenses. It also dispensed with most if not all confusion arising from the semantic and syntactic forms, as well as potential confusion arising from the contexts and questions themselves. The fifteen items were randomly arranged on two different questionnaire forms, where an item would consist of an isolated context and a question appropriate to this context.

Procedures

The final form of the questionnaire was administered to each subject individually, the entire proceedings taking roughly ten minutes per subject. The questionnaire items were uniformly read to each subject by the examiner, and the interview was taperecorded and transcribed simultaneously, for later analysis. The same questionnaire was given to both native speakers of English and Japanese. The numbering of the items was altered on 50% of the questionnaires, so as not to allow for any 'order effect' in the results of the survey (See Figure 1).

All subjects were asked to fill out an information sheet immediately prior to the administration of the questionnaire (See Figure 2). This information sheet elicited data relevant to the findings of the study, information regarding the subject's age, sex, native language, length of time in an English speaking country, and a self-assessment of their own English speaking ability. The subjects were here asked to indicate if they were a beginning, intermediate, advanced, or fluent English speaker, and appropriate definitions of these terms were beside each. This self-assessment was thought to be a sufficient means of gauging the subjects' fluency, in that it was used only as a supplement to the information elicited regarding the length of time that they had resided in an English speaking country.

The subjects were then given a sheet of paper with fifteen story lines or contexts on it. They were at no time given any clue as to the emphasis of the questionnaire, and were at no time given any prodding in terms of hand or body movements in the direction of an expected answer. There were no questions on the subjects' papers. The subjects were asked to answer the questions as if they were a participant in the conversation. There was an example context and question on the information sheet, which was explained before the start of the testing. The examiner, after starting the taperecorder, would read aloud the context which the subjects had before them, and then ask a question at its close. The subjects were then asked to answer the question. An example of this format is as follows:

The subjects would see a context on the page.

Larry and Daisy go to McDonalds.
Daisy does not like hamburgers.

The examiner would read the following to the subjects:

Larry and Daisy go to McDonalds.
Daisy does not like hamburgers.
Daisy asks Larry 'Don't they serve sushi here?'

The subjects would not see or read the question, but merely hear the examiner ask it. They would then give the answer they deemed appropriate. The subjects were given a ten second span of time to answer the question. This is the time allotment given to students taking the TOEFL (Teaching of English as a Foreign Language) test, and was felt to be an appropriate allotment of time in which to answer the questions.

The tape was replayed by the examiner to verify the transcribed results, and the data was then processed for the computer. The final form of the questionnaire and information sheet are here included.

FIGURE 1

Final Form of the Questionnaire

1. Larry and Daisy go to McDonalds for lunch.
Daisy does not like hamburgers.
Daisy asks Larry 'Don't they serve sushi here?'
2. Mr. Tanaka was two hours late from work.
His wife ate dinner without him.
When he got home he said that he was hungry.
His wife asks 'Haven't you eaten yet?'
3. Little Lynda was put to bed over two hours ago.
Her mother finds her watching T.V.
Her mother asks 'Shouldn't you be in bed?'
4. Daisy has pictures of Robert Redford on her wall.
She also has pictures of him in her wallet.
Larry asks 'Do you like Robert Redford?'
5. Richard and Kathy are at a restaurant.
Richard hates to eat peas.
Kathy asks him 'Wouldn't you like some more peas?'
6. Brett and Laurie are going to see a movie.
Laurie wants to see the movie 'E.T.' again.
Brett asks her 'Didn't you already see that movie?'
7. Brett watched the news on T.V.
Laurie came home from work.
She asks him 'Did you see the news?'

8. John took his handsome friend Bill to a party.
There were many teen-age girls there.
One girl asks Bill 'Aren't you Robert Redford?'
9. Larry is hitting his sister Lynda.
His mother sees this.
His mother asks him 'Should you be hitting your sister?'
10. Barb and Les want a vacation this winter.
Barb wants to go to Alaska.
Les asks her 'Won't it be cold?'
11. Charles can't find his new book.
He finds Scott reading it in his bedroom.
He asks Scott 'Isn't that my book?'
12. Mr. Jones picks up his wife after work.
They are both hungry.
He asks her 'Have you eaten yet?'
13. Mark and Harry are invited to Kim's house.
Mark gets sick, so Harry goes alone.
Kim asks Harry 'Couldn't Mark come?'
14. Naoko wants to see a movie tonight, so she misses school.
Yoichi phones her.
He asks her 'Can't you come to the movie tonight?'
15. Scott comes home.
His umbrella is dripping.
Charles asks him 'Is it raining?'

FIGURE 2

Information Sheet

The following is a copy of the questions asked eliciting information pertinent to the study. Each subject completed this information sheet.

A.) AGE

1) Under 19 _

2) 19 - 25 _

3) 26 - 35 _

4) 36 - 50 _

5) Over 50 _

B.) SEX

1) Female _

2) Male _

C.) NATIVE LANGUAGE

1) English _

2) Japanese _

3) Other (please specify) _____

BACKGROUND

D.) The length of time that you have been in an English speaking country is: ___(months) ___(years).

E.) Your level of English speaking ability is:

- 1) Beginning - (You are just learning. You can speak a few sentences and phrases.) __
- 2) Intermediate - (You can hold simple conversations, and can communicate your main ideas.) __
- 3) Advanced - (You have a good knowledge of English, with only some difficulty.) __
- 4) Fluent - (You have a native-like ability in the language.) __

Please answer these questions as you would in a normal conversation.

IV. RESULTS

All fifty subjects completed the same test. Their results will be discussed here, independently at first, and then as they compare to one another.

As stated, all answers and responses, to be acceptable, had to fit into one of the four answer categories:

1. No, with a negative tag.
2. Yes, with a positive tag.
3. No, with a positive tag.
4. Yes, with a negative tag.

The categories can be delineated as such:

1. Category 1 - 'No' with a negative tag.

Negative disagreement in Japanese.

Negative disagreement and negative agreement in English.

2. Category 2 - 'Yes' with a positive tag.

Positive agreement in Japanese.

Positive agreement and positive disagreement in English.

3. Category 3 - 'No' with a positive tag.

Positive disagreement in Japanese.

Not used in English.

4. Category 4 - 'Yes' with a negative tag.

Negative agreement in Japanese.

Not used in English.

Answers were deemed unacceptable if the subject did not qualify the answer with a tag. A 'tag' was considered to be the response

qualifying the 'yes' or 'no' aspect of the entire response. In a few instances it was needed to approximate the answer to an appropriate category. For example, to the question:

'Wouldn't you like more peas?'

many subjects, English and Japanese, responded:

'No, thank you.'

This constitutes a polite refusal to the request. The form was used properly, and therefore the answer was treated the same as an answer of:

'No, I wouldn't.'

a category 1 response, 'No' with the negative tag 'I wouldn't'.

All answers, to be grammatically correct, had to be from either the first or the second categories, depending upon the specific context in question. All category 3 and 4 responses were deemed ungrammatical and therefore incorrect. All results were at first in a categorical form, and had to be processed, in terms of the number of correct and incorrect responses, before any meaningful analysis could be done.

The subjects' ability to correctly answer the corpus of questions was used as the dependent variable in this study, while the independent variables were composed of information elicited from the information sheet, data concerning the subjects' age, sex, English fluency, native language, and the length of time that the subject had resided in an English speaking country.

Native Speakers Results

The control group consisted of ten native English speakers at the University level from various faculties at Simon Fraser University. The native speakers' data was analysed in order to verify certain predictions made regarding native speaker ability to answer correctly negative questions in English. The first step in the analysis of this data was merely the tallying of results, correct and incorrect responses. There were 150 responses made by the native sample, and six errors were reported. Three subjects made a total of one error each, while one subject made three errors. Two of the errors made by the native speakers were reported on item 9 and item 15, positive yes/no questions. Item 9 allowed for some interpretation on the part of the answering subject, and was therefore what we could call an 'opinion question'. The answers to some of these were incorrect in light of the contexts, but were still grammatically correct in that they were from one of the first two answer categories.

Fifty per cent of the errors made by the native group were found to be ungrammatical. Two errors on item 6 and one error on item 10 were of the third category type, 'No, with a positive tag'. The other error made by the English group was reported on item 11. Three of the errors made, those on item 9, item 11, and item 15, were grammatically correct, and it must be assumed that there was some subject confusion regarding the context or question.

For the three grammatically incorrect responses, item 6 and item 10, a negative question was asked soliciting a positive category 2 response. Two subjects responded with 'No, I did.' on item 6, and one with 'No, it will.' on item 10. The answers to these items can both be classified 'declaratives', and the subjects, when answering a negatively phrased question which they wished to answer in the affirmative, felt that they had to negate the negated predicate of the interrogative, and thereby arrived at the incorrect category 3 responses, 'No', with a positive tag.

There was a 4% error rate for the native speakers involving negative questions, and a 4% error rate involving the entire corpus of questions. The mean response rate for the entire sample was 14.6 correct responses for each subject.

There was no significant difference recorded in native speaker ability to correctly answer negative questions with regards to age, sex, or length of time that they had resided in an English speaking environment. All were native speakers of English, so self-assessed fluency was not deemed to be a meaningful variable(See Table 1).

Nonnative Speakers Results

The Japanese sample used in this study originally consisted of forty subjects. One subject, however, scored nine unacceptable answers, five incorrect answers, and only one correct. He was a Japanese male under 19 years of age, who had

TABLE 1

NATIVE SPEAKER RESULTS			
	Negative Questions	Positive Questions	Total
Correct	96	48	144
Contextually Incorrect	1	2	3
Grammatically Incorrect	3	0	3
Total	100	50	150

lived in Canada for only seven months, although he assessed himself as an 'intermediate' English speaker. His results proved him to be an outlier or far outlier on most statistical tests done, so he was removed from the sample and the tests were repeated, with a modified sample size of thirty-nine subjects.

There were 585 potential responses for the sample of 39 subjects. Seven answers were either left blank or found to be unacceptable. There were 139 errors made, and the sample had a mean response rate of 11.51 correct responses per subject.

Positive Questions

Ten of the 139 incorrect responses were made on items 4, 9, 12, and 15, positive questions. There were no errors on item 7,

also a positive question. Item 4 solicited a category 2 response, and the lone error made here was a category 1 response, a grammatically correct answer. Item 9 solicited a category 1 response, and of the six errors made here, five were from category 2, and one from category 3. The category 2 errors are grammatically correct, but contextually incorrect, and only the incorrect answer from category 3 was grammatically incorrect. Item 12 solicited a category 1 response, and the lone incorrect answer was a category 2 response, grammatically correct but contextually incorrect. Item 15 solicited a category 2 answer, and the two incorrect responses here were from category 1, again, answers which were grammatically correct but contextually incorrect. Of the ten response errors made on the corpus of positive questions only one was grammatically incorrect, while nine were grammatically correct but contextually incorrect. The five incorrect category 2 responses for item 9 can be explained by subject or context confusion, for although only one native English speaker chose this response error, the same percentage (10% of both samples) indulged in this error. A more adequate explanation is that, as has been explained, Item 9 was open to interpretation for some subjects, and many chose an unexpected interpretation.

Negative Questions

If we subtract the total number of positive questions (195) from the total corpus of questions given to the Japanese sample

(585) we are left with a sum total of 390 questions, or ten negative questions for each subject. Seven of these responses were either left blank or found to be unacceptable, which leaves us with a total of 383 questions with which to work. Of these, there were 129 incorrect responses, a 33.6% error rate, with a mean of 33.02%. Of the sample, 66% were either 'beginning' or 'intermediate' speakers of English, which would account for the ostensibly high error rate of the sample. Even so, of the 129 errors made on the negative questions, the beginners accounted for 50.4%, the intermediate subjects 36.4%, the advanced 12.4%, and the fluent subjects accounted for 0.07% of the errors.

Some of the errors made by the Japanese sample were found to be 'contextual errors', errors from either category 1 or 2 which were grammatically correct, but incorrect in light of the contexts they addressed. There were 17 such errors, 4.4% of all responses, and 13.1% of all errors made. Therefore, 86.9% of all errors made were from either category 3 or 4, grammatically incorrect responses (See Table 2). Of the 17 contextual errors made, the beginners accounted for 23.5% of these errors, the intermediate subjects 52.9%, the advanced 17.6%, and the fluent subjects accounted for 5.8% of the contextual errors made on the test items.

For each item there was an 'expected response error', an error that was expected in light of the workings of the Japanese answering system. Only 10 of the ungrammatical category 3 and 4 errors were from an unexpected response category, 9.8% of all

TABLE 2

NONNATIVE SPEAKER RESULTS			
	Negative Questions	Positive Questions	Total
Correct	254	185	439
Unacceptable	7	-	7
Grammatically Incorrect	112	1	113
Contextually Incorrect	17	9	26
Total	390	195	585

ungrammatical errors, 7.7% of all errors, and 2.6% of all responses.

Of all responses, 102 were 'expected response errors', 26.6% of all responses, with a mean of 26.1%. Of all 129 errors made, 102 were 'expected response errors', 79% of all errors. Of the 102 'expected response errors', the beginners accounted for 54.9%, with 56 errors. The intermediate subjects accounted for 34.3%, with 35 errors, the advanced for 10.8%, with 11 errors, and the fluent Japanese speakers of English made no 'expected response errors' (See Table 3).

TABLE 3

NONNATIVE SPEAKERS ITEMIZED RESULTS FOR NEGATIVE QUESTIONS

Item #	Response Errors	Expected Response Errors	Correct Response Category	Expected Response Error Category
1	7	5	1	4
2	14	9	1	4
3	16	9	2	3
5	8	6	1	4
6	14	12	2	3
8	14	13	1	4
10	19	18	2	3
11	18	12	2	3
13	12	11	1	4
14	7	7	2	3
Totals	129	102		

Itemized Results

- Item 1. There were seven errors made on item 1, 17.9% of all responses. There was one category 2 error, one category 3 error, and five category 4 errors, the expected response error. Of all responses, 12.8% were expected, and 71.4% of all errors were expected. The question was a negative question soliciting a negative response with a negative tag, a category 1 response.
- Item 2. There were 14 errors made on item 2, 35.8% of all responses. There were three category 2 errors, two category 3 errors, and nine category 4 errors, the expected response

- error. Of all responses, 23% were expected response errors, while 52.6% of all errors were expected errors. The question was a negative question soliciting a category 1 response.
3. Item 3. There were 16 errors made on item 3, 41% of all responses. There were six category 1 errors, one category 4 error, and nine category 3 errors, the expected response error. Of all responses, 23% were expected response errors, while 52.6% of all errors were expected response errors. The question was a negative question soliciting a positive category 2 response.
 4. Item 5. There were eight errors made on item 5, 20.5% of all responses. There were two category 3 errors, and six category 4 errors, the expected response error. Of all responses, 15.3% were expected response errors, while 75% of all errors were expected response errors. The item was a negative question soliciting a category 1 response.
 5. Item 6. There were 14 errors on item 6, 35.8% of all responses. There was one category 1 error, one category 4 error, and twelve category 3 errors, the expected response error. Of all responses 30.7% were expected response errors, while 85.7% of all errors were expected response errors. The question was a negative question soliciting a category 2 response.
 6. Item 8. There were 14 errors on item 8, 35.8% of all responses. There was one category 2 error, and thirteen category 4 errors, the expected response error. Of all

- responses, 33.3% were expected response errors, while 92.8% of all errors were expected response errors. The question was a negative question soliciting a category 1 response.
7. Item 10. There were nineteen errors on item 10, 48.7% of all responses. There was one category 1 error, and eighteen category 3 errors, the expected response error. Of all responses, 46.1% were expected response errors, while 94.7% of all errors were expected response errors. The question was a negative question soliciting a category 2 response.
8. Item 11. There were eighteen errors on item 11, 46.1% of all responses. There were four category 1 errors, two category 4 errors, and twelve category 3 errors, the expected response error. Of all responses, 30.7% were expected response errors, while 75% of all errors were expected response errors. The question was a negative question soliciting a category 2 response.
9. Item 13. There were twelve errors on item 13, 30.7% of all responses. There was one category 3 error, and eleven category 4 errors, the expected response error. Of all responses, 28.2% were expected errors, while 91.6% of all errors were expected response errors. The question was a negative question soliciting a category 1 response.
10. Item 14. There were seven errors made on item 14, 17.9% of all responses. All errors were category 3 errors, the expected response error. The question was a negative question soliciting a category 2 response.

Further Results

Within the Japanese sample itself there were other results that are here worth mentioning (See Table 4).

There is a significant positive correlation between age and correct results on the questionnaire items, $r=0.28$, $p<0.04$. The older that the subjects were, the better results they obtained.

There is a significant positive correlation between the amount of time spent in an English speaking country and the number of correct responses on the questionnaire items, $r=0.70$, $p<0.001$. The more time that a subject has spent in an English speaking environment the better results he/she attained on the test items. This is an encouraging finding, for it shows the effect that the learner's immediate environment has on his/her ability to acquire the language, and the processes within the language.

Furthermore, there is a significant positive relationship between the subjects' ages and the amount of time that they have spent in an English speaking country, $r=0.31$, $p<0.01$. The older that the subjects were, the more time that they had been in an English speaking country. This tends to show that it may be the length of time spent in an English speaking country, and not the subjects' ages, which will be an important factor in determining the subjects' abilities to perform in the language.

There is a significant positive correlation between the subjects' self-assessed fluency levels and the number of correct

TABLE 4

CORRELATION COEFFICIENTS FOR JAPANESE

SAMPLE BY NUMBER OF CORRECT RESPONSES

	Age -----	Time -----	Fluency -----
Coefficient	0.2762	0.7035	0.6955
Cases	39	39	39
Significance	p=0.044	p=0.000	p=0.000

responses on the test, $r=0.6955$, $p<0.001$. The more fluent a subject assessed his/her English speaking ability, the greater number of correct responses he/she attained on the test items. The beginners accounted for 50.4% of all errors, the intermediate subjects for 36.4%, the advanced for 12.4%, and the fluent subjects accounted for 5.8% of all errors made. This supports the practice of self-assessment in this area, as well as lends support to the hypothesis as stated, that the learners will use the incorrect forms until the time that they have mastered the correct forms in the target language.

There is a significant positive correlation between the subjects' self-assessed fluency and the amount of time that they have spent in an English speaking environment, $r=0.75$, $p<0.001$. The longer that they have been in English speaking environs, the greater they assessed their own fluency.

An analysis of covariance by self-assessed fluency, using length of time in an English speaking country as a covariate, found a marginally significant difference between fluent and

non-fluent members of the Japanese sample and the number of correct responses scored on the corpus of test items, $F(1, 34)=2.71$, $p<0.06$. The more fluent the subjects would assess themselves, the greater number of correct responses they would score on the test (See Table 5).

Discussion of Combined Results

An analysis of covariance, by native language, using length of time in an English speaking country as a covariate, found a significant difference between native English and nonnative English speakers and the number of correct responses scored on the corpus of question items, $F(1,46)=7.78$, $p<0.01$. This is by no means a surprising result, for we would expect the native speakers to answer English questions better than nonnative speakers (See Table 6).

The 245 positive yes/no questions asked in this survey were asked for specific reasons, although it was not necessarily the results and a tabulation of the number of correct responses that we were interested in. At one level, these questions were asked to lead subject suspicion away from the fact that they were being tested solely upon their ability to answer negative questions. Secondly, these questions were asked to verify the hypothesis that negative questions are more difficult to answer than positive questions for nonnative speakers of English. This assumption is supported by the data. Thirdly, the relative ease of the positive questions asked was used as a sort of buffer

TABLE 5

ANALYSIS OF COVARIANCE OF NONNATIVE SPEAKERS SCORES					
Source of Variation	Sum of Squares	Degrees of Freedom	Mean Squares	F Ratio	P
Covariate-TIME	108.756	1	108.756	41.290	0.00
Main Effect-FLUENCY	21.433	3	7.144	2.712	0.06

between the subject and the relative difficulty of the negative questions asked, hopefully putting the subjects at some degree of ease. Finally, the positive questions were asked to verify that it was the negative questions themselves, and not the subjects' inadequacies in the English language, that allowed the errors on the corpus of negative questions. The sum of positive questions, and the results scored upon them, will here be dismissed from further analysis and discussion, and we will concentrate solely on the results scored on the negative questions asked.

For the entire sample group of 49 subjects there were 490 negative questions asked. Seven of these responses were deemed unacceptable, which leaves us with a total of 483 negative questions asked, 100 to the English sample, and 383 to the Japanese sample.

For the English sample there were four errors made, 4% of all responses. Three of these errors were ungrammatical category 3 or 4 responses, 3% of the responses and 75% of the errors.

TABLE 6

ANALYSIS OF COVARIANCE FOR ALL SUBJECTS BY NATIVE LANGUAGE

Source of Variation	Sum of Squares	Degrees of Freedom	Mean Squares	F Ratio	P
Covariate-TIME	87.795	1	87.795	23.831	0.00
Main Effect-LANGUAGE	28.657	1	28.657	7.779	0.008

These three errors were answered in the same manner as the 'expected response errors' of the Japanese sample. The 'expected response error' is not applicable to positive questions, and is not really applicable to the native English sample either. This 'expected response error' is that error made due to interference from Japanese, the response that would be applicable were the question asked and answered in Japanese, but which is incorrect in English. Therefore, the native sample would have no interference from a competing system, as do the Japanese subjects, and would therefore have no 'expected response error'. One error made by the English sample was a grammatically correct response, a contextual error, probably caused by subject or context confusion.

For the Japanese sample, there were 129 errors made on the negative questions, 33.6% of the responses. Of these, 112 were ungrammatical, 19.2% of the responses, and 86.8% of the errors. Of these, ten were ungrammatical and unexpected errors, 2.6% of all responses, and 7.7% of all errors. There were 102

ungrammatical and 'expected response errors', 26.6% of all responses and 79% of all errors. There were 17 errors which were grammatical responses, 4.4% of all responses and 13.1% of all errors, which must be attributed to confusion arising either from the subjects or the contexts.

The 'expected response error' is that error which, while it would be correct were the negative question being asked and answered in Japanese is grammatically incorrect in English. These are responses from category 3 or 4. The research involved in this study was undertaken to investigate the hypothesis that when two linguistic systems are in competition in the learner/speaker, he/she will, in cases of doubt, confusion, or ignorance of the correct form or process, choose the more familiar, and therefore simpler, form. The simpler system for native speakers of Japanese will undoubtedly be the Japanese system. Japanese students of English will, therefore, answer negative questions in English in a manner similar to their strategy in Japanese until they have mastered the correct English process, which we have shown by the significant positive correlation between nonnative fluency and the number of correct responses scored on the questionnaire items. To this end the 'expected response error' was used as an important variable in this study. At one stage, the mere fact that we can hypothesize an 'expected response error', and to some degree support its existence by some statistical evidence, constitutes support for our hypothesis, lending credence to the predictions made by the

TABLE 7

ANALYSIS OF VARIANCE OF RESPONSE ERRORS ON NEGATIVE QUESTIONS

Source of Variation	Sum of Squares	Degrees of Freedom	Mean Squares	F Ratio	P
Between	55.9475	1	55.9475	15.086	0.0003
Within	174.2972	47	3.7085		
Total	230.2447	48			

Group	Count	Mean	Standard Deviation	Standard Error
1	10	0.400	0.9661	0.3055
2	39	3.0513	2.0894	0.3346
Total	49	2.5102	2.1902	0.3129

CA of the two answering systems.

We would expect native English speakers to answer more English questions correctly than nonnative speakers. This has been shown to be true. The speaker's native language has a statistically significant effect upon his/her ability to correctly answer English questions. For nonnative speakers, it has been shown that both their self-assessed fluency levels and the amount of time that they have spent in an English speaking country also have a statistically significant effect upon their abilities to correctly answer English questions. There is an even greater effect upon their ability to correctly answer English negative questions. What now needs support is whether there are enough 'expected response errors' on the negative

questions to justify the hypothesis regarding their existence as a significant phenomenon.

An analysis of variance done on the number of errors made on the corpus of negative questions found a significant difference between native and nonnative speakers of English and the number of response errors made, $F(1, 48)=15.08$, $p<0.001$. There were only four errors made by the English sample, for a mean error response rate of 0.4, while the sample of Japanese native speakers scored a mean error response rate of 3.05 errors per person (See Table 7).

An analysis of variance done on the number of 'expected response errors' on the corpus of negative questions also found a significant difference between native and nonnative speakers of English and the number of errors made, again on the corpus of negative questions, $F(1, 48)=11.31$, $p<0.001$. There were only three errors made here by the native sample, for a mean error response rate of 0.3 errors per person, while the Japanese sample had a mean error response rate of 2.54 'expected response errors' per person (See Table 8).

The results of these last two analyses of variance showed homogeneity of variances, whereby the variations for different subjects within each group should be the same between groups, but they were not here because of the low number of errors scored by the native English sample. The English sample therefore had less variation within the group than the Japanese sample.

TABLE 8

ANALYSIS OF VARIANCE OF EXPECTED RESPONSE
ERRORS ON NEGATIVE QUESTIONS

Source of Variation	Sum of Squares	Degrees of Freedom	Mean Squares	F Ratio	P
Between	39.8811	1	39.8811	11.306	0.0015
Within	174.2972	47	3.5275		
Total	205.6732	48			

Group	Count	Mean	Standard Deviation	Standard Error
1	10	0.300	0.6749	0.2314
2	39	2.5385	2.0628	0.3303
Total	49	2.0816	2.070	0.2957

The results of this research show that native speakers of Japanese do use strategies employed in Japanese when answering negative questions in English until they can master the correct method of dealing with these questions in English.

V. DISCUSSION AND CONCLUSIONS

Hypotheses and Results

This thesis challenged a recent and current tradition in ESL and second language research, the tradition that dictates an inferior theoretical position for a Contrastive Analysis within a language program, or as a tool for objective language research. Error Analysis has replaced CA as a method for predicting, observing, and justifying learner errors in a second language program. CA has historically been treated as a fine tool for predicting a few phonological errors for the learner, but of little or no use in areas other than the sound systems of the languages in question, areas like syntax, morphology, or semantics. Recent work, however, has shown CA to be helpful in predicting interference from the learner's native syntax, and semantics as well (See Taylor, 1979). Transfer and interference errors are only one type of documented error that the learner will experience, and the only type that a CA would be of any use in predicting. Not all of CA's predicted transfer errors may occur, due to a faulty or biased analysis, an analysis marred by grammars from two theoretically opposed schools of linguistics, or merely because a specific learner has an aptitude for avoiding errors of this type. A CA will, however, when properly administered and objectively discussed, predict transfer errors

'...on a better than chance basis' (Oller, 1971:79). The native language of the learner must have an effect upon his/her ability to use the target language, and this effect will permeate the phonology of the target language as well as the syntax, the morphology, the semantics, and the working pragmatics of the language in everyday use.

As it was used CA did have gaping theoretical holes, and tried to account for all of the learner's errors by a comparison of the target language with the native language of the learner. It cannot do this. But, as a tool for divining and supporting learner's transfer errors CA has done, and presently does, a much more thorough job than Error Analysis. An Error Analysis cannot predict a learner's errors, but merely justify them. A prediction of the learner's errors via a CA, and a subsequent testing of these predictions through an Error Analysis, is what this thesis attempted to do. Once validation or empirical proof of a predicted error is sought we have left the arena of CA and have already started dealing with Error Analysis. A CA must be used within the scope of a comprehensive Error Analysis to be effective.

The basis for the research involved in this thesis, and the hypotheses that this research attempts to support, was arrived at through a CA of the syntax of Japanese and English, with special emphasis upon the negative yes/no question type and the answering systems employed by the two languages. The hypotheses were spelled out at the end of the second chapter of this

thesis, and the results detailed in the fourth chapter. The research involved operated on the assumption that the answering system employed by the native speaker of Japanese would have a deleterious effect upon his/her ability to properly employ the English answering system when answering negative questions in English.

The two answering systems were compared and contrasted, and, while there are certain noticeable similarities between the two, there are also certain great differences between them, differences that would, it was hypothesized, cause some confusion and trouble for the Japanese learner of English. The differences between the answering systems are highlighted in the methods employed to answer negative questions, and upon this basis it was hypothesized that certain errors, or 'expected response errors', could be predicted or expected for the Japanese learner of English if he/she is not cognizant of the proper method of dealing with negative questions in English. A discussion of the results of the research proved this to be true, and lent credence to the hypotheses as stated.

There are many question types available to the questioner in English. Some forms, forms that are not syntactically marked as questions, can be questions or requests for action. On the other hand, some forms that are syntactically marked as questions are not really questions at all, in a logical sense, but indirect requests or polite invitations. Most logical and syntactically marked questions will be overt requests for

information. This thesis dealt with only those questions which could be formed by aux-movement or do-periphrasis, the yes/no question type. WH, intonation, and tag questions were not used. Yes/no questions were asked in a positive and a negative form, with the results scored on the corpus of negative questions of most interest and relevance to this research, although all results were taken into statistical and theoretical consideration.

The results showed that Japanese learners of English do tend to carry over question answering strategies employed in their native tongue to their target English at a statistically significant level. This would imply some sort of 'translation technique' being employed, where the English questions are translated into Japanese, answered in Japanese, the answer translated into English, and then answered. This lends credence to the stated hypothesis that the learner's native syntax will have a negative effect, via interference and negative transfer, on the acquisition of the target syntax. The answering systems of English and Japanese were compared by a CA of their structures and processes, and the predicted errors were validated by statistical evidence.

The results showed a significant positive statistical relationship between subject fluency and the number of correct responses scored on the corpus of test items. The more fluent that the native Japanese learner perceived him/her self to be in English, the more apt he/she was to answer the negative question

in the manner found to be grammatically correct in English. When two systems are in competition in the learner, the learner will, in cases of doubt, confusion, or ignorance of the correct form, use the system that he/she is more comfortable with, probably his or her native language system. Beginning and intermediate students of English are more comfortable with the Japanese answering system, and thus reverted to its question answering strategies more often than the advanced students of English, and far more than the fluent students of English, who only seldom reverted to their native language question answering strategies.

The results showed a significant positive statistical relationship between the amount of time that the learner had been in an English speaking country and the number of correct responses scored on the questionnaire items. The longer that the learners had resided or studied in Canada, or any other English speaking country, the greater was their ability to correctly answer negative questions in English. The more time that they had spent in English speaking environs apparently gave them more chance to see the English answering system in operation, and the more chance they would therefore have to be more comfortable with it and incorporate it into their own English language proficiency.

The results showed a positive statistical relationship between the subjects' ages and the number of correct responses scored on the corpus of questionnaire items. The older that the subjects were the better the results they obtained.

The above results may be somewhat misleading, for there is also a positive statistical relationship between the subjects' ages and the length of time that they have been in an English speaking country. It would seem reasonable to assume that it is the length of time in an English speaking country, rather than the subjects' ages, that would enable them to score better on the corpus of questions.

The results showed a significant difference between native English and nonnative subjects' ability to correctly answer items in the questionnaire. This is by no means a surprising discovery, for we would expect native speakers of a language to be more proficient in the language than nonnative speakers.

The results showed a significant difference between native and nonnative subjects and their ability to correctly answer the corpus of negative questions in the questionnaire. Furthermore, there was a significant finding in that when only the 'expected response errors' were taken into consideration for the Japanese sample, there was still a statistically significant difference between the native and nonnative subjects and their ability to answer negative questions correctly in English. These results will therefore allow us to conclude the following:

1. Native speakers of English will use correctly the English answering system. They will use:
 - i) 'No' with a negative tag for negative agreement and negative disagreement.
 - ii) 'Yes' with a positive tag for positive agreement and

positive disagreement.

2. The results of the Japanese sample differed significantly.

They used, to a significant degree:

i) 'Yes' with a positive tag for positive agreement, as did the English sample.

ii) 'No' with a negative tag as negative disagreement, as did the English sample.

iii) 'Yes' with a negative tag as negative agreement, where the English sample would use 'no' with a negative tag for this form.

iv) 'No' with a positive tag as positive disagreement, where the English sample would use 'Yes' with a positive tag for this form.

Recent work by Akiyama (1976), Akiyama et al (1979), and Pope (1971, 1973, 1976) appears to corroborate the findings as stated here, and lends further credence to the use of CA in linguistic and educational research as an objective tool to divine potential errors for the learner of a second language. It will also give us insights into the acquisition of language in general, be it a first or a second language.

The results of this research, therefore, constitute support for the hypotheses as stated. They may also strengthen the stance that a CA must take in a second language program for specific language backgrounds of learners.

Limitations of the Research

There will most always be some shortcomings found in a specific aspect of any research done. When dealing with human subjects, and testing an entity as enigmatic as language, even the most patient care and thorough preparation will leave some aspect of the research overlooked. So it is with the present research.

The generalization of the results may be disputed in that college and university students do not represent an accurate cross-section of native speakers of English. It may be argued that foreign students studying at Canadian schools do not accurately represent the enormous population of Japanese speakers using or learning English. The foreign and native students would be relatively well educated, and come from a relatively high socio-economic level. The reasons for choosing the groups as done, however, are obvious. There are three different groups of Japanese speakers present in the Vancouver area; the first are the foreign students, born and raised in Japan; the second are the business people and entrepreneurs of the downtown Powell Street business area, some of which are second or third generation (nisei and sansei) Japanese-Canadians, owning dialectical idiosyncracies peculiar to their specific community; the third group is the Steveston fishing and farming community, a rural community composed of a cross-section of different generations of Japanese-Canadians and recent immigrants, also owning dialectical idiosyncracies. The

only reasonably sure method of attaining some linguistic equity in the sample was to approach the foreign student population alone, subjects who had learned Japanese as a native language in Japan, and who were, for one reason or another, studying English in Canada. Once this sample group was chosen, it had to be matched with a similar sample cross-section of native English speakers, also chosen from the post-secondary level of education.

Another problem facing this research is that of it being a cross-sectional rather than a longitudinal study. It would have been beneficial to try and discover when the Japanese learners of English do acquire the correct English question answering strategies, although it would vary from learner to learner. This could have been done more efficiently in a longitudinal type study, although this was not practical with respect to time and financial constraints. The data were collected individually for each subject, but only once for each subject, so any 'time-ordered relationships' had to be inferred from the results, such as those indicated by the positive statistical relationship between subject fluency and the number of correct responses.

This study chose to ignore all questions other than those formed by aux-movement and do-periphrasis, positive and negative yes/no questions. Intonation, WH, tag, and other question types were necessarily left out of the testing instrument, for several reasons. WH questions require answers in English that are of the

same type as the answers they require in Japanese. No negative transfer and interference were predicted for these question and answer types, so no analysis was performed upon them. Intonation questions can be, logically, WH or yes/no questions, so this question type introduced variables and issues that this thesis chose not to address. Tag questions may well be another source of confusion and trouble for the second language learner of English, but were felt to be outside the scope of this paper as well.

Elicited data was used in the present research, rather than naturalistic language data, or some other form of data, for practical reasons. Elicited speech data could be obtained at one sitting, and in a reasonably short amount of time. It would have been difficult and contrived were the researcher to get post-secondary students to speak in a naturalistic way in front of a microphone, and attempt to get them to ask and answer negative and positive yes/no questions in English. The contrivance needed for such a feat would have rendered the data suspect anyway, so it was decided that elicited data, imperfect though it may be, was the best that could be achieved.

One problem that faces research of any contrastive nature is that of different language backgrounds, the very basis for carrying out this research. A speaker's language background may well influence the type or level of speaker expectation and presupposition in the asking and answering of questions in certain circumstances. One question type may be more common in a

specific language then in another, and these differences may come to light in differences for native and nonnative speakers and how they use the language.

Implications of the Research

The results of this research, as reported, will naturally lead to certain implications for the field, and for further research. The teaching of yes/no questions, and of the English answering system, should be accomplished early in a second language program. The longer that old or bad habits are allowed to remain with the second language learner the more trouble they will be to erase at a later date.

Japanese is not the only international language with an answering system drastically opposed in structure to the English answering system. Russian, Tagalog, Chinese and Korean all have answering systems that differ, in one degree or another, from the English system. French also differs.

The use of iie 'no' for the affirmative answer to a negative question in Japanese is often likened to that of 'si' in French. In French, the affirmative answer to a positive question is oui 'yes', while the affirmative answer to a negative question starts with si.

(Kuno, 1973:274)

German is similar to French, in that it has a specific answer for a positive reply to a negative question, unlike English.

All learners from these, and other language backgrounds must be impressed with the differences between their native language and the target language answering systems.

This research also implies certain directions for further research in second language teaching. There is a practical role for CA within an Error Analysis framework, a role that will give the pedagogue a certain headstart in ascertaining and predicting the learners' needs. CA has been proven to work, and it has been proven in the arena of syntax. It is not a difficult process for the teacher of English as a second language, or the textbook writer, to consult grammars of languages common in the ESL classroom, and to compare the phonological, syntactic, semantic, and typological characteristics of the languages in question with the English that is taught in the classroom. If a certain item or form is to be taught in the ESL classroom, a simple cross-referencing of the grammars of the tongues in question will greatly enable the teacher to predict where a potential for problems may lie with the learners of any language background.

Contrastive studies abound in educational and linguistic literature. Some are well written and researched, others not so. Greater effort is needed, however, to do thorough research and discuss objective findings in a theoretical and practical manner. The role of CA must be reassessed, within the framework of an Error Analysis, or as an autonomous and credible research tool for predicting and justifying interference and transfer errors within second language programs and research.

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