

DON'T JUST SAY "NO": DEVELOPMENTAL SEQUENCE OF NEGATION

Kay Ahmad
The American University

INTRODUCTION

Interlanguage Theory

The Interlanguage Theory based on error analysis discusses that learner errors are not just transfers from L1. The learner cognitively tries to determine the L2 structure and in the process creates an interlanguage of developmental sequences containing various stages. These stages often include grammatically incorrect structures. If a learner uses a grammatically correct sentence it is believed that this is a repetition of something the learner heard (often a "chunk"). When grammatically incorrect utterances are made, this is believed to show the learner's true level of understanding of the rules and patterns of the L2 (Lightbrown & Spada, 1999). As the learner receives new input, he/she reexamines the language structure and revises his idea of the rules and patterns. He could at one point use a correct form, but then alter that correct form based on new input. For example, the learner learns the irregular past tense form of go as went at an early stage, but as new input is received, the learner discovers the -ed past tense ending pattern. The learner then begins using this new knowledge and uses goed in lieu of went. This regression shows that the learner is applying rules or patterns of the L2 that have been acquired (or learned), but the difference between the marked and unmarked forms have not yet been acquired. At times learners may remain at a certain stage for a long time without any alterations in the pattern or rule. This is known as fossilization if the learner is unable to move to the next stage.

The L2 developmental sequences are similar from one learner to another. Moreover, there are similarities between L2 learner errors and children's L1 errors. L1 and L2 have similar but not exact developmental sequence stages. Stage 1 in the L1 developmental sequence consists of *no* used externally. Studies in L2 negation acquisition show little or no evidence of external *no*. Unanalyzed *don't* is developed in stage 2 of the L2 developmental sequence, but it is not developed until stage 3 of the L1 sequence. Therefore, there appears to be a natural route of acquisition that the learner follows even though the routes are not exactly the same in L1 and L2. There is a black box or internal processing unit that is used in acquiring both L1 and L2.

L2 Developmental Sequence of Negation

Four stages in the developmental sequence of negation have been observed (Lightbrown & Spada, 1999):

- Stage 1 - The negative particle (no or not) is positioned before the verb or thing being negated.
Examples: *No cake.* *No have money.* *I not understand.*
- Stage 2 – The negative element don't is used but not marked for person, number or tense and is even used before modals.
Examples: *She don't like me.* *I don't can drive.*

- Stage 3 - The negative element is positioned after auxiliary verbs (are, is, etc.) and modals (can, etc.) However, the negative element don't is used and continues to be unmarked for person, number or tense.
Examples: *You cannot see it.* *She was not happy.* *He don't understand.*
- Stage 4 – The negative element don't is marked for person, number and tense. However, the auxiliary and the verb may both be marked for person, number and tense.
Examples: *She doesn't understand.* *We didn't go to the zoo.*
They didn't ate there. *He doesn't seems to understand.*

Hypotheses

This study seeks to provide insight into how negation is acquired and developed by second language learners. I'm interested in where the various stages will fall within the conventional breakdown of students at a post-secondary institution (course levels) – whether the proficiency level will influence the subjects' accuracy at certain developmental stages. I would also like to know how native language, length of stay in U.S. and other demographic data affect the route of the developmental stages of negation.

The following hypotheses guide the study:

- Acceptance of negation errors will be vast and varied in the lower proficiency level courses.
- Few or no errors will be accepted at the higher proficiency levels.
- Learners living in the U.S. for a long time will accept fewer errors than those recently coming to the U.S.
- No learners will accept errors from the stage one level. If there is an exception the learner will be from the lowest proficiency level course (Foundations).
- Chinese and Russian learners will accept fewer errors than Spanish learners.

REVIEW OF LITERATURE

Error Analysis / Interlanguage

Studies on error analysis were done essentially to determine why the errors were being made and what needed to be changed in the teaching to help the students decrease their errors in second language acquisition. In actuality the learner is processing the intake of the L2 and assessing this information. This assessment process includes analyzing the rules and patterns observed in the L2 input to which he is exposed. Thus, the focus could be centered on how a learner goes about acquiring a second language by studying the learner's utterances. The learner's language is constantly changing because his interlanguage rules are being adapted as he receives and analyzes more input in the process of acquiring the target language (Corder, 1981). The study is not only of the errors but also of the correct usage of a language structure after a period of incorrect usage. The learner is developing the language in stages just as L1 learners do. This leads to a need for focusing on what makes up the interlanguage. Selinker coined the term *interlanguage* in 1972. As the learner is exposed to more English, he/she develops the language by applying more accurate (most of the time) rules of the language that he is processing, moving closer to the target language.

Negation Studies

Gass “firmly believe[s] that it is only through a multiplicity of approaches to IL studies that we will begin to fit the pieces of the IL puzzle together” (Davies, A., Cripser, C. and Howatt, A., 1984) Evidence of beginning studies show that the interlanguages are similar from one person to the next and that variables are influenced by learner factors and learning environment (exposure).

Table 1 shows the demographic information of the studies on negation that has been reviewed. Not all of the information for each of the demographic categories was found in the literature. The table was compiled by gathering the data from various sources, which include Butterworth, G. A., Hatch, E. (1978); Cancino, H., Rosansky, E. J., and Schumann, J.H. (1978); Eubank, L. (1996); Hilles, S. (1986); Huang, J., Hatch, E. (1978); Ravem, R. (1978); Schumann, J. H. (1979); Shapira, R. G. (1978); and Stauble, A. M., Schumann, J. H. (1983). Most of these studies included only children as subjects; thus, lower stages in negation were observed more often than the higher stages that are closer to accurate L2 negated structures. The reason for using children as subjects was so as to compare L1 acquisition to L2 to see if the developmental sequences are the same. The initial study listed in the table is Klima and Bellugi (1966) who conducted a longitudinal study of three English-speaking children: Adam, Eve and Sarah. Klima and Bellugi analyzed their data into three stages in the developmental sequence of negation. “In the first stage the negative particle is sentence-external: *no singing song, no the sun shining*. In the second stage the negative is placed within the sentence and *don’t* and *can’t* appear: *He not little, he big; He no bite you; I don’t want it; We can’t talk*. The third stage is characterized by full realization of the auxiliary. Auxiliaries begin to appear in declaratives and interrogatives and therefore are no longer simply part of the negative element in the sentence: *No, it isn’t; That was not me; Paul didn’t laugh; I am not a doctor*” (Cancino, H., Rosansky, E. J., and Schumann, J.H., 1978). Bloom (70) and Lord (74) conducted studies with native English speakers, but their results, which were briefly discussed in the literature, do not confirm the existence of Klima and Bellugi’s stage 1 of the negative particle *no* used externally of the nucleus of the sentence.

Many of the results of the initial L2 studies in developmental sequence of negation were compared to Klima and Bellugi’s three stages. Butterworth (1972) conducted the first major study of L2 learners of English in the acquisition of negation with Spanish-speaking subjects. Studies such as Butterworth (72), Adams (74), Young (74), Shapira (76) and Milon (74) show some evidence of Klima and Bellugi’s stage 1 although there are few examples of the data and the usage time of the external *no* is very short. Furthermore, some of the data has the deletion of the subject (possibly Spanish interference), so categorizing the negative particle as external or internal of the nucleus is not evident. In the case of Milon (74), data from a Japanese boy shows utterances where there is no nucleus: *no* and *not* are uttered alone.

Cancino, H., et al. conducted a study that was the first observational-longitudinal study that looked specifically at age differences in the rate of acquisition of language forms including negation. Their subjects consisted of two children, two adolescents and two adults. Out of the classroom spontaneous speech data was collected and the subjects had varied exposure to the L2. Cancino, H., et al. found no evidence of Klima and Bellugi’s stage 1 and they eventually decided to abandon reference to Klima and Bellugi. They categorized their own stages, which are divided into four instead of three stages. Their analysis yielded “a developmental sequence of four negating devices: (1) *no* V, (2) *don’t* V, (3) aux-neg, (4) analyzed *don’t*, disappearance of *no* V”

Stages Used in KELA Studies Based on Lightbrown/Spada		L2 Negation Study (Spanish-Speaking Subjects Excluding Klima & Bellugi [L1])						
Stage	Characteristics	Klima & Bellugi ('66)	Butterworth ('72)	Young ('74)	Shapiro ('76)	Cancino et al. Prelim. ('74)	Cancino et al. Final ('78)	Stauble ('77/'78)
1	Neg. particle (no) before V or thing being negated <i>No cake. No have money.</i>	Stage 1 <i>No singing song.</i>	<i>No correct. No understand.</i>	<i>I no like cookies.</i>	<i>No is too little.</i>	<i>No wood. No go to Lechmere.</i>	Stage 1 <i>I no understand. I no can see.</i>	Stage 1 <i>No saw him.</i>
1	Neg. particle (not) before V or thing being negated <i>I not understand.</i>		<i>Not too much. (No verb)</i>	<i>No, not I proken. (External)</i>				
2	Neg. element <i>don't</i> used but not marked for person, number or tense <i>She don't like me.</i>	Stage 2 (unmarked?) <i>I don't want it.</i>	<i>[I don't know.] eliminated from study</i>	<i>Don't fall it down.</i>	<i>I don't think so.</i>	<i>They don't like. I don't go school. (unmarked?)</i>	Stage 2 <i>He don't like it.</i>	Stage 1 <i>Don't like. Early Stage 2 I don't saw him.</i>
2	Neg. element <i>don't</i> used before modals <i>I don't can drive.</i>						Stage 2 <i>I don't can explain.</i>	
3	Neg. particle used after aux. verbs (are, is, etc.) <i>She was not happy.</i>	Stage 3 <i>I am not a doctor.</i>					<i>It's not danger. Stage 3 I wasn't there.</i>	Mid Stage 2 He wasn't talking <i>to the teacher.</i>
3	Neg. particle used after modals (can, etc.) <i>You cannot see it.</i>	Stage 2 <i>We can't talk.</i>		<i>Can't get off me. I can't see yet.</i>			Stage 3 <i>He can't see. You can't tell her.</i>	Early Stage 2 <i>The dog can't bark.</i>
3	<i>Don't</i> still used but not marked for person, number or tense <i>He don't understand.</i>							
4	Neg. element <i>don't</i> is marked for person, number or tense <i>She doesn't understand. We didn't go to the zoo.</i>	Stage 3 <i>Paul didn't laugh.</i>					Stage 4 <i>It doesn't spin. She didn't believe me.</i>	Late Stage 2 <i>I didn't went to Costa Rica.</i>
4	Both aux. & V marked in person, number or tense <i>He doesn't seems to know.. They didn't ate there.</i>							

(Cancino, H. et al., 1978). Wode (78) also makes no comparison with Klima and Bellugi's stages.

Other studies compared their results to Klima and Bellugi's stages 2 and 3. Gilles (75) analyzed data from two Japanese-speaking children. The results were similar to Klima and Bellugi's stages 2 and 3, but one subject's utterances showed small traces of stage 1. Agnello (77) compares the data of her 42-year old Greek subject with Klima and Bellugi's stage 2 and the beginning signs of stage 3. An interesting variable in this study, as well as age, is that the subject had already been living in the U.S. for ten years prior to the study. Agnello (77) and Bruzzese (77) conducted separate studies on two different Italian subjects; however, in analyzing their data, they both found evidence of Klima and Bellugi's stages 2, but no signs of stage 1.

Others developed their own stages. Stauble (1977, 1978) used the data of two subjects from Cancino's et al. study subdividing the second stage into three parts:

Stage 1: *no + phrase* constructions

Early Stage 2: pre-verbal negation with unanalyzed *don't* and post-auxiliary negation with copulas and *can*

Mid-Stage 2: *No + Verb* constructions and *Not + phrase* construction

Late Stage 2: Elimination of non-standard (*no + phrase* and pre-verbal negation) and analyzed *don't* in negation and tense

Stage 3: Negation correctly inflected for person, number and tense (Schumann, 1979).

Eubank (96) related the effects of native language on L2 production in relation to syntax of German and English based on data described in Wode (1981). Eubank's used Wode's three stages but addressed them syntactically:

Stage 1 (phrasal negation: no/not) – *no catch up, no car*

Stage 2 negation with non-thematic be: *lunch is no ready, that's not good.*

Stage 3 negation with thematic verbs: *John go not to school. You not shut up.*

You have a not fishing pole. Hit it not over the fence.

Eubank stated that the examples from the first two stages do not provide any proof of verbal inflection. In the third stage, agreement was evident but not tense. Also, the examples of the third stage showed negative particles in the preverbal and post-verbal positions.

Butterworth (72), Shapira (76) and Cancino et al. (74) recognized "[I] *don't know*" as nonomorphic and eliminated this utterance from the study. This was practical because a chunk like this one would not give accurate information in the use of *don't* in the developmental sequence of negation.

The results of Cancino's, H., et al. observation of children, adolescents and adults was more interesting than the others because they introduced the variable of age and exposure. Alberto, their 33-year-old subject, showed little linguistic development during the study; thus, remaining at stage 1 as defined by Cancino et al. Schumann (78) discusses the many variables that could have attributed to his pidginization and concluded that social and psychological distance were the major influences.

Young (74) conducted a nine-month study on the acquisition of English negation with two subjects, who were Spanish-speaking children. Young divided the study into three periods – ten weeks, eleven weeks, and ten weeks. Even after being exposed to the L2 in the classroom (an all-English kindergarten class) for nine months, the *no + Verb* construction was still frequent.

Study	Subjects					Length of Study	Reference to Klima/Bellugi	Don't monomorphic	Notes
	No	M/F	L1	Age	In U.S.				
Klima/Bellugi (66)	1/2	M/F	English	children					Designated three stages
Bloom (70)	3		English	children			No evid. Stage 1		
Lord (74)	1	F	English	child			No evid. Stage 1		
Butterworth (72)	1	M	Spanish	13 yrs	2 mos.	3 mos.	Stages (1), 2, (3)	<i>I don't know.</i>	Most Stage 1 - transfers from L1
Adams (74)	10		Spanish	4 yrs			Stages (1), 2, 3		Pseudo-Longitudinal;
				5 yrs					<i>don't, can't</i> not in Stage 2
Young (74)	2	M	Spanish	5.7 yrs		9 mos.	Stages (1), 2, 3	unanalyzed	
		M	Spanish	5.1 yrs			Stages 1, (2)	chunks	
Barker (75)	1		Chinese	early		5 weeks			<i>Don't</i> - frequent negator;
	1		Korean	twenties					Passed beginning stages of developmental
	3		Spanish						sequence in negation
Shapira (76)	1	F	Spanish	22 yrs	3 yrs.	1.5 yrs.	Stage 1	<i>don't know</i>	Minimal use of <i>don't</i> (<i>don't know</i> elimin)
Cancino et al. (74)	1	M	Spanish	33 yrs	Less	3 mos.	No evidence of	<i>I don't know.</i>	Doesn't reflect any of Klima/Bellugi stages
Preliminary	1	M	Spanish	13 yrs	than		Stage 1	<i>I don't think so.</i>	
	1	F	Spanish	5yrs	3 yrs.				
Cancino et al. (78)	2	M/F	Spanish	33; 25		10 mos.			Abandoned reference to Klima/Bellugi
Final	2	M/M	Spanish	11; 13					One subject - pidginized (little development)
	2	F/M	Spanish	5; 5					
Stauble (77/78)	2		Spanish				Stages 2, 3		Review of 2 subjects of Cancino et al.
Milon (74)	1	M	Japanese	7 yrs			Stage 1, 3		Cancino's 1, 2; Stauble's 1, Early 2
Giles/Weber (76)	2	M	Japanese	6 yr 11 m	4 mos.		Stages 2, 3		One subject had a small trace of Klima &
			Japanese	7 yr 6 m	6 mos.				Bellugi's stage 1
Hakuta (75)	1	F	Japanese	5 yrs		15 mos.			<i>Don't</i> as first negator
Gerbault (78)	1	F	French	4 yrs		2 yr			

Wode (78)	4		German	4-9 yrs		6 mos.	No comparison	<i>didn't</i>	Post-verbal negation -John go not to the school.
Ravem (74)	1	F	Norwegia n	3 yr 9 m		10 mos.		<i>don't</i>	Intonation to signal negation
	1	M	Norwegia n			5 mos.			Supplemental (done earlier)
Huang (71)	1	M	Taiwanese	5 yrs	1 month	6 mos.			No evidence of Taiwanese (Chinese) interference
Agnello (77)	1	M	Greek	42 yrs	10 yrs.	3 hrs.	Stage 2 & (3)		10 yrs. residence in U.S.
Agnello (77)			Italian			3-4 hrs.	Stage 2 (no 1)		
Bruzzese (77)	1	F	Italian				Stage 2 (no 1)		
Eubank (96)	1	F	German	9 yrs		6 mos.			Based on one subject from Wode (81)

Stages Used in KELA Studies		Negation Study (NON-Spanish-Speaking Subjects)											
Based on Lightbrown/Spada		Milon (74)	Gilles/Weber	Hakuta (75)	Gerbault	Wode ('78)	Ravem (74)	Huang (71)	Agnello	Agnello	Bruzzese	Tiphine	Eubank (96)
Stage	Characteristics	Japanese	(76) Jap.	Japanese	('78) Fr.	German	Norwegian	Taiwanese	(77) Greek	(77) Italian	(77) Italian	(83) French	Ger. [Wode]
1	Neg. particle (no) before	Stage 1			Stage 1	Stage 2b				60%	78%		Stage 1
	V or thing being negated	No my turn.	No helps.	No saw him.	No drink	No play		NONE	23	I no find.	130/232	Joel no	No catch it.
	No cake. No have money.				milk.	baseball.						knows bike.	
1	Neg. particle (not) before	Stage 2			Stage 1								Stage 3
	V or thing being negated	I'm not climb.	Not need		Not + V		I not like it.	Kenny not					You not
	I not understand.		shoes.					got it.					shut up.
2	Neg. element don't used				Stages 2 - 5	Stage 4a							
	but not marked for person,				Unanalyzed	Don't say	Jig don't		28	12%		He don't	
	number or tense				don't + V	some thing.	need all.		Unmarked?	I don't read.		know.	
	She don't like me.									unanalyzed			
2	Neg. element don't used					? Stage 3c							
	before modals		I don't can go.			[I didn't can	I don't will it.						
	I don't can drive.					close it.]							
3	Neg. particle used after				Stages 1 - 5				1 - was not				
	aux. verbs (are, is, etc.)				Be not				1 - are not	1 - It's not		He is not	
	She was not happy.								1 - is not			very sad.	
3	Neg. particle used after				Stage 4	Stage 3a			5 - can't	20%	21%		Stage 2
	modals (can, etc.)				can't	I cannot hit			1 - can not	He can't go.	49/232		That's not
	You cannot see it.					the ball.			1 - couldn't	I couldn't sleep.			good.

3	<i>Don't</i> still used but not marked for person, number or tense			Stages 2 - 5								
	<i>He don't understand.</i>			Unanalyzed								
				<i>don't + V</i>								
4	Neg. element <i>don't</i> is marked for person, number or tense				Stage 3b							
	<i>She doesn't understand.</i>		<i>doesn't</i>					1 - <i>didn't</i>				
	<i>We didn't go to the zoo.</i>		<i>didn't</i>		<i>I didn't see.</i>			1 - <i>did not</i>				
								1 - <i>doesn't</i>				
4	Both aux. & V marked in person, number or tense				? Stage 3c							
	<i>He doesn't seems to know..</i>				<i>[I didn't can close it.]</i>							
	<i>They didn't ate there.</i>											

Shapiro's (76) subject, a 22-year-old Guatemalan woman, also showed little linguistic development during the one and a half year study. The *no* + Verb form was uttered 80% in the first sample of her spontaneous speech, 54% in the second sample and 61% in the third sample (Schumann, 1979).

Zobl (1982) as well as Schumann (1979) state that Spanish speakers learning English tend to prolong the use of pre-verb negation (stage 1) because this developmental stage is similar to the negation system in Spanish. Zobl concludes that the similarity between the early developmental structure and the L1 inhibits the transition to the next level of the developmental sequence. Thus, second language acquisition is drawn out or possibly impeded as in fossilization.

The research that I conducted includes adults at various interlanguage stages as determined by their class level placement and responses to the survey. I used the four stages in the developmental sequence of negation listed in Lightbrown & Spada (1999). Table 2 shows a comparison of negation stages from the various studies using Spanish-speaking subjects as related to the four stages that were used in this research project. Cancino's et al. stages are very similar to those used in this project. In table 2, evidence of Stage 1, characterized as *no* + verb or thing being negated, is recorded in each of the studies although the difference is seen in the omission or use of the subject. *Not* + V is not as evident in all of the studies. The negative element *don't* is found to be used but not marked for person, number or tense in all of the Spanish-speaking studies (Stage 2). The data from Butterworth, Young, Shapira and the preliminary study of Cancino et al. have little or no evidence of stages 3 and 4. Table 3 compares the data from the non-Spanish-speaking subjects in relation to the stages used in this study. This table also shows that there is evidence of stage 1: *no* + V in all but two of the studies. One is the study of the Norwegian children by Ravem (74) and the other is the study of the Taiwanese boy by Huang (71). The results show that the French and German subjects have acquired more stages of the developmental sequence in negation than the other subjects listed in table 3.

METHODOLOGY

Subjects

The questionnaires were presented, explained, and distributed to students enrolled in the following classes at Montgomery College Continuing Education: Foundations (low beginning), Fundamental Skills (high beginning), Intermediate Skills (low intermediate), High-Intermediate Grammar Skills (high intermediate), and TOEFL Preparation (Advanced). Half of the classes were starting a new session (end of March), and the others were mid-term. The following courses that began in January and end in May are referred to as mid-term:

- High-Intermediate [mid-term] Skills Class
- Intermediate Skills [mid-term] Class
- Foundations [mid-term] Class

The High-Intermediate Skills class is only offered January to May. The Intermediate Skills [mid-term] class was presented the questionnaire because the class was also being observed by the researcher and the instructor was interested and offered her students as subjects. The Foundations class was presented the questionnaire because the instructor preferred that I use the students in this mid-term class as subjects because she couldn't spare the time in her Foundations class that

just started. A total of 79 questionnaires were collected from the six classes. The overall average class enrollment at the time of the questionnaire presentation is thirteen. The breakdown is as follows:

- TOEFL Preparation Class - 14 students
- High-Intermediate [mid-term] Skills Class - 12 students
- Intermediate Skills [mid-term] Class - 13 students
- Intermediate Skills Class - 14 students
- Fundamental Skills Class - 17 students
- Foundations Class [mid-term] - 9 students

Most of the presentations in the classes were done close to the beginning of a class session, but there were exceptions: TOEFL Preparation (close to the end of a class session); Intermediate Skills [mid-term] (in the middle of a class session); and Intermediate Skills (just before a break).

The L1 population of the students at Montgomery College is reflected in one of the questions on the questionnaire, but some of the students' L1 were not represented there; for example, Balania/Criolo, Gujarati, Kmere (2), Slovakian, Swedish and Thai were written on the blank following other. The following is a breakdown of the rest of the native first languages tabulated from the questionnaires:

<u>1</u> Amharic	<u>2</u> Arabic	<u>1</u> Bengali	<u>0</u> Bulgarian	<u>9</u> Chinese
<u>1</u> Czech	<u>4</u> Farsi	<u>4</u> French	<u>5</u> German	<u>10</u> Greek
<u>1</u> Hebrew	<u>0</u> Hindi	<u>2</u> Japanese	<u>5</u> Korean	<u>1</u> Nepalese
<u>1</u> Polish	<u>6</u> Portuguese	<u>3</u> Russian	<u>21</u> Spanish	<u>0</u> Turkish
<u>1</u> Urdu	<u>4</u> Vietnamese	<u>7</u> Other	(Write the name)	

In a non-statistical observance I observed that the TOEFL class had many students with European L1s, so I organized the demographic information in a chart comparing proficiency level and L1 (Appendix A). Also, eleven of the fourteen advanced subjects (79%) have been in the U.S. for less than a year. A chart relating length of stay in U.S. and proficiency level has been included in the demographic information (see Appendix B).

Four native speakers with the following ages (68, 35, 12 and 8) also completed the questionnaire and the results were tabulated. The only native speaker that was not 100% accurate was the eight-year old. Her accuracy rated at 71%.

Questionnaire

The questionnaires collected demographical information about the students and their responses to the “correctness” of various “negated” sentences (see attached questionnaire – Appendix C). The sentences were listed in random order on the questionnaire. Each sentence represented a different developmental stage of negation and was grammatically correct or incorrect. The responses on negation were used to focus on accuracy and not communicative ability.

The demographic information was collected by fill-in the blank and check format although the “proficiency level” (course level placement) was recorded by the color of the questionnaire as follows:

- TOEFL Preparation Class - goldenrod
- High-Intermediate Skills Class - blue
- Intermediate Skills Class - green

- Fundamental Skills Class - yellow
- Foundations Class - pink

The questions (prompts) included the following: the students' native country, native language, other fluent languages, sex, age range, educational level, as well as years spent in the U.S., age when they started learning English, where they studied English, and where they use English. During the data collection a few problems developed. The questionnaire didn't account for occupation in native country as well as in U.S. This was verbally conveyed to students. Also, the section for where the subject studied English before coming to Montgomery College should have had another choice of other and a blank space.

Tabulation

After collecting the data, the results were tabulated and analyzed in three categories: "proficiency" level (course level placement), L1 (focusing on Spanish, Chinese and Russian), and length of stay in U.S. The other demographic data collected contributed to the analysis with qualitative variables.

First, according to the different "proficiency" levels (course level placement), the data was tabulated from the responses to the "correctness" of various "negated" sentences using a tabulation sheet for each class. A colored pencil was used for the tabulations and corresponded to the questionnaire color. A light green and dark green pencil were used to distinguish the two different Intermediate Skills classes. Also, mid-term was written on each of the questionnaires from the appropriate Intermediate Skills class. The tabulations were then calculated into percentages according to the percentage of those who accepted the sentence as correct and the percentage of those who rejected the sentence as incorrect. The percentages of each proficiency level were then compiled into one chart where an overall percentage of correct and incorrect answers were calculated (Appendix D). At the bottom of the chart, the average percentage per level is calculated according to the overall accuracy, the errors refuted and the errors accepted.

Second, the responses to the "correctness" of various "negated" sentences were tabulated using colored pencils and a tabulation sheet for nine of the L1 groups. The colored tally marks give a quick visual to the proficiency levels of the subjects. My preliminary selections of the L1 groups were Spanish, Russian and Chinese. Since there were only three Russian subjects, I decided to look at many of the other L1 languages including Farsi, French, German, Korean, Portuguese and Vietnamese. The percentages for the L1 groups were calculated and the results were compared in a chart format. The tabulations were then calculated into percentages according to the percentage of those who accepted the sentence as correct and the percentage of those who rejected the sentence as incorrect. The percentages of each L1 group were then compiled into one chart where an overall percentage of correct and incorrect answers were calculated (Appendix E). At the bottom of the chart, the average percentage per L1 is calculated according to the overall accuracy, the errors refuted and the errors accepted.

Finally, according to the length of stay in the U.S., the responses to the "correctness" of various "negated" sentences were tabulated using colored pencils and a tabulation sheet for each time range. The colored tally marks give a quick visual to the proficiency levels of the subjects. Also the L1s were written on the tabulation sheet using the appropriate colored pencil to designate the proficiency level. This provided an overview of the three demographics being focused upon: proficiency level, L1, and length of stay in U. S. Then, the percentages were calculated, and the results of the different lengths of stay in the U.S. time ranges were compared.

This information, as well as the average percentage per length of stay in the U. S., was calculated according to the overall accuracy (the errors refuted and the errors accepted) and then compiled in a chart (see Appendix F).

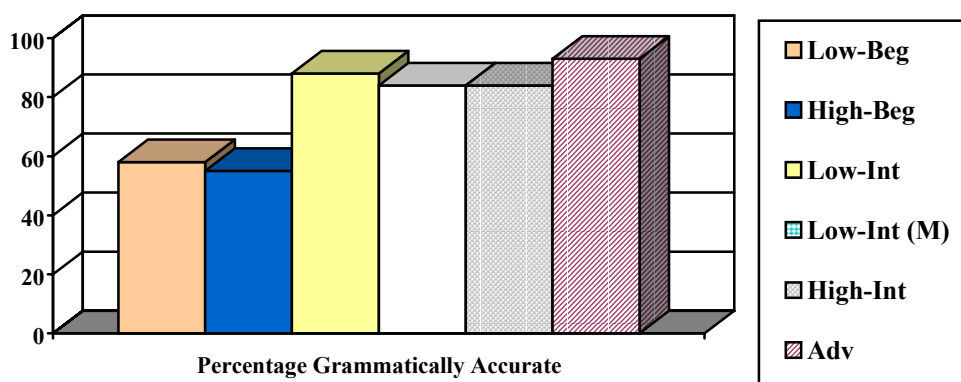
The information from the tabulations and the percentage comparison forms (Appendices D, E and F) were organized into graphs according to overall accuracy, and acceptance of errors in negation for the three demographics: proficiency level, L1 and length of stay in the U. S. Overall accuracy for each sentence categorized by stage were calculated in graphs according to the three demographics focused on. The graphs and the percentage comparison forms were referred to during the analysis of the research.

RESULTS / DISCUSSION

Overall Analysis

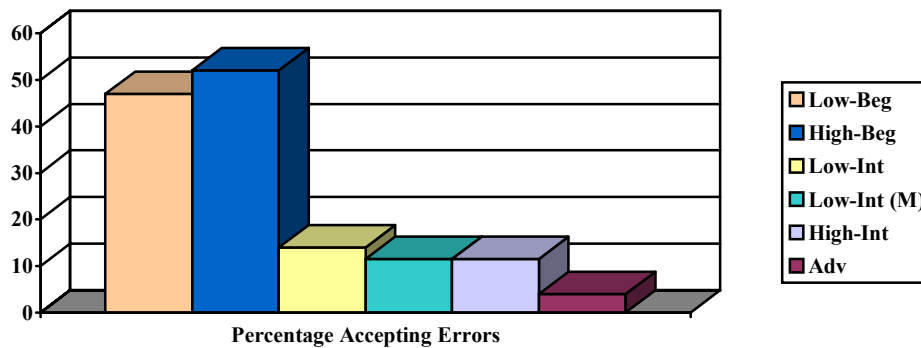
In analyzing the data according to proficiency levels, the dramatic change in grammatical accuracy is seen between the beginning levels and the intermediate/advanced levels (see Graph 1).

Graph 1: Proficiency Level Accuracy



The results of the beginning subjects rate in the mid-50 percentile (Low-Beginning – 58% and High-Beginning – 55%) while the higher levels rated in the 80/90 percentile (88%, 84%, 84% and 93%, respectively Low-Intermediate to Advanced) in relation to overall grammatical accuracy, which is defined as accepting grammatically correct negated sentences and refuting errors in negated sentences. There is also evidence (as shown in Graph 2) that the beginning level subjects accepted a much higher percentage of grammatical errors in negated sentences (47% and 52%) than the higher level subjects (14%, 11.5%, 11.5% and 4%). It is important to note that the graphs demonstrating acceptance of grammatical errors as being correct excludes the percentage of correct sentences marked as incorrect.

Graph 2: Proficiency Level: Accepting Grammatical Errors in Negation



According to Graph #1, the Low-Beginning subjects had more accurate responses than the High-Beginning subjects. One variable that could contribute to this is due to the fact that 55% of the Low-Beginning students have spent 7-10 years in the U.S. and 76% of the High-Beginning students have spent less than three years in the U.S., with 53% being here for less than one year. The longer length of stay in the U. S. could have improved the Low-Beginning students' results through more exposure to the L2. For example, 56% of the Low-Beginning subjects (mid-term) were accurate in determining that the sentence "*Mary don't swim.*" (stage 2) is grammatically incorrect; whereas, the High-Beginning subjects' accuracy was only 29%. The following sentences had similar results.

<i>I don't can draw.</i> (stage 2)	60% Low-Beginning	47% High-Beginning
<i>The students were not at school.</i> (stage 3)	67% Low Beginning	53% High Beginning
<i>The girl doesn't work.</i> (stage 4)	89% Low-Beginning	65% High-Beginning

The example from stage 4 (*The girl doesn't work.*) demonstrates that exposure to L2 especially in a working environment could contribute to the successful accuracy in marking this sentence. The Low-Beginning students listed their occupations as pattern cutter, manicurist, machinist, homemaker, manager, newspaper delivery [person], babysitter, secretary and supervisor. Forty-seven percent (8/17) of the High-Beginning subjects indicated their occupation as student. An additional three subjects are not working in the U .S.: two indicated retired (from profession in own country) and one, homemaker.

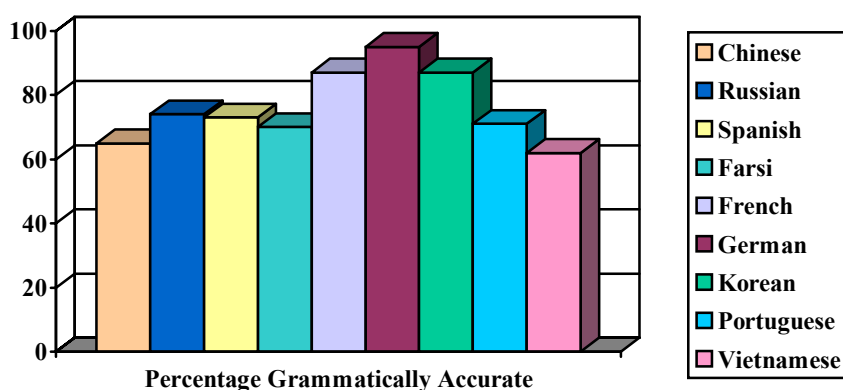
The results from the two Low-Intermediate and the High-Intermediate subjects were very similar in the overall grammatical accuracy rating in the mid to high 80 percentile (88%, 84% and 84%, respectively). The results from the Low-Intermediate Class, which had met for approximately thirty hours (at the time of the questionnaire presentation), calculated a higher grammatical accuracy than the midterm Low-Intermediate class surveyed, which met for approximately forty hours (see Graph 1). However, the results from the class with 30 hours of instructional time show that the subjects accepted more grammatical errors in negation; whereas, the mid-term Low-Intermediate class refuted a higher percentage (see Graph 2). Furthermore, the midterm Low- Intermediate Class results showed that the subjects in this class refuted more correct sentences than the other class. One dramatic example is sentence # 15 (The televisions don't work). One hundred percent of the subjects (midterm Low-Intermediate) checked off that it is an incorrect sentence. This sentence was refuted as correct (33-36%) at all the levels. In the control group of native speakers, the retired subject commented that this sentence is tricky because we usually only talk about one television. – "The television doesn't work" is more

commonly used. The overall results represent the confusion that some students may have had relating the sentence to what they may have heard used (television – singular) instead of applying a rule in which “*don’t*” is used with plurals such as *televisions*. Therefore, exposure to the common usage of a singular noun more than a plural noun in certain contexts could influence the results of accuracy.

The results from the subjects at the advanced proficiency level (TOEFL Preparation students) had a lower percentage (93%) of grammatical accuracy than I would have expected. Incorrect sentences that one or two students (not always the same student) accepted as correct included “*We don’t should drive fast*”, “*He don’t like sad movies*”, “*Susan doesn’t wants to do her homework*”, and “*He didn’t found my book*”, which represent stages 2-4. I expected the advanced students to be 100% accurate at stages 1-3. The possible reason for the lower anticipated accuracy results could be attributed to the variable of length of stay in the U.S. Seventy-nine percent (11/14) of the subjects at the advanced level have been in the U.S. for less than a year.

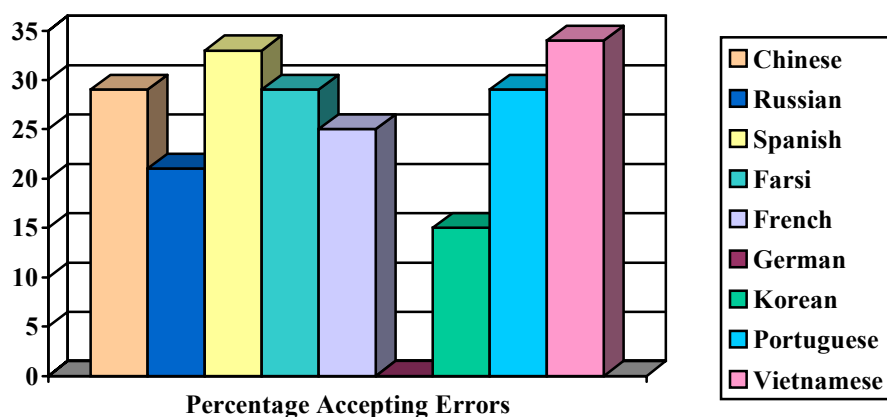
As seen in Graph 3, the French, German and Korean subjects were more than 80% accurate in marking the negated sentences as correct or incorrect (87%, 95%, 87%, respectively). The Vietnamese had the poorest accuracy percentage of the nine native language groups analyzed.

Graph 3: L1 Grammatical Accuracy in Negation



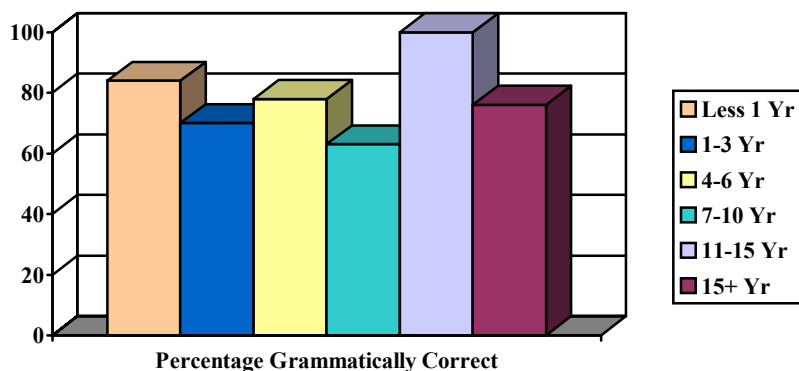
The Spanish subjects were overall more accurate (73%) than the Chinese subjects (65%), but the Chinese (29%), as well as the Russians (21%), accepted fewer errors in negation than the Spanish subjects (33%), therefore confirming one of my hypotheses (see Graph 4). The French accepted more errors in negation (25%) than the Koreans (15%) even though the overall accuracy was the same (87%); thus, the Koreans marked correct sentences as being incorrect. The Vietnamese accepted more errors in negation (34%) than the others. On the other hand, the Germans accepted no errors in negation. Their inaccuracy was from marking correct sentences as incorrect.

Graph 4: L1- Accepting Grammatical Errors in Negation



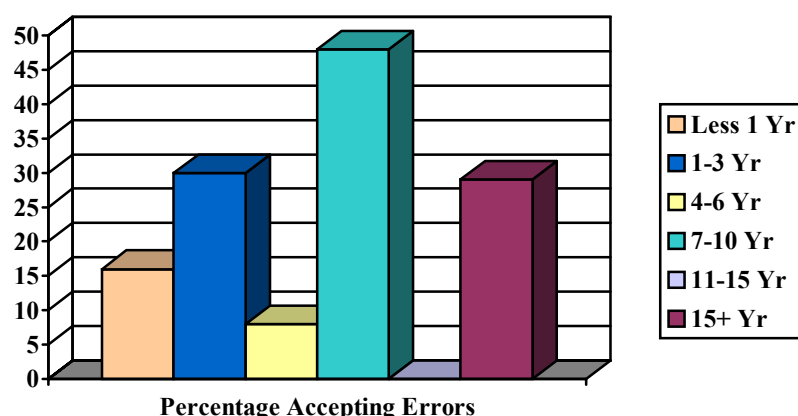
Graph 5 shows the overall accuracy according to the length of stay in the United States. Subjects in the U.S. from seven to ten years were the least accurate (63%) in marking the negated statements. The most accurate was a single subject in the eleven to fifteen year range, who was 100% accurate. This student is also in the advanced course (TOEFL Preparation). Surprisingly the subjects in the U.S. less than one year were more accurate than the other ranges with the exception of the previously mentioned subject in the U.S. for 11 - 15 years.

Graph 5: Length of Stay in U.S. Accuracy



In opposition to my hypothesis that learners living in the U.S. longer will accept fewer errors, those in the U.S. less than a year accepted fewer errors (16%) than those in the U.S. 1 - 3 years (30%), 7 – 10 years (48%) and 15 or more years (29%) [See Graph 6]. The subjects in the United States seven to ten years accepted the most grammatical errors in negation. This could be due to the fact that 73% (8/11) are Spanish-speaking and 45% (5/11) are students in the Low-Beginning class. In analyzing these findings, it is evident that more than one variable must be considered.

Graph 6: Length of Stay in U.S. – Accepting Grammatical Errors in Negation



Analysis by Stage

Appendices G – V show the three different overall accuracy results for each of the sentences according to the demographics: proficiency level, L1, and length of stay in the U. S. The sentence results were organized and thus explained by stage. Appendices G - I are graphs of the sentences from stage 1; appendices J - L, stage 2; appendices M - P, stage 3; and appendices Q – V, stage 4.

Stage One

A majority (94.8) of the subjects were grammatically accurate when responding to the correctness of sentence #7 (*I no have any money*), showing that the perception of using *no* + verb as accurate negation is almost non-existent. Of the minority (four subjects) who accepted the *no* + verb construction as correct, three were Spanish-speaking, and the other was Korean. The demographics for these subjects are listed below in Table 4.

Table 4: Demographics of Subjects Who Believed *No* + V to Be Correct

L1	Country	Prof. Level	Time in U.S.	Occupation	Speak English
Spanish	El Salvador	High-Beginning	Less than 1 year	Student	Home; Friends
Spanish	Peru	High-Beginning	7 –10 years	Retired	(None checked)
Spanish	Chile	High-Intermediate	1 – 3 years	(None listed)	Friends; Community
Korean	Korea	Low-Beginning	1 – 3 years	Machinist	Work; Community

As mentioned in the review of literature, it was noted that Spanish speakers more than other L1 learners prolong the developmental stage 1 in negation because the *no* + V construction is similar to Spanish syntax. It was surprising that the Peruvian has been here for seven to ten years and was still inaccurate in marking sentence # 7 incorrect. Other demographic information can explain this. The Peruvian is seventy-five years old and only began learning English at age seventy-three. In addition, she does not use English outside of the classroom. The High-

Intermediate student from Chile was overall only 40% accurate in marking the negated sentences. This student has been in the U.S. for one to three years and this is apparently her first English class outside of her country, where she started learning English when she was twelve.

The Korean's proficiency level (Low-Beginning) and the fact that he didn't start learning English until he was an adult could explain his incorrect response. Also, he does not speak English with his family and friends, only at work, where he is a machinist, and in the community.

In all four cases various variables contributed to the possible reason for the incorrect response with L1, proficiency level, length of stay in the U.S., and years of studying English as the major influences for the acceptance of this grammatical error in negation.

The other stage one sentence (#13) "*The children not like it*" produced different results where more of the lower level (Low-Beginning and High-Beginning) subjects accepted the error in negation as being grammatically correct. Of the 9 (36%-9/25) L1 languages analyzed [76% (60/79) of the total # of subjects] only three of the L1s were 100% accurate in marking the previously mentioned sentence #13 as being incorrect. Portuguese (83%), Korean (80%), Chinese (78%), Farsi (75%), French (67%), and Spanish (62%) were 62-83% accurate with the Spanish having the least accuracy with this stage 1 example.

Stage Two

In analyzing the data representing stage 2, there is still evidence of a big percentage difference between the Beginning levels and Intermediate/Advanced levels as seen in the stage 1 sentence "not + V" although the difference is more evident in sentence # 12 (*We don't should drive fast.*) using *don't + should*. The results show that more than 50% of the lower level subjects (Low-Beginning – 78% and High-Beginning – 65%) as well as more than a third (36%) of the Low-Intermediate level subjects labeled the sentence as being correct. Additionally, the High-Intermediate was 100% accurate; whereas, the Advanced subjects' results were only 93% accurate with one subject labeling the sentence as correct. This subject has been in the U.S. for one to three years and is from Bangladesh.

Sentence #1 (*Mary don't swim*) using *don't* (unmarked for the 3rd person singular) + verb and sentence # 4 (*I don't can draw*) using *don't + can* produced results where the Low-Beginning level subjects were more accurate in their responses than the High-Beginning. As mentioned before, length of stay is a major variable since most of the Low-Beginning subjects have been in the U.S. longer than the High-Beginning subjects.

In stage 2 the Germans were 100% accurate in marking each of the three sentences as incorrect. The Koreans were 100% accurate with refuting the sentences using unanalyzed *don't + V* and *don't + can*, but one student marked *don't + should* as being correct reducing the Korean's accuracy for the sentence to 80%. It is interesting to note that the overall accuracy of almost all the L1s (except Farsi) was higher in refuting the errors of *don't + can* than *don't + should* with four out of nine L1's being 100% accurate with *don't + can* and only two out of nine for *don't + should*. The Vietnamese subjects were 100% accurate in refuting *don't + can*. The Vietnamese were only 100% accurate with three of the fifteen sentences and the other two sentences reflected stage 1. *Can/can't* are considered to be used more often in English at the early levels than *should* and could explain the higher accuracy of refuting the incorrect use of *don't + can*. In contrast, the Farsi speakers were 100% accurate in marking *don't + should* as incorrect, but only 75% accurate with *don't + can*.

Stage 2 accuracy graphing according to the length of stay in the U.S. was very similar for all three sentences of stage 2 with one exception. In marking *don't + can* and *don't + should* sentences, those in the U.S. fifteen or more years were 100% (3/3) accurate in refuting these sentences. However, the same subjects were only 67% (2/3) accurate with unanalyzed *don't + V* since one of the subjects marked sentence # 1 (Mary don't swim.) as being correct.

Stage Three

The High-Beginning subjects were more accurate (88%) in marking sentence #2 (She was not happy) as correct than in marking the other stage 3 sentences: *were + not* (53%), *cannot + V* (47%) and the incorrect unanalyzed *don't + V* (47%). Interestingly enough the High-Intermediate subjects were more inaccurate with sentence #2 *was + not* (67% accuracy) than the other stage 3 sentences (83%, 92%, 83%), respectively. The Low-Intermediate (midterm) subjects were 100% accurate in refuting sentence #10 (He don't like sad movies). This is the only time in stage 3 that the Low-Intermediate (midterm) was more accurate than the other Low-Intermediate subjects. In fact, the Low-Intermediate (midterm) was only 69% accurate in marking sentence #8 (I cannot see the road) as correct whereas the other Low-Intermediate class was 95% accurate. The *was + not*, *were + not* and *cannot + V* sentences of stage 3 did not use contractions. This could be attributed to poor accuracy results if the subjects in the courses were only exposed to contractions, especially in sentence #8 where cannot is used in lieu of can't or can not. This idea can also attribute to the fact that the German and Korean subjects were only 80% accurate in marking sentence #8 using *cannot + V* as correct; whereas, both L1 groups were 100% accurate in marking the other stage 3 sentences. It's interesting to note though that the Vietnamese speakers were more accurate (75%) in marking sentences #2 and #8 than the two other stage 3 sentences: sentence #6 (The students were not at school), 50% and sentence #10 (He don't like sad movies), 25%.

In reference to length of stay in the U.S., those in the U.S. fifteen years or more were 100% (3/3) accurate marking *was + not* and *cannot + V* as correct; however, they were only 67% (2/3) accurate in marking *were + not* and unanalyzed *don't + V*. The subjects in the U.S. four to six years were 100% (3/3) in refuting sentence #10 (He don't like said movies.) However, they were only 33% (1/3) accurate in accepting sentence #8, using *cannot + V*, as being correct.

Stage Four

As mentioned before, sentence #15 (The televisions don't work.) received poor results in accuracy according to proficiency level L1 and length of stay. The Low-Intermediate (mid-term) subjects were 0% accurate! The exceptions in the poor accuracy of this sentence were the French subjects (according to L1) and the one advanced subject from Ecuador that has been in the U.S. for eleven to fifteen years (according to length of stay in U.S.) – they were 100% accurate. In relation to proficiency level, the High-Intermediate subjects were less accurate than the Low-Intermediate, Low-Intermediate (midterm) and Advanced subjects with the stage 4 sentences except in sentence #15, where their results were just a little more accurate than the others.

In stage 4 according to L1, the Korean subjects were less accurate than Germans and French when the forms were marked for person, number or tense in both the auxiliary and verb. Sentence #3 (Susan doesn't wants to do her homework.) and sentence #9 (You didn't found my

book.) are examples of the double markings. In relation to length of stay, the subjects in the U.S. more than fifteen years were also less accurate in the stage 4 sentences #3 (doesn't wants) and #9 (didn't found) than the other sentences. The accuracy for sentence #3 was 0% and 33% for sentence #9. These subjects have different proficiency levels and L1's as follows High-Beginning/ Vietnamese, Low-Intermediate (mid-term)/Farsi, and High-Intermediate/French [Cameroon]. The Iranian subject is the one that accurately marked sentence # 9 as being incorrect. Proficiency level and L1 therefore are variables affecting the accuracy, since it would be expected that someone in the U.S. for eleven to fifteen years would be more accurate than those here for less time.

CONCLUSION

On the basis of the findings reported in this research study, one can determine that there is a significant difference in the developmental stages in the acquisition of negation between the Beginning level subjects and the higher level subjects (Intermediate and Advanced). The results from the L1 and length of stay analysis are inconclusive since the numbers of subjects for L1 and range of years in the U.S. were unequally distributed. These limitations would need to be supplemented with additional research that would provide the needed subjects for a more equal distribution among the various L1 languages and years in the U.S. More precisely, the results indicate that the research cannot focus only on one aspect of the demographic data as L1 and length of stay because other variables can shift the results dramatically; for example, the overall accuracy percentage for those in the U.S. for less than a year was very high since approximately one-fourth of that group was at the advanced proficiency level.

In comparison with the other negation studies, the findings are similar in the sense that acquisition of the stages overlaps (one stage is not completed before moving to the next), and Spanish-speakers tend to prolong the lower developmental stages. Also, there is evidence in Gerbault's (78), Wode's (78) and my results that show the French and German subjects more successfully acquired the various negational stages. These findings, incidentally, are not entirely compatible with the results collected from the negation studies listed in the literature review because those results were based on productive data and in many cases focused on the lower developmental stages of children and pidginized adults. The framework of this study needs to be tested in a productive context, so as not to limit the subjects' knowledge to the few selected statements chosen for the study. This paper has attempted to demonstrate that the developmental sequence in negation is not a linear acquisition. As the findings have shown, acquisition of the characteristics within the stages overlaps.

REFERENCES

- Butterworth, G. A., & Hatch, E. (1978). A Spanish-speaking adolescent's acquisition of English syntax. In E. M. Hatch (Ed.), Second language acquisition: A book of readings. (pp. 231-245). Rowley, MA: Newbury House Publishers, Inc.
- Cancino, H., Rosansky, E. J., & Schumann, J.H. (1978). The acquisition of English negatives and interrogatives by native Spanish speakers. In E. M. Hatch (Ed.), Second language acquisition: A book of readings. (pp. 207-230). Rowley, MA: Newbury House Publishers, Inc.
- Corder, S. P. (1981). Error analysis and interlanguage. London: Oxford University Press.
- Davies, A., Cripser, C., & Howatt, A. (1984). Interlanguage. Second language research, 1, 83-92.
- Eubank, L. (1996). Negation in early German-English interlanguage: More valueless features in the L2 initial state. Second Language Research, 12, (1), 73-106.
- Hilles, S. (1986). Interlanguage and the pro-drop parameter. Second language research, 2, 43-49.
- Huang, J., & Hatch, E. (1978). A Chinese child's acquisition of English. In E. M. Hatch (Ed.), Second language acquisition: A book of readings. (pp. 118-131). Rowley, MA: Newbury House Publishers, Inc.
- Ravem, R. (1978). Two Norwegian children's acquisition of English syntax. In E. M. Hatch (Ed.), Second language acquisition: A book of readings. (pp. 148-154). Rowley, MA: Newbury House Publishers, Inc.
- Schumann, J. H. (1978). Second language acquisition: The pidginization hypothesis. In E. M. Hatch (Ed.), Second language acquisition: A book of readings. (pp. 256-271). Rowley, MA: Newbury House Publishers, Inc.
- Schumann, J. H. (1979). The acquisition of English negation by speakers of Spanish: A review of the literature. R. W. Andersen (Ed.), In The acquisition and use of Spanish and English as first and second languages. (pp. 3-32). Washington, DC: TESOL.
- Shapira, R. G. (1978). The non-learning of English: Case study of an adult. In E. M. Hatch (Ed.), Second language acquisition: A book of readings. (pp. 246-255). Rowley, MA: Newbury House Publishers, Inc.

Wode, H. (1978). Developmental sequences in naturalistic L2 acquisition. In E. M. Hatch (Ed.), Second language acquisition: A book of readings. (pp. 101-117). Rowley, MA: Newbury House Publishers, Inc.

Zobl, H. (1982). A direction for contrastive analysis: The comparative study of developmental sequences. TESOL Quarterly, 16, (2), 169-182.