Charting the Course of Language Acquisition: A Case Study

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Abstract

Much research has been devoted to exploring whether learners follow an identifiable sequence in their acquisition of language; a sequence of acquisition. While a large portion of this research has focused on first language acquisition, there is also an expanding body of research that examines second language learning. This paper seeks to describe the sequence of acquisition of one young learner, specifically their use of negators. After identifying several distinct patterns of negation, data are presented to indicate that the learner does follow a discernable pattern as they advance towards a comprehensive understanding of negation.

Introduction

The route a learner takes in acquiring a specific grammatical structure is an area of research that covers a great deal of ground limited only, obviously, by the number of structures. Ellis (1997) states that "when learners acquire a grammatical structure they do so gradually, moving through a series of stages en route to acquiring the native-speaker rule" (p.23). Much research has been devoted to the study of the sequence of acquisition in both first and second language acquisition and this paper seeks to address only one of these structures: negation. Data were collected from one young learner

noting their use of negators. These data were then analysed in order to examine the veracity of Ellis's claim.

Literature Review

One very influential early study on the feature of negation that had a large impact on much of the literature that followed was that done by Klima and Bellugi (1966, as cited in Ellis, 2008). They identified three stages in the acquisition of negatives and Ellis summarises them as being: stage 1 "negative utterances consist of a nucleus either preceded or followed by a negator"; stage 2 "negators are now incorporated into the affirmative clauses...don't and can't appear...negative commands appear"; stage 3 "negators are now always incorporated into affirmative clauses. The auxiliary + not rule has been acquired" (p.71).

While their study was concerned with those learners acquiring a first language, the three stages that they identified learners as passing through in the acquisition of negatives has been used as a starting point for many subsequent studies in second language acquisition. Milon (1974), for example, in his study of a seven year old Japanese boy named Ken explicitly compared the stages he was able to identify to those of Klima and Bellugi. Milon formulated Klima and Bellugi's stage 1 as "[{no, not} – nucleus]S or [Nucleus – no]S" (p.138) and was able to contrast this with his own results which he formulated only slightly differently. Likewise at stage 2, which Milon gave as S = Nominal – (Auxneg) – {Predicate, Main Verb}(p.139), Milon was able to say that the "only substantive difference between Ken's stage 2 data and Klima and Bellugi's stage 2 data is in the area of auxiliary verbs...except for the addition of *no more* as an option in Neg and the addition of *no can* as an option in Vneg, Ken's stage 2 rule is identical to Klima and Bellugi's" (p.141). At this point Milon halted the comparison.

However, in the first two stages at least his findings were largely in agreement with those of Klima and Bellugi.

Likewise, Schuman (1979) in his study of the acquisition of negation, this time by Spanish speakers, begins by summarising the stages of Klima and Bellugi. Using less technical language than Milon, Schuman summarises Klima and Bellugi's stages, giving an example of stage 1 as "no singing song", stage 2 as "I don't want it", and stage 3 as "that was not me" (p.4). He then reviews several studies involving Spanish speakers learning English. Much of Schuman's analysis of the studies of Spanish speakers offers little argument against the presence of Klima and Bellugi's stages and he regularly admits the similarities in the appearance of the data to these stages. However, he cites Spanish interference as a likely explanation for the presence of the particular linguistic devices in contrast to a more universal sequence of acquisition as suggested by other researchers, as when he states that the "findings show similarities to, but are not identical to Klima and Bellugi's...and, as noted above, this negation can perhaps also be explained by Spanish interference" (p.7).

Cancino et al (1978) conducted a study of six native Spanish speaking English learners; two children, two adolescents, and two adults. The linguistic devices they identified were: 1) *no* – verb e.g "I no can see", 2) *don't* – verb e.g. "I don't hear", 3) aux-neg e.g. "You can't tell her", 4) analysed *don't* e.g. "It doesn't make any difference". They agreed with Schuman stating that "Spanish speakers' first hypothesis is that negation in English is like negation in Spanish" (p.218) but then went on to outline the route that they theorised Spanish speakers took to full understanding of negation. The four devices they identified, while differing slightly from Klima and Bellugi's nonetheless identified many of the same features and in fact could possibly have been placed within the framework identified by the original researchers.

Ravem (1968) in his study of a young Norwegian boy named Rune, in contrast to Schuman, argues the case for a more broadly applicable sequence of acquisition when he states "one prediction would be that Rune, in keeping with Norwegian structure, lets *not* follow the main verb and produces sentences in the form NP + VP + *not.* What we find, however, are such sentences as *I not like it, one is not crying, I not looking for the edge*" (p.180). Ravem goes on to say that "what is perhaps more striking is the extent to which second language acquisition...seems to be a creative process not unlike that of first language acquisition. The similarities between Rune and L1 learners in the developmental sequence of negative...sentences are in many ways more revealing than the differences" (p.185).

Overall then the literature is for the most part in agreement. Like so much of second language acquisition research there is healthy debate and frequent diversion in specific details. However, some of the difference could be viewed as difference in style rather than substance. Schuman, while providing an alternative explanation to Klima and Bellugi for the presence of given linguistic devices, at the same time readily admits the similarity in the data. Likewise, Cancino et al offer an alternative framework for the sequence of acquisition of negatives which could in reality be placed within that given by Klima and Bellugi. What most researchers seem to agree on is that it is possible to chart a learners' progress, particularly regarding the feature of negation, through analysing utterances given by a learner over an extended period of time.

Research Question

With a healthy body of research to call on, the research question for this article is as follows:

- What evidence is there that this L2 learner is successfully acquiring English over the period of study?

Method

All of the data for this analysis came from a study conducted by Ellis (1992) in which two language learners were observed over a period of time and their various utterances recorded for analysis. However, for the purpose of this paper the utterances of only one of the students were examined. More specifically, the utterances examined were those concerned with the grammatical feature of negation.

Participant

The student, recorded as "J", was a native Portuguese speaker who had arrived in London, where the study took place, a few months before the study began. J was approximately 10 years old at the time of the study and Ellis explains that he was able to follow simple instructions but was unable to speak any English other than "yes" and "no".Ellis further describes J as being an adventurous child who was confident in learning. While he enjoyed games he was also capable of applying himself to serious, independent study and used English most of the time.J was studying at a school intended to provide instruction to learners before they were sent to local secondary schools and stayed for a full school year as a full-time student and continued part-time for a fourth term. J's classmates at the school were from a wide variety of backgrounds but all were beginners at English study. The language of instruction was English and J

experienced a variety of teachers, and consequently teaching styles, during his time at the school.

Data Collection

The data for the study were collected by an observer attending J's classes periodically over a nine month period. The observer sat next to J and recorded by pen-and-pencil his various utterances, noting as much contextual information as possible. Many of the lessons were also audio-recorded and this was used to check the accuracy of the primary pen-and-pencil recordings. While the observer initially kept strictly to this role, over time their role evolved to become more of a participant. However, while Ellis acknowledges the potential for this change in role, as well as the presence of an observer in general, to affect the behaviour of the participant, he claims the affects were negligible.

Method of Analysis

The method of analysis used to address the research question was frequency analysis. Ellis (2005) describes frequency analysis as examining "the various devices a learner uses in order to perform a specific grammatical feature". In this case the feature being analysed is negation. Ellis goes further to say that by analysing "the devices used at one stage of development with those used for the same linguistic feature at another time it is possible to describe the developmental route that learners follow".

Therefore, frequency analysis provides a framework through which the development of a student is able to be gauged. Further, the extent to which the developmental pattern coincides with the literature as briefly reviewed above provides a reliable way of answering the research question, namely; what evidence is there that the learner is successfully acquiring English?

In order to analyse the data the utterances were recorded and grouped in three periods – months 1-3, 4-6, and 7-9, identified as Period 1, 2, and 3 respectively. In analysing the raw data several utterances were removed. Milon (1974) stated that "one expects non-native speakers to discover certain very useful phrases and borrow them in their entirety. The use of them obviously does not imply a general control over the syntactic processes involved" (p.139). Milon used this as his justification for eliminating *"I don't know"* from his study of a seven year old Japanese boy. It was for the same reasons that Cancino et al (1978) removed *"I don't know"* from their study of the acquisition of negatives in Spanish speakers. Therefore all instances of *"I don't know"* that were present in the raw data have been removed on the assumption that the expression was a 'learned chunk' and that its inclusion in the analysis would have negatively impacted on the accuracy of the results.

One of the key points of frequency analysis lies in the identification of the devices a learner uses to perform a feature of language. For the purposes of this analysis I have identified five devices used by the learner.

- The first device can be identified as *Neg-X (including no and not)*. This category was a two-word device and involved J using simple negators coupled with a single word to express negation. J sometimes included a verb and other times did not. Examples of this device were "me no", and "not climbing".

- The second device was identified as *Neg (inc. no, not) – phrase (no verb)* whereby J extended his utterances to include multi-word phrases, more often including subject and object, however, at this stage still not including a verb. Examples of this device were "me no ruler" and "a bicycle no pedals".

- The third device was *Neg (inc. no, not) – verb phrase* which was similar to device 2 except that J now began to include verb phrases in his negation devices. Examples include "no writing on the book", and "me no drawing in here".

- The fourth device identified was *Don't – verb phrase.* This device showed J's progress from the simple negators of *no* and *not* to the inclusion of 'don't' as a negator and included "don't look please" and "sir don't sit in that one chair".

- The final device was described as *Aux/Cop+ neg – verb* and involved J attaching negators to auxiliary and copular verbs. This device showed a more advanced understanding of negation and examples include "he cannot read" and "in this one the man is not shouting".

Results

Device	Period 1	Period 2	Period 3
1) Neg – X (inc. no, not)	7 (30%)	3 (17%)	7 (29%)
2) Neg (inc. no, not) – phrase (no verb)	11 (48%)	8 (44%)	0
3) Neg (inc. no, not) – verb phrase	3 (13%)	4 (22%)	6 (25%)
4) Don't - verb	2 (9%)	2 (11%)	5 (21%)
5) Aux/Cop+ neg - verb	0	1 (6%)	6 (25%)
Totals	**23**	**18**	**24**

What the results above show for period 1 is a preponderance of utterances at the level of devices 1 and 2. While J does occasionally include verbs coupled with *not/no* and *don't* these instances are relatively rare and there are no instances of his marrying a

negator to any copular or auxiliary verbs. In period 2 the figures for both devices 1 and 2 decrease while the percentage figure for device 3 increases and device 4 stays relatively stable. There is also the appearance for the first time of device 5. In period 3 the number of times device 1 is used increases again. However, there are no instances of device 2 being used at all and a slight increase again for device 3. The instances of device 4 almost double in period 3 and there is also a sharp increase in the number of times device 5 is used.

Discussion

Looking at these results it's possible to identify several features. The first and most obvious trend is the gradual movement of the utterance percentages down the table from device 1 towards device 5. In period 1 a relatively large 78% of J's utterances could be classified as using either device 1 or 2 indicating an obvious reliance on very simple *no/not* phrases to indicate negation coupled with an extremely variable use of verbs. As the study progresses we see the gradual increase in the use of other devices until at period 3 we see 71% of J's utterances being classified as devices 3-5, all of which include verbs.

Period 3 in particular shows some significant changes in J's use of negation. While device 3, *neg (no, not) – verb phrase*, shows steady improvement over the three periods, it is the rapid increase in the use of device 4, *don't – verb,* and device 5, *aux/cop + neg – verb,* that are really significant. This shows a clear development in J's understanding of negation. He appears to be learning the necessity of including a verb and at the same to have developed a more sophisticated understanding of negation as it applies to the use of *don't* as well as copula and auxiliary verbs. No longer relying almost exclusively

on *no/not,* he is able to incorporate other forms of negation into his sentences and is utilising these more advanced forms at an increasing rate.

All of this agrees with what Schuman (1979) said in the conclusion of his study when he stated that initially the negator used is *no* followed by the appearance of unanalysed *don't f*ollowed again by post-auxiliary negation such as *can't* and *isn't.* While the analysed *don't* never appeared in J's utterances his progress along these first three steps of the sequence is obvious. Likewise, the data seems to coincide with the developmental sequence identified by Cancino et al (1978). Again, and quite expectedly, J didn't reach the final stage but he clearly progressed through the *no –V, don't - V,* and *aux-neg* stages that they laid out in their study.

An interesting point to note is that in period 3 several of J's Neg-X utterances were instances of his correcting either himself or somebody else. All of these utterances were left in the analysis because the lack of a broader context and the absence of the original statements made it impossible to discount them. However, it is possible to speculate that had those utterances been simple corrections of otherwise more advanced utterances then they could have been removed from the analysis as not showing an accurate representation of J's understanding of negation. Had they been removed then certainly the percentage of device 1 would have decreased and the result would have been a corresponding increase in the percentages of devices 3-5, further proof of J's understanding of negation and acquisition of English.

A further point of interest in answering the research question relates to the length of J's utterances. Ellis (2008) states "children typically begin with one-word utterances...(and) gradually extend the length of their utterances...at the same time they systematically acquire the various syntactical and morphological rules of the language. The result is that remarkable regularities are evident in both the overall pattern of

development and in the acquisition of specific linguistic systems (for example...negation). These regularities are often described with reference to mean length of utterance as a general measure of development" (p.70). While Ellis was speaking here in reference to first language learners, J's data show that his development mirrors that of first language learners. Having established previously that J's progress matches that outlined in the literature in terms of his sequence of acquisition, an examination of the length of his utterances further confirms his progress. In period 1 the mean length of J's utterances is 3.6 words. Period 2 shows a mean length of 3.9 words, while period 3 shows a mean of 4.2 words.

Conclusion

The aim of this analysis has been to show evidence of the acquisition of English in a young learner. Having reviewed the literature and established that despite some differences of opinion there is a very general consensus on the sequence of acquisition for the acquisition of negatives and that our particular learner is clearly progressing through this sequence, it remains to examine the pedagogical implications of such findings.

If we take for granted the notion that most learners will progress through a predictable sequence in their acquisition of negation irrespective of instruction then the opportunities this provides for teachers and resource and curriculum developers is significant. As Ravem (1968) says "it does not follow from this that the appropriate methodology for teaching a foreign language at an early stage is to expose the children to a 'language bath' and let them develop for themselves internalised generative rules which ultimately develop into those of adult grammar" (p.185). An established sequence of acquisition does not absolve the teacher from responsibility but rather provides them with more tools in the fulfilment of that responsibility. Having

something of a pathway established by the research enables teachers to follow this pathway in some measure in the hope of matching the developmental stage of the learner to the material being studied and to ensure at the very least that they are not wading against the current of a fairly universal sequence.

Whether or not following along with a sequence of acquisition will actually speed up a learner's development is not clear. Though as Ravem (1968) again says, despite not knowing "if second language acquisition can be speeded up by the children being exposed to selected and linguistically graded language patterns...we cannot exclude the possible transfer value of well-established basic sentence patterns, especially if they are acquired in contextualised situations" (p.185).

What all of this means in a pedagogical sense is that it makes sense for teachers to take close notice of a sequence of acquisition and that despite the lack of any clear evidence that in doing so they can speed up a learner's progress, common sense suggests that by not battling against an established sequence and in aiming to match the developmental stages of a learner they are at the very least giving it the best possible chance of happening.

References

Ellis, R. (1992). Learning to Communicate in the Classroom: A Study of two Language Learners' Requests. *Studies in Second Language Acquisition.* 14, 1-23.

Ellis, R. (1997). *Second Language Acquisition.* Oxford: Oxford University Press.

Ellis, R. (2008). *The Study of Second Language Acquisition (2nd edition).* Oxford: Oxford University Press.

Ellis, R. & Barkhuizen, G. (2005). *Analysing Learner Language.* Oxford: Oxford University Press.

Cancino, H., Rosansky, E., & Schuman, J. (1978) The Acquisition of English Negatives and Interrogatives by Spanish Speakers. In E. Hatch (ed.). *Second Language Acquisition.* Rowley, Mass; Newbury House.

Milon, J. (1974). The Development of Negation in English by a Second Language Learner. *TESOL Quarteryl,* 8 (2), 137 – 143.

Ravem, R. (1968). Language Acquisition in a Second Langauge Environment. *International Review of Applied Linguistics in Language Teaching,* 6 (2), 175 – 185.

Schuman, J. (1979). The Acquisition of English Negation by Speakers of Spanish: A Review of the Literature. In R. Anderson (ed.). *The Acquisition and Use of Spanish and English as First and Second Languages.* Washington D.C.. TESOL

<u>Appendix</u>

Period 1

Utterance	Context
me no 1	He doesn't have any crayons.
me no 1	He hasn't got a ruler.
me no more 2	He doesn't want 'to play a game any more.
me no ruler 2	In response to the Q: "John, have you got a ruler?"
Phoc no good 2	The teacher had just scolded Phoc.
Is not Captain Spock 2	He didn't think his picture really looked like Captain Spock.
we no school 2	In response to Q: T. John, Monday are you coming to school?
don't look please 4	He wanted Phoc to stop looking- at his word bingo card.
no look, no good 1	Trying to stop other children from looking at his bingo card.
me no out of here 2	He didn't want to leave his seat.
me no thirsty 2	Said while looking at pictures of cups.
this one standing, this one no standing 3	Describing the difference in position of two cups.
not together 1	Describing a picture of tree with part of the trunk missing.
a man no one leg 2	Describing a picture of a man vanishing through a wall.
foots no front walk 3	Describing a picture of a boy with feet pointing back to front.
umbrella no good 2	Describing a picture of a leaky umbrella.
a door no downstairs 2	Describing a picture of a house with the front door in the upstairs part.
no writing on the book 3	Describing a picture of a man reading a blank page.
a bicycle no pedals 2	Describing a picture of a bicycle with no pedals.
not finished 1	The teacher has just said that Phoc has not finished his drawing.

big square/ not very big square 1	Describing a shape to another pupil.
no four, three legs 1	Describing a table with three legs.
Why don't you play? 4	Asking someone why they don't want to play tic tac toe.

Period 2

Utterance	Context
Not very very small 1	Answering query from teacher in describing game.
no very big 1	In response to Q: "Is it bigger?" in describing game.
me no out this one 2	Explaining that he was not the one who had torn some paper.
me no ruler 2	He didn't have a ruler.
its no there sir 3	The teacher didn't draw- a mark on some card clearly.
This no one 2	Asking teacher to confirm he had drawn something correctly.
Mariana no coming 2	Teacher Q: "Where's Mariana today?"
I don't understand sir 4	Teacher had explained exercise to class.
me no play 3	Telling the teacher he wouldn't be playing football at break.
me no thirsty 2	Said while looking at pictures of cups.
me no stay 3	Telling the teacher he wouldn't be staying after school.
sir don't sit in that one chair 4	The teacher was about to sit on a chair covered with chalk dust.
bicycle no pedal 2	Describing a picture of a bicycle with no pedals.
bicycle has no pedal 2	The same.
the man is can't read it the book 5	Describing picture of a man reading a blank book.
me no drawing in here 3	He doesn't want to draw in his writing book.
not that one 1	Explaining that "hangar" was wrong in hangman game.
me no match 2	Explaining that he doesn't use matches to light the cooker.

Period 3

Utterance	Context
don't say that 4	Telling Mariana not to say same thing.
no speak Portuguese, only English 1	Telling Mariana not to speak Portuguese to him.
you did no read properly 5	To another pupil who had just read
it's not 1	Correcting something pupil had read.
he cannot read 5	Criticizing pupils reading out loud.
I'm not out 3	Denying he was out of the game.
She don't understand 4	A pupil had given wrong answer.
no sitting 1	Response to Q: "Is something sitting or no?"
I don't know the color 4	Response to Q: "What color do you wear clothes?"
no this is drawing? 1	Checking if he had to draw something on ma.
in this one the man is not shouting 5	Describing a picture.
especially the dog is not shouting 5	Same.
no fruit 1	Correcting an answer after T had queried it.
not climbing 1	Correcting his previous statement about some boys climbing.
is not the tree all right 3	Correcting another pupil.
don't draw anything 4	T told pupils not to draw and then asked if he was listening.
Not this year 1	In response to Q: "Aren't you going to Portugal?"
this man can't read because the light is green 5	Describing a picture.
the bicycle no go 3	In response to Q: "What do you think would happen if a boy tried to ride the bicycle?"
I no throw paper on the floor 3	In response to Q: "Who throws paper on the floor in the play ground?"
You don't? 5	A pupil had said: "I don't care"
It's not smoking 3	Explaining that a pupil's money box doesn't contain cigarettes
I not got a pen 3	Explaining why he was not writing.
I said I don't want 4	He had told his parents he didn't want to go to Portugal.