

# Formulaicity in the Acquisition of L2 Japanese

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## Abstract

This paper explores the role of formulaic speech (FS) in developing productive L2 grammatical competence. It is well known that what is variously labeled formulae, routines, unanalyzed speech, frozen phrases, rote-learned constructions, modular chunks, prefabricated patterns, lexicalized sentence stems, etc. frequently allows learners to outperform their competence, but it remains controversial whether FS has any lasting effect on the acquisition process. Until now, few researchers in either in L1 or L2 have been willing to deal with this messy cluster of phenomena.

The study reported here attempts to clarify the role of various types of FS over time by examining the longitudinal patterns that emerge in the interlanguage of instructed adult L2 learners of Japanese. Data collected at four points during one year in semi-structured interview format, were analyzed both qualitatively and quantitatively. Qualitatively, two learners, with very different styles, were compared in depth over time and task; one seemed to benefit from abundant use of FS, while the other appeared to suffer from eschewing it. An additional eight learners' production was analyzed quantitatively with the aid of CLAN (Computerized Language Analysis).

## 1. INTRODUCTION

The fields of linguistics and psycholinguistics have until now successfully avoided formulaic speech as a main focus of attention, but the ubiquity of this phenomenon suggests that progress in language research will remain limited until it can be explained adequately. Part of the problem is simply agreeing about what formulaic speech is, but more concentrated study should quickly begin untangling the relationships among the senses in which the term is currently used. After briefly reviewing the literature on the role of formulaic speech in second language acquisition, this paper will report on an exploratory study of L2 Japanese learners, and the extent to which their language production over time indicates revealing patterns of formulaicity.

## 2. PREVIOUS RESEARCH

In focusing on language acquisition, the most important question about formulaic language is the role, if any, that it plays in the developing competence of language learners. Arguments have been made for it playing a major role, and conversely that it is merely a short-

term communicative tactic, epiphenomenal to the development of the language system. Krashen and Scarcella (1978) made a strong case for the latter point of view, and this case was further elaborated by Bohn (1986). On the other hand, Peters (1983) suggested that perhaps Krashen and Scarcella's argument boiled down to little more than that of the separateness of the lexicon from the generative process, effectively ignoring the more interesting questions of the relationships between induced rules and stored chunks.

The empirical evidence has been far from conclusive. Many longitudinal studies in the child L2 literature have portrayed formulaic speech as having an important, or at least a salient role. Burling (1973), Hakuta (1974), Wong Fillmore (1976), and Huang and Hatch (1978) all found evidence of children making productive use of formulaic language. The children that each of them studied were found to use unanalyzed chunks of speech which combined in patterns with other sentence elements (sometimes other chunks), resulting in more complex sentences than their current level of syntactic development should have allowed. In some cases, there was also evidence that unanalyzed chunks were gradually analyzed into smaller, more productive pieces. Bohn (1986), on the other hand, concluded that the little formulaic speech found among her subjects was of no more syntactic complexity than what they could generate purely from scratch; she claimed that what earlier researchers found were artifacts of their research procedures.

Rescorla & Okuda (1987), studying the L2 English development of a Japanese five-year-old girl (a study very similar to Hakuta's), found a major role for what they called "modular chunking." "Modules" are phrases which the child has memorized and uses as an unanalyzed unit. "Chunking" refers to the fusing together of modules to produce longer utterances. In direct contradiction to Krashen and Scarcella's (1978) conclusions, Rescorla and Okuda (1987) concluded that the fusing together of modular chunks played a major role in the second language development of their five-year-old subject, Atsuko. Modular chunking allowed the learner to produce increasingly longer utterances without a corresponding increase in sentence complexity. In common with Hakuta's subject, Atsuko was able to use relatively modular patterns to produce a large number of different sentences. Besides (or in combination with) the fusing of modular chunks, within each chunk it was relatively easy for the learner to

substitute different lexical items into a variable slot within a module. In this sense, the modular pattern served as a frame, in much the same way as Braine's (1976) limited scope formulas, which consist of a constant term and a variable slot.

The adult L2 literature has thus far generally not shown the major role for formulaic language that much of the child L2 research has. Hanania and Gradman (1977), Shapira (1978), Schumann (1978), and Huebner (1983) found little evidence that formulaic speech was making a difference in their subjects' language development. It must be kept in mind when interpreting these studies, however, that nothing else was making a difference; they are all studies of quite unsuccessful language learners.

Contrary to the previous adult L2 studies, Schmidt (1983) found that formulas were instrumental in the communicative success of his subject, but did not seem to develop into rules. Schmidt and Frota (1985) again demonstrated the pervasiveness of speech formulas, in this case finding that formulas sometimes evolved into rules.

Bolander (1989), focusing on two complex rules of Swedish grammar, showed how subjects could produce the rule much better in some lexical environments than others; there were also times when formulaic collocations would be in competition within a sentence and lead to errors. For her this was evidence of a major role for formulaically learned material in second language development.

There have been a number of purely cross-sectional studies dealing with the issue of formulaic language, but these shed little light on the question of its productive role in learning. Scarcella (1978) and Irujo (1986) focused more on the learning of idioms, which were shown to be a problem even for advanced learners. Yorio (1989) also found in students' writing that idiomaticity was difficult to acquire. Ellis (1984) did focus on formulaic language's role in learning, finding that it was pervasive and sometimes did lead to syntactic development.

A noteworthy recent study of formulaic speech is that by Andrews (1993). Although her experimental task of story retelling was virtually guaranteed to yield more formulaic speech than would likely appear in a conversational setting, the robust correlations she obtained between formulaic speech on the one hand, and recall, fluency, and idiomaticity on the other, were quite impressive and are worthy of investigating with other tasks. Also, her distinction

between story formulas (language verbatim from the story) and personal formulas (language from the subject's own accessible repertoire which recurred within or across retellings) may have useful correlates in conversational interaction.

One promising general approach to formulaic speech is that of the Kassel group: Dechert, Raupach, Möhle, Lennon, *inter alia*. For the current study, especially pertinent was one by Raupach (1984), who defined formulae as "speech segments that are delimited by pauses or hesitation phenomena such as drawls, repeats, false starts, etc." He found learners' use of formulae to serve as a window to different forms of language processing, as well as to account for different types of learners. Raupach also observed that phrase length and articulation rate were important indicators of fluency. In general, lower level learners displayed a great variety of idiosyncratic forms of planning behavior, especially in the use of lexicalized fillers and modifiers. More advanced learners had in some cases arrived at near-native segmentation of speech stretches, partly due to a more idiomatic use (in terms of form and distribution) of hesitation phenomena. Advanced learners also showed great similarity in activating certain organizers on the sentence and phrase levels, in contrast to differences in command of the target language vocabulary. Compared to native speakers, learners' repertoires of formulae were relatively restricted; consequently, certain formulaic items and schemata occurred with excessive frequency, so that even if their form was not erroneous, their stereotyped use often resulted in non-idiomatic performances.

Raupach (1984) explained many of his findings with reference to Dechert's (1983, 1984) idea of "islands of reliability," well-rehearsed chunks of language which could "become the basis for search processes necessary in the course of planning and executing speech, in L1 as well as in L2." The present study will use Raupach's and Dechert's approach as a starting point for analyzing the speech production data of L2 Japanese learners, with special reference to the role of phrase length, and fillers, modifiers, and organizers as formulae. In addition to Raupach's orientation, an examination akin to that of the L2 child researchers will be attempted, to see the extent to which more or less fixed simple formulas develop into productive patterns.

### 3. METHODOLOGY

#### 3-1. Subjects

Subjects were beginning students in the International University of Japan (IUI) Japanese Language Program, learning Japanese to enrich their stay in Japan while they completed a two-year English-medium Master's degree course in either International Relations or International Management. Many were also anticipating the need to use Japanese in the positions they hoped to secure upon graduation. Although over 30 students participated in the research project, complete sets of data are available for only 10 of them; it is those 10 subjects whose data will be analyzed here. Their native language background breakdown is as follows: Bengali = 4; Brazilian Portuguese = 2; Persian, British English, Hindi, Thai, Urdu = 1 each. In this sample there was only one woman (identified as B).

#### 3-2. Procedures

The data for this study was collected longitudinally over one year, at four points: 11/89, 2/90, 5/90, and 11/90. Thus the first data collection took place approximately two months after Japanese instruction began. The primary goals of the interview were to draw as much Japanese as possible from the subjects, and to make the interviews, over time and across interviewers, as comparable as possible. To these ends, a structured interview format was agreed upon, whereby a number of standardized questions were asked, concerning, for example, the student's weekend routine or information about her country, but with the interviewer having license to allow the subject to go off in any direction that would generate more learner speech. Interviewers were instructed to facilitate this process with as little of their own speaking as possible. The interviewers were all native speakers of Japanese: IUI JLP instructors (5), visiting JSL instructor (1); and JSL instructors-in-training (1).

The data was transcribed by native Japanese speakers trained for the task, and every transcript was checked by at least one other transcriber. The transcription system roughly followed the guidelines distributed by the University of Hawaii Center for Second Language Classroom Research. They were later reformatted by the present researcher to be readable by

the computer program CLAN (Computerized Language ANalysis) developed by MacWhinney (1991).

### **3-3. Data analysis**

The CLAN program was used to calculate word (and filled pause) frequencies, type/token ratios, mean length of utterance (MLU), mean length of turn (MLT), and cooccurrences. From these cooccurrences two formulaicity indices (FI) were developed. In the Results section, Formulaicity 2 refers to proportion of identical strings of two cooccurring words that occur at least twice in a speech sample to the total word types produced by the subject in that interview. Formulaicity 3 is basically the same thing except that it includes only the identical strings that occur three or more times in one interview. In the next phase of the data analysis, four new formulaicity indices will be introduced: Formulaicity I, Formulaicity I2, Formulaicity IA, and Formulaicity IA2. Formulaicity I will indicate the degree of overlap between the learner's and interviewer's word types, under the assumption that the learner is likely to be using the interviewer's speech to scaffold her own. Formulaicity I2 will demonstrate how many sets of at least two cooccurring words they have in common. Formulaicity IA will indicate the overlap of lexical items within one adjacency pair, which gives stronger evidence of a reliance by the learner on the interlocutor's speech. Finally, Formulaicity IA2 is the overlap of cooccurring strings within adjacency pairs.

### **3-4. Results**

This data reported in this paper will focus primarily on the first three data collections and on two learners: P, a Pakistani male who by all available indications is the fastest learner, and B, a Brazilian female and who appears to be much slower. Their contrasting use of formulaic speech is revealing of some interesting patterns, but it should be emphasized that what P does is not necessarily common to all the students who made rapid progress, nor is B representative of all the slower learners. There is a substantial amount of individual variation, and in fact all of the learners made impressive gains in proficiency during the course of the data collection. Nevertheless, many of the things which appear to contribute to P's success are

present to various degrees in the speech of other learners, and are transparent enough that one would expect most learners to be able to utilize them if they tried.

A variation of Raupach's (1984) fluency indicator, phrase length, will be used as an indicator of fluency in this study. The fluency rating here will be operationalized as the total number of words uttered by a learner during an interview divided by the learner's number of filled pauses, rendering the average length of phrase between pauses. Raupach used a measure of average length of syllables rather than words, and unfilled rather than filled pauses. No one measure of fluency is going to be convincing on its own. However, I can think of no principled reason why Raupach's is more valid than the one used here; the differential functions (if any) of filled and unfilled pauses remain an empirical question. In the meanwhile, it would be best to include data on both kinds of pauses, but the corpus being used in the present study has not yet been coded for unfilled pauses. Additional measures of fluency will be developed in future phases of this study. As potentially useful baseline data, mean length of utterance (MLU) and mean length of turn (MLT) are also provided.

### **3-5. Quantitative results**

The detailed look at the two learners' speech samples over time will be more meaningful in the context of some general group trends. Table 1 shows that at Time 1, when the learners were very limited in what they could even attempt to say, they were more fluent (by our measure of filled pauses per utterance) than they were at Time 2, when they have many more lexical items and grammatical generalizations to work with, but a certain amount of "cognitive overload" due to the relatively low degree of automatization of any of that knowledge. In Bialystok's (1978) terms, it appears that the learners have moved much farther along the "Analysis" dimension than along the "Control" dimension. However, with more time to automatize the basic vocabulary and structural patterns, and in relation to a task (the interview) which gets more and more familiar both in form and content, the Fluency Index rises dramatically from Times 2 to 3, and from Times 3 to 4.

Table 1. Group Fluency Index over one year.

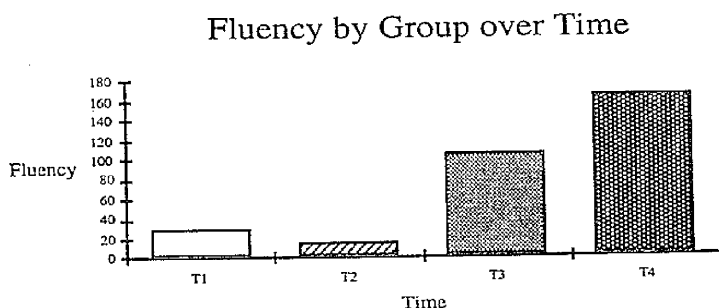
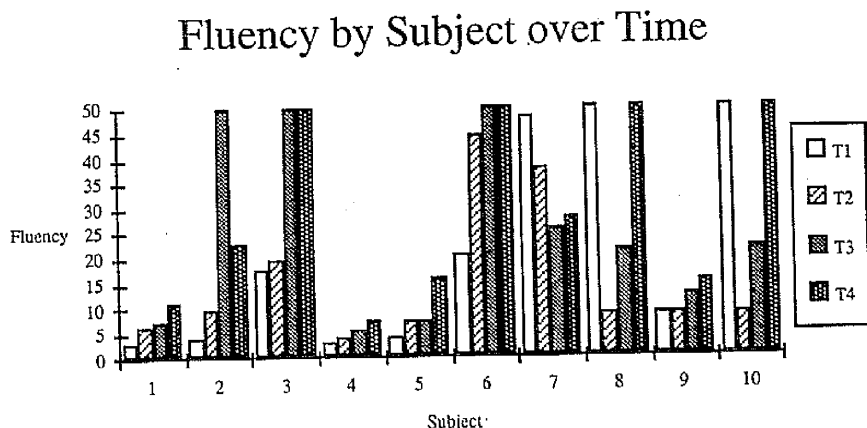


Table 2, a view of the individual patterns of fluency development over one year by the ten subjects, shows Table 1 to give a very incomplete picture. Because Subjects 7, 8, and 10 avoided filled pauses completely in their first interview, their Fluency Index was actually their total number of tokens. (It must also be noted that the scale has been arbitrarily cut off at 50, for purposes of easier viewing). For each of those three learners, their Fluency Index dropped dramatically at Time 2. For all of the other learners, however, there was a rise in fluency between Times 1 and 2. Another interesting trend in the data is that four (including B, who is #1) of the ten subjects make consistent but very small gains in fluency throughout the year, whereas the other six, while not always consistent, made impressive gains in fluency. In the case of P (#6), the gains are both consistent and impressive. Learner #7 evinces the strangest pattern, and his data needs to be looked at more carefully.

Table 2. Individual Fluency Indices over one year





To begin looking more closely at B and P, Table 3 provides a quantitative comparison of features of B's and P's language use throughout the year. The types of information deemed relevant are the Fluency Index, two formulaicity indices, vocabulary use measures, and composite evaluations by their classroom teachers.

Table 3. Language Use Characteristics of B and P

Learner	T 1 (11/89)		T 2 (2/90)		T 3 (5/90)		T 4 (11/90)		Average	
	B	P	B	P	B	P	B	P	B	P
Fluency Index	3.17	20.4	6.27	44.7	7.59	50	11.2	50	7.07	41.3
Formulaicity 2	.09	.21	.21	.25	.23	.42	.13	.37	.17	.31
Formulaicity 3	.03	.15	.04	.06	.06	.12	.04	.15	.04	.12
MLU	5.89	4.61	3.88	4.47	3.82	7.8	3.88	6.96	4.36	5.96
MLT	17.2	14.3	8.64	9.12	8.42	29.3	6.44	15.6	10.2	17.1
Word types	120	62	216	171	256	284	214	278	606	614
Word tokens	208	143	518	447	677	936	443	936	1846	2448
Type/token	.58	.43	.42	.38	.38	.30	.48	.30	.33	.25
Course grade	B+	A+	B	A	B	A			B	A
Total points	80.2	94.2	71.4	91.9	75.1	91			75.6	92.4
Rank (of 10)	9	2	10	1	10	2			10	2

Table 3 shows that B's Fluency Index never rises above 11.2, whereas P's begins at 20.4 and skyrockets from there (remember that the 50 is an arbitrary cut-off point). In terms of formulaicity, P averages almost twice as much as B when measured by two or more occurrences, and three times as much when the criterion is three or more occurrences. If we raised the criterion further, we would find the gap further widening.

Because of B's style of attempting to say fairly complex things, her MLU is only slightly lower than P's, but because she often gets stuck her MLT shows a greater disadvantage.

The measures of vocabulary usage are very interesting. B uses nearly the same number of different words as P, and has a higher type/token ratio. What this means, however, is that P is getting much more use out of his limited vocabulary.

Finally, the evaluations by their teachers for each of three trimesters indicate how the language features quantified above correlate with classroom success. Throughout the year, P was either ranked first or second by his teachers, whereas B was the lowest or second lowest of these ten learners (though not necessarily among the full group of students).

### 3-6. Qualitative results

At Time 1, P's fluency rating is 20.4, the third highest among the ten learners, and B's is 6.27, the second lowest. P's MLU and MLT are 4.61 and 14.3 respectively, while B's are 5.89 and 17.2. P's formulaicity indices are .21 and .15, respectively, while B's are .09 and .03.

P's interview at Time 1 begins with the interviewer showing him a card which asks him (in English) to say what he did over the preceding weekend.

**Transcription notes:** Particles are capitalized; [a] indicates non-lexicalized filled pause; [/] indicates retracing without correction; [//] indicates retracing with correction; -: indicates vowel lengthening; +... indicates an uncompleted utterance. All speech is subjects' unless otherwise indicated. Errors are not indicated. The language is formatted on the page so as to highlight formulaic speech; new lines do not indicate pauses. Unfilled pauses are not yet coded on the transcripts. The English glosses are approximate, to help the non-Japanese speakers make sense of the data. When an utterance extends over several lines, or is retraced, an accurate translation is impossible.

#### Segment 1 (P at Time 1)

watashi WA doobi NI ozo [/] ozo-i	okimasu.	(I get up late on Saturday)
soredewa [/]		(Then...
soredewa nihongo benkyoo	O shimasu.	then I study.)
soredewa-: shukuda [a] [//]		(Then homework
soredewa {heiJoogoha:n}	O tabemasu.	(Then I eat lunch)
soredewa-: tenisu [//]		(Then tennis...
tenisu O [//]		tennis...
tenisu MO-:		tennis and...
pinpon MO-: ondo	O shimasu.	I play tennis and pingpong and exercise)
soredewa-: sanpo	O shimasu.	(Then I take a walk)
soredewa-: toshoka:n DE benkyoo	O shimasu.	(Then I study at the library)
soredewa-: gohan	O tabemasu.	(Then I eat a meal)
soredewa [a] heya-:	DE nemasu.	(Then I sleep in my room)
 *INT: [a] hai.	 ii desu KA.	 (OK. Are you ready?)
hai.	ii desu.	(Yes. I'm ready)

As Segment 1 shows, P answers in the present tense; the past tense had been taught already, and most of the other students answered in the past, but apparently past tense was not on P's communicative agenda at that time. He gets off to a slow start in his first sentence,

shortening *doyoobi* (Saturday) by one syllable, and then using the adjectival form (*osoi*) rather than the appropriate adverbial form (*osoku*) before the verb. However, no other student attempted this *-ku* + verb construction until much later.

After that sentence, P begins to show his formulaic (and aggressive) use of what Raupach (1987) calls "organizers," words or expressions which create a frame, or at least a direction, for the next sentence to go. In P's case it is *soredewa*, which he may have overgeneralized from hearing his teacher saying it in class. It is usually used to indicate the end of a topic, activity, or conversation, and/or the beginning of a new one. It does not mean *after that*, which P intended; an appropriate expression would have been *sore kara*. P uses *soredewa* nine times in this stretch of speech, each time using it to start off an object + V-*masu* sentence, though with slight variations as he progresses. The first two sentences and the first stab at the third are of the same simple obj + particle + V-*masu* form, but P becomes adventurous on the third sentence about tennis, trying to report more than one activity in the same sentence. He does not get it quite right, but shows that he is on the right track toward learning how to list nouns in Japanese.

P then alternates between the same simple sentence frames and ones which additionally contain locative noun + particle *de*. Thus, it appears that not only is he using *soredewa* as an island of reliability, but the sentence frame as well; he uses it not just to fill in the slots, but also to test out new slots.

The next question on a card asks the interviewee to speak about his country. His response is Segment 2 below.

#### Segment 2 (P at Time 1)

watashi NO kuni NO			
nae WA	pakisutan	desu.	(My country's name is Pakistan)
pakisutan WA	minami NI	aru desu.	(Pakistan is in the south)
pakisutan WA ichinenjoo	ataakai	desu.	(Pakistan is warm all year round)
pakisutan WA [/]			(Pakistan
pakisutan WA [/]			Pakistan
pakisutan WA	ookii	desu.	Pakistan is big)
pakisutan WA	ii	desu.	(Pakistan is good)

P's response to the question in **Segment 2** resembles those of most of the other subjects, using the formula country name + topic marker *wa* + (one of a small set of) adjective

+ copula *desu*. The main difference between him and most of the other subjects is that he used the simple frame to keep talking without getting bogged down. He has numerous restarts with *pakisutan* + *wa*, but few cases of self-correction, and fewer filled pauses than most of the other students. Also, his use of the copula and the existential verb *aru* together in the same sentence is unusual for his level. Again, it is not quite right, because a noun or a nominalizing particle is needed between the two verbs, but he is just a small step away from stumbling on a very productive pattern in Japanese.

When the interviewer asks him in **Segment 3** what is so good about Pakistan, P displays his skillful use of the language which is already there.

### Segment 3 (P at Time 1)

*INT: nani GA	ii	desu KA?	(What's so good about it?)
nani GA	ii	desu KA?	(What's so good about it?)
iroiro NA	ii	desu.	(Various things are good)
[a] kisetsu WA	ii	desu.	(The seasons are good)
[a] ryoori WA	ii	desu.	(The food is good)
uraa [/] ura WA	ii	desu.	(Lahore is good)

He repeats the question, as he often does, and then tries to maintain the same pattern in his response. Just as with the past tense earlier, the subject particle *ga* is apparently not on his learning agenda for that day; although he repeats it correctly in his imitation of the question, he then subverts it to *na* in the first part of the answer, and then goes back to *wa*, which is inappropriate in these sentences. P's use of *na* is reminiscent of Bolander's (1989) subjects, who sometimes overgeneralize useful collocations. *Iroiro*, meaning *various*, is most often followed by *na*, but this is so that it can attach to a noun.

In **Segment 4**, the interviewer does not understand the student's hometown name of Lahore, and he elects not to repair, but to go on to what turns out to be a related topic.

### Segment 4 (P at Time 1)

*INT: ura?		
[a] on [/]		(Mu...
onga [/]		mu...
ongaku WA [/]		music
ongaku WA	ii	desu. music is good)
*INT: hai hai hai.		(Uh-huh)

hitori pakisutan jin MO	ii	desu.	(A single Pakistani is also good)
*INT: [a] donna ongaku?			(What kind of music?)
donna ongaku-:			(What kind of music?)
[a] {folk}           ongaku.			(Folk music)
*INT: hai.			(yeah?)
hai. {folk} ongaku.			(Yeah. Folk music)
watashi NO [/] [a]			
watashi NO toka [/]			(My city's
tokai NO ongaku WA	ii	desu.	city's music is good)
*INT: soo desu KA.			(I see)
hai.	ii	desu	(Yes. It's good)

It seems that he is unsure about the word for *music*, *ongaku*, but manages to build up his sentence quite systematically (like the old pattern practice books). After briefly attempting to expand the topic, he takes one of his few filled pauses to think of a Japanese word for the type of music, opts for the English word *folk*, and then is apparently ready to attempt the longer sentence needed to restate that music is what is good about his hometown.

It is much more difficult to interpret what is going on in **B's first interview**. She does use formulaic language, but it does not accomplish the smoothness that it seemed to in P's first interview. In general, B seems to be more message-oriented than P, who in contrast seems to be more interaction-oriented. B tries to say what she is not really prepared to say, and therefore expends a lot of effort getting it out to a degree that the interlocutor can understand. Whereas P seems to make maximum efficient use of what he knows, B seems to try hard to put together most of her sentences from scratch, using lots of filled pauses, lengthened vowels, and retracings to help her construct her utterances.

A possible explanation for the different styles of two learners may be differential motivation. Considering the learners' motivations for studying Japanese, they seem comparable: both of them were mainly concerned with communicating smoothly with Japanese people, and both had Japanese friends. Motivations in approaching the interview task may have been quite different, however. P seems to treat it as a game and a chance to further develop his Japanese, whereas B seems to consider it a kind of test of her ability to express herself in Japanese. Nevertheless, their teachers have verified that the differences between them in the interviews are representative of differences in other discourse contexts.

Segment 5 starts with B's response about what she did on the weekend.

### Segment 5 (B at Time 1)

sen- sen [a] doyoobi.	(last Saturday)
*INT: un ?.	(Yeah?)
[a] yamatomachi[i] yakuba-: ikimashita.	(I went to the Town Hall)
[a] tabemono O-: [/] O	(Food)
afurika NO-:	African
chugoku NO-: [/] O	Chinese
amerika NO-: tabemono O-: tabemashita.	and American food I ate)
[a] sake O nomimashita [laughter].	(I drank sake)
[a] amerika NO-: ongako O utaimashita.	(I sang American songs)
[a] dakara	(Therefore)
[a] doyobii doyobi NI ban disuko WA	(the Saturday night disco
[a] dansu [a] ikimashita.	I went dancing)

Unlike P, who started with routine things expressed in simple sentences, B tries to describe her experience at a *sake* party given at the Town Hall by the local *sake* producers to promote their products. B appears not to have a plan for her first sentence about food, and is erratic in her use of particles. It seems that she lets herself try to think of everything at once. When she finally settles for the simple noun + O + V-*masu*, she is able to get out three statements relatively fluently. Then, just as P was not able to come up with the correct expression, *sore kara*, for after that, B tries *dakara* (*therefore*), and once again has trouble trying to report an event in what for a beginner is a very complex sentence. *Doyoobi ni* is probably formulaicized, as students practice from early on the use of *ni* with time expressions; unfortunately, the way she has put the sentence together, every noun except *doyoobi* takes a *ni*. Even if B knew that for each one, she would be wary of using the same particle more than once, and in fact she does not. A native speaker would most likely reorganize the sentence so as to avoid awkward particle redundancy.

In Segment 6, B does make some good use of formulaic speech.

### Segment 6 (B at Time 1)

[a] getsuyobi	(Monday)
[a] suimasen	(Excuse me)
[a] nichiyoubi	(Sunday)
[a] kezai GA kezai NO benkyoo O shimashita.	(I studied economics)
muzukashii desu.	(It's hard)
[a] tsugi WA-: nihongo NO benkyoo shimashita.	(Next I studied Japanese)
[a] watashi NO heya NO sooji O shimashita.	(I cleaned my room)
[a] {oh} urasa E ikimashita.	(Oh, I went to Urasa)
*INT: [a] nani O +/.	(I: What...?)

*SUB: [a] supaa suppa NI-:	(To the supermarket)
*INT: hai.	(I: Yes?)
*SUB: [a] banana	(Bananas
[a] TO-: tamago TO-: miruku-: kaimashita.	(and eggs and milk I bought)

Once she gets going, B is able to go on fairly smoothly by relying on the the frame noun + *O* + *shimashita*. She is even able to vary the pattern and mix in a *muzukashii desu* (it's difficult), a phrase that every Japanese learner knows well. It is this kind of mixing formulaic phrases with new elements within one's current range of competence that B only occasionally takes advantage of, but that P does so well. B then connects that statement with the next with a *tsugi wa* (next), not 100% natural in the situation but better than either *soredewa* or *dakara* for marking the next thing in a sequence. Again, if P had found that expression worth using, he would have used it repeatedly, whereas B uses it just once, and leaves other items in the sequence unmarked. An additional contrast between P and B is what happens when the interviewer tries to help B with a question. Instead of repeating the whole question as P would have done, B, knowing conceptually what the question will be, does not even wait to hear the whole thing.

**Segment 7** provides more examples of B's attempts to produce sentences that are apparently beyond her current competence.

#### **Segment 7 (B at Time 1)**

[a] {oh O.K. oh} watashi NO tomodachi-:		(oh OK oh my friend
[a] niigata KARA		from Niigata
[a] kokusai daiga:ku-:		[to] I.U.J.
[a]	kimashita.	(came)
	kimashita.	(came)
*INT: aa soo desu KA.		(Is that right?)
[a] watashi NO-: tame NI		(For me (my sake)
[a] watashitachi zenbu-: tabemono-: [/]		we (bought) all food
[a] haya-: [/] hayaku-: fuyu tabemono+...		early winter food
[a] {oh x } watashitachi		oh x we
[a] kokusai daigaku NO	aruite	took a walk around I.U.J.)
[xx] [laughter]		
[a] shigashi-:		(However
[a] kinoo WA	samui	yesterday was cold
*INT: soo deshita NE.		(Yes it was.)
dakara-:		(Therefore
[a] watashitachi-: ta [/]		we
	totemono NO naka NI-:	inside the building
[a]	tamashi-: [/] tama:shita-:	(stayed)
	wakarimasu KA-:?	(Do you understand?)
*INT: wakarimashita. daijooobu desu YO.		(I understand. You're doing fine)

This segment features a lot of vowel lengthening and filled pauses, a number of ineffective retracings, and the abandonment of one statement about her friend from Niigata helping her to stock up on food for the winter. Changing the topic, she gets herself into another troublesome sentence, which she manages to complete fluently and comprehensibly, though with several errors and a verb transferred either from English or Portuguese. *Walk* is *aruku*, but *walk* as in *take a walk* should be *sanpo suru*. Her use of *shigashi* (*shikashi*) and *dakara* are skillful in this segment, and should serve her well later when she has a stock of formulaic frames that might be triggered by each such discourse markers ("organizers" in Raupach's (1984) terms). At this stage, however, they tend to get her into trouble again, and she ends up with a sentence that is incomprehensible because the verb she uses does not resemble any verb in Japanese. The interviewer claims to understand, but there is nowhere for the topic to go from there. One final interesting item in this segment is that she repairs the beginning of the correct word for building, *tatemono*, with an incorrect segment *to*, to yield *totemono*. The reason for this is quite likely that she could not repress the well-rehearsed *totemo*, a very frequently occurring intensifier, which learners find very useful after learning it early on.

B's final task at Time 1, a description of her country; appears as **Segment 8** below.

### **Segment 8 (B at Time 1)**

[a] burajiru WA-: minami amerika	desu.	(Brazil is South America)
[a] burajiru WA-:		(Brazil
minami burajiru WA-: samui	desu.	South Brazil is cold)
[a] kita burajiru WA-: atsui	desu.	(North Brazil is hot)
*INT: fuun. soo desu KA.?		
(Is that right?)		
[a] burajiru WA-: okii ka [//]		(Brazil is a big...
okii	kuni desu	a big country)
*INT: soo desu NE.		
(Is that right?)		
[a] {xx} {xx}		(Unintelligible)
[a] burajiru WA-: [/]		(Brazil
burajiru GA-: ju- [/] juman [/] juman		(Brazil is 100,000
[a] burajirujin nihonjin		desu. Brazilian Japanese)
{and [a] they [a]}		
minna burajirujin WA		(All Brazilians
[a] hyaku- hyakuman		desu.(are 1 million)
{xx} {understand}?		
[a] kirekatta	desu.	(It was beautiful (?))
{oh} {yeah}		
[a] watashi NO-:		(My
[a] tokai tokai NO soba NI-: zaa		(Near my city



[a] itariajin [a] doitsujin			imasu. there are Italians and Germans)
*INT: soo desu KA.			(Is that right?)
[a] ima WA [a]	natsu	desu.	(Now is summer)
*INT: aa soo desu KA.			(Is that right?)
[a] chigai:- [/]		chigaimasu.	(It's different)
nihon ima WA:-			(Japan now
[a]	furui	desu.	(is old (winter))
burajiru ima WA			(Brazil now
[a]	natsu	desu.	is summer)
*INT: soo desu KA.			(Is that right?)
{ oh I know I did terrible } [laughter].			
*INT: daijoobu daijoobu.			(It's all right x 2)

She starts out similarly to P, giving simple statements, probably rehearsed many times, about the country's location and climate. However, the elongation of the topic particle would suggest that she is operating with the small chunk *Brazil wa* rather than longer chunks of *Brazil wa* + 'commonly asked simple information,' as P seems to be doing. In her third turn she gets into trouble again, trying a statement (*There are 100,000 Japanese Brazilians in Brazil*) which requires the *ni wa* particle combination, an existential verb, counting by ten thousands instead of thousands, and the modification of a noun by another noun. She gets the number almost right (it just lacks the (redundant but obligatory) counter *nin*), but none of the other features. It seems that B is searching for relevant things to say about Brazil, and too often only coming up with things which are too difficult for her to express. After the population comparison, she says something incomprehensible, so that her next two statements lack a context. B then decides to talk about the weather, and once (twice) again shows the overgeneralizing effect of well rehearsed formulas; this time *ima wa* is properly used and then improperly stuck on to *nihon* and *burajiru* (*burajiru ima wa* should be *burajiru wa ima*). *Furui* (meaning *old* but meant as *winter*, which is *fuyu*) is probably another example of the same phenomenon, the more commonly used term *furui* being accessed in place of the phonologically similar *fuyu*. In general, B's speech at Time 1 shows that formulaic speech controls her at least as much as she controls it.

At Time 2 both speakers show substantial improvement in how well they can communicate. P's and B's fluency ratings both double, P's to 44.7 and B's to 6.27. Also, the

content of B's filled pauses begins to show variety; in addition to *uhh* (transcribed as [a]), there is now the native-like *ee to* and *chotto matte*, though native speakers normally do not use the latter when searching for a word. The MLT and MLU of both speakers decreases, not surprising in light of the fact that the speakers and the interview format has become more interaction oriented. The two learners' Formulaicity Indices are quite comparable, and both subjects' interviews also double in length at Time 2. A few short segments should suffice to show what has become of the patterns developed at Time 1.

**Segment 9** shows that **P** has further developed his skill in using and expanding from his own sentence frames and those of his interlocutor.

### **Segment 9 (P at Time 2)**

sensee to denwa de hanashi o shimashita.  
ato de [a] watashi no heya de  
[a] sukoshi gyuuniku o nomimashita.  
ato de benkyoo shimashita.

I talked with the teacher on the telephone.  
Afterward, in my room...  
I drank a little beef.  
Then I studied.

*\*INT: hoo. gyuuniku? gyuunyuu? Wow. Beef? Milk?*

gyuunyuu.  
gyuunyuu o tabemashita.

Milk.  
I ate milk.

*\*INT: aa gyuunyuu desu ne. I thought you meant milk.*

aa nomimashita.  
nomimashita.  
mikan tabemashita.  
[a] [ano] goji made benkyoo shimashita.

I drank it.  
I drank it.  
I ate a tangerine.  
I studied until 5.

*\*INT: aa goji made benkyoo shimashita ka.*

*You studied until 5?*

yarimashita.  
ato kara [ano] sukii no tokoro?

I did.  
Then, you know the ski place?...

When he has a lexical mix-up, substituting *gyuuniku* (*beef*) for *gyuunyuu* (*milk*), he repeats the interviewer's correction, expands on it, repairs his expansion after the interviewer lets the new error go by, repeats his repair, adds a statement in which the erroneous word is now appropriate, and then expands on the statement he made just before the repair sequence. When the interviewer repeats the statement as a kind of backchannel, P confirms with a synonymous verb.

In **Segment 10**, in response to the question about his country, P uses the same basic patterns and much of the same vocabulary, but with some important differences.

### Segment 10 (P at Time 2)

[a] watashi NO kuni wa			(My country
[ano] totemo ii	kuni	desu NE.	is a really good country indeed.)
chotto [ano]	atatakai	desu.	(It's pretty warm.)
ichinen juu	atatakai	dakara.	(That is to say it's warm all year.)
*INT:	ii	desu NE.	(That's nice.)
[a]		yoku arimasen.	(It's not nice.)
*INT:	yoku nai	desu KA?	It's not nice?
	yoku nai	desu.	(It's not nice.)

He drops the unnecessary (both from a linguistic and psycholinguistic point of view) repeated topics *pakisutan wa*, and starts to modify the sentences in ways that make them referentially and interactionally more sophisticated. In his first statement he adds the intensifier *totemo* and after the copula he adds the affective particle *ne*, which also acts as a kind of intensifier. As discussed elsewhere (Sawyer, 1991), *ne* plays a very important role in Japanese conversation, and P's use of *ne* sets him apart not only from B, but from all the other learners in this dataset. In the next statement, his use of *chotto* is not appropriate, but can be seen as a perhaps necessary step toward skillful use of another interactionally very important lexical item in Japanese. His *ichinenjuu* (all year round) has been improved over Time 1's inaccurate *ichinenjoo*, and he varies the end of that statement with *dakara*, instead of *desu*. Again, his use is inappropriate, both syntactically and semantically, but the negative effect is minimal, and he is making progress toward use of a clause ender which is extremely useful and frequently occurring among native speakers. These examples lend support to the idea that P is picking these expressions out of the input, and then using them formulaically while gradually sorting out the meaning and grammatical details.

At the end of this segment, P negates the interviewer's *ii desu ne* using a polite form, and following the interviewer's repetition of the negation in familiar form, he repeats it also in the familiar form, just as the interviewer said it. This is yet another example of taking full advantage of the interlocutor's speech in an interactionally acceptable way.

B's interview at Time 2 is represented first by **Segment 11**.

### Segment 11 (B at Time 2)

[a] doyobi to nichiyoubi shigoto o shimashita.

Saturday and Sunday I work

[a] resutoran no shigoto o shimashita ikimashita.	I do restaurant work I went.
*INT: donna resutoran? doko no? doko no resutoran desu ka?	What kind of restaurant? Where? Where is the restaurant?
[a] muikamachi no-: [a] tsugi ni [ee to] {x} [ee to] chisai [a] machi desu. ishiushi.	Muikamachi's next small town Ishiuchi
*INT: [a] ishiuchi.	Ishiuchi.
wakarimasu ka?	Do you know it?
*INT: shitte imasu. donna resutoran?	I know it. What type of restaurant?
[a] futatsu noo {x} [a] futatsu no resutoran [ee to] oki no resutoran wa nihon no tabemono [a] demo chisai resutoran wa [a] gaijin tabemono	Two Two restaurants. desu. The big R is Japanese food. desu. But the little R is foreigner food. desu.
*INT: de {calich} san wa nani o shimasu ka? What did you do?	And what do you do? nani o shimashita ka?
kippu o u- utte to	I sell tickets and...
*INT: {ticket}?	Tickets?
un. to [a] chotto matte] [a] nabe o a- aratte to iroiroy no [a] iroiroy no {work} shimashita.	Yeah. And...wait a second I washed dishes and... and various I did various kinds of work.

In contrast to Time 1, B starts off within her range, using informative and fluent variations of *X + shigoto O shimashita*. She gets into trouble when the interviewer asks her the location of the restaurant where she works. Rather than use the structure that the interlocutor provides in the question, she seems to try to piece together an answer from scratch, and it becomes highly dysfluent. Going back to more formulaic sentence frames in response to the next question, B's fluency increases considerably. Between the second and third sentences in this turn, the only differences after the contrast marker *demo* are *chi(i)sai* (small) for *o(o)ki(i)* (big), and then *gaijin* (foreigner) for *nihon* (Japan). B also shows evidence of having learned formulaically the NOUN + *O* + V-*te* construction, used to combine more than one verb phrase in a sentence, as she uses it (incorrectly) together with the noun combiner *to*. V-*te* tends to be drilled a lot in class, and it is both frequent and salient in the input, but its functions and cooccurrence patterns take time to learn. In this segment, B seems to be taking a similar

approach in trying out the form in environments which are not too challenging and where the form seems more or less appropriate.

In Segment 12, B describes her country for the second time.

**Segment 12 (B at Time 2)**

[a] {brazil} [/]			
[a] {brazil} WA okkii	kuni	desu.	(Brazil is a big country)
[a] kita {brazil} TO minami {brazil}	WA [a] chigau	desu.	(North & South B are different.)
[a] kita {brazil} tenki	WA [a] atsui	desu.	(North Brazil is hot.)
demo minami {brazil}	WA samui	desu.	(But South Brazil is cold.)
*INT:	samui desu KA?	(It's cold?)	
[nn] minami	WA	samui.	(The south is cold.)
[ee to] nihon to		chigau.	(Different from Japan.
hantai.			(Opposite.)
[a] watashi WA [/]			(I...
watashi NO tokoro WA			My place
[a] minami {brazil}		desu	is South Brazil.)

Her explanation about how the north and south of Brazil have different climates is much better organized than at Time 1, both discoursally and in terms of sentence planning. Discoursally, she states that there is a difference and then specifies what it is; sententially, she uses slight elaborations of the X wa X desu patterns for all the sentences in her turn.

At Time 3, P's fluency rating increases to 156; B's increases to 7.59. P's MLU goes up to 7.8, and MLT rises to 29.2. B's MLU and MLT remain about the same. Although the fluency ratings are telling, the MLU and MLT are most likely influenced a great deal by the interlocutor and the student's mood. Also, B's low MLU and MLT are partly determined by the fact that she is becoming more interactionally oriented, giving more minimal responses when appropriate rather than worrying about constructing fully explicit sentences, which she probably only hears in Japanese class. Both students' Formulaicity Indices increase, but P's much more dramatically.

In Segment 13, the interviewer is asking P what is so good about Islamabad.

**Segment 13 (P at Time 3)**

isurama WA [ano] keshiki WA NE		About Islamabad's scenery..
[ano] urasa NO keshiki TO daitai onaji desho.		it's about the same as Urasa's
*INT: soo desu KA.		(Is that right?)
soo	desu.	(That's right.)

yama MO		aru shi	(There are mountains...
[ano] iroiro NA ki MO		arimasu.	and there are a variety of trees...
tenki MO	ii	desu.	and the weather is good as well.)
anmari atatakakunai		desu.	(It's not so warm.)
tenki MO soo.			(The weather too.)
sorede keshiki WA	ii.		(Also, the scenery is good.)
[ano] kiree NA machi		desu.	(It a pretty town.)
michi MO kitana- kitanaku		nai.	(The roads are not dirty either.)
kitanaku		nai desu.	(They're not dirty.)
[ano] ippai gaikokujin GA		sunde imasu	(Lots of foreigners live there.)

P responds to the interviewer's question with "... *keshiki wa ne*...;" *wa* topicalizes the word for scenery, while the affective particle *ne* establishes the topic as being in the speaker's field of information, solicits the interlocutor's involvement, and gives the speaker more time to plan the rest of the sentence. This non-sentence-final use of *ne* is very commonly heard among native speakers, but rarely among all but the most advanced learners. Although three more of the 11 subjects studied so far seem to be able to consistently use *ne* appropriately in sentence-final positions by Time 4, P is the only learner who uses *ne* after particles, in non-sentence-final positions. Not only does this make him sound more native-like, but it gives him a valuable strategy for sentence planning. With the skillful use of *ne*, a speaker can stop for planning in almost any part of the sentence without sounding dysfluent.

Also notable in this segment, and in this interview as a whole, are new devices for fusing together syntactically simple pieces of material into larger chunks.

P also continues his explorations into new organizers at Time 3. In Segment 13, he uses the expression *sore de*, which usually means something like *upon that*, when what he really needed was *dakara* (*for these reasons*). Later in the interview, he uses *sore de* for a different meaning, inappropriately again. The appropriate contexts will come later. The same is true for *soshitara*, which he uses seven times in this interview. *Soshitara* usually means something like *that being the case...* or *that having happened...*; P seems to use it for a variety of meanings, none of them quite right but none too far off.

B, in her third go at describing her country, continues to make slow but sure progress. As at Time 2, she uses a contrast as an organizing principle. As before, this framework helps to know what to say and how to say it. In Segment 14, the contrast is based on differences between Brazil and Japan.

### Segment 14 (B at Time 3)

hai. watashi WA buraziru kara	kita.	(Yes. I'm from Brazil)
[a] buraziru NO NO GA nihon yori		(Brazil is bigger than Japan)
ookii	desu.	
demo jinkoo WA onaji gurai	desu.	(But the population is about the same)
*INT: aa soo desu KA.		(Is that right?)
sorede [a] buraziru TO nihon TO		(Also, Brazil and Japan are different)
[a] chigau	desu	
tatoeba		(For example,
[a] burazirujin WA		Brazilians
[a] itsumo	tanoshii	are always pleasant)
nihonjin WA MOO nihonjin MO	tanoshii.	(Japanese are also pleasant)
demo daitai		(But on the whole
[a] nihonjin WA		Japanese
[a] itsumo	shigoto O shite imasu.	are always working)
itsumo	isogashii desu.	(They're always busy)
[a] [ee to] tatoeba buraziru NO		(For example, Brazil's
[a] ichiban ichiban sakan NO mono WA		most popular thing
[a] {curnival}	desu.	is Carnival)
{curnival}?		(Carnival?
	shirimasu KA?	(Do you know it?)

After the statement in which she identifies herself as being from Brazil, her next five sentences are variations of the basic pattern "something about the country" *wa X desu*, though there are more sophisticated variations than attempted before, and her use of organizers continues to improve. She uses *demo* and *tatoeba* appropriately twice each in this short segment, and her experiment with *sore de* is just as close as most of P's attempts with that one. Another sign of progress, at least in terms of what P has shown to be useful strategies, is her use of paraphrase to expand her fluent repertoire. About Japanese people, she first says that they are always working, and then paraphrases it by saying that they are always busy, which requires a different, but well-automatized, pattern.

In Time 4's data, P's fluency rating has increased to 919, while B's has climbed substantially to 11.2. P's MLU (6.96) has decreased slightly, and MLT (15.6) has been cut in half. B's MLU (3.88) has risen very slightly, while MLT has dropped a bit (6.44). P has become exceptionally conversationally competent and continues to attempt more challenging sentence patterns, building on the ones he has previously automatized. His use of the particle *ne* and other "interactional organizers" impresses native speakers. B, on the other hand, seems to have levelled off; between Times 3 and 4 she had spent two months in New York, and that probably had a lot to do with her lack of progress. She is able to carry on a conversation with

fairly short utterances, but she easily sprinkles in English words when the Japanese one does not come quickly to mind, and she has become sloppy with her particle use and other grammatical features not essential for communication.

#### 4. CONCLUSION

The discussion of P's and B's use of formulaic language over the course of their language development has been highly interpretative, and in many cases merely impressionistic. However, it was found that this type of exploratory qualitative analysis was a necessary first step toward developing a credible account of the roles that formulae plays in these learners' acquisition of Japanese. The qualitative analysis of more learners, over more time, and the quantitative analysis of the entire corpus, will confirm, disconfirm, and refine putative explanatory speculations made in this paper. Likewise, these further analyses will proceed much more efficiently with the foundation and directions established in this preliminary examination of part of the data. Statements about the learning effects of formulaic language are very difficult to validate empirically and unambiguously, but the amount of potentially supporting data is immense. Much more research effort in this direction is certainly indicated.

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## REFERENCES

- Andrews, S. (1993). The use of formulaic speech in oral story retelling by native and nonnative English speakers. Unpublished M.A. thesis, Dept. of ESL, University of Hawai'i at Manoa.
- Bialystok, E. (1988). Psycholinguistic dimensions of language proficiency. In W. Rutherford & M. Sharwood-Smith (Eds.), Grammar and Second Language Teaching (pp. 51-60). New York: Newbury House.
- Braine, M.D. (1976). Children's first word combinations. *Monographs of Society for Research in Child Development*, 41.
- Bohn, O.-S. (1986). Formulas, frame structures, and stereotypes in early syntactic development: Some new evidence from L2 acquisition. Linguistics, 24 (1), 185-202.
- Bolander, M. (1989). Prefabs, patterns and rules in interaction? Formulaic speech in adult learners' L2 Swedish. In K. Hyltenstam & L. Obler (Eds.), Bilingualism Across the Life Span: Aspects of Acquisition, Maturity, and Loss, 73-86. New York: CUP.
- Dechert, H. (1983). How a story is done in a second language. In C. Faerch & G. Kasper (Eds.), Strategies in Interlanguage Communication, (pp. ) London: Longman.
- Dechert, H. (1984). Second language production: Six Hypotheses. In H. Dechert, D. Möhle, and M. Raupach (eds.), Second Language Productions (pp. 211-230). Tübingen: Gunter Narr.
- Ellis, R. (1984). Formulaic speech in early classroom second language development. In J. Handscombe, R. Orem, and B. Taylor, Eds., On TESOL '83: The Question of Control. Washington, D.C.: TESOL.
- Hakuta, K. (1974). Prefabricated patterns and the emergence of structure in second language acquisition. Language Learning, 24, 287-297.
- Hanania, E., & Gradman, H. (1977). Acquisition of English structure: a case study of an adult native speaker of Arabic in an English-speaking environment. Language Learning, 27, 75-91.
- Huang, J., & Hatch, E.M. (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.
- Huebner, T. (1983). Linguistic system and linguistic change in an interlanguage. Studies in Second Language Acquisition, 6, 33-53.
- Irujo, I. (1986). Don't put your leg in your mouth: transfer in the acquisition of idioms in a second language. TESOL Quarterly, 20, 287-304.
- Krashen, S. & Scarcella, R. (1978). On routines and patterns in second language acquisition and performance. Language Learning, 28-2, 283-300.
- MacWhinney, B. (1991). *The CHILDES Project: Tools for Analyzing Talk*. Hillsdale, NJ: Erlbaum.
- Peters, A. (1983). The Units of Language Acquisition. Cambridge: Cambridge University Press.

- Raupach, M. (1984). Formulae in second language production. In H. Dechert, D. Möhle, & M. Raupach (Eds.), Second Language Productions (pp. 114-137). Tübingen: Gunter Narr.
- Rescorla, L. & Okuda, S. (1987). Modular patterns in second language acquisition. Applied Psycholinguistics, 8, 281-308.
- Sawyer, M. (1991). The development of pragmatics in Japanese as a second language: The particle *ne*. In G. Kasper (Ed.), Pragmatics of Japanese as a Native and Target Language (Technical Report #3) (pp. 85-127). Honolulu, HI: University of Hawai'i, Second Language Teaching and Curriculum Center.
- Scarcella, R. (1983). Discourse accent in second language performance. In S. Gass & L. Selinker (Eds.), Language Transfer in Language Learning (pp. 306-326). Rowley, MA: Newbury House.
- Schmidt, R. (1983). Interaction, acculturation, and the acquisition of communicative competence. In N. Wolfson & E. Judd (Eds.), Sociolinguistics and Language Acquisition. Rowley, MA: Newbury House.
- Schmidt, R., & Frota, S. (1985). Developing basic conversational ability in a second language: A case study of an adult learner of Portuguese. In R.R. Day (Ed.), Talking to Learn: Conversation in Second Language Acquisition. (p.p. 237-326). Rowley, MA: Newbury House.
- Schumann, J. (1978). The Pidginization Process: A Model for Second Language Acquisition. Rowley, MA: Newbury House.
- Shapira, R.G. (1978). The non-learning of English: A case study of an adult. In E. Hatch (Ed.), Second Language Acquisition (pp.246-265). Rowley, MA: Newbury House.
- Wong Fillmore, L. (1976). The second time around: Cognitive and Social Strategies in Second Language Acquisition. Unpublished doctoral dissertation, Stanford University.
- Wong Fillmore, L. (1979). Individual differences in second language acquisition. In C. Fillmore, D. Kempler, and W. Wang, (Eds.), Individual Differences in Language Ability and Language Behavior. New York: Academic Press.
- Yorio, C. (1989). Idiomaticity as an indicator of second language proficiency. In K. Hyltenstam and L. Obler (Eds.), Bilingualism Across the Life Span: Aspects of Acquisition, Maturity, and Loss, 55-72. New York : CUP.