

## ON THE ACQUISITION OF ENGLISH RHYTHM: THEORETICAL AND PRACTICAL ISSUES\*

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The inability to focus on the rhythmic pattern as a whole is suggested in this paper as one of the main deficiencies in teaching English rhythm and partly responsible for a syllabic rhythm in the speech of the EFL learner. A technique is proposed in which the patterns are first isolated from their segmental phones and sequences with which they co-occur in language. This has been found to increase the learner's acuity in perceiving the same feature in normal language behaviour.

### INTRODUCTION

Over the past two decades or so, an accurate rhythm has been considered to be one of the most important phonetic aspects for the auditory comprehension and intelligible oral production of English (Prator 1971, Brown 1977, Morley 1979, Savignon 1983, Faber 1986, Anderson 1993). At the same time, syllable length seems to present the most significant phonetic differences between English and various other languages (Delattre 1966). It has also been suggested that perhaps the most widely encountered difficulty among foreign learners of English is rhythm; that the difficulty appears to be common to all groups of learners, irrespective of their native language; and that this difficulty gives rise to a similar kind of incorrect rhythm in the majority of cases (Taylor 1981: 219). Unlike many other aspects of phonology where there is a certain amount of overlapping among languages, the lengthening and shortening of syllables have to be taught from scratch to most learners.

Nevertheless, the teaching of English rhythm has not kept pace with developments in other areas of pronunciation; this facet of pronunciation teaching is often underestimated and undertaught in the classroom. There are various reasons that seem to induce this apparent neglect. On the one hand, the true nature of the problems that the rhythm system presents for EFL learners has not been clearly established. On the other hand, the auditory perception of

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rhythmic patterns presents particular difficulties, not found with other pronunciation features: since the rhythm of the language is superimposed on the utterance, it is difficult for both teacher and student to focus on it without also attending to other phonetic, lexical, syntactical and semantic aspects. This difficulty in the auditory perception of rhythm makes most of the materials designed for teaching incompatible with the learner's ability to acquire the feature in a productive communicative way. Teachers and materials designers usually expect the learner to perceive and produce the rhythmic patterns automatically without having previously developed the ability to do so. Furthermore, both of these problems also seem to be the result of not making a clear distinction between the mechanisms that usually lead us to a conscious knowledge of language rules but that do not normally develop oral fluency and the mechanisms that move us along the development of an automatic language competence. This is a learnability problem that has been discussed extensively by various authors (McLaughlin 1979, Krashen 1982, Bialystock 1982, Tarone 1982, Ellis 1993).

The main purpose of this paper is to address these problems and present a technique that facilitates auditory perception and automatic production of rhythmic patterns. A distinction will be drawn between analytic processes which usually convey an explicit knowledge of pronunciation features and unanalyzed psycho-motor activities which seem to be essential in automatizing these features. It will be argued that in the teaching of rhythm, more attention is usually given to the analytic processes. Furthermore, the manner of presenting the different factors which contribute to a proper rhythm in English frequently induces a word by word discrimination of rhythm and not its perception and production in chunks or patterns. It is suggested in this paper that a failure to discriminate the English rhythmic pattern as a whole is partly responsible for the syllabic rhythm in the speech of the learner. The technique presented in the last section proposes a way in which this problem might be overcome.

#### AUTOMATIZING PRONUNCIATION FEATURES

A common complaint among language teachers is the inability of the adult learner of English to produce spontaneously, in out-of-class situations, phonetic aspects which, in their consideration, have been thoroughly practiced in class. A "thorough" practice, however, consists mainly of articulatory and orthographic information on the structure of the pronunciation feature, and aural-oral discrimination and production in fully conscious situations. Thus, for example, the teaching of the voiceless interdental fricative /θ/ might include the visual representation of the sound in a chart where the articulatory position of the organs of speech is shown. This is usually followed by the auditory discrimination of the sound in minimal-pair exercises where it is contrasted with another sound with which it might be confused, the voiceless alveolar fricative /s/, for example. After discriminating them aurally, the student produces the sounds first at a word level and then within sentences. The differences between the voiced and voiceless

interdental fricatives might complete the unit with some of the same aural-oral practice given before; orthographic differences such as those in *bath-bathe* might also be given.

The activities above have only assured us that the basic linguistic information has been conveyed. The learner should be able to perceive and articulate the segments under controlled situations. Depending on the amount of practice, he might even be able to use this knowledge easily and rapidly but in fully conscious situations, that is, when he is actually concentrating on the pronunciation problem. The question at hand is whether this explicit knowledge will eventually become implicit or automatic with more of the same kind of practice or whether other mechanisms will also be needed to automatize the feature.

Ellis (1993) has discussed this learnability problem extensively, arguing that learners are often unable to learn the structural properties they are taught because the manner in which they are taught does not correspond to the way learners acquire them. In the acquisition model he proposes, he suggests that explicit knowledge has an indirect effect on acquisition: conscious knowledge will enable the learner to notice the feature and establish the differences between native speaker speech and his own production, but it can only feed directly into implicit knowledge under certain conditions which are related to the learner's stage of development.

When dealing with pronunciation, however, an issue of primary concern is whether the adult learner *can* reach a stage of development in which he is able to internalize the phonological features of the second language. The fact that pronunciation remains problematic even for advanced learners of the second language has called into question the extent to which humans are capable of learning new speech patterns. It is often suggested that after acquiring the sound pattern of the native language, the nerves and the muscles of the tongue and mouth region and even some neural functions in the central nervous system become atrophied, so far as to prohibit accurate pronunciation of a second language. This suggestion, however, would have to be refuted in light of studies such as the one carried out by Neufeld (1987) with a group of university students who were tested for their ability to accurately reproduce the articulatory and prosodic features of Japanese and Chinese; the correct acoustic images of the languages were formed by forcing the subjects to focus on the sound patterns without any explicit instruction in the meaning or pronunciation of the utterances or the grammatical rules of the language. The study demonstrated that these adult learners could imitate utterances up to sixteen syllables in length so well that they were judged as native speakers by native speakers.

The underlying assumption in Neufeld's study is that adults do retain the potential for acquiring nativelike proficiency in a new language and that the problem lies in finding adequate means to access that potential. If this is so, and the organs of speech do not become atrophied with age, then the poor achievements of adult foreign language learners in pronunciation might be partly due to insufficient and perhaps inadequate training of the muscles of the tongue and mouth region. Since the muscles and nerves of tongue and mouth have been used to producing the same set of sounds from the native language for years, it

seems to follow that a great amount of muscular training would be needed to accustom the organs of speech to new sounds. The link between the brain and muscles is always attended to when dealing with other psycho-motor activities such as playing the piano, ballet-dancing, swimming, and even driving. But this has not been clearly appreciated in the teaching of pronunciation. The link between the brain and the muscles of the organs of speech sets pronunciation apart from all other facets of language (Stevens 1974). The analytic processes – the articulatory and orthographic awareness– are necessary for self-monitoring and self-correcting techniques and for noticing the feature in the input (Ellis 1993) but they are just mental processes that have to be converted into motor activity:

Any human actions that are psycho-motor in nature, rather than solely mental, are by definition subject to that whole series of limitations which apply to all muscular training. In a sense teaching pronunciation is more like gymnastics than linguistics (Stevens 1974: 182).

Muscular training seems to be basic to automatize pronunciation features; therefore specific attention should be given to it by the teacher in the classroom and by the student on his own. In the case of segments, such as /θ/ and /s/ dealt with above, muscular training could consist of an alternating continuous repetition of both sounds in isolation, i.e., /ssssθθθθssssθθθθ.../. These exercises train the muscles in an unanalyzed way to a new sound or sounds, and they also give the learner more of a chance to hear the sound and to feel the contact of the articulators than if they were just exercised in sentences such as *Yes, thank you, sir, Next Thursday is my birthday*, etc., which in any case would be useful after the sounds have been practiced in isolation.

Muscular training is one of the factors that makes the acquisition of a pronunciation feature at a fully competent level a long-range activity and the students should be made aware of this, since motivation for change in pronunciation can often flag because impatient learners perceive the process as being too slow (Wong 1987). With articulatory and orthographic awareness and initial psycho-motor instruction, the learner is fully equipped to practice the pronunciation feature in all other aural-oral language activities and eventually he can be expected to acquire pronunciation competence. Figure 1 depicts the suggested processes in the acquisition of a pronunciation feature:

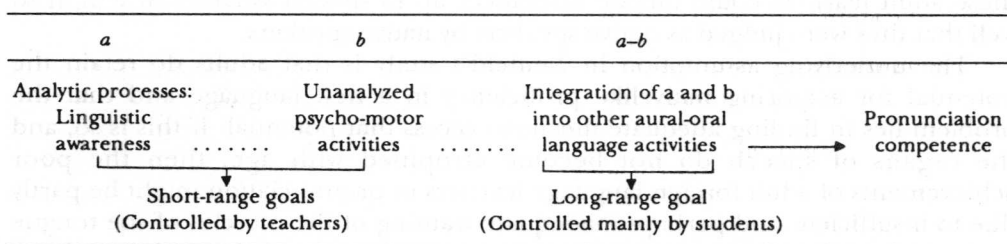


Figure 1

The integration of the pronunciation practice into other aural-oral language activities serves at least two very important purposes: on the one hand, the time allotted for pronunciation practice in most programmes is usually not sufficient to achieve any significant results and, on the other hand, learners need to be aware of the connection between their pronunciation and effective aural-oral communication. I was able to successfully give basic phonological training for auditory discrimination to an ESP reading course in a non-native environment when the students recognized the need for it in the listening comprehension activity they had as part of the programme (Chela Flores 1993). Factors that usually complicate the integration of pronunciation features into other aural-oral language activities are the order and priorities given to the phonological aspects presented. It is not only common to find phonological features presented as discrete and separate items, but the order in which they are presented and the special attention given to some features and not to others, do not always correspond to the priorities for aural-oral intelligibility. English rhythm, our key issue in this article, has been considered "as the guide to the structure of information in the spoken message" (Brown 1977: 43). Nevertheless, it is almost wholly neglected by teachers, teacher trainers, and materials designers alike. In the following sections I will first analyze some of the reasons for this neglect and then suggest ways of overcoming its difficulties in teaching.

#### THE ENGLISH RHYTHM SYSTEM: UNDERSTANDING ITS DIFFICULTIES

English rhythm has been examined from a number of perspectives and we are now beginning to understand the true nature of the problems that it presents for EFL learners. We no longer attribute the difficulties to the theory of stress-timing and syllable-timing on which most teaching methodologies for pronunciation have been based; this theory has been shown to be unsound since the tendency for stresses to recur regularly appears to be a language universal property (Roach 1982, Dauer 1983, Borzone and Signorini 1983, Miller 1984). This must certainly come as a relief to many teachers and students who struggled through exercises in which the main objective was to keep stressed syllables equally spaced and also to materials designers who sometimes even warned the learners of the difficulties they were going to encounter with the stress-timing exercises (Hagen and Grogan 1992: 123). The theory was also shown to be fallible in a survey carried out by Taylor (1981) in which both speech and reading of experienced non-native teachers of English of very varied language backgrounds were recorded and analysed. Within the group that had unacceptable rhythm there were some with non-syllable-timed native languages; this seemed to indicate that the problem was more than just simple transference of the rhythmic pattern from L1 to L2. Taylor attributes this difficulty to a failure to make sufficient difference in length between the vowels in stressed and unstressed syllables. He corroborates his findings with a major investigation carried out by Adams and Munro (1978). In this study, spoken English of native and non-native speakers was compared, and although little difference was found in the duration of stressed vowels, the

unstressed vowels were significantly longer in the speech of non-native speakers. Anderson (1993) came to much the same conclusion after comparing the interstress interval in the English of non-native speaking subjects and native English speakers. Native speakers had the shortest time and the fewest number of stresses, the "most intelligible" group had the next shortest time and next fewest number of stresses, and the "least intelligible" group had the longest speaking time and the greatest number of stresses.

The failure to make sufficient difference in length between the vowels in stressed and unstressed syllables seems to be the basic cause of difficulty with English rhythm among non-native speakers of English. Other factors, such as detecting the accented syllables, have not been considered as important. Cluter and Clifton (1982) demonstrated that the wrong placement of stress does not seem to seriously affect the recognition of a spoken word, so long as the pattern of full and reduced vowels is not changed. But, according to the results that Taylor (1981) obtained in the survey mentioned above, even the failure to reduce vowels correctly in the appropriate places cannot wholly explain the syllable-timed rhythm, since from the twenty four subjects who achieved acceptable English rhythm in his survey, no fewer than fourteen used none or very few weak forms and generally did not properly reduce vowels in unstressed syllables.

Since the difficulties with English rhythm seem to be found even among learners with non-syllabic native languages, and since an acceptable rhythm does not seem to necessarily imply an adequate production of the main factors related with English rhythm, i.e., the reduction of vowels, placement of stress, etc., a syllabic rhythm might be the result of too much emphasis on the pronunciation of each unit within an utterance and not producing adequately lengthened and shortened syllables in chunks. This, in turn, may be the result of inadequate instruction: the manner in which rhythmic factors are often taught in the classroom and exercised in commercial materials tends to lead the learner to approach the utterance word by word; the learner is asked to listen to stressed words, to decide which syllables have full or reduced vowels, to underline content or function words, to fill in blanks with missing stressed or unstressed words, etc. After the learner has been introduced to the different factors that contribute to a contrasting syllable length in English in this word-by-word manner, he is supposed to be able to perceive and produce, without any specific training, adequate rhythmic *patterns*, with adequate lengthening and shortening of syllables.

We rarely see exercises that approach lengthened and shortened syllables in chunks, except for limericks. Teachers and materials designers are conscious that limericks work because they force the correct rhythmic pattern on the learner in an unanalyzed way: "The rhythmic swing will be broken if the students have to pause at each line to figure out which word to emphasize" (Gilbert 1984: 22). However, the potential of limericks for developing rhythmic competence is very restricted. They do not offer sufficient or systematized practice nor will the learner encounter natural language or rhythmic patterns of various lengths and varieties. In other words, with occasional limericks, the learner is not likely to acquire that English "rhythmic swing" in his own speech. Nonetheless, limericks do point out the characteristics that should be present in exercises aimed at

acquiring proper lengthening and shortening of syllables in chunks: the exercises should not draw attention to any other factor of English rhythm except the duration of lengthened and shortened syllables. As with limericks, these exercises should be given in such a way that the learner does not have to analyze which syllables are lengthened or shortened –the main attention should be kept on the “rhythmic swing” of the pattern. Aside from these characteristics found in limericks, a variety of rhythmic patterns should be presented with sufficient practice and task-oriented exercises to enable the student to fix the pattern in his speech. Finally, the exercises should also train the students to use the proper rhythm in all other oral language activities.

Teaching students to produce rhythmic patterns with the proper swing and in an unanalyzed way would correspond to the psycho-motor activities suggested in Figure 1, as one of the mechanisms for acquiring pronunciation features. The analytic processes, in contrast, would draw explicit attention to the central features of the rhythm system in English. These two phases, however, are not usually seen as separate processes that need specific attention. The learner is often expected to discriminate and produce rhythmic patterns automatically, just as a result of covering the technical and analytic practice on contrastive syllable length in English. Thus, for example, the unit on sentence rhythm from a commercial text (Hagen and Grogan 1992: 111) begins with a description of how contrastive syllable length should be achieved in oral speech. This is followed by an exercise in which the student is asked to listen to a set of 10 words and phrases, each set having the same number of syllables and the same pattern of stronger and weaker syllables; the student has to locate the short and long syllables, mark them with dots and lines and write the number of syllables next to them (p. 112).

### Exercise 1.

Single word	Words in group	No. of syllables
• —	• —	
1. succeed	He left.	_____
2. dangerous	Talk to her.	_____
3. umbrella	a red one	_____
etc.		

The student is then asked to practice repeating these words and word groups. In the next exercise, stress patterns have to be discriminated aurally in a same-different fashion (pp. 112-113).

### Exercise 2.

- |  |   |
|--|---|
| 1. <u>S</u> I'm leaving you.<br>He's eaten some. | 4. _____ their education.<br>He has a problem.      |
| 2. _____ John does.<br>She slept.                | 5. _____ with his friend<br>a report.               |
| 3. _____ Open it.<br>Take it out.                | 6. _____ Promise me again.<br>This must be the one. |

The authors' intention with this exercise seems to be the aural discrimination, in chunks, of stress patterns of various lengths and varieties. The learner should be able to perceive these patterns as a result of analyzing long and short syllables in Exercise (1). The main focus of the first exercise, however, seems to be on the analysis of strong and weak forms *within* words and word groups in order to understand the construction of rhythmic patterns. Furthermore, even though the student is listening to the samples being read, the exercises might be carried out by working out the stressed and unstressed syllables from the written samples and not by discriminating them aurally from the input. I have found (Chela de Rodríguez 1979) that both learners and linguistically naive native speakers of English find it very hard to perceive aurally stressed syllables and words.

The sense of sight, body movements or kinesthesia are frequently used as a help to see and feel the differences in length in English rhythm. For this purpose, Gilbert (1978) introduced the use of rubber bands and elastic materials for this purpose. In Exercise (1) above, length is shown by means of a set of dots and lines which helps to see what the pattern looks like, but again, the manner in which the graphic representation is used by the learner gives rise to a syllable by syllable or word by word analysis –the student marks the words and word groups with dots and lines *after* deciphering the stressed and unstressed syllables. In order to aurally perceive the patterns in chunks, as is expected in Exercise (2), the student would first need an exercise in which attention was drawn just towards the pattern without focusing on its parts, for example:

a	b	
. ———	——— ..	
succeed	think of it	1. on time _____
he left	dangerous	2. several _____
of course	talk to her	3. open it _____
		4. she slept _____
		5. approach _____
		etc.

Furthermore, for a more accurate aural discrimination, only two patterns of similar length should be presented simultaneously and lengths and varieties increased gradually. Exercise (2) above includes eight different rhythmic patterns. However, presenting rhythmic patterns with near equivalents in the language is rather difficult because of the different lexical structures of the patterns. This procedure is easier with segments and even with pitch variations –a sentence such as *He's coming tomorrow* can have a low fall, a high fall and a rising pitch in the last stressed syllable to indicate a matter-of-fact statement, an emphatic statement and a question, respectively. However, different rhythmic patterns necessarily have different lexical structures, making it difficult to direct the listener's attention solely to the problem in question. What follows is a description of a technique which mainly consists of presenting English rhythmic patterns in minimal pairs to facilitate auditory perception and oral production (Chela de Rodríguez 1983). This technique has been used successfully during two academic years in a teacher training programme at Universidad del Zulia, Venezuela.



## TEACHING PERCEPTION AND PRODUCTION OF RHYTHMIC PATTERNS

The discussion carried out in the previous sections points to the following aspects as basic requirements in developing exercises aimed at acquiring English rhythmic patterns in an automatic way: (i) The exercises should draw attention only to the duration of lengthened and shortened syllables; description and analysis of other central features of the rhythm system should be handled separately. (ii) The exercises should be presented in such a way that the learner does not have to analyze which syllables are lengthened or shortened –the main emphasis should be placed on the auditory perception first and then the oral production of the “rhythmic swing” in the patterns. (iii) A variety of rhythmic patterns, graded according to length and complexity, should be presented in a minimal pair fashion and with sufficient task-oriented exercises to enable the learner to perceive and fix the pattern in his speech. Furthermore, these exercises, for each pair of patterns practiced, should range from the recognition of the patterns in their simplest form up to their use in normal language behaviour. (iv) The exercises should also train the students to eventually transfer the rhythmic patterns to other oral language activities.

As noted above, there is a basic problem in presenting English rhythmic patterns for their aural discrimination. It is difficult to find means of directing the learner’s aural attention to the patterns as a whole; they are superimposed on the utterance and they have different lexical structures; therefore it is not so easy to present them with near equivalents in the language (i.e., minimal pairs). Because of this difficulty, both teachers and materials designers tend to concentrate more on the specific features that contribute to a proper lengthening and shortening of syllables, i.e., the use of reduced vowels, the placement of stress, the distinction between content and function words, etc., rather than on the pattern as a whole, maybe expecting that the student will be able to put all the parts together by himself and perceive and produce the patterns adequately.

I have tried to overcome the problem of auditory perception of rhythmic patterns by developing a set of lessons in which the patterns are first presented isolated from the normal segments and sequences with which they co-occur in language. I have found (Chela de Rodríguez 1981) that this helps the learner increase his acuity in perceiving the same feature in normal language behaviour. By isolating the rhythmic pattern, it is then possible to present two stimuli simultaneously, juxtaposed, thus giving the learner a better chance to more accurately discriminate the auditory effects of the rhythm. Oral production is presented in each unit after the rhythmic pattern has been adequately perceived. The exercises proceed on the widely accepted principle that a learner is unlikely to be able to produce a certain pronunciation feature if he is unable to perceive the feature aurally.

The procedure is as follows: two rhythmic patterns are presented graphically and echoed with the nonsense syllable *ti* for unstressed syllables and *TA* for stressed ones:

- (1) a) . — . — . (ti 'TA ti ~TA ti)  
 b) — ... — ('TA ti ti ti ~TA)

The capital letters in the syllable *TA* help to indicate that the stressed syllables are longer and louder than the surrounding unstressed ones. However, it must be remembered that sometimes there is no measurable difference in loudness between stressed and unstressed syllables. Pitch variation is also marked on the stressed syllables by means of a slanted line; for the sake of simplicity and a better concentration on the rhythm, the tonic syllable is kept on the last stressed syllable of the thought group and only structural intonation is considered. The main emphasis of the exercise, however, is on the contrastive syllable length perceived as a chunk. The student is first asked to discriminate aurally the two rhythmic patterns in (1), which the teacher verbalizes with the nonsense syllables *ti* and *TA*. A same-different drill or a drill identifying the pattern with the corresponding letter *a* or *b* can be used. The student can then proceed to imitate the patterns orally, still using the monosyllables *ti* and *TA*.

As a second exercise, a number of words, phrases and sentences are presented which contain the rhythmic patterns in (1). The students identify the pattern used by writing *a* or *b* next to the example:

- (2) Examples: Some of you can come *b*  
 I bought a record *a*

- i) We started early \_\_\_\_\_
- ii) Tennis is a game \_\_\_\_\_
- iii) Why has no one come? \_\_\_\_\_
- iv) We'll have a picnic \_\_\_\_\_
- v) A piece of chocolate \_\_\_\_\_
- vi) He's just a baby \_\_\_\_\_
- vii) Where can it have gone? \_\_\_\_\_
- viii) Examination \_\_\_\_\_
- ix) Do it after lunch \_\_\_\_\_
- x) A vegetarian \_\_\_\_\_

Up to now, the students have not been asked to verbalize the rhythmic patterns except for the nonsense syllables in Exercise (1). It is important that the patterns be perceived and discriminated accurately before they are produced orally in a normal language situation. Guided oral practice comes in the next exercises. In Exercise (3) the student repeats a number of words, phrases and sentences that contain the patterns in question:

- (3) a) . — . — . (ti 'TA ti ~TA ti)

Pronunciation/ He left on Monday/ It is time for supper/  
 Determination/ She couldn't help it/ I don't believe you/ This  
 morning's paper/ You mustn't leave her/ We'll have a picnic/ A  
 pound of apples/ Remind the grocer/ They'll come this evening/

There's something missing/ Forget your troubles/ Another sandwich?/ He's absent-minded.

b) — ... — ('TA ti ti ti TA)

Tell her not to come/ Peter was with us/ Why did you return?/ What about a drink?/ How is Mrs. Jones?/ Thirty of them left/ Erick must be there/ Don't be such a fool/ Look before you cross/ Put it on the floor/ Hurry to the store/ Robert could have gone/ Ask him what he wants/ Have a cigarette/ Carry it away/ Tell him all you know/ How did she behave?

Exercise (4) consists of two dialogues made up of utterances containing the two rhythmic patterns practiced in the lesson. The graphic representation of the rhythmic patterns is given above the utterances of one of the dialogues. The student has to work out on his own the rhythmic pattern of the second dialogue:

(4) a) Danny :  $\overline{\text{Why}} \text{ } \dot{\text{a}}\text{r}\dot{\text{e}} \text{ } \overline{\text{y}}\overline{\text{o}}\overline{\text{u}} \text{ } \text{st}\dot{\text{i}}\text{ll} \text{ } \overline{\text{h}}\overline{\text{e}}\overline{\text{r}}\overline{e}?$

Bill :  $\text{W}\dot{\text{e}} \text{ } \overline{\text{l}}\overline{\text{e}}\overline{\text{a}}\overline{\text{v}}\overline{\text{e}} \text{ } \text{on} \text{ } \overline{\text{M}}\overline{\text{o}}\overline{\text{n}}\overline{\text{d}}\overline{\text{a}}\overline{\text{y}}.$

Danny :  $\overline{\text{O}}\overline{\text{n}}\overline{\text{c}}\overline{\text{e}} \text{ } \text{y}\dot{\text{o}}\text{u} \text{ } \text{h}\dot{\text{a}}\text{v}\dot{\text{e}} \text{ } \overline{\text{a}}\overline{\text{r}}\overline{\text{r}}\overline{\text{i}}\overline{\text{v}}\overline{\text{e}}\overline{\text{d}}, \text{ } \overline{\text{g}}\overline{\text{e}}\overline{\text{t}} \text{ } \text{i}\dot{\text{n}} \text{ } \text{t}\dot{\text{o}}\text{u}\dot{\text{c}}\text{h} \text{ } \text{w}\dot{\text{i}}\text{t}\dot{\text{h}} \text{ } \overline{\text{J}}\overline{\text{o}}\overline{\text{h}}\overline{\text{n}}.$   
He  $\overline{\text{w}}\overline{\text{a}}\overline{\text{n}}\overline{\text{t}}\overline{s}$  to  $\overline{\text{m}}\overline{\text{e}}\overline{\text{e}}\overline{\text{t}}$  you.

Bill :  $\text{O}\dot{\text{K}}. \text{ } \text{I}'\text{l}\text{l} \text{ } \overline{\text{p}}\overline{\text{h}}\overline{\text{o}}\overline{\text{n}}\overline{\text{e}} \text{ } \text{on} \text{ } \overline{\text{T}}\overline{\text{u}}\overline{\text{e}}\overline{\text{s}}\overline{\text{d}}\overline{\text{a}}\overline{\text{y}}. \text{ } \overline{\text{T}}\overline{\text{h}}\overline{\text{a}}\overline{\text{n}}\overline{\text{k}} \text{ } \text{y}\dot{\text{o}}\text{u} \text{ } \text{v}\dot{\text{e}}\overline{\text{r}}\overline{\text{y}} \text{ } \overline{\text{m}}\overline{\text{u}}\overline{\text{c}}\overline{\text{h}}.$

b) Jane : I want to see you.

Mary : When?

Jane : What about tonight?

Mary : I have a meeting... but maybe later. Let's make it seven.

Jane : OK. Try to be on time. It is important.

There is one more exercise, usually given as homework, where the student has to make up his own examples to fit the patterns seen in the lesson.

In the last lessons the dialogues are longer, but still only two rhythmic patterns are seen simultaneously in each lesson. Exercises (5) and (6) are examples of longer dialogues with rhythmic patterns of eight and nine syllables:

(5) Rhythmic pattern used:

a) . — . — . — . — . — . — . — (ti 'TA ti ti 'TA ti ti TA)

b) . — . — . — . — . — . — . — . — (ti 'TA ti ti ti TA ti ti ti)

Janet :  $\text{A}\dot{\text{n}}\text{d} \text{ } \overline{\text{w}}\overline{\text{h}}\overline{\text{e}}\overline{\text{r}}\overline{\text{e}} \text{ } \text{h}\dot{\text{a}}\text{v}\dot{\text{e}} \text{ } \text{y}\dot{\text{o}}\text{u} \text{ } \overline{\text{b}}\overline{\text{e}}\overline{\text{e}}\overline{\text{n}} \text{ } \text{a}\dot{\text{l}} \text{ } \text{t}\dot{\text{h}}\text{i}\dot{\text{s}} \text{ } \overline{\text{t}}\overline{\text{i}}\overline{\text{m}}\overline{e}?$  I have  $\overline{\text{w}}\overline{\text{a}}\overline{\text{i}}\overline{\text{t}}\overline{\text{e}}\overline{\text{d}}$   
 $\text{f}\dot{\text{o}}\text{r} \text{ } \overline{\text{o}}\overline{\text{v}}\overline{\text{e}}\overline{\text{r}} \text{ } \text{a}\dot{\text{n}} \text{ } \overline{\text{h}}\overline{\text{o}}\overline{\text{u}}\overline{\text{r}}!$

- Bob : My bicycle broke down this morning. I only had a bicycle pump. I couldn't repair it myself. I took it to a service station. They told me to wait for a while.
- Janet : But John could have fixed it tonight. You know he enjoys fixing bikes.
- Bob : I knew he could fix it tonight, but I needed the bike after lunch. I couldn't have waited for John.
- Janet : And why didn't you telephone me?
- Bob : I didn't expect to be late. He said he could finish it soon, but one of his sons must have phoned, for he had to go back to his house.
- (6) Tim : Whatever could have happened to him?
- Alan : He doesn't want to talk about it... I think he has failed his exam.
- Tim : But Robert could have helped him with it.
- Alan : Yes, but... he normally studies alone.
- Tim : He needn't be so sad about it. He'll take it again in July.
- Alan : It isn't as easy as that. He's got to be home by July.
- Tim : Perhaps he could do it before... I think I will call him tonight.

I developed ten lessons similar to the one described above with rhythmic patterns ranging from two syllables to twelve syllables. To evaluate their effectiveness, the exercises were tested for a semester with students of English from a teacher-training programme at Universidad del Zulia. Before the trial period, an analysis was made of the students' pronunciation to roughly determine the percentage of errors in word and sentence stress. This analysis was carried out from two texts read by the students, a dialogue between husband and wife and a letter to a friend; the students were asked to tape these texts in a language laboratory after preparing them for a week. After the trial period in which the ten lessons were practiced, the students were re-tested in two ways. They were first asked to prepare two texts for reading aloud. They were allowed a week to prepare the texts; the graphic representation was given above the utterances for one of the texts and they had to work out the rhythmic patterns for the second text. A third text was also given without the graphic representation and with only

half an hour for preparation before reading it. For the first two texts, a great improvement was shown in comparison with the results of the analysis made before the trial period, even more significant with the text that had the graphic representation of the rhythmic pattern. Some improvement was also shown with the text read without the more detailed previous preparation, but the study demonstrated that more practice was needed before the students could handle the patterns automatically in uncontrolled situations. However, the results, on the whole, were very encouraging for several reasons. After trying out various methodologies, I have found that the most effective way to teach the aural discrimination and oral production of rhythmic patterns is by first isolating these patterns from their lexical items. The students tested also reported that with this technique they were able to detect their own mistakes and felt more confident in their self-correction.

#### CONCLUDING REMARKS

This paper has sought to analyze the possible causes for the persistent difficulties in achieving proper rhythmic patterns in English and at the same time present a pedagogical proposal to overcome some of these problems. The inability to focus on the rhythmic pattern as a whole has been suggested as one of the main deficiencies in teaching English rhythm and partly responsible for the syllabic rhythm in the speech of many learners. This, in turn, seems to be the result of the difficulty in perceiving the pattern aurally. The only efficient way which has been found to focus on the pattern as a whole has been to isolate the pattern from the lexical items, so that the student is not concerned with the meaning of the utterance or with any other pronunciation feature until he is able to perceive the pattern aurally. After this is achieved, the rhythmic patterns are then presented under conditions that approximate normal language behaviour. Although the validity of isolating the patterns as a means of perceiving the rhythm would need more support from empirical research, this pedagogical proposal has been successfully tried out in the classroom. Integration of this technique into other language activities is recommended in order to achieve automatic control of the patterns in spontaneous situation. In a future paper, I hope to be able to suggest ways of bringing about this integration.

#### REFERENCES

- ADAMS, C. and R. MUNRO. (1978). In search of the acoustic correlates of stress: Fundamental frequency, amplitude and duration in the connected utterance of some native and non-native speakers of English. *Phonetica* 35: 125-156.
- ANDERSON, P. (1993). Defining intelligibility parameters: The secret of sounding native. Paper presented at the XXVII TESOL Annual Convention. Atlanta, Georgia, U.S.A.
- BIALYSTOK, E. (1982). On the relationship between knowing and using forms. *Applied Linguistics* 3: 181-206.
- BORZONE DE MANRIQUE, A. and A. SIGNORINI. (1983). Segmental duration and rhythm in Spanish. *Journal of Phonetics* 11: 117-128.

- BROWN, G. (1977). *Listening to spoken English*. London: Longman.
- CUTLER, A. and C. CLIFTON. (1982). The use of prosodic information in word recognition. In H. Bouma and D. Bouwhuis (Eds.), *Attention and performance I*. Hillsdale, NJ: Erlbaum.
- CHELA DE RODRÍGUEZ, B. (1979). Teaching English suprasegmentals to Spanish speakers. In F. Eckman and A. Hastings (Eds.), *Studies in first and second language acquisition*. Rowley, Mass.: Newbury House Publishers.
- CHELA DE RODRÍGUEZ, B. (1983). Recognizing and producing English rhythmic patterns. *English Teaching Forum* 21 (3): 27-29 and 35.
- CHELA DE RODRÍGUEZ, B. (1981). Estudio teórico-metodológico de los aspectos fonéticos fundamentales para la comprensión auditiva y producción oral del inglés. *ARGOS* 3: 165-189.
- CHELA FLORES, B. (1993). Strengthening visual and auditory images in EFL reading. *English Teaching Forum* 31 (2): 22-27.
- DAUER, R. (1983). Stress-timing and syllable-timing reanalyzed. *Journal of Phonetics* 11: 51-62.
- DELATTRE, P. (1966). A comparison of syllable length conditioning among languages. *IRAL* 4 (3): 183-198.
- ELLIS, R. (1993). The structural syllabus and second language acquisition. *TESOL Quarterly* 27 (1): 91-113.
- FABER, D. (1986). Teaching the rhythms of English: A new theoretical base. *IRAL* 24: 205-216.
- GILBERT, J. (1978). Gadgets: Nonverbal tools for teaching pronunciation. *CATESOL Occasional Papers* 4: 68-78.
- GILBERT, J. (1984). *Clear speech: Pronunciation and listening comprehension in American English*. Cambridge: Cambridge University Press.
- HAGEN S. and E. GROGAN. (1992). *Sound advantage: A pronunciation book*. Englewood Cliffs, NJ: Regents/Prentice Hall.
- KRASHEN, S. (1982). *Principles and practice in second language acquisition*. Oxford: Pergamon.
- MCLAUGHLIN, B. (1979). The monitor model: Some methodological considerations. *Language Learning* 28: 309-332.
- MILLER, M. (1984). On the perception of rhythm. *Journal of Phonetics* 12: 75-83.
- MORLEY, J. (1979). *Improving spoken English*. Ann Arbor: University of Michigan Press.
- NEUFELD, G. (1987). On the acquisition of prosodic and articulatory features in adult language learning. In G. Ioup and S. Weinberger (Eds.), *Interlanguage phonology*. Cambridge: Newbury House Publishers.
- PRATOR, C. JR. (1971). Phonetics vs. phonemics in the ESL classroom: When is allophonic accuracy important? *TESOL Quarterly* 5 (1): 61-72.
- ROACH, P. (1982). On the distinction between "stress-timed" and "syllable-timed" languages. In D. Crystal (Ed.), *Linguistic controversies: Essays in linguistic theory practice in honour of F.R. Palmer*. London: Edward Arnold.
- SAVIGNON, S. (1983). *Communicative competence: Theory and classroom practice*. Reading, MA: Addison-Wesley.
- STREVENS, P. (1974). A rationale for teaching pronunciation: The rival virtues of innocence and sophistication. *English Language Teaching Journal* 28: 182-189.
- TARONE, E. (1982). On the variability of interlanguage systems. *Applied Linguistics* 4: 142-163.
- TAYLOR, D. (1981). Non-native speakers and the rhythm of English. *IRAL* 19: 219-226.
- WONG, R. (1987). *Teaching pronunciation: Focus on English rhythm and intonation*. Englewood Cliffs, NJ: Prentice Hall.