

The Roles of the Language Laboratory in Teaching Languages: A Case Study of Bayero University, Kano

Amina Adamu¹, Mustapha Mukhtar Umar² and Hussaini Muhammad³

¹Department of English and Literary Studies, Bayero University, Kano, Nigeria

²Language laboratory, Bayero University, Kano, Nigeria

³Department of Nigerian Languages

Corresponding Author: Amina Adamu

ABSTRACT: This paper presents some simple ways of teaching languages using the facilities of a typical language laboratory and discusses a sample of the software available for advanced researches in phonetics and phonology, as well as basic scientific and mathematical tools. The shortcomings of using the language laboratory and their solutions are also presented. The important roles of teachers and students' expectations in the use of the language laboratory are also discussed. Using Microsoft Power Point, different practical exercises are developed with audio and video files to demonstrate that practical exercises are easier to learn using the laboratory. A questionnaire was designed to seek the opinion of students on the use of the laboratory and how beneficial it is to their learning. Results of the study revealed that students are positively disposed to the use of language labs since the digital environment is motivating and online help is readily available. The finding of this research shows that those students taught in the language laboratory could realize the correct pitch better than those taught in the classroom.

KEYWORDS-Teaching, language laboratory, Praat, stress and intonation

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I. INTRODUCTION

Globalization is changing the way we teach and learn. Language laboratories in most of our tertiary institutions are used as tools of satisfying accreditation requirements and also developing a passion in those trying to utilize the laboratory. It is becoming quite a challenge to teach using the conventional, digital or multimedia language laboratories and also to establish who is responsible for preparing practical.

The Language laboratory (LL) is an electronic device that is designed to help the learning process to become easier. The four skills of reading, writing, listening and speaking have to be practiced. Our new multimedia LL can help students in writing, speaking and listening. Listening will not be fully comprehended without merging *reading* and *listening* together (receptive skills) as well as linking the written word or passage with audio and pictorial views (productive skills). It is surprising that majority of the schools in Nigeria, secondary schools as well as Universities, do not have the language laboratory. Even when they do, it is not properly equipped to serve as one[1].

Learning using the language laboratory is obviously a challenging trend, which has effects on what to teach, how to teach and what laboratory based lecture is supposed to be. For instance, teaching in the classrooms only will not enable students to understand fully the articulatory auditory and acoustic features. However, using software like *PRAAT* and Microsoft Power-point (MPP), the three sub-fields of phonetics are clearly and conveniently taught in the language laboratory. With Praat and MPP, students are exposed to the practical aspects of lectures especially in stress and intonation and other segmental aspects. When they pronounce words and see the patterns of their speech, syllables and pitch in the pitch contour, the students get excited and motivated to learn more and pay attention to what is taught and shown to them.

The Role of the Language Laboratory

The main purpose of LL is to make students improve their communication skills in the target language. It is also proven that one can learn the aspects of the phonetics of a language, such as pronunciation, accent, stress, etc. in a LL[2] and[3]. The presence of teaching and learning facilities and infrastructure are among the factors supporting the smooth teaching and learning activities in the LL. It is not only useful to undergraduate students as beginners in phonetic and phonology. It also facilitates the work of researchers at the postgraduate level in the area of the acoustics of sounds and forensic language analysis in the field of linguistics generally. The language laboratory is the perfect place to organize seminars and workshops and various aspects of educational technology, educational software, production techniques, dubbing, etc. It provides learners with a platform to conduct a lot of

training programmes, group discussions, presentations, personal interviews, debates and role plays. This will enhance their intellectual capability and creativity[4].

As in any other language, LL can be used to study “Tajweed” (in the language of Qur’an) in which the phonological and phonetics aspects of “Tajweed” are clearly practiced, such as the production of nasals and assimilation. This gives the students of Arabic a good opportunity to practice and study the rules of Tajweed, using the software in the LL.

In the theater and performing arts, the roles of LL especially in music listening and the recitation of lyrics create a cycle of engagement in which students constantly self-observe, self-judge, self-regulate and self-monitor techniques. These are encouraged as the components of contemporary pronunciation pedagogy. The LL also performs significant roles in enhancing the skills of engineering students through interactive lessons to enable them to face interviews, telephonic conversation and public speaking. The trained students of Robotic Engineering have a role to play with their training in stress, intonation, word accent and rhythm. They can train their robots in especially voice recognition of the target language.

The English Teacher and the Language Laboratory

The student is not the only beneficiary of the LL. The teacher also gains a lot being that the process of teaching pronunciation is made easier. The system of LL provides the teacher with the opportunity to listen to the individual sound articulation of students as many times as possible, unlike in the classroom situation where the teacher gets one chance to process the linguistic input[5]. The Multimedia Device provides the teacher with the platform to teach students individually or in groups. The teacher can assess them based on individual performances. Those students that perceive the English sounds and can articulate and pronounce them properly can then move to other aspects of phonetics without being delayed by slow learners.

Acoustic Phonetics and the Language Laboratory

Acoustic phonetics is an aspect that is not usually taught in the classroom teaching of pronunciation. It involves sound waves and how the sounds uttered by a speaker from the output of microphone travel in the air. The LL is the place that has the facility (Multi-Speech) to show the difference in the fluctuations of the sounds uttered, which clearly illustrates that no two sounds are uttered the same way, even if pronounced by the same person.

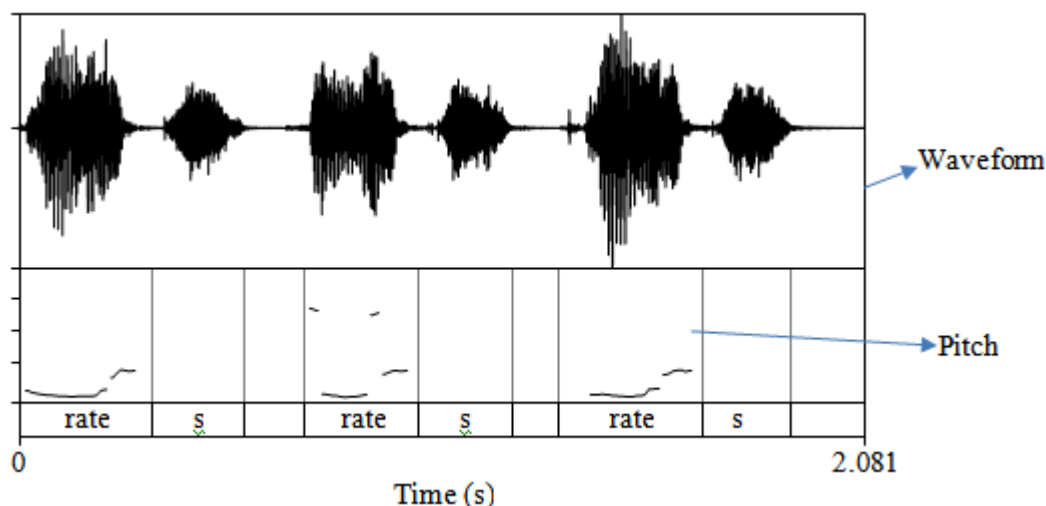


Figure 1.0 Representation of a sound (rates) uttered three times

The appearance of the waveform and pitch as representation of a sound uttered by students, makes them excited and motivates them to utter more sounds until their pronunciation matches with the sample given.

Auditory Phonetics and the Language Laboratory

Auditory phonetics, which is an aspect that deals with the receptive skill, can be taught effectively at the LL. The introduction of the audio-lingual approach has contributed in shifting the focus of the foreign learner (FL) and the second language learner (ESL) of English from reading and writing to listening and speaking. Hence, the function of the LL as a technology of teaching ESL and EFL becomes ideal for the language teacher[6]. The Audio-Lingual approach is based mainly on systematic pattern drilling[7], in which the repetition of minimally different sentences is allowed. This allows the student to correct his pronunciation through the repetition of

minimal patterns generated in different sentences. The electronic device in the LL coupled with high-quality tapes helps the learner's receptive skills in listening to the sound properly, since accurate and intelligent listening is necessary to ESL and EFL learners. The listener has many purposes or goals for listening, which determine his level of concentration. According [8] the goals of listening are categorized as: listening for enjoyment, for information, for persuasion, for perception, for comprehension and for solving problems. The goal of the foreign or second language learner of English in the LL is mainly for perception, although it can be for information and comprehension as well. The Multimedia Device used in modern language laboratories has facilities that make the student learner an active participant, because the teacher and the student can both communicate with each of them becoming both the encoder and the decoder of the message. The learner can only articulate the correct English phonemes when he listens attentively. Hence, the headphones in the LL enable them to concentrate and listen to the sounds that are encoded through the pronunciation of the teacher or the chosen model. He then decodes the message through his perception and comprehension of the sounds, which will lead him to responding, if there is need for that.

The LL provides facilities for the listening quiz and listening exam modes in which an audio source file can be used by the teacher to administer the quiz to students or the teacher can simply speak to the microphone. The Listening Exam, which is more formal, requires a prepared test file.

The Role of Teachers in the Language Laboratory

The teacher of today is considered as a creator and manager of a simulating environment. The role of teachers in language teaching has been misunderstood. Their roles and responsibilities in a LL are actually very important. They have to use their knowledge and skills, and must also be aware of the latest technological approach and methods of teaching in the LL. The English language teacher should conduct writing workshops on letters, report, resume, poster and project writing and provide remedial feedback to learners to brush up their writing skills[9]. The English language teacher is not just a teacher of grammar and sentence structure. He/she is expected to play an active role as a counsellor, communication specialist and soft skills trainer. The teacher should help students to overcome their fears in communication. For this, a teacher should be aware of the latest technologies, explore new ideas and have a certain amount of specialization in the subject[10]. The teacher should collaborate with the laboratory technologist to write laboratory manuals with aim, objectives and the procedure to carryout experiments. At the end of a laboratory session, a teacher should assess their students.

Proper classroom management is achieved through the use of the LL. This involves activities such as: roll call, attendance and test scoring. Using other devices in the LL (control assistance), the teacher can control students' reception (instruction mode) and even allow them to select from the multiple instructions provided and also online materials (Study hall Mode). Using the Digi-studio, teachers can score students' recorded answers in a grid. For browsing, the teacher can assign a web site like the URL and open all student browsers to it. The teacher can, at his convenience, close all student browsers.

Classifications of the Language Laboratory

There are different types of language laboratory used in various institutions all over the world. However, development and innovations in modern technology bring about more facilities attached to the language laboratory, such as interactive boards, which are very useful for student learning. The various types of language laboratories are

- i. Conventional language laboratory: uses the tape recorder and a few audio cassettes for the teaching of the target language
- ii. Lingua Phone laboratory: it is just like the conventional LL with a little electronics modernization that acts as a cassette, which serves as a recorder for play back comparison
- iii. Computer Assisted Language Laboratory (CALL): the language materials are already fed into the computer according to the features available. It helps teachers to give practice in particular aspects of language, such as sound, animation and videos. There are also web-based laboratories, which are called Web Assisted Language Laboratory (WALL).
- iv. Multimedia Language Laboratory: this type of laboratory uses different types of software available in the market like: Renet, Aristoclass, Hiclass, Globalina, Console OCL-908W, Histudio MHi and Tech Online Software ([11] and [12]). According to [13], the contributions of Multimedia in learning can be summarized as:
 - a. Active participation of learners
 - b. Induced learning
 - c. Recalling and applying knowledge
 - d. Control over the level and speed of information
 - e. Freedom to access information according to their needs
 - f. Approach for support information

Therefore, Multimedia LL takes advantage of auditory and visual capabilities at once, so the systems connections to the two channels allow deeper understanding and better mental models than previous classes of LL.

- v. Smart language laboratory: The Smart LL has some features in addition to Multimedia LL, these additional feature helps student even when they are off campus to receive exercise and do it at home depending on the features available by the LL companies these feature were summarized from different LL companies:
 - a. Facility for setting the lessons, batches and sessions in advance for the entire academic year.
 - b. Students can automatically receive lessons from master source while logging in and can use these lessons for personal practice.
 - c. Automatic passage storage and comparison with the repeated version of the similar passage.
 - d. While speaking skills are developed with an accent and style internationally understood, the listening skills can be developed on several accent, as desired by the institution.[14]

The Language Laboratory in Bayero University, Kano

In Bayero University, Kano, the first language laboratory was a Philips AAC6000 analogue language laboratory (ALL) type which uses cassettes and with which students can record a teacher's sound and compare with their recording. The short comings of this type of language laboratory was that a student had to come along with his pen, paper and recommended dictionary for checking meanings. Students had to raise their hands to draw the attention of a teacher for questions or clarifications.

The Philips AAC6000 was replaced with a Winta /Peucco digital language laboratory (DLL) that has a computer as the teacher console unit. It also uses cassettes for recording and any sound from the teacher can be transmitted by the computer to all the student Console Units. The problem of calling the attention of a teacher in an AAC 6000 was overcome. The student just pressed "CALL" and the teacher responded. The teacher could group students, make conference and intercom from his unit. He could also record student sounds in the computer, although recording and removing unwanted signals were time-based. However, recently the Multimedia Language Laboratory (MLL) was installed in the Department of English and Literary Studies, which overcome all the short-comings associated with ALL and DLL. The MLL has additional software links for phonetic analysis, calls and chats among students, links to some Microsoft materials, a dictionary, etc.

In teaching ESL, most students find it difficult to relate the audio sound of some words and compare the audio sound with the pictorial view. This is where laboratory coordinators/technologists come in. The LL coordinator maintains these facilities by creating laboratory-use schedules and providing training sessions for users. The coordinator also collaborates on lesson plans with language teachers, writes budget reports and makes recommendations on technology purchases and upgrades.

For the teachers to become experts in LL, they must be willing to use it beyond its basic functions, which is by creating additional exercises and using some related software for teaching, but this needs teachers to spend a significant amount of time to build good skills and practice. To do this, departments that use LL need to arrange for training in fundamental LL mechanics if they expect the students to use the laboratory competently for continued improvement in technology integration, due to the fact that students now rely on computers to interact with the world. Today, we are facing under-utilization and misuse of LL resource because teachers lack the training and practice to teach in a LL.

The Effects of the Language Laboratory on the Pronunciation of Students' of English

The three basic concepts of phonetics: the articulatory, the acoustic and the auditory, are better understood when learners are exposed to the LL in the process of teaching. Articulatory phonetics deals with the issue of the production of speech, which involves the various places responsible for the production, the manner in which the sounds are produced and the phonation, which relates to the vibration of the vocal cords. All these are illustrated practically using sound and visual inputs. The production of segmentals in English and the aspects of the ingressive and egressive flow of air into and from the lungs are also shown to students. Unlike in classroom teaching where the teacher is left with pictures and drawings to explain the process of speech production, the LL provides a pictorial view for students to understand the lecture properly.

The correct articulation of vowels and consonants is taught effectively at the LL, where students listen attentively using the headphones attached to the console, to listen to native speakers. Software such as the **Palatometer Database** is used in the LL to offer a unique opportunity to examine lingual activity as the tongue moves to different sites along the palate and the teeth in order to produce different speech sounds. It also illustrates the general processes involved in the production of different neighbouring strings of consonants and consonant-vowel transitions. The movement of the jaw and even of the muscles are shown to students. In the production of vowels, for example, the position of the tongue in the mouth and the shape of the lips are not just left to the mercy of drawings in a textbook. Life models are presented and the articulation is well captured. **Sona-Match** software is a good device used in the LL to help students to realise the correct articulation of vowel sounds. The diphthongs that contain two sounds, one gliding into the other, are better illustrated in the LL, where the model shows the

gradual glide of one sound into another by pronouncing the sounds slowly. The students will be asked to pay attention to the gradual change in the shape of the model's lips.

Another very important aspect of the LL to the pronunciation of students is their ability to practice their articulation of English sounds after listening to the teacher or to the model. The Multimedia software has a device in which they can record their voices, using the microphone. This process enables them to assess their own spoken ability by comparing their recorded articulation of sounds with that of the teacher or model.

Analysis of Software (Praat and Microsoft Power Point) in the Language Laboratory

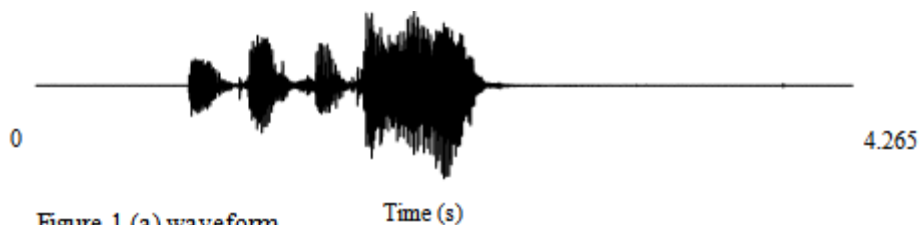
Teachers are expected to know how to use Praat and Microsoft Power-point software, as they will be able to combine theory and practice on a computer using those applications. According to[15], PRAAT is a very flexible tool to do speech analysis, which offers a wide range of standard and non-standard procedures, including spectrographic analysis, articulatory synthesis and neural networks. Accessing the prosodic features of the English language using PRAAT gives students instantaneous and automatic feedback[16]. L2 learners can use PRAAT in the integration of intonation with semantic, syntax and rhythm[17].

Praat is the Dutch word for "talk" or "speak". It is a free scientific computer software package for the analysis of speech in phonetics. The auditory sensation of tonal height in speech reflects the periodicity of the speech signal. The vocal folds vibrate during voiced sounds. This vibration creates regular (periodic) fluctuations of air pressure that infringe upon a hearer's eardrum. The rate of vibration (calculated as the number of vibrations per second = Hz) is the fundamental frequency (F_0). The perception of fundamental frequency is pitch.

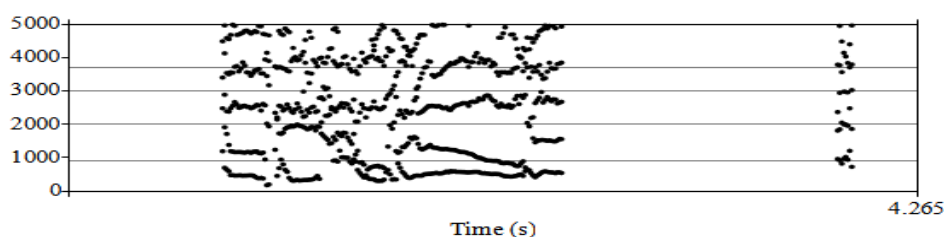
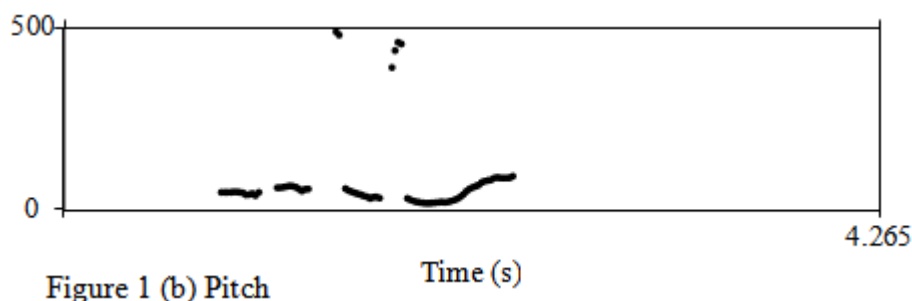
Frequency, according to Doersma (2003), is how often something happens in a certain time. In Praat frequency, it is the number of vibration cycles per second (cps) or Hz (herz). In speech analysis there are two kinds of vibration. For pitch, frequency is the number of glottal cycles per second and for spectral analysis, the number of sine wave cycles per second.

Intensity is the distance at which a sound can be heard. It depends on its intensity. Intensity is the average rate of the flow of energy per unit area perpendicular to the direction of propagation, which is similar to the rate at which a river flows through a gate in a Dam[18].

The above mentioned can be shown pictorially in Fig. 1 (a) (b) (c) and (d)



The wave form is a sound pressure as a function of a time or the microphone output as a function of time[19].



Formant represents spectral structure as a function of time. It is a sample into a number of frames centered around equally spaced times. Each frame contains frequency and bandwidth information about several formants.

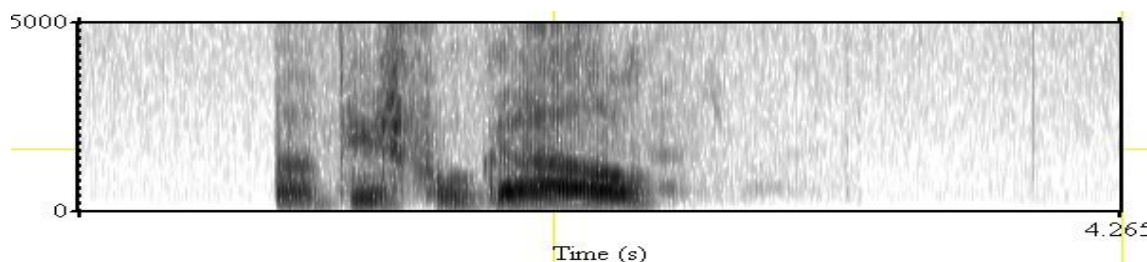


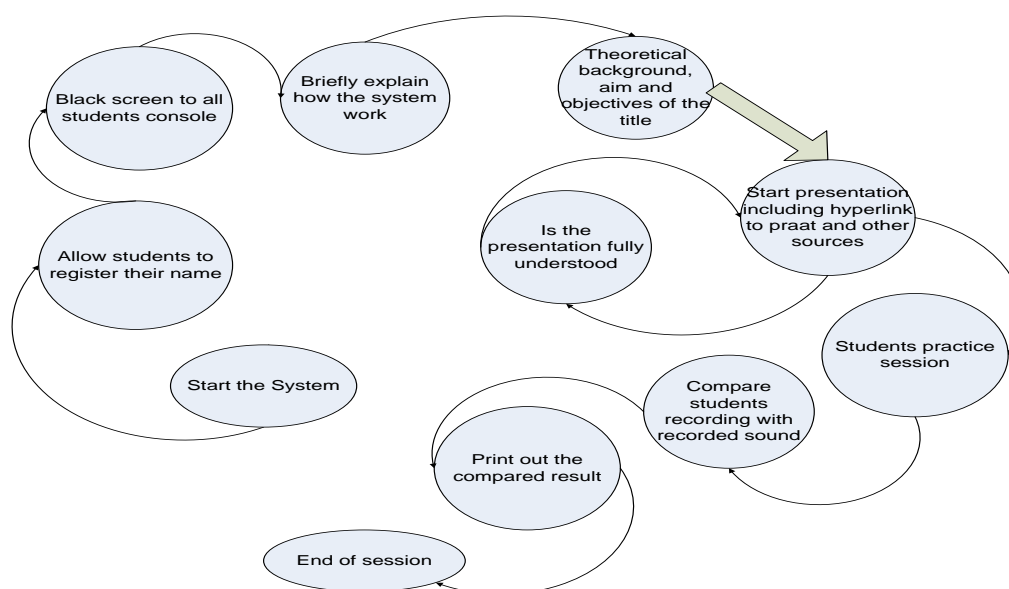
Figure 1.0 (d) Spectrogram

Power Point in the Language Laboratory

MPP can be used to teach many ideas and concepts to students. The teacher must anticipate areas of misunderstanding and difficulty. Once the teacher knows the troubles which a student will face, he or she can adopt a presentation for them. It is also a type of presentation software that allows one to show coloured text and images with simple animation and sound[20]. It has been observed that some teachers use MMP only for seminar and personal purposes. They are not aware that Power-point is needed in the teaching field. It can help teachers to organize their ideas and thoughts or any kind of information in an orderly and attractive way, as it is gaining entrance in the English teaching field[21]. PowerPoint presentations will transform a routine lesson into a lively, even memorable session [22]. MPP can also be used for initial teaching and student project presentation. Its entertaining context makes students attractive and more attentive in capturing their normal classroom teaching. It also aids in reading comprehension and can also be used to teach vocabulary and develop their reading skills in the traditional ESL classroom.

The procedure of teaching with MPP in the laboratory was summarized in a flow chart.

II. METHODOLOGY



Flow Chart of Teaching with MPP

To conduct the exercise, a laboratory technologist has to make sure that all the systems are in good condition by switching them on. The next thing is to register students’ names or registration numbers. That will serve as attendance and will be easier for teachers to identify students because their names will appear on the teacher console. This will be done in at most three minutes. Then apply a black screen to all student consoles/systems, so that their attention will not be divided.

The Technologist shall explain briefly how the system works and the type of software that they are going to use and its advantage for the aim and objectives of the exercise. Then the teacher has to flashback the theoretical background of the titled exercise.

Research Presentation/Analysis

Stress

When we say that in words, a certain syllable is stressed or produced more strongly than other syllables, which are unstressed. Some of the features of stress that we are going to consider are:

- i. Stressed syllables are louder than unstressed syllables
- ii. Stressed syllables are also perceived to be longer than unstressed ones
- iii. Pitch and pitch movement are important features of speech. Pitch is related to the frequency of the vibration of the vocal cords and every syllable is said on some pitch, high or low. If all the syllables in a word are said on a pitch except one, on which the pitch falls from a high or raises from a low, the syllable on which the pitch movement takes place is heard as stressed.
- iv. Generally, in English the stressed syllable has a vowel that is different in quantity from the vowel in an unstressed vowel. Unstressed syllables frequently have the vowels /ʊ/, /ɪ/ and /ə/ and also syllabic consonants. Stressed syllables, in contrast, often have a long vowel or diphthongs, which are perceived to be stronger against the background of the weaker unstressed syllables[23].

The above four different factors can be analyzed in LL using Praat software.

Table 1 Word stress

Words	Stress
educate	ˈeducate
garage	ˈgarage
Madam	ˈMadam
telephone	ˈtelephone
compensation	ˈcompensation

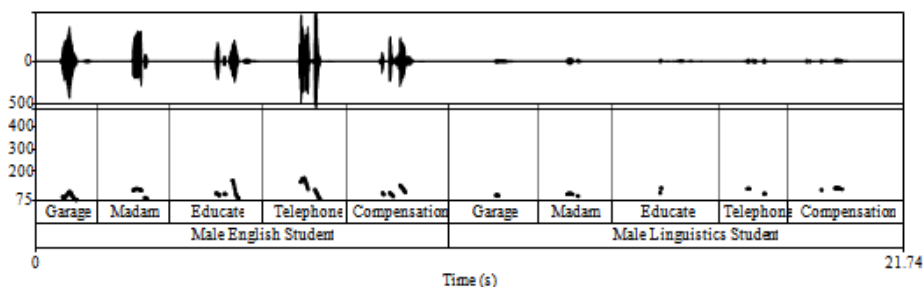


Figure 2 Male stress pronunciation of English and Linguistics Student respectively

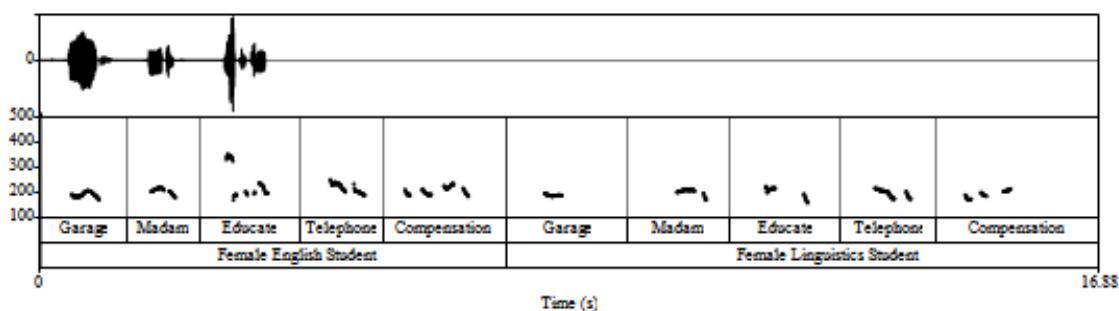


Figure 3 Female stress pronunciation of English and Linguistics Student respectively

The experimental group followed the procedure highlighted in the flow chart while the control group used normal classroom method. Comparing the above Figures 2 and 3 with the Figure in the Appendix on stress, which was the original recorded sounds in the laboratory, we can see clearly that the experimental group performed better in following the rule listed [23], especially while pronouncing the word “*madam*”, “*garage*” and “*telephone*”. The control group found it difficult to pronounce those words correctly. From the wave form we can see that the energy used by the control group is low due to the fact that, they did not attend the practical sessions in the language laboratory.

Intonation

In the laboratory, the pitch of a speaker can be easily identified whether he or she is making a statement or asking a question. The following examples were pronounced by English and Linguistics students:

1. A few years ago they were \top(statement)
2. Is there /anything you wouldn't.eat (question)
3. Have you ever considered /writing (question)
4. We try to do our shopping in the \market (statement)

With the above explanation and presentation using Power-point and Praat software, students are expected to make their recordings, as highlighted in the procedure flow chart. Ten students (10) were selected from Level 300 in the Department of English and Literary Studies for this research. Their recording was compared with the recorded sound in[24]. The result of the recorded sounds was depicted in the Appendix. We considered the pitch and text grid in the intonation exercise and in the stress exercise the sound wave, pitch and text grid. The result of the recording of some male and female students of English and Linguistics students were analyzed in the following figures:

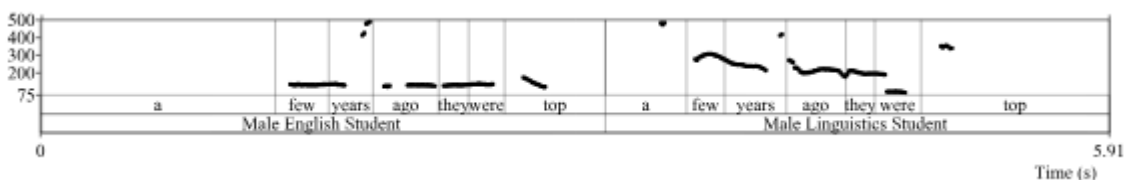


Figure 4 Males Intonation “a few years ago they were top”

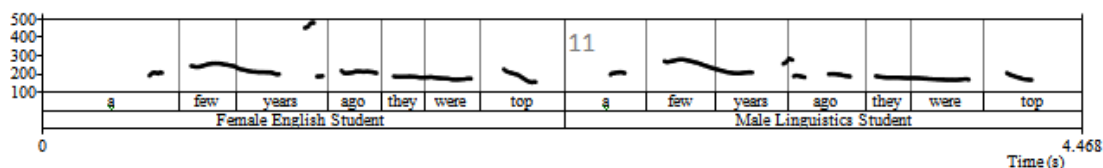


Figure 5 Females Intonation “a few years ago they were top”

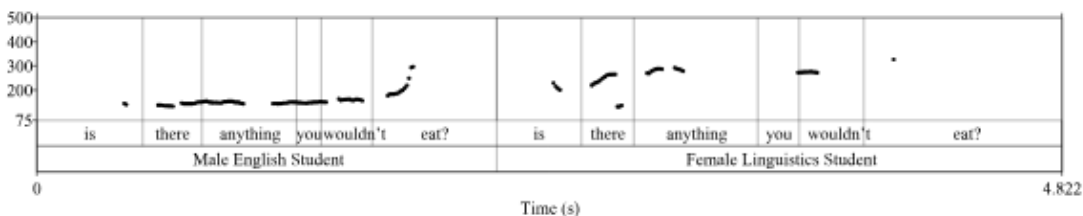


Figure 6 Males Intonation “is there anything you wouldn't eat?”

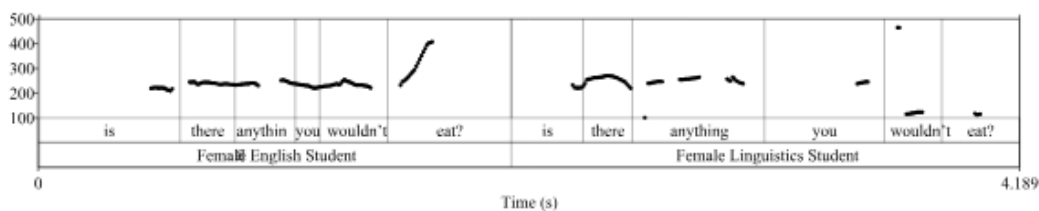


Figure 7 Females Intonation “is there anything you wouldn't eat?”

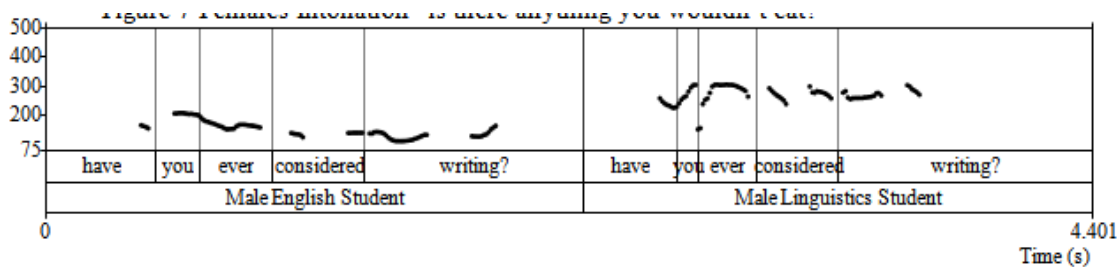


Figure 8 Males Intonation “have you ever considered writing?”

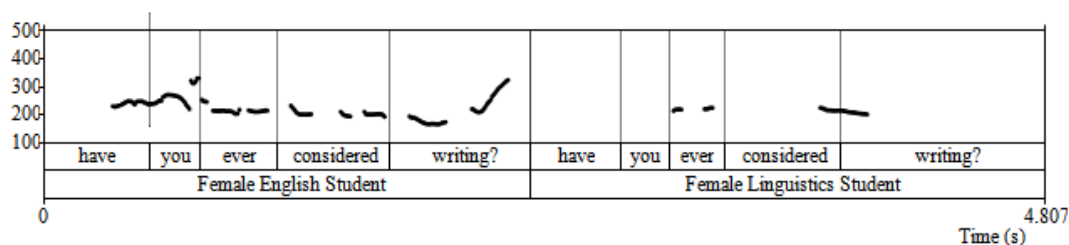


Figure 9 Females Intonation “have you ever considered writing?”

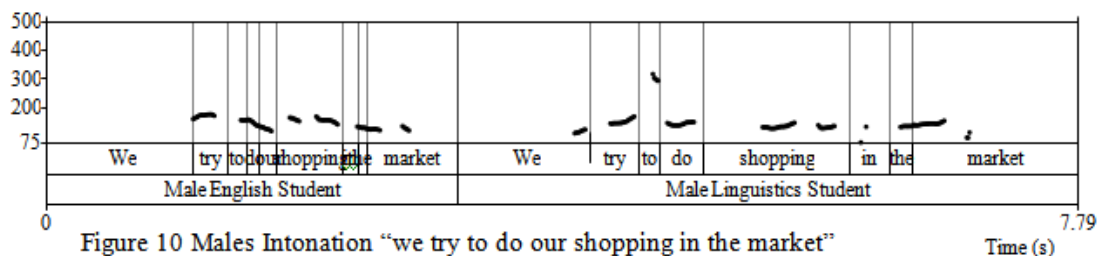


Figure 10 Males Intonation “we try to do our shopping in the market”

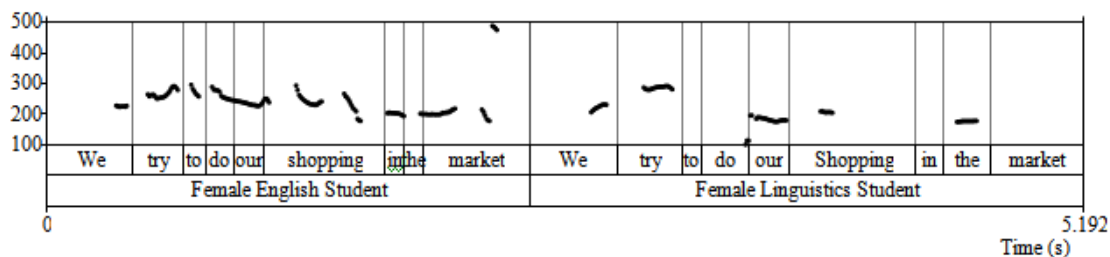


Figure 11 Females Intonation “we try to do our shopping in the market”

As in the stress analysis, the results compared the output using Power-point presentation and the traditional technique for teaching in the classroom. Twenty recordings were made, ten from the experimental group and ten from the control group. Two best uttered sounds were selected from each group, one male and one female. The four sentences were used for intonation two of which are “statement” and the other two “question” with falling and rising tone respectively. From Figure 4, the statements “*A few year age they were top*” and “*We try to do our shopping in the market*” have a falling tone in the Appendix. The experimental group (English students) uttered it as a *falling pitch* while the control group (Linguistics students) pronounced it as a *level pitch*. On the other hand, the two question sentences, “*Is there anything you wouldn’t eat*” and “*Have you ever considered writing*” were uttered in Figure 7 and 8. Clearly, the experimental group of both males and females uttered the sentences as rising pitch, as compared with the recording in the Appendix.

Questionnaire

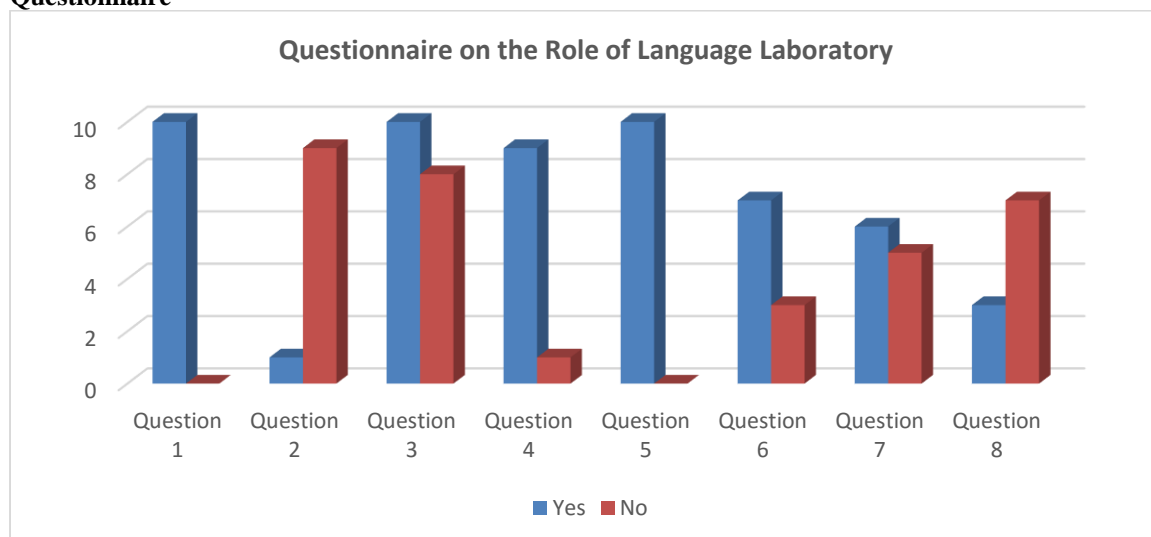


Figure 12 bar chart Based on Questionnaires Distributed

Based on the questionnaire distributed in Appendix D, it has been observed that Level 300 students in the Department English and Literary Studies participate in LL exercises and enjoy learning in the LL and that time for tutorials of 3 to 4 hours is not enough.

III. FINDINGS

Modern LL contributed a lot in teaching languages this lead to the fact that:

- i. Students that attend the laboratory can utter sounds correctly and better than students of the traditional classroom.
 - ii. Teachers of languages can use LL, using Power-point and Praat software.
 - iii. With the help of MLL, teachers and students can do research in auditory, articulatory and acoustics phonetics
- These findings identify the classifications and roles of LL and teachers and students in LL as well as the methods to perform practical exercises in the laboratory.

IV. CONCLUSION

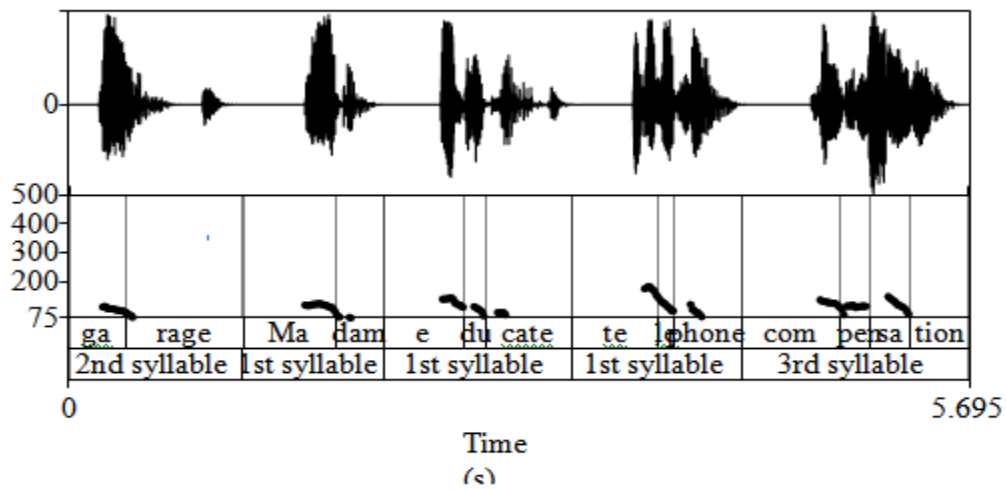
Modern LL contributes a lot in teaching languages. This leads to the fact that students that attend the laboratory can utter sounds correctly when compared to students taught in the classroom only. Teachers of languages can use LL, using Power-Point and Praat software. With the help of MLL, teachers and students can do research in auditory, articulatory and acoustics phonetics. Other aspects of the prosodic features of English like the stress and intonation are better leaned and taught in the language laboratory.

REFERENCES

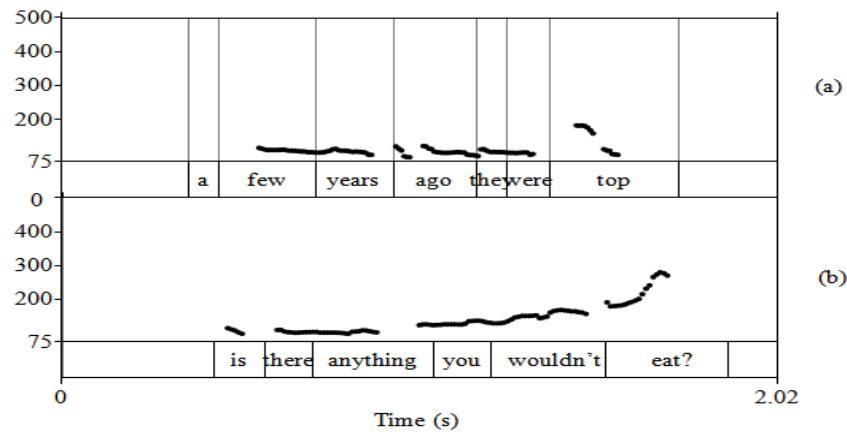
- [1]. B. Ajisafe and V. Okotie, "Resuscitating the Use og Language Laboratory in Language Teaching and Learning," The Nigerian Academic Forum, vol. 21, no. 1, pp. 110-113, 2011.
- [2]. K. K. Vishalakshi, "Significance of Language Laboratory in Learning English as a Second Language," Indian Journal of Applied Research, p. 162, 2014.
- [3]. A. Kusmaryuni, "English Laboratory Management: A Site Study at Semesta Junior High School Semarang," Graduate School Muhammadiyah University of Surakarta, pp. 2-17, 2011.
- [4]. R. C. Visweswara, "The Purpose of Language Laboratories," International Journal of English Language, Literature and Humanities, vol. IV, no. IV, pp. 241-250, 2016.
- [5]. N. Schmitt, An Introduction to Applied Linguistics, Second ed., London: Holder Education An Hachette UK Company, 2006.
- [6]. C. A. N. Brenes, "The Language Laboratory and the EFL Course," Actualidades Investigativas En Educacion, vol. X, no. 2, 2006.
- [7]. J. C. A. K. O' Malley, "Listening Comprehension Strategies in Second Language Acquisition," Applied Linguistics, pp. 418-432, 1989.
- [8]. A. Saricoban, "The Teaching of Listening," The Internet TESL Journal, vol. V, no. 12, December 1999.
- [9]. A. Rai, "Role of Communication Skills Laboratory in Empowering the Communicative Competence in Engineering Students," International Journal of Education Research and Technology, vol. V, p. 3, 2014.
- [10]. J. Kavitha, "The Importance of the English Laboratory in Developing Communication Skills," The Criterion: An International Journal in English, vol. III, no. III, pp. 1-3, 2012.
- [11]. W. D. David and V. Thayalan, "The Significance of the Language Laboratory in Communication," Karen's Linguistics Issues, 2007.
- [12]. D. S. Patel, "Digital Language Laboratory –A Vital Role in 21st Century of English," Research Journal of English Language and Literature (RJELAL) a peer reviewed international journal, vol. II, no. 1, pp. 260-262, 2004.
- [13]. A. Rai, "Role of Multimedia Laboratories in Language Teaching," IRC'S International Journal of Multi-Disciplinary Research in Social and Management Sciences, pp. 154-156, 2004.
- [14]. P. Aerodesigns, "http://digitallanguagelab.com/language-lab-software-functional-features.php," 9 February 2018. [Online]. Available: <http://digitallanguagelab.com>.
- [15]. P. v. Lieshout, "PRAAT Short Tutorial A basic Introduction," Toranto, 2003.
- [16]. H. Mushangwe, "Computer-aided Assessment of Tone Production: A Case Study of Zimbabwen Student Learning Chinese as a Foreign Language," Iranian Journal of Language Teaching Research, vol. II, no. 1, pp. 63-83, January 2014.
- [17]. L. Delrue, "Introducing Voice Analysis Software into the Classroom: how Praat Can Help French Students Improve their Acquisition of English Prosody," in ICT for Language Learning, Florence (Italy), 2014.
- [18]. P. Birjandi and M. A. Salmani-Nodoushan, An Introduction to Phonetics, Iran: Zabankadeh Publications, 2005.
- [19]. G. K. Pual Boersma, "Spectral characteristics of three styles of Croatian folk singing," Journal of the Acoustic Society of America, vol. 119, no. 3, pp. 1806-1816, March 2006.
- [20]. D. L. Fisher, "Using PowerPoint for ESL Teaching," The Internet TESL Journal, vol. IX, no. 4, April 2003.
- [21]. A. M. Jones, "The Use and abuse of PowerPoint in Teaching and Learning in the Life of Sciences: A Personal Overview," BEE Journal, 2003.
- [22]. M. R. Eugene V. Gallagher, "PowerPoint: What is the Point," Essays on Teaching Excellence toward the Best in the Academy, vol. 16, no. 3, 2005.
- [23]. M. A. Yadugiri, The Pronunciation of English: Principles and Practice, India: Viva Books Private Limited, 2013.
- [24]. P. Roach, English Phonetics and Phonology: A practical course, Cambridge University Press, 2016.
- [25]. B. Gorjia, A. Hayati and P. Pourkhoni, "Using Praat Software in Teaching Prosodic Features to EFL Learners," in 3rd World Conference on Psychology, Counselling and Guidance, Turkey, 2013.
- [26]. D. David Wilson and Thayalan, "The Significance of th Language Laboratory in Communication," Karen's Linguistics Issues, 2007.

Appendix

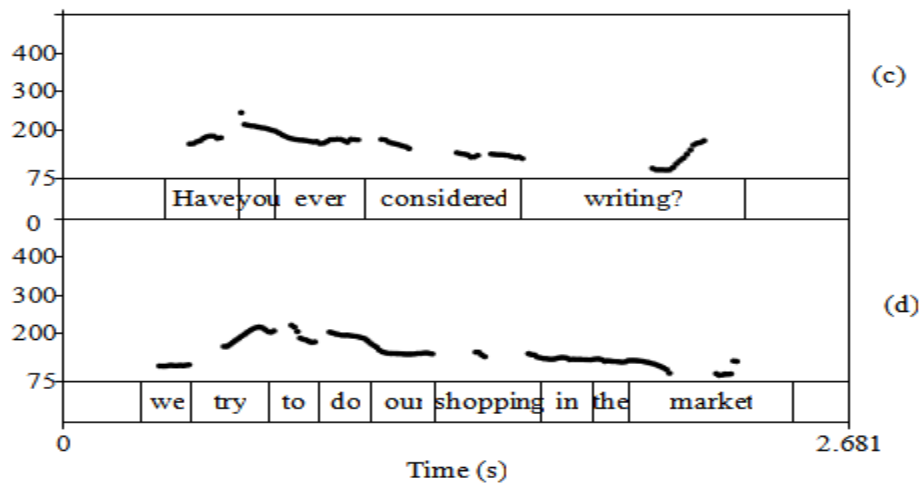
Appendix A Stress



Appendix B



Appendix C



Questionnaire

Gender _____

Level _____

Please mark the appropriate answer

1. Have you ever been to Language Laboratory?
Yes No
2. Do you find listening in the language laboratory difficult?
Yes No
3. Do you think language laboratory is more effective than classroom teaching?
Yes No
4. Do you enjoy exercises in the language laboratory more than in the classroom?
Yes No
5. Do you feel motivated when learning in the language laboratory?
Yes No
6. Do you enjoy learning in the language laboratory?
Yes No
7. How many hours a week do you use the language laboratory to practice English?
2-3 hours per week 3-4hours per week
8. Do you think the time is enough?
Yes No

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