Fall 12-15-2017

Phonological Awareness and Foreign Accent: A Handbook for German EFL Teachers

Kerstin Menzer
kerstin.dora.menzer@gmail.com

University of San Francisco

Phonological Awareness and Foreign Accent:

A Handbook for German EFL Teachers

A Field Project Proposal Presented to
The Faculty of the School of Education
International and Multicultural Education Department

In Partial Fulfillment
Of the Requirements for the Degree
Master of Arts in Teaching English as a Second Language

By
Kerstin Menzer
December 2017

Phonological Awareness and Foreign Accent:

A Handbook for German EFL Teachers

In Partial Fulfillment of the Requirements for the Degree

MASTER OF ARTS

in

TEACHING ENGLISH TO SPEAKERS OF OTHER LANGUAGES

by
Kerstin Menzer
December 2017

UNIVERSITY OF SAN FRANCISCO

Under the guidance and approval of the committee, and approval by all the members, this field project (or thesis) has been accepted in partial fulfillment of the requirements for the degree.

Approved:

_____   _____
Instructor/Chairperson   Date
Dr. Luz Navarrette García

_____   _____
Committee Member*   Date

*Added only if there is a second reader

TABLE OF CONTENTS

ACKNOWLEDGEMENTS

ABSTRACT

Foreign accent, or the deviation from non-native speech, has a direct impact on communication and may even result in undesirable consequences for the speaker. Instead of perceiving statements as more difficult to understand, native speakers often perceive them as less trustworthy. However, the pronunciation of adult second language (L2) learners is extremely difficult to change, and L2 native-like pronunciation is rarely achieved after early childhood. The latest research suggests that explicit instruction about phonological awareness can contribute to better spoken comprehensibility even in adult L2 learners. There is a direct relationship between the L2 learners' language awareness and the quality of L2 pronunciation. Following the Matthew effect, which is already known to apply to the development of reading skills (the more a child reads, the faster the reading skills will develop), researchers believe that the more L2 learners speak, the more attention they will pay to spoken input. By becoming more attentive to spoken input, L2 learners notice the 'how and what' of what native speakers actually say. This field project offers a "Handbook for German EFL Teachers" and exemplifies how phonological awareness can be raised while teaching two selected suprasegmental aspects of American English pronunciation: word stress and sentence stress.

This page intentionally left blank.

CHAPTER I
INTRODUCTION

Statement of the Problem

Pronunciation of adult second language (L2) learners is extremely difficult to change (Kennedy & Trofimovich, 2010, p. 171), and L2 native-like pronunciation is rarely achieved after early childhood (Derwing & Munro, 2005; Flege, Munro, & Mackay, 1995; Lenneberg, 1967; Scovel, 2000).

Young adult Germans, who come to the United States for study or to strive in their existing careers, are typically well-educated (OECD, 2015, p. 10). Many are subject matter experts in their field, have built an impressive knowledge of English vocabulary and grammar, and are able to read and write well academically. According to the latest "Education First" English Proficiency Index (EF EPI), which tested English proficiency of 950,000 adults in 72 countries in 2015, Germany achieved high English proficiency ratings and ranked ninth place worldwide (EF EPI, 2016). However, when it comes to speaking, these young adults can be easily identified as native speakers of German, not only by native speakers of American English, but by other foreigners as well. What makes Germans speak American English so stereotypically and erratically, and what can still be done to help adult learners?

The problem that inspired this field project is threefold: (1) foreign accent poses both a psycholinguistic and sociolinguistic problem as it impairs the credibility of L2 speakers (Flege, 1995; Lev-Ari & Keysar, 2010, Lippi-Green, 2011), (2) phonological awareness (accurate knowledge of the target language's phonological system) can help to mitigate foreign accent even in adult learners (Kennedy & Trofimovich, 2010; Park, 2015; Venkatagiri & Levis, 2007), and (3) many English as a Second Language (ESL) / English as a Foreign Language (EFL) teachers feel ill-prepared to teach pronunciation (Derwing & Munro, 2005; Kennedy &

Trofimovich, 2010; Thomson & Derwing, 2015). Second Language (L2) pronunciation instruction – if present at all – primarily focuses more on the segmental aspects of language (the sound system of consonants and vowel patterns), but often neglects the suprasegmental aspects (prosody: stress, intonation, rhythm, linking, pausing) (Derwing & Munro, 2005; Foote, Trofimovich, Collins, & Urzúa, 2016; Thomson & Derwing, 2015). While any foreign language learner could benefit from the discussion about the above-mentioned issues, this field project narrowly focuses on the issues for native German speakers.

Foreign accent, or non-native pronunciation, is the deviation from non-native speech (Ulrich, 2013). It is a linguistic phenomenon in which non-native users of any language carry the intonation, phonological processes, and pronunciation rules from their native language (L1) into the speech of the target language (L2). While foreign accent has a direct influence on communication (Derwing & Munro, 2005), it may even result in undesirable consequences for the speaker (Flege, 1995; Lev-Ari & Keysar, 2010; Lippi-Green, 2011). Being difficult to understand, especially in non-ideal listening conditions, can lead to misjudgment of the speaker's affective state and provoke negative personal evaluations (Flege, 1995, p. 234). It is this extra effort a listener must put forward, possibly along with evoking negative group stereotypes, that causes the negative effect (p. 234). Lev-Ari and Keysar (2010) even go so far as to call their study "Why don't we believe non-native speakers?" Based on empirical studies, the researchers found that people who have to listen to accented speech feel their "processing fluency" gets impaired. Instead of perceiving statements as more difficult to understand, they perceive them as less trustworthy (p. 1095). Therefore, foreign accent can easily have a negative influence on the judgement of credibility (p. 1095). While some people may not care about carrying a thick foreign accent, many do, especially those who feel it undermines their professionalism. The

feeling of being looked down on or being teased for one's poor speaking proficiency may further decrease one's speech production ability, which is known as the psychological phenomenon of the *nerve cycle* in speech theory (Archibald, 1992). Speakers, who are nervous because they fear they will not be understood, may experience a so-called "muscle freeze." Speech muscles freeze up due to nervousness, and articulation gets even more impaired (p. 222). Now the audience really has to listen with extra effort. Although the audience may not comment verbally, the body language of a listener can be very intimidating for the speaker (e.g., moving close to the speaker's mouth, tilting one's head for better understanding). This vicious cycle will only intensify a person's fear of speaking in public (p. 222).

Factors that impact foreign accent are very well researched in Second Language Acquisition (SLA) theory (Brown, 2007; Celce-Murcia, Brinton & Goodwin, 2010), and will be discussed in detail in Chapter II. In general, children are more likely to learn foreign languages without a foreign accent, because their brains are not yet lateralized (Baker, Trofimovich, Flege, Mack, & Halter, 2008; Lenneberg, 1967; Scovel, 2000). Factors affecting foreign accent fall into two main categories: non-linguistic and linguistic factors. Non-linguistic factors that affect foreign accent are (1) the age at which L2 learning began, (2) the length of residence in an L2-speaking country with active immersion, (3) motivation, (4) gender, (5) length and type of instruction, (6) language learning aptitude, and (7) the continued L1 language use (Flege, Munro, & Mackay, 1995; Gut, 2009; Piske, Mackay, & Flege, 2001). Brown (2007) also includes (8) the learner's educational background. Among the linguistic factors, a speaker's native language (L1) and the L1-L2 interference of phonological systems (negative transfer) are considered to be significant causes for the production of non-native speech (Lado, 1957; Wardhaugh, 1970). Recently, another new linguistic factor emerged: *phonological awareness*. Phonological

awareness is concerned with explicit knowledge about the *segmental* and *suprasegmental* aspects of pronunciation (Park, 2015). The segmental aspect addresses the sound patterns of consonants and vowels, while the suprasegmental aspect is related to *prosody* of language; that is stress, intonation, rhythm, linking, and pausing. Phonological awareness is the key driver behind this field project, as the latest research suggests that explicit instruction about phonological awareness can contribute to better spoken comprehensibility (Celce-Murcia et al., 2010; Park, 2015; Venkatagiri & Lewis, 2007).

Second-language acquisition of prosody is a much under-researched area (Li & Post, 2014), which is one reason why it is not yet sufficiently addressed in ESL/EFL pronunciation instruction (Derwing & Munro, 2005). Derwing and Munro (2005) claim that ESL/EFL teachers are not sufficiently trained in how to teach American English pronunciation. Teachers are apprehensive to include the teaching of prosody because many do not know how to teach it. This field project attempts to add value to English language pronunciation instruction for teachers by providing a how-to guide for teaching prosody.

Given the above considerations, is it possible for L2 learners to speak like a native? It is possible, but it is rarely accomplished by adult L2 learners (Flege et al., 1995; Scovel, 2000). Ellis (1994) contrasted the results of L2 phonology acquisition in children and adults. The researcher identified six good reasons why adult L2 learners may have difficulties achieving native speech. First of all, child L2 learners are more able to perceive and segment sounds. Second, the area for language learning in a child's brain is not lateralized yet. Third, children feel less inhibited in speaking. Fourth, children rely on their innate language acquisition device in the brain, while adults apply problem-solving skills to language learning. Fifth, it is easier for children to receive input, while adults feel the need to apply meaning. Last but not least, children

store L1 and L2 knowledge in the same area of the brain, while adults store them separately. Therefore, to achieve near-native speech for adult L2 learners requires extraordinary effort (Flege et al., 1995; Scovel, 2000). Speaking – in the native or a foreign language – requires the precise control of the *larynx* (the voicebox) as well as the muscles of lips, tongue and jaw (the speech articulators). However, the formation of the larynx in humans is completed by puberty (age 11-13), and it is generally difficult to add or modify sound patterns afterwards. The critical period hypothesis (CPH), a theory related to first language acquisition, suggests that younger learners learn better, because age is a critical factor (Krashen 1973; Lenneberg, 1967; Scovel, 1969, 2000). The applicability of CPH to second language acquisition is widely debated among researchers, because near-native speech is not impossible; it has been achieved by individual adult learners (e.g., actors).

Since this field project focuses on native German speakers, the following question is quintessential: What is known about the cross-linguistic differences between L1 German and L2 American English pronunciation? German and English are both West-Germanic, stress-timed languages (Avery & Ehrlich, 1992), and the differences of phonetic features between American English and German are well researched (Delattre, 1965). Native German speakers are known to struggle with a number of specific segmental issues: (1) vowel production (/i^y/ vs. /ɪ/, /e^y/ vs. /ɛ/, /u^w/ vs. /ʊ/, /ɛ/ vs. /æ/, /a/ vs. /ʌ/) and (2) consonant production (/Θ/ and /ð/, /ʤ/, word-final voiced consonants /b/, /d/, /g/, /v/, /ð/, /z/, /ʒ/, /ʤ/, and /v/ vs. /w/) (Avery & Ehrlich, 1992; Delattre, 1965). In addition, native German speakers struggle with proper English stress, intonation, rhythm, linking, and pausing due to L1 language interference (Avery & Ehrlich, 1992; Delattre, 1965). For example, consider stress at word level alone. Many words are so similar or even shared (e.g., *Kalender* [kaˈlɛndər]*vs. calendar* [ˈkæləndə(r)]*, Enzyklopädie*

[ɛntsyklopɛˈdiː] *vs. encyclopedia* [ensaikloˈpiːdiə]*, Geografie* [geograˈfiː] *vs. geography*

[dʒiˈ(ɒ)grəfi]), but syllables are stressed differently (Langenscheidt Online Dictionaries, 2017;

Collins Online Dictionary, 2017). Unless fully aware of proper stress in the foreign language,

many German speakers apply L2 American English word stress incorrectly. Flaws are not

limited to word stress, but appear in intonation, rhythm, linking and pausing as well. Being

insufficiently aware of the phonology of American English (in contrast to the German language),

many German speakers – like speakers of other languages – have built wrong, fossilized speech

habits over time (Seliker, 1972; Trillo, 2002). *Fossilization* is the term used to describe the

persistence of formal (grammatical, semantical, phonological) errors in non-native speakers

(Selinker, 1972). Trillo (2002) modifies the term to include *Pragmatic Fossilization* to express

that non-native speakers systematically use certain forms inappropriately at the pragmatic level

of communication. Again, it takes tremendous conscious effort to overcome incorrect speech

habits (Flege et al., 1995; Scovel, 2000).

In order to understand the differences in phonology, Gut (2009) offers a comprehensive

corpus-based analysis of available empirical studies related to phonological and phonetic

properties of L2 English and German. In total, the researcher's survey included 172 empirical

studies, published in international journals between 1969 and September 2008 (p. 39). It turned

out, most studies focused on the production of individual segments as well as syllable structure

and consonant clusters (p. 39). Only 10 studies were dedicated to word stress, nine to intonation

and four to speech rhythm (p. 39). The researcher concluded that issues related to sound

production of consonants and vowels in L2 English are well-researched, but prosody is not.

Being a native speaker of German myself, I experienced all the previously mentioned

issues first hand: doubt of self-worth due to foreign accent, lack of phonological awareness (in

German and American English), and fossilization. I came to the United States in my late 20s, mid-way into my career as a software development engineer. I did well at my job and was quickly promoted to software development manager. While I initially thought that I was doing well linguistically, I was frequently picked out as a native German speaker after having said only a few words, even by other foreigners. I felt so embarrassed about my own foreign accent that I wanted to learn English all over again. However, I had passed the TOEFL test already and spoke English well enough; I was not accepted into a regular ESL class. Therefore, I enrolled in the "Teaching ESL/EFL certificate program" at UC Berkeley Extension. This program really allowed me to start all over, and I fell in love with teaching! However, I did not want to limit myself to teaching ESL and/or adults. In order to teach in a public school in California, I needed a California teaching credential. I, therefore, completed the necessary program at Sonoma State University (2015-2017). Honestly, it was only there that I realized that I still had to improve my own speaking ability dramatically. If I wanted to teach children of native speakers, I would have to be able to teach English Language Arts (ELA) and English Language Development (ELD) according to California standards, and as a near-native speaker. By now, I am about to earn a master's degree in Teaching English to Speakers of Other Languages (TESOL). I feel I brought together all my faculties, and I can now speak American English with joy and confidence, even in public. However, it took me years to get to this point, and I want to share the experiences of my own pitfalls with my fellow countrymen and other ESL/EFL learners of American English.

In summary, the problem that inspired this field project is three-dimensional. First, foreign accent is an issue that deserves attention, because it may negatively impact a listener's judgment about credibility of the accented speaker. Second, research has found that increased phonological awareness can help to mitigate foreign accent even in adult learners. Finally,

contemporary ESL/EFL pronunciation instruction of American English focuses more on the segmental aspects of language; that is the teaching of consonant/vowel patterns. However, the suprasegmental aspects of American English, or prosody, are largely neglected.

Purpose of the Project

The purpose of this field project is to prepare German EFL teachers for the teaching of American English pronunciation in a way that German-speaking adult learners can increase phonological awareness to mitigate foreign accent. Research has shown that phonological awareness allows improvement despite concerns about lateralization of the brain and the fixed formation of the larynx in adult learners (Baker, Trofimovich, Flege, Mack, & Halter, 2008; Scovel, 2000).

By offering a handbook for German EFL teachers, this field project attempts to provide an example for how to teach American English pronunciation. While issues related to the segmental aspects of American English (individual sound patterns for consonants and vowels) are an integral part of it, the handbook primarily focuses on the question of how two suprasegmental aspects of American English can be taught effectively: (1) word stress and (2) sentence stress.

This field project is informed by research in the field of second language acquisition and stands on the following four pillars: (1) factors which influence foreign accent, (2) leading theories on L2 phonology acquisition, (3) specific challenges L1 German speakers face, and (4) considerations in teaching pronunciation. Chapter II is dedicated to a full discussion of research findings.

This field project narrowly focuses on stress-related differences between American English and German, and provides an example of how to implement ESL/EFL instruction in

prosody for German adult learners. The handbook for German EFL teachers illuminates how the topics of word stress and sentence stress can be made accessible to German speakers. It also offers two mini lessons for teachers in the format of whiteboard animation videos. Although the videos are for teachers, they can easily be modified to serve as instructional materials for students, either for classroom-based instruction or long-distance online instruction. The video lesson format was chosen to utilize technology and multi-media in the classroom, and to address the growing mobile English language learner (MALL) population (Byrne & Diem, 2014).

The lessons are customized to the needs of German-speaking learners. Similarities and differences between American English and German phonological systems are addressed in each lesson. Examples of German words, phrases, or sentences are directly compared and contrasted to their American English counterparts in order to illustrate differences in prosody. However, instruction is entirely given in the target language.

In summary, it is my hope that this field project can address the importance of increased phonological awareness as a factor in reducing foreign accent even in adult learners. This handbook provides an example for how American English pronunciation can be taught by EFL instructors, specifically by using technology and multi-media in the classroom. The videos are designed to serve as an inspiration to EFL teachers when creating their own materials for instruction of German-speaking adult learners. Although this field project focuses on issues related to native German speakers, it is applicable to and meaningful for learners from different L1 backgrounds as well.

Theoretical Framework

This field project is supported by three theoretical frameworks: (1) communicative

competence (CC), (2) communicative language teaching (CLT), and (3) task-based language teaching (TBLT).

Communicative Competence

Communicative competence is the ability to know "when and how to say what to whom" (Larsen-Freeman & Anderson, 2011, p. 115). Dell Hymes introduced the term in the 1960s by asserting that communicative competence should not be limited to (1) grammatical competence, but requires (2) discourse competence, (3) sociolinguistic competence, and (4) strategic competence as well (Hymes, 1972). His research was a direct response to Noam Chomsky (Chomsky, 1965) and Chomskyan linguists who were convinced that language learning is best approached through the study of morphology, syntax, sentence-grammar semantics, and phonology. According to Hymes and other sociolinguists, Chomsky's notion of language competence was too narrow (Brown, 2007, pp. 218-219; Canale & Swain, 1980).

Discourse competence. In order to become a competent communicator, one needs to know how to participate in conversation, which includes appropriate phrases for call, response, and turn-taking. While most learners have discourse competence in their native language, they need to be taught explicitly how to connect sentences in stretches of discourse in American English, both orally and in writing (Brown, 2007, p. 220). This aspect of communicative competence is called discourse competence.

Sociolinguistic competence. A successful communicator needs to understand the social context in which language is used. Hence, sociolinguistic competence is the ability to choose utterances appropriately depending on the specific social setting (Brown, 2007, p. 220; Savignon, 1983, p. 37).

Strategic competence. A successful communicator deploys verbal and nonverbal communication strategies to overcome an awkward situation or to prevent the breakdown of communication (Canale & Swain, 1980, p. 30). This aspect of communicative competence is called strategic competence.

In order to make the learner of American English a more competent communicator, this field project addresses all four aspects of competence. Discourse, sociolinguistic and strategic competence require an understanding of American culture and pragmatics. The appropriateness of speech acts in American English (what to say and how to say it in a given situation) must be taught explicitly to L2 learners (Ishihara & Cohen, 2010). During each lesson, students are exposed to contemporary, authentic language in the form of snippets from podcasts (and their transcripts) from National Public Radio (NPR, www.npr.org/programs/fresh-air/). By focusing on segmental and suprasegmental aspects of pronunciation, this field project addresses grammatical competence. By selecting authentic audio recordings, learners are exposed to models of native speech. The snippets also shed light on the role of the speaker, the social situation, the appropriateness of language, and word/phrase choice. The goal of this field project is for learners of American English to realize that correct stress, intonation, speech rhythm, contractions and linking are not optional, but are expected from a speaker of American English with good communicative competence.

Communicative Approach or Communicative Language Teaching

In the late 1970s and early 1980s, the research on communicative competence led to a massive paradigm shift in language teaching: away from the linguistic structure-based approach and towards the Communicative Approach or Communicative Language Teaching (CLT) (Savignon, 1983; Widdowson, 1990). The Communicative Approach offered the theoretical

rationale for CLT, which exclusively focuses on communication and communicative competence as the goal of language teaching (Larsen-Freeman & Anderson, 2011, p. 115). It is the goal of CLT to enable students to communicate in the target language. Teachers, therefore, need to ask themselves: What is involved for the students to do so?

CLT emphasizes the exclusive use of the target language in the classroom. This allows students to realize that the target language is a vehicle for communication, not just an object to be studied.

CLT often uses a functional syllabus, which allows students to work on all four language skills from the beginning: speaking, listening, reading, and writing. In addition, the teaching of pragmatics must be incorporated. Lessons are – by design – no longer teacher-centered, but student-centered. By selecting communicative activities such as information gaps, role-plays, games, and problem-solving tasks, learners are forced to interact with one another and negotiate the meaning of what they say (Larsen-Freeman & Anderson, 2011, p. 223). This approach allows a maximum of student talking time (STT) compared to teacher talking time (TTT). The ratio of SST to TTT will vary depending on the level of instruction. However, for more advanced students, the goal is 80% SST and 20% TTT. Also, a variety of changing configurations should be used for different activities: pairs, triads, small groups, and whole group. In this way, students learn to communicate with changing partners, not just with their immediate neighbors or preferred peers. With that, the teacher's role has changed from being the main speaker to becoming a facilitator of communication.

It is important to make all activities purposeful, because this is known to work with the intrinsic motivation of a learner. Rarely are students all at the same level in their learning. In order to cater to the actual needs of individual learners, it is important to elicit prior knowledge

from the students before teaching new content. However, the grouping of students into small groups based on ability requires the teacher to really know their students. Small group work can thereafter allow for activities at different levels, which is an important component of modern multi-level teaching. In this way, the teacher can truly address the needs of all learners, not just gifted or those with additional needs.

My handbook for German EFL teachers incorporates techniques and principles of the CLT approach. Similarities and differences between American English and German sound patterns are compared and contrasted, but lessons must exclusively be taught in the target language. The lessons themselves showcase a wide spectrum of possible activities used in pronunciation teaching. Activities can easily be adapted to meet different audiences: individuals, pairs or small groups, or the whole class.

Task-based Language Teaching

Task-based language teaching (TBLT), also known as task-based instruction (TBI), focuses on the use of authentic language and on asking students to do meaningful tasks using the target language. Tasks are well-defined if and only if they have measurable results. Only in this way will students have a chance to deploy self-correcting and self-monitoring strategies, which are so essential for L2 learners (Avery & Ehrlich, 1992, pp. 215-219). In an effort to reduce teacher talking time over student talking time, it is advised to design tasks in a way that students engage more with each other in speaking. In this way, not only are the selected students speaking at any given time, but all students acquire practice speaking. Larsen-Freeman and Anderson (2011) consider TBLT an example of the 'strong version' of the communicative approach, because students acquire knowledge through the actual use of language (p.150).

The mini lessons, created as part of this field project, are entirely for teachers, but they themselves are task-based. They showcase typical tasks for the students that can be objectively assessed in terms of an outcome. The tasks range from controlled practice, to guided practice, to independent practice. Furthermore, the purpose of the sample tasks varies. Some tasks address the deepening of listening discrimination, while others target the sharpening of phonological awareness. Speaking tasks for the students are interwoven at regular intervals. During each lesson, students are given authentic listening tasks based on materials from National Public Radio (NPR, www.npr.org/programs/fresh-air/). Students are asked to identify certain speech patterns (e.g., word stress). Additionally, by viewing listening material through the lens of free, open source spectrum analyzer software, students can gain a deeper understanding of how a given speech pattern is actually used by native speakers, not just the ESL/EFL instructor. These listening tasks were deliberately included for students to sharpen phonological awareness.

In summary, this field project is supported by three theoretical frameworks: (1) communicative competence (CC), (2) communicative language teaching (CLT), and (3) task-based language teaching (TBLT).

Significance of the Project

One does not have to be an expert in phonetics to teach pronunciation (Naiman, 1992), but one needs an understanding of the American English sound system to teach pronunciation effectively (p. 164). Being a non-native speaker of American English myself, this field project was informed by my own challenges in mastering English pronunciation. The field project is an effort to share my experiences within the TESOL community. I am convinced that adult L2 learners can mitigate their foreign accent based on increased phonological awareness, knowledge about phonics rules, and a conscious effort to imitate the speech patterns of native speakers.

Ultimately, this project may help German adult learners to speak American English more intelligibly, more comprehensible, and possibly with a reduced accent. This project is significant because it can help German adult learners to acquire the phonetic tools necessary to pronounce words and phrases correctly and to communicate more effectively in English in the United States. Phonological awareness in a foreign language and the ability to identify the root cause of one's own pronunciation issues is the key to self-correction! It is possible to put this project to immediate use in EFL/ESL classrooms with German adult learners at any level, or to use the video lessons for self-study.

Definition of Terms

Accentedness – A listener's perception of how different a speaker's accent is from that of a L1 community (Derwing & Munro, 2005)

Communicative Competence – the cluster of abilities that enable humans to convey and interpret messages and to negotiate meanings interpersonally within specific contexts (Brown, 2007)

Communicative Language Teaching – an approach to language teaching methodology that emphasizes authenticity, interaction, student-centered learning, task-based activities, and communication for real-world, meaningful purposes (Brown, 2007)

Comprehensibility – A listener's perception of how difficult it is to understand an utterance (Derwing & Munro, 2005)

Foreign Accent – non-native pronunciation**,** or deviation from non-native speech (Ulrich, 2013)

Fossilization – term used to describe the persistence of formal (grammatical, semantical, phonological) errors in non-native speakers (Selinker, 1972)

Intelligibility – The extent to which a listener actually understands an utterance (Derwing & Munro, 2005)

Language Awareness – explicit knowledge about language, and conscious perception and sensitivity in language learning, language teaching, and language use. (Association for Language Awareness, 2010)

Phonological Awareness – explicit knowledge about the *segmental* and *suprasegmental* aspects of pronunciation (Park, 2015)

Pragmatic Fossilization – Phenomenon by which a non-native speaker systematically uses certain forms inappropriately at the pragmatic level of communication (Trillo, 2002)

Task-based Instruction – an approach to language teaching that focuses on tasks. Tasks are classroom activities in which meaning is primary. There is a problem to solve, a relationship to real-world activities, with an objective that can be assessed in terms of an outcome (Brown, 2007).

CHAPTER II
REVIEW OF THE LITERATURE

Introduction

This chapter identifies scholarly literature as relevant to the topic "Foreign Accent and Phonological Awareness: A Handbook for German EFL Teachers." The literature review itself is divided into four sections. First, foreign accent is explored with respect to perception and production, intelligibility, comprehensibility, accentedness, and factors that affect foreign accent. The second section analyzes leading theories of L2 phonology acquisition, while the third section identifies specific struggles of native German speakers in mastering standard American English pronunciation. The fourth section is concerned with pedagogies for ESL/EFL pronunciation instruction. Finally, the conclusion states which findings were most relevant for the creation of this field project.

Foreign Accent

There still does not exist an exact, comprehensive, and universally accepted definition of foreign accent (Gut, 2009, p. 253). In the absence of a definition, foreign accent is widely equated with non-native pronunciation, or deviation from non-native speech (Ulrich, 2013). Foreign accent is a linguistic phenomenon in which non-native users of any language carry the intonation, phonological processes, and pronunciation rules from their native language(s) (L1) into the speech of the target language (L2).

In general, children are more likely to learn foreign languages without a foreign accent (Baker et al., 2008; Krashen, 1973; Lenneberg, 1967; Scovel, 2000). A learner's L1 and L2 are believed to interact in different ways in the brain depending on the age L2 is learned. Research has found that the brain areas involved in the processing of L1 and L2 were overlapped in

children, but not in older learners (Baker et al., 2008, p. 338). Younger L2 learners, as compared to older L2 learners, may draw on different brain structures in language learning and use. Adults cannot usually learn to speak a foreign language without an accent, because the central nervous system undergoes some permanent reorganization after puberty (Flege, 1981). Also, adults' difficulties in L2 learning may be traced to age-based developmental issues that render speech perception and production mechanisms (perceptual distortions or loss of perceptual sensitivity) (Baker et al., 2008, p. 338).

Factors affecting foreign accent are very well researched and documented in Second Language Acquisition (SLA) theory (Brown, 2007; Celce-Murcia, Brinton & Goodwin, 2010; Ellis, 1994; Flege, Munro, & Mackay, 1995; Gut, 2009; Piske, Mackay, & Flege, 2001). They fall into two main categories: non-linguistic and linguistic factors. Non-linguistic factors that affect foreign accent are (1) the age at which L2 learning begins, (2) the length of residence in an L2-speaking country with active immersion, (3) motivation, (4) gender, (5) length and type of instruction, (6) language learning aptitude, and (7) the continued L1 language use. Brown (2007) also includes (8) the learner's educational background. Among the linguistic factors, there are two that are significant for L2 perception and production: (1) a speaker's native language and the L1-L2 interference of phonological systems (positive and negative transfer) and (2) the L2 learner's phonological awareness. While the first factor has been extensively researched, the latter – phonological awareness – is relatively new.

Phonological awareness is the key driver behind this field project, as the latest research suggests that explicit instruction about phonological awareness can contribute to better spoken comprehensibility even in adult L2 learners (Kennedy & Trofimovich, 2010; Park, 2015; Venkatagiri & Lewis, 2007). The significance of phonological awareness in L2 learning is

shaped slowly over time. Schmidt (1990) introduced the *Noticing Hypothesis* (NH), because he realized how the L2 learner's performance increased after they had qualitatively "noticed" differences in language input. However, NH was not tested in the realm of phonology until recently (Kennedy & Trofimovich, 2010; Park, 2015; Venkatagiri & Lewis, 2007).

Phonological awareness is concerned with explicit knowledge about the *segmental* and *suprasegmental* aspects of pronunciation. Segmental aspects address the sound patterns of consonants and vowels, while suprasegmental aspects are related to *prosody* of language; that is stress, intonation, rhythm, linking, and pausing. The term phonological awareness is not reserved to L2 learning, but pertains to L1 learning as well. It plays an integral part in the curriculum of English Language Arts (ELA) and English Language Development (ELD) instruction at public schools in the United States. If children receive explicit instruction in American English phonology, why not adult L2 learners as well?

Research has shown there is a direct relationship between the L2 learners' language awareness and the quality of L2 pronunciation (Kennedy & Trofimovich, 2010). It is likely that the relationship between language awareness and pronunciation is even reciprocal (Kenney & Trofimovich, 2010, p. 183). Following the Matthew effect, which is already known to apply to the development of reading skills (the more a child reads, the faster the reading skills will develop), Kennedy and Trofimovich (2010) believe that the more L2 learners speak, the more attention they will pay to spoken input. By becoming more attentive to spoken input, L2 learners notice the 'how and what' of what native speakers actually say (Kennedy & Trofimovich, 2010, p. 183). Consequently, there is also a strong correlation between language awareness and a learner's amount of L2 listening (Kennedy & Trofimovich, 2010, p. 183). The amount of time a L2 learner spends interacting with native speakers and/or listening to authentic materials is

significant for the mitigation of foreign accent. A learner's heightened awareness may, therefore, eventually lead to improved pronunciation (Kennedy & Trofimovich, 2010).

Foreign accent has been extensively researched, both from the perspective of production and perception (Ulrich, 2013, p. 398). The primary goal of that research was to reveal how segmental and suprasegmental errors contribute to perceived foreign accent. Production studies measure acoustic signals to detect deviations from native speech, while perception studies rely on the listener's judgement, evaluation, and rating. Perception studies about foreign accent are known to rate three key parameters: (1) *intelligibility* (the extent to which a listener actually understands an utterance), (2) *comprehensibility* (a listener's perception of how difficult it is to understand an utterance), and (3) *accentedness* (a listener's perception of how different a speaker's accent is from that of an L1 community) (Derwing & Munro, 2005, p. 385). The interrelationship among accentedness, comprehensibility, and intelligibility has been a trending research topic since the 1960s to the present (Munro & Derwing, 1995, Derwing & Munro, 2005; Scovel, 1969; Trofimovich & Isaacs, 2012; Venkatagiri & Levis, 2007). Interestingly, numerous studies have shown that L2 production issues are directly related to the L2 learner's perception. Furthermore, appropriate perceptual training can lead to improvement of production (Derwing & Munro, 2005, p. 388). Research also found that poor prosody affects intelligibility and comprehensibility in spoken language communication to a degree that is at least comparable to segmental pronunciation errors (Munro & Derwing, 1995, 1998; Kennedy & Trofimovich, 2008; Ulrich 2013). Therefore, the goals for teaching pronunciation to L2 learners must be set in this order: (1) intelligibility, (2) comprehensibility, and (3) accentedness (Celce-Murcia et al., 2010; Kennedy & Trofimovich, 2008; Park, 2015). The foremost goal for ESL/EFL teachers is to prepare students for successful communication outside the classroom (Kennedy & Trofimovich,

2008). While near-native pronunciation as a goal is desired by many teachers and students, it should not be the primary goal (Celce-Murcia et al., 2010; Kennedy & Trofimovich, 2008; Park, 2015).

Leading Theories of L2 Phonology Acquisition

The question "To what degree do pronunciation patterns acquired in one's first language govern or determine the process of second-language phonological acquisition?" (Celce-Murcia et al., 2010, p. 22) is one of the most debated questions related to the 'native language' factor. The study of the 'native language' factor itself led to six major theories: (1) Contrastive Analysis, (2) Error Analysis, (3) Interlanguage Hypothesis, (4) Markedness Theory, (5) Language Universals, and (6) Information Processing Theory.

Contrastive Analysis Hypothesis (CAH) is the longest standing theory of L2 phonological acquisition (Celce-Murcia et al., 2010, p. 22-23). Its objective is to predict difficulties at the phonological level based on cross-linguistic differences between two languages. Three different versions of CAH have emerged so far (Brown, 2007, pp. 248-254): (1) strong CAH, (2) weak CAH, and (3) moderate CAH. The strong version of CAH, introduced by Lado (1957), predicted that dissimilar or nonexistent L1 features interfered with L2 acquisition. Furthermore, it claimed that all systematic language-learning errors could be predicted for all learners of a given L1 language. Wardhaugh (1970) disagreed and published the weak version of CAH stating that there is cross-linguistic influence from the native language. Many systematic language-learning errors could be predicted, but not all. Finally, there is the moderate version of CAH (also called Subtle Difference Theory) which addresses "false friends" (Oller & Ziahosseiny, 1970). "False friends" are language features that exist in both L1 and L2, but are used differently. Regardless of the

specific version, CAH recognizes interference or negative transfer (from L1 into L2) as a significant factor in accounting for foreign accents (Celce-Murcia et al., 2010, p. 23).

While CAH was being developed, *Error Analysis* (EA) emerged (Brown, 2007, pp. 257-266). EA does not focus on L1/L2 differences. It is concerned with the errors L2 learners actually produce (Celce-Murcia et al., 2010, pp. 23-24). Richards (1971) introduced the concepts of (1) interlingual errors (caused by negative transfer from L1), (2) intralingual errors (caused by all learners regardless of L1), and (3) developmental errors (caused by native speaking children as well). Research on EA revealed the phenomenon of 'avoidance', meaning speakers avoid words or language features if they do not have the confidence yet to use them correctly (e.g., English conditionals).

The *Interlanguage Hypothesis* (ILH*)*, introduced by Selinker (1969, 1972), asserts that 'interlanguage grammar' exists independently of the speaker's native language or the target language (Celce-Murcia et al., 2010, pp. 24-25). The concept of *fossilization* was introduced by Selinker (1972) to describe the persistence of formal (grammatical, semantical, phonological) errors in non-native speakers. The term fossilization has been borrowed from the field of paleontology to indicate that an L2 learner's proficiency is petrified and cannot progress further. Fossilization is persistent despite corrective feedback, intrinsic motivation or intensive L2 use (Al-Shormani, 2013). In fact, L2 learners are known to achieve native-like proficiency in some areas, but not others. A *plateau in learning* is different from fossilization, as the L2 learner can progress, but it requires tremendous conscious effort (Al-Shormani, 2013). Again, a learning plateau is temporary, while fossilization is permanent (Al-Shormani, 2013). Trillo (2002) adds the term *Pragmatic Fossilization* to express that non-native speakers systematically use certain discourse markers (e.g., "I know", "anyways") inappropriately at the pragmatic level of

communication; that is due to a lack of cultural awareness. In other words, the overuse of certain phrases can become an inappropriate habit.

Markedness Theory advocates to leave the native language alone, but instead suggests to "mark" the exceptions in the target language (Celce-Murcia et al., 2010, pp. 25-26). This theory was initially developed by Trubetzky (1939) and Jackobson (1941) and later refined by Eckman (1981). Eckman's *Markedness Differential Hypothesis* (MDH) postulates that marked items in a language are more difficult to acquire than unmarked items. The idea is to mark the 'exceptions' to the rule, and focus the L2 learner on those. An example related to English phonology is the word "herb." The initial h is not pronounced, whereas the initial h is pronounced in other words (e.g., "here", "heart").

The theory of *Language Universals* (LU) claims that certain rules – acquired by children in learning the first language – are universal (Flynn,1987). For example, researchers found a remarkable universal hierarchy for phonology acquisition: (1) stops are acquired before nasals, (2) nasals are acquired before fricatives, and (3) fricatives will be replaced by stops (Celce-Murcia et al., 2010, p. 26; Jackobson, 1941; Macken &Ferguson,1987). This theory heavily supports Chomsky (1965), the idea of an innate language acquisition device, and universal grammar in L1 learning. Different languages set their parameters differently, thereby creating the characteristic grammar for that language (Brown, 2007, p. 255).

Finally, there is *Information Processing Theory* which predicts that learners will exhibit a distinct tendency to interpret L2 sounds as a set of sounds that they command in their native language (L1). L2 learners tend to produce a compromise, or "middle ground" between the sounds in the native and the target language, which is also referred to as the *Phonological Translation Hypothesis* (PTH) (Flege, 1981). Flege eventually developed the so-called *Speech*

Learning Model (SLM), which is currently one of the most influential models of L2

pronunciation (Gut, 2009, p. 22). Its aim is "to account for age-related limits on the ability to

produce L2 vowels and consonants in a native-like fashion" (Flege, 1995, p. 237). Unfortunately,

it focuses exclusively on the segmental aspects of language (Gut, 2009, p. 22). Research asserts

that learner's L1 and L2 interact in different ways in the brain, depending on the age L2 is

learned (Baker et al., 2008, p. 319). This aspect of Flege's Speech Learning Model has been

termed the "*Interaction Hypothesis*". Furthermore, it is likely that L1 and L2 influence each

other to some degree (Baker & Trofimovich, 2005), which opens a brand-new field of research:

the influence of L2 back onto L1.

Gut (2009) offers a comprehensive corpus-based analysis of available empirical studies

related to phonological and phonetic properties of L2 English and German. In total, the

researcher's survey included 172 empirical studies, published in international journals between

1969 and September 2008 (p. 39). It turned out, most studies focused on the production of

individual segments as well as syllable structure and consonant clusters (p. 39). Only 10 studies

were dedicated to word stress, nine to intonation and four to speech rhythm (p. 39). The

researcher concluded that issues related to sound production of consonants and vowels in L2

English are well-researched, but prosody is not. Interestingly, 58% of all studies focused on

L1/L2 interference, which is considered the leading factor for causing foreign accent in adult L2

learners (p. 42).

Going beyond the available studies, Gut (2009) published the results of her own study,

which contrasts non-native speech productions for L2 English and L2 German. Participants came

from a variety of L1 backgrounds in either group. The author's research featured an innovative

corpus-based approach and measured the following factors: AOL (age of first contact with L2),

LOR (length of residence in the English/German-speaking country respectively), GEN (the speaker's gender), INS (total length of formal instruction in L2), KNO (self-reported knowledge of L2 at first arrival in the country), MOT (self-reported wish to sound native), MUS (self-reported interest and ability in music), and ACT (self-reported interest and ability in acting). It turned out that age (AOL) and length of residence (LOR) were most influential in affecting foreign accent (Figure 1).
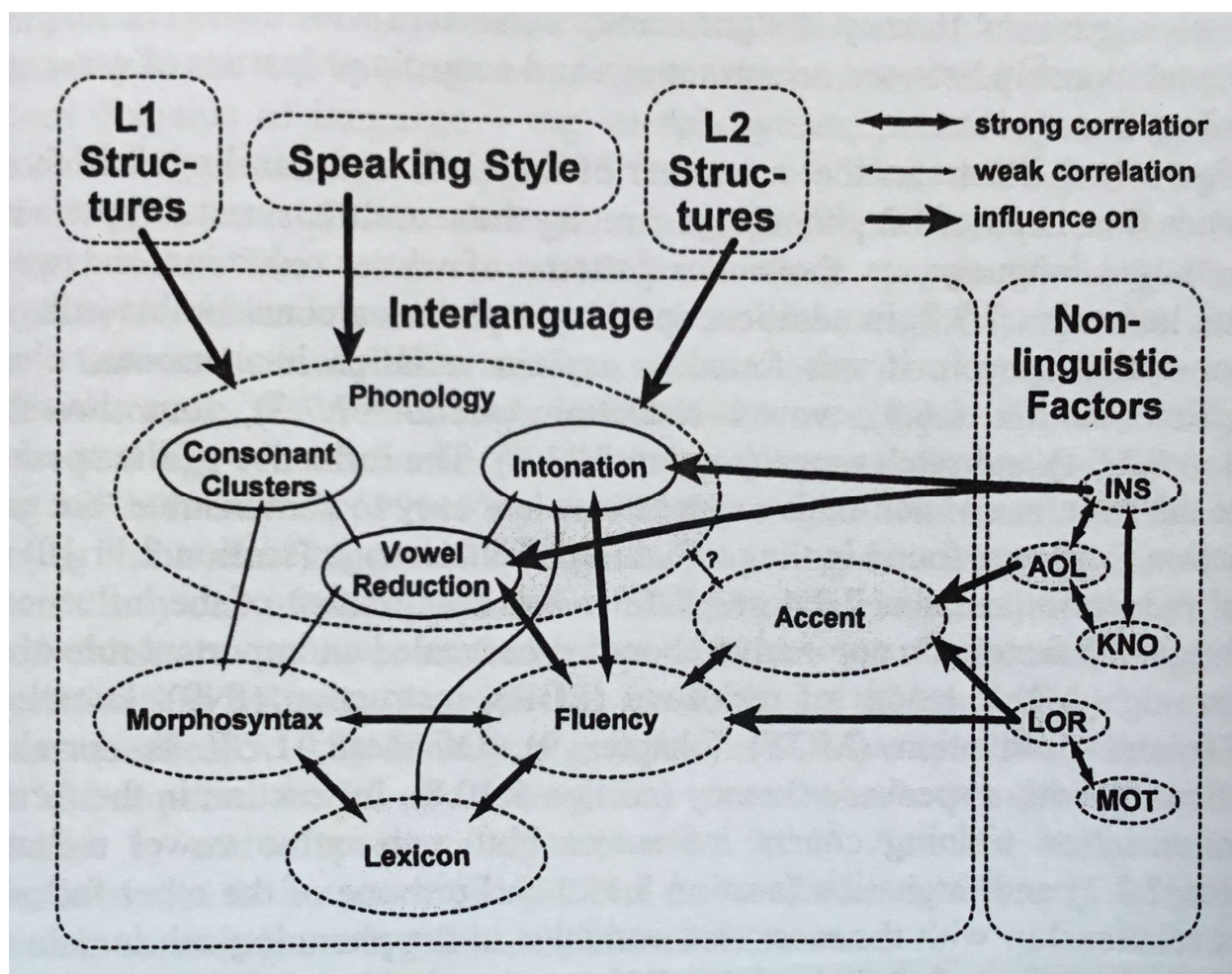

Figure 1: Non-Native Speech Model (Gut, 2009, p. 299)

Gut's model is called the *Non-Native Speech Model* and includes suprasegmental aspects of language. Figure 1 shows that Gut's model depicts strong and weak correlations as well as

influences between multiple parameters, which all contribute to foreign accent. Gut (2009) also gives invaluable insight into specific issues related to syllabification, cluster reduction, speech rhythm, vowel reduction, and intonation, which gave inspiration to the content of the mini lessons provided as part of this field project.

Specific Challenges of German-Speaking Learners

Standard American English is based on the sound system of North American English (NAE), as it is spoken in the United States and Canada. According to Celce-Murcia et al. (2010, pp. 41-42), NAE is comprised of (1) segmental aspects of language (e.g., consonants, vowels, diphthongs) and (2) suprasegmental aspects of language (stress, rhythm, connected speech, prominence, intonation).

The acoustics of American English speech are well-researched and documented (Olive, Greenwood, & Coleman, 1993), and the phonetic features of American English have been compared with other languages since the appearance of the Contrastive Analysis Hypothesis in the 1960s (Delattre, 1965). This comparison among languages was primarily done to improve foreign language teaching for Americans. Delattre (1965) used a variety of scientific research methods, including spectrographic analysis, spectrographic synthesis, articulatory motion-picture study, and statistical calculation. By doing so, he systematically compared the prosodic, vocalic, and consonantal features between American English, German, Spanish, and French. Although his research focuses more on segmental aspects of language than suprasegmental aspects, his work is remarkable as he visualizes the speech characteristics between languages in side-by-side fashion. For example, Figure 2 shows his observations for falling and rising pitches between all four languages (here for the intonation of a declarative statement).
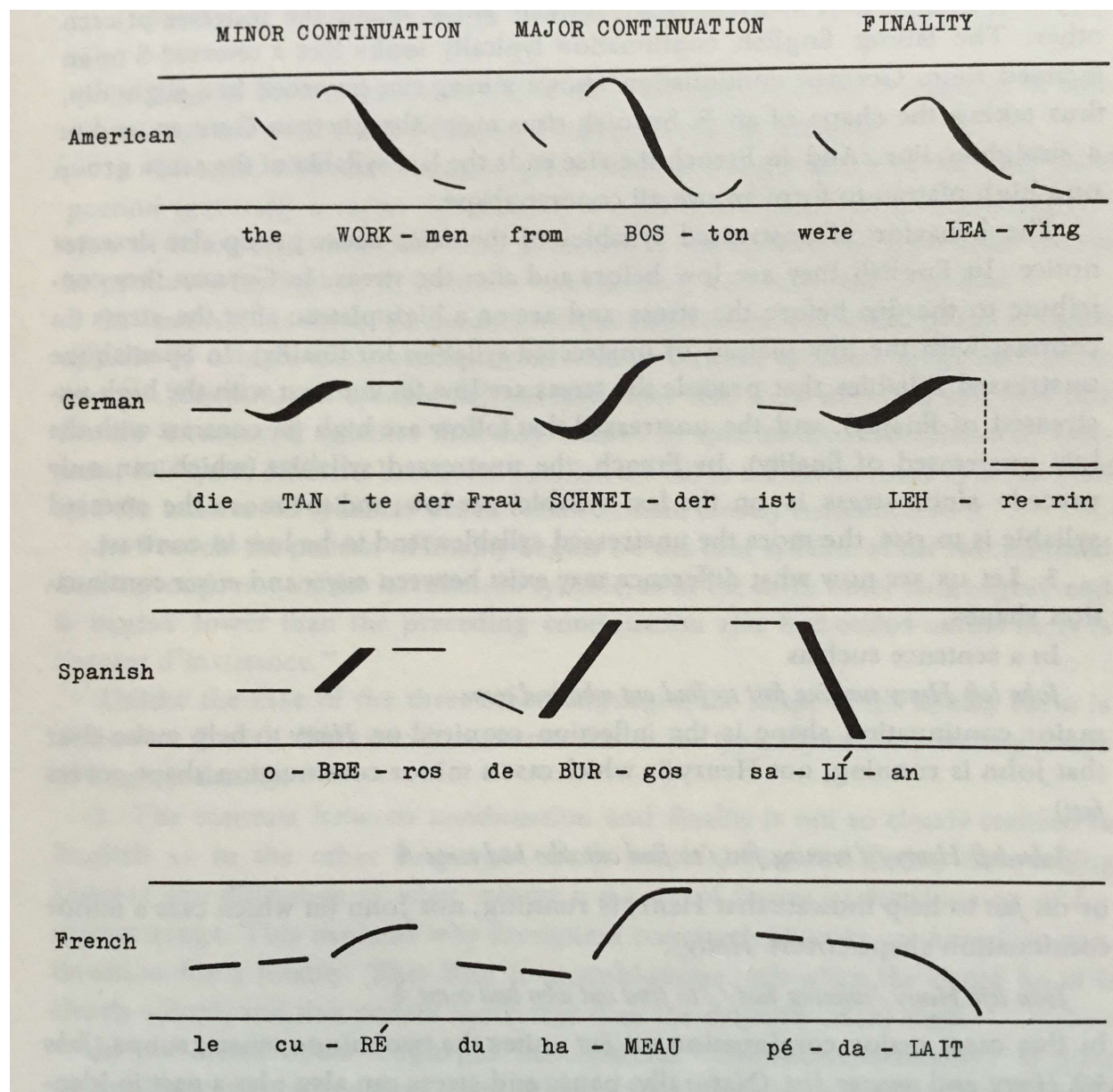
Figure 2: Comparison - Statement Intonation (Delattre, 1965, p. 25)

Based on the above characteristics, it does not come as a surprise that many German speakers automatically apply their native speech patterns when producing a declarative statement in American English (e.g., "I remember it."). Stereotypically, many German speakers use rising pitches throughout and an abrupt, falling pitch at the final position (Figure 3). This phenomenon

– in turn – enables listeners (native and other non-native speakers of American English) to easily identify such an L2 speaker as a native German speaker.

American intonation 2-3-1

I re - MEM - ber it

Spanish imitation
of American 2-3-1

I re - MEM - ber it

French imitation
of American 2-3-1

I re - MEM - ber it

German imitation
of American 2-3-1

I re - MEM - ber it
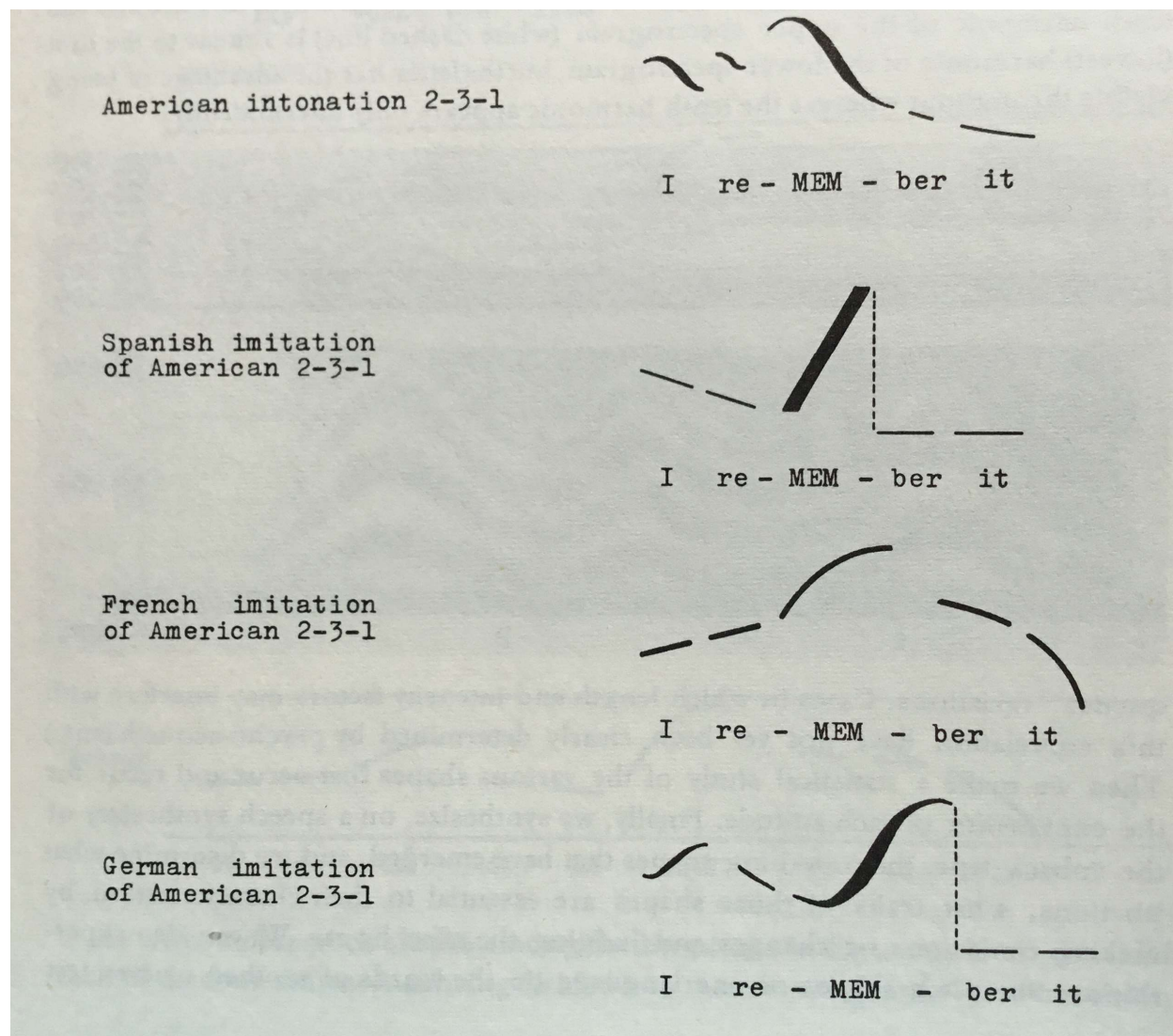
Figure 3: Statement Intonation – L1 interference (Delattre, 1965, p. 23)

Delattre's (1965) diagrams – derived from spectrographic recordings – also emphasize that German and English are indeed stress-timed languages, as syllables are not spoken in equal length and loudness. Stressed syllables appear in fat print as they are acoustically louder and longer. On the other hand, unstressed syllables sound shorter, less loud and are often reduced. In

contrast, the diagrams also illustrate that Spanish and French are syllabic languages, which means that every syllable is pronounced with equal length. This approach tremendously helps L2 learners to gain increased phonological awareness because it illustrates not only the desired speech pattern in the target language (here American English), but contrasts it directly with the same feature in the native language (here German). Delattre's work is, therefore, especially beneficial for visual learners.

Although it appears at first glance that many of the phonemes between American English and German are shared, there are phonemes that are absent in either language. Furthermore, phonemes which exist in both languages (identified by the same symbol in the International Phonetic Alphabet (IPA)), might be articulated in slightly different places or manner (Flege, 1981, p. 446). For example, Figure 4 compares how German and American English vowels are articulated in the human mouth. The 2-dimensional shapes, used in Figure 4, represent the inner cavities of the human mouth. Front vowels are produced near the front of the mouth; they are displayed to the left side of the shapes (e.g., /i/, /e/). Back vowels are produced near the back of the mouth; they are displayed to the right side of the shapes (e.g., /u/, /o/). Furthermore, the grid depicts whether a vowel is produced high up in the mouth, in the middle, or low in the mouth. The reader will notice some phonemes are completely absent in one language (e.g., /ʌ/ is absent in German), while others exist in both languages (e.g., /u/). However, if the same phoneme is present in both languages, the place of articulation or manner of articulation may not be entirely identical. If both shapes (the American English and German) are placed onto each other, they do not precisely overlap. This visualization demonstrates very effectively that the production of a given phoneme may differ acoustically. However, not all German speakers are aware of the

difference. Explicit knowledge about these features will help L2 learners to make significant improvements for American English vowel production.
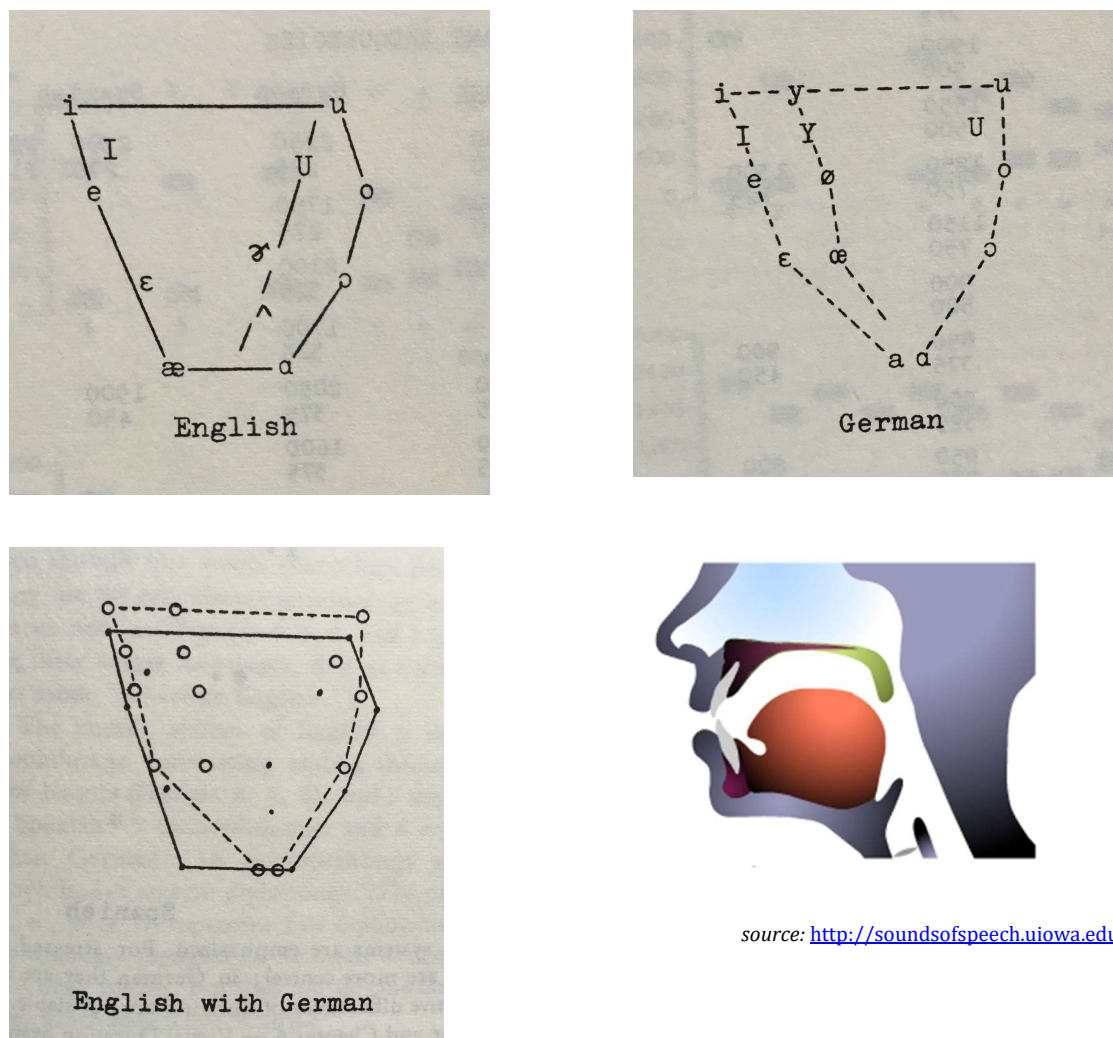

Figure 4: Vowel Phonemes and places of articulation (Delattre, 1965, pp. 50-51)

In addition, Delattre addresses the significance of long vs. short vowels in American English. The distinction between long and short vowels is not obvious to many German speakers, but is significant in the context of word stress. While most poly-syllabic German words are pronounced on the first syllable, the same is not true for English words (Figure 5).
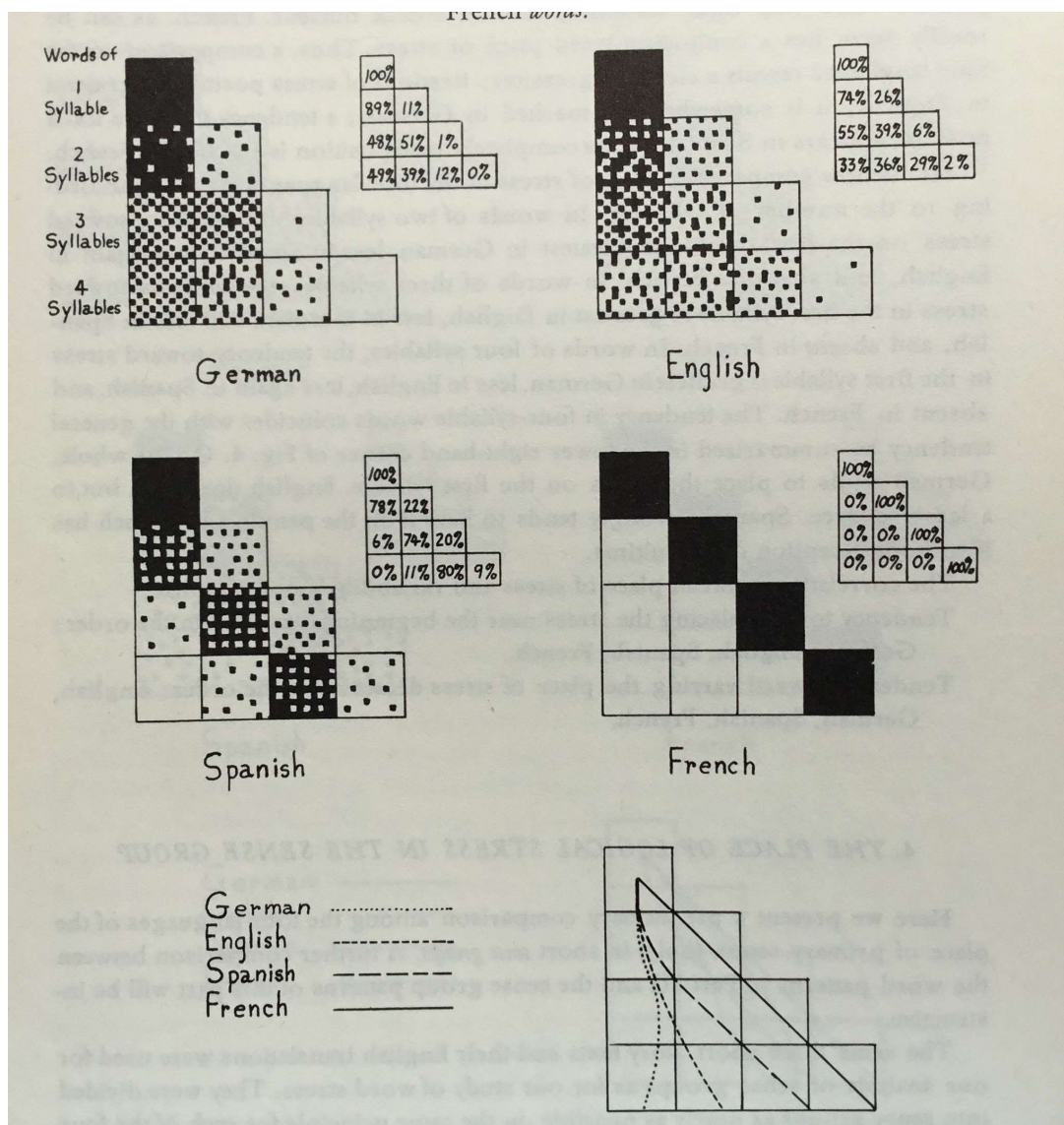
Figure 5: Place of the stressed syllable in multi-syllabic words (Delattre, 1965, p. 29)

Figure 5 indicates that the primary stress in two-syllable, three-syllable, and four-syllable German words is still more often on the first syllable, compared to two-syllable, three-syllable, and four-syllable English words. Word stress is especially challenging, as many words are similar or even shared between German and English (e.g., *Kalender* [kaˈlɛndər] *vs. calendar* [ˈkæləndə(r)]*, Enzyklopädie* [ɛntsyklopɛˈdiː] *vs. encyclopedia* [ensaikloˈpiːdiə]*, Geografie* [geograˈfiː] *vs. geography* [dʒiˈ(ɒ)grəfi]), but syllables are stressed differently (Langenscheidt

Online Dictionaries, 2017; Collins Online Dictionary, 2017). Unless fully aware of proper stress in the foreign language, many German speakers apply L2 American English word stress incorrectly.

The remainder of this section gives a short overview about the key challenges for German speakers in mastering American English pronunciation. Table 1 summarizes segmental aspects of American English, which tend to be pitfalls for many German speakers (Avery & Ehrlich, 1992, pp. 123-125, Delattre, 1965):

English Vowels	/iʸ/ vs. /ɪ/	German speakers tend to pronounce the tense vowels of English as long vowels without the characteristic semi-vowels of the English tense vowels. Example: sleep vs. slip
	/eʸ/ vs. /ɛ/	German speakers tend to pronounce the tense vowels of English as long vowels without the characteristic semi-vowels of the English tense vowels. Example: taste vs. test
	/uʷ/ vs. /ʊ/	German speakers tend to pronounce the tense vowels of English as long vowels without the characteristic semi-vowels of the English tense vowels. Example: luke vs. look
	/ɛ/ vs. /æ/	German speakers tend to substitute /ɛ/ for /æ/. Example: lend vs. land
	/ɑ/ vs. /ʌ/	German speakers tend to substitute /ɑ/ for /ʌ/. Example: son vs. sun
English Consonants	/θ/ and /ð/	The German language does not have the interdental fricatives /θ/ and /ð/. German speakers generally substitute /s/ for /θ/ and /z/ for /ð/.
	/ʤ/	/ʤ/ is absent in German language. German speakers may substitute /ʧ/ for /ʤ/. Example: chuck vs. jug
	word-final voiced consonants /b/, /d/, /g/, /v/, /ð/, /z/, /ʒ/, /ʤ/	German speakers tend to produce a voiceless version of stops, fricatives, and affricates at the end of words. However, the phenomenon is not observed in other positions of the word (initial, middle).
	/v/ vs. /w/	German speakers may substitute /v/ for /w/, producing 'vine' instead of 'wine'.

	/r/	German speakers may produce a centro-pharyngeal /r/ sound instead of the English centro-palatal /r/ sound. (Delattre, 1965, p. 81)
	/l/	German speakers may produce a latero-dental /l/ sound instead of the English latero-alveolar /l/ sound. (Delattre, 1965, p. 81)

Table 1: Challenges for German Speakers (segmental aspects)

Table 2 lists challenges to German speakers which are related to suprasegmental aspects

(Avery and Ehrlich, 1992, pp. 106-109; Delattre, 1965; Gut 2009):

Stress	Stress in German usually falls on the first syllable with a few exceptions. English word stress does not necessarily follow the same pattern for multi-syllabic words. Proper English word stress must be consciously learned on a per word basis.
Rhythm	Speakers of German pronounce all syllables clearly in their native language. However, in English stressed syllables are pronounced louder, clear, and longer. Unstressed syllables are pronounced softer, unclear, and shorter. German speakers struggle with vowel reduction (production of the schwa sound for unstressed syllables; represented by the symbol (ə) in the International Phonetic Alphabet)
Intonation	German speakers must adapt to the characteristic intonation patterns of English: - Final rising as used in yes-no questions - Final rising-falling are used in statements, commands and wh-questions - Non-final rising-falling as used in complex sentences - Non-final rising as used in lists
Linking	German speakers fail to link words properly in connected speech which results in choppy speech.
Contractions	German speakers fail to master contractions properly, especially those requiring consonant cluster reductions. Consequently, the produced speech sounds non-native.

Table 2: Challenges for German Speakers (supra-segmental aspects)

Considerations in Teaching Pronunciation

As discussed in Chapter I, Communicative Language Teaching (CLT) is one of the theoretical frameworks that drove this field project. Unfortunately, pronunciation instruction has become a casualty of CLT, because CLT prioritizes meaning over form-focused instruction (Thomson & Derwing, 2015, p. 326). A recent survey about the efficacy of contemporary pronunciation instruction has shown poor results (Thomson & Derwing, 2015, p. 326). Many ESL/EFL teachers still feel ill-prepared to teach pronunciation or limit their pronunciation instruction to giving occasional feedback (Derwing & Munro, 2005; Thomson & Derwing, 2015; Kennedy & Trofimovich, 2010). However, textbooks on how to teach American English pronunciation as well as online materials for American English pronunciation instruction have become more readily available. The design of the mini lessons, which were created as part of this field project, were based on three ESL/EFL teacher guidebooks: (1) Celce-Murcia et al. (2010), (2) Avery and Ehrlich (1992), and (3) Larsen-Freeman and Anderson (2011).

First, Celce-Murcia et al. (2010) offer a wealth of information on how to teach NAE pronunciation by addressing the consonant system, the vowel system, connected speech, stress, rhythm, prominence, and intonation in discourse. In addition, the authors provide insights on how the NAE sound system intersects with other areas of language as (1) pronunciation and listening, (2) the sound system and morphology, and (3) the sound system and spelling. Finally, there are guidelines on testing and evaluation, techniques, tools, and the use of technology.

Second, Avery and Ehrlich (1992) address the sound system of American English as well, but identify specific pronunciation problems for speakers of various L1 languages (e.g., Arabic, Chinese, German, Russian, Vietnamese). Those listings of specific problems are of tremendous value when customizing pronunciation instruction to a specific audience. In addition,

the book suggests a variety of classroom pronunciation activities in support of communicative language teaching. Therefore, this textbook for ESL/EFL instructors makes an invaluable companion to the textbook by Celce-Murcia et al. (2010).

Third, Larsen-Freeman and Anderson (2011) do not discuss pronunciation. Instead they analyze the value of various historical and contemporary techniques and principles for ESL/EFL language teaching. Currently, the following three are considered cutting-edge approaches: (1) communicative language teaching, (2) content-based instruction, and (3) task-based language learning.

Summary

What is the takeaway from this literature review? First of all, there is neither a best theory of second language acquisition, nor is there one for L2 phonology acquisition. Instead, a wealth of theories and hypotheses has grown organically since the first half of the 20th century. Some theories no longer flourish, while others were augmented or merged. Gut's (2009) *Non-Native Speech Model* (Figure 1) is the most recent speech learning model of foreign accent.

This field project takes into considerations a total of nine insights from currently prevailing research in the field of L2 phonology acquisition:

1. The interference of the native language with the target language plays a significant role in a learner's L2 phonology acquisition (Celce-Murcia et al., 2010, p. 34; Macken & Ferguson; 1987).

2. The degree to which negative transfer occurs varies from learner to learner. Some aspects of language may interfere stronger than others (Celce-Murcia et al., 2010, p. 34; Macken & Ferguson; 1987).

3. There are some aspects of L2 phonology acquisition that are universal among languages and hence parallel the first-language acquisition of children (Celce-Murcia et al., 2010, p. 34; Macken & Ferguson; 1987).

4. Depending on whether a conversation is formal (control-facilitating) or informal (automaticity-facilitating), mastery of L2 pronunciation accuracy may vary for a given L2 learner (Celce-Murcia et al., 2010, p. 34; Macken & Ferguson; 1987).

5. The age at which L2 learning begins and the length of residence in an L2-speaking country with active immersion are two other prominent factors. The earlier a learner is exposed to native speakers of the target language, the better the L2 phonology acquisition. The younger the adult learner, the more his or her pronunciation can be improved (Celce-Murcia et al., 2010, pp. 34-35).

6. Intelligibility is the most important goal of pronunciation teaching, especially for postpubescent adolescents and adults. This is followed by comprehensibility as a secondary goal. Once a L2 learner can be understood, accentedness might become another goal to further improve L2 pronunciation. However, nativelike pronunciation as the solitary goal of pronunciation teaching is unrealistic (Celce-Murcia et al., 2010, p. 35).

7. L2 phonology acquisition is qualitatively different from the L2 acquisition of other aspects of language (e.g., syntax, lexicon). Child L2 learners of English who achieve very good pronunciation may have serious gaps in grammar and lexicon. Conversely, adults who – more or less – master English syntax and lexicon may have serious problems with pronunciation (Celce-Murcia et al., 2010, p. 35).

8. Other factors that influence the degree of pronunciation proficiency are the learner's attitude, motivation, gender, length and type of instruction, language ego, language learning aptitude, the continued L1 language use, the learner's educational background as well as sociocultural and socio-psychological influences (Celce-Murcia et al., 2010, p. 35, Brown, 2007).

9. Increased phonological awareness is an essential prerequisite for mitigating foreign accent (Kennedy & Trofimovich, 2010).

While research in L2 phonology acquisition has traditionally focused on the learner's acquisition of individual vowel and consonant phonemes, contemporary research addresses the learner's acquisition of English stress, intonation, rhythm, connected speech, and voice quality.

The handbook for the German EFL teacher, which was developed as part of this project, intentionally targets two suprasegmental elements of American English pronunciation: (1) word stress and (2) sentence stress. The materials provided were informed by the readings from Celce-Murcia et al. (2010), Avery and Ehrlich (1992), Gut (2009), and Larsen-Freeman and Anderson (2011) respectively, and sheds light on the question: How can these two topics be taught so that German adult learners can raise their phonological awareness?

While foreign accent is unlikely to be eliminated in adult learners (due to completed forming of the larynx before puberty and reduced plasticity of brain areas required for L1/L2 language learning), this field project emphasizes the importance of increased phonological awareness. Phonological awareness, or the knowledge about the phonological systems of the target language in contrast to the systems of the native language, can help adult learners to improve their pronunciation in American English.

CHAPTER III
THE PROJECT AND ITS DEVELOPMENT

Brief Description of the Project

This project offers a "Handbook for German EFL Teachers" which is an effort to help German EFL teachers to teach American English pronunciation. Since teaching materials on segmental aspects (sounds of consonants, vowels and diphthongs) are more readily available (Derwing & Munro, 2005; Foote, Trofimovich, Collins, & Urzúa, 2016; Thomson & Derwing, 2015), my project narrowly focuses on how to teach two selected suprasegmental aspects of American English to native German speakers: (1) word stress and (2) sentence stress. These two aspects were selected because it is the combination of word stress and sentence stress that is so quintessential for the creation of the rhythm of an English utterance (Celce-Murcia et al., 2010, p. 209). If L2 learners could raise their phonological awareness just for word stress and sentence stress, they would be more likely to move in regular, rhythmic beats from stress to stress, no matter how many unstressed syllables fall in between (p. 209). Native speakers are likely to perceive such a speech pattern as more intelligible and comprehensible, and possibly even less accented. As discussed in Chapter II, the judgment about the credibility of an accented foreign speaker rises and falls depending on how well native speakers can perceive utterances. Therefore, a more natural speech pattern will help learners of American English to be better understood in the first place, and ultimately gain higher credibility ratings.

The project itself is organized into five main parts: (A) a discussion on how to teach word stress, (B) a discussion on how to teach sentence stress, and (C) supporting materials for a sample lesson on word stress, (D) supporting materials for a sample lesson on sentence stress, and (E) copyright permissions that were necessary for the creation of this project. In addition, the handbook provides a short glossary (F).

Part A, the discussion of how to teach word stress, provides the teacher with insights on how to approach the topic. This part of the project offers suggestions on how to break the subtopic down into lesson elements along with suitable student activities to nurture phonological awareness. It begins with syllabification, and is followed by a distinction between three levels for syllable stress (unstressed, lightly stressed, most stressed), the role of vowels in syllables, and vowel reduction in unstressed syllables.

Part B, the discussion of how to teach sentence stress, begins with a discussion of the regular rhythmic beat in English (or rhythm), and focuses on listening discrimination. Students need to learn that all sentences (e.g., statements, questions, imperatives) can be broken into phrases, or combinations of words, that belong together for a reason. The goal for the students is it to speak in a "phrase-by-phrase" manner. In this way, they learn which words to emphasize and which not to. English is a language where content words are stressed, but function words are not.

Parts A and B both provide links to videos, which are meant to inspire German EFL teachers. The mini lessons were produced in a short whiteboard animation video format. Note, the mini lessons do not offer comprehensive coverage for the topics of word stress or sentence stress. Rather, they are meant to serve as tools to exemplify how the teaching of word stress and sentence stress could be approached from a practical point of view. Students will not master word stress or sentence stress by being instructed once, or by listening to a video. Instead, students need to practice word stress and sentence stress through speaking. Therefore, activities that address word stress and/or sentence stress should become an integral part of every ESL/EFL lesson. With this in mind, it is my goal that these videos may serve as an inspiration to German EFL Teachers for their own lesson design and the creation of their own materials for either

classroom-based teaching or distance learning. While the mini lessons are beneficial for L2 learners of any background, they are specifically customized to the needs of German-speaking learners. Similarities and differences between the American English and German phonological systems are addressed in each lesson. Examples of German words, phrases, or sentences are directly compared to their American English counterparts. This comparison was done to illustrate differences in prosody. However, instruction is given entirely in the target language.

Parts C and D both offer supporting materials for two sample lessons; they mirror what is presented in the videos. Both videos exemplify how the teaching of two specific suprasegmental aspects of language can be implemented, so that L2 learners can increase phonological awareness. Each video lesson is 15-16 minutes long. The format of short video lessons was chosen to demonstrate (1) how technology and multimedia can effectively be utilized in the classroom, and (2) how the needs of a growing mobile English language learner (MALL) population can be rapidly addressed. Both videos are accessible through links to the internet.

Part E addresses copyright permissions that were necessary for the creation of this project, namely from (1) National Public Radio (npr.org) and (2) Presentation Media (presentationmedia.com).

Part F provides a short glossary of specific terms that appear in the videos.

Development of the Project

This project was launched by analyzing the specific challenges German L2 learners face in mastering standard American English pronunciation; research presented by Delattre (1965), Avery and Ehrlich (1992), and Gut (2009) served as invaluable resources. As a native speaker of German, I validated what the above sources emphasized and incorporated my own experiences.

Since attention to the teaching of segmental aspects of languages currently outweighs that of suprasegmental aspects (Derwing & Munro, 2005; Foote, Trofimovich, Collins, & Urzúa, 2016; Thomson & Derwing, 2015), I decided to narrowly focus on suprasegmentals. However, the scope was still too broad for this project. Eventually, I decided on two suprasegmental elements: word stress and sentence stress. I specifically selected these two elements, because English and German are both stress-timed languages, but – as a native speaker of German – even I struggled with the application of stress for a long time. It was not until I realized how important it is for native speakers to hear proper stress that I started to pay more attention to it.

I wanted to focus on how a German EFL teacher could teach both topics, and from this idea emerged parts A and B of this project. I also wanted to provide hands-on tips for how to implement a lesson, but a lesson plan by itself did not seem engaging enough. I wanted to offer more, something that could serve as an inspiration to German EFL teachers. As someone who has worked as a computer scientist for 15 years, I am also fond of incorporating technology into my classroom. I love to develop my own digital materials, which can not only be used for classroom-based instruction, but for distance learning as well. I have used animated Powerpoint presentations for a long time, and the same materials can easily be turned into whiteboard animation videos suitable for online instruction. So, instead of providing a plain lesson plan as part of my handbook, I decided to design two mini video-lessons for teachers on how to teach word stress and sentence stress. The powerpoint presentation slides that served as the foundation for the videos are shared in parts C and D respectively.

Once I identified the focus for each lesson, I designed a mini lesson, created all necessary materials, and produced a video. From a pedagogical point of view, I implemented suggestions provided by Celce-Murcia et al. (2010), Larsen Freeman and Anderson (2015) and Brown (2007.

Each lesson begins with a short introduction to the topic. Afterwards, the teacher offers

activities for controlled practice. The teacher models the targeted sound pattern, and students just

listen at first. Later, they repeat after the teacher. Here, it is important that students receive

immediate feedback for what they do wrong. If students do not gain constructive feedback, they

will likely claim "I said what you just said!" and walk away from the lesson disappointedly.

While teaching pronunciation, students can benefit greatly from "listen and read along"

materials. Contemporary, authentic and culturally appealing materials are best suited for this

purpose. Therefore, each lesson includes a snippet of a podcast (along with its transcript) from

National Public Radio (NPR, e.g. www.npr.org/programs/fresh-air/). Legally, those materials can

be incorporated into EFL lessons as long as none of NPR's "Terms of Use" (see

http://www.npr.org/about-npr/179876898/terms-of-use) are violated.

Listening along to authentic speech can enhance phonological awareness even further

when looking at listening material through the lens of a spectrum analyzer. I, therefore,

introduced the analytical tool Audacity (www.audacityteam.org), which is free, open source

audio software for multi-track recording and editing. A spectrum analyzer can help students to

visually recognize how syllables are pronounced in terms of loudness and length. Ideally,

students will record their own voices and compare them to the recordings of native speakers

Students sharpen their phonological awareness through the discovery of discrepancies between

the pronunciations. Phonological awareness is not something that can be acquired passively; it

requires the interest and engagement of a student.

Each lesson ends with a self-assessment segment. It requires students to read particular

words, phrases, or a passage. Afterwards the teacher reveals the correct stress patterns. In this

way, the student can recognize any discrepancies. Self-assessment is important, because it helps learners to realize that they are responsible for their own learning.

I began to conceptualize this project at the beginning of the semester. However, it was fully developed over the course of four weeks, between October 5 and November 2, 2017.

The Project

The project in its entirety can be found in the appendix.

CHAPTER IV
CONCLUSIONS AND RECOMMENDATIONS

Conclusions

Pronunciation of adult second language (L2) learners is extremely difficult to change, and L2 native-like pronunciation is rarely achieved after early childhood. The problem that inspired this field project is threefold: (1) foreign accent poses both a psycholinguistic and sociolinguistic problem as it impairs the credibility of L2 speakers, (2) phonological awareness (accurate knowledge of the target language's phonological system) can help to mitigate foreign accent even in adult learners, and (3) many English as a Second Language (ESL) / English as a Foreign Language (EFL) teachers feel ill-prepared to teach pronunciation.

The purpose of this field project was to prepare German EFL teachers for the teaching of American English pronunciation to increase phonological awareness and to mitigate foreign accent for German-speaking adult learners. Phonological awareness is not something that can be acquired passively, it requires the interest and active engagement of a student.

By offering a handbook for German EFL teachers, this field project has attempted to provide an example on how to teach American English pronunciation. While issues related to the segmental aspects of American English (individual sound patterns for consonants and vowels) are an integral part of it, the handbook primary focuses on the question of how two suprasegmental aspects of American English can be taught effectively: (1) word stress and (2) sentence stress. In particular, the handbook also offers two mini lessons in the format of short whiteboard animation videos (15-16 minutes). However, the mini lessons do not offer comprehensive coverage for the topics of word stress or sentence stress. Rather, they are meant to serve as tools to exemplify how the teaching of word stress and sentence stress could be approached from a practical point of view. Students will not master word stress or sentence stress

by being instructed once, or by listening to a video. Instead, students need to practice word stress and sentence stress through speaking. Therefore, activities that address word stress and/or sentence stress should become an integral part of every ESL/EFL lesson. With that in mind, it is my goal that those videos may serve as an inspiration to German EFL Teachers when it comes to their own lesson design and the creation of their own materials for either classroom-based teaching or distance learning. While the mini lessons are beneficial for L2 learners of any background, they are specifically customized to the needs of German-speaking learners.

The significance of this field project is that one does not have to be an expert in phonetics to teach pronunciation, but one does need an understanding of the American English sound system in order to teach pronunciation effectively. Being a non-native speaker of American English myself, this field project was informed by my own challenges in mastering English pronunciation. In producing the teaching materials, I wanted to share my experiences with the TESOL community. I am convinced that adult L2 learners can mitigate their foreign accent based on increased phonological awareness, knowledge about phonics rules, and a conscious effort to imitate the speech patterns of native speakers.

Ultimately, this project may help German adult learners to speak American English more intelligibly, more comprehensibly, and possibly with a reduced accent. This project is significant because it can help German adult learners to acquire the phonetic tools necessary to pronounce words and phrases correctly and to communicate more effectively in English in the United States. Phonological awareness in a foreign language and the ability to identify the root cause of one's own pronunciation issues is the key to self-correction! It is possible to put this project to immediate use in EFL classrooms with German adult learners at any level, or to use the video lessons for independent study.

Recommendations

The handbook for German EFL Teachers focused exclusively on the teaching of only two suprasegmental aspects of American English: (1) word stress and (2) sentence stress. It completely ignored many of the other suprasegmental aspects of American English, such as intonation, linking, and pausing. These topics are worth exploring as separate field projects. Also, this field project focused exclusively on German learners of American English. It would be interesting to see what is challenging in terms of word and sentence stress for speakers from other L1 language backgrounds.

While this field project led to the creation of two mini lessons in the format of whiteboard animation videos, the aspect of how those videos were created could not be adequately covered. However, I believe that the skills necessary for the rapid and on-demand creation of appealing instructional materials are in high demand, not only within the TESOL community. I also believe it is the mindset of the ESL/EFL instructor that shines through his or her instructional materials. Students will appreciate if you bring cutting-edge technology to them, packaged in meaningful and digestible units. Therefore, I could imagine that the creation of digital materials – for the purpose of ESL/EFL instruction – could lend itself nicely to a field project and/or professional career of its own.

REFERENCES

Al-Shormani, M. Q. (2013). Fossilization and plateau effect in second language acquisition. *Language in India, 2,* 763.

Archibald, J. (1992). Developing natural and confident speech: Drama techniques in the pronunciation class. In P. Avery, & S. Ehrlich (Eds.). *Teaching American English Pronunciation* (pp. 221-227). Oxford, England: Oxford University Press.

Association for Language Awareness. (2010). *Language awareness defined.* Retrieved from

http://www.lexically.net/ala/la_defined.htm

Avery, P., & Ehrlich, S. (1992). *Teaching American English pronunciation.* Oxford, England: Oxford University Press.

Baker, W., Trofimovich, P. (2005). Interaction of native- and second language vowel systems in early and late bilinguals. *Language and Speech, 48*, 1-27.

Baker, W., Trofimovich, P., Flege, J. E., Mack, M., & Halter, R. (2008). Child-adult differences in second-language phonological learning: The role of cross-language similarity. *Language And Speech*, *51*(4), 317-342.

Brown, H.D., (2007). *Principles of Language Learning and Teaching. 5th Edition*. White Plains: NY, Pearson-Education.

Byrne, J., & Diem, R. (2014). Profiling mobile English language learners. *JALT CALL Journal*, *10*(1), 3–19.

Canale, M., &Swain, M. (1980). Theoretical bases of communicative approaches to second language teaching and testing. *Applied Linguistics, 1,* 1-47.

Celce-Murcia, M., Brinton, D., & Goodwin, J. M. (2010). *Teaching pronunciation: A course book and reference guide.* (2nd ed.) Cambridge, England: Cambridge University Press.

Chomsky, N. (1965). *Aspects of the theory of syntax.* Cambridge, MA: Massachusetts Institute of Technology Press.

Collins Online Dictionaries (2017). American English-German and German-American English. Retrieved from: https://www.collinsdictionary.com/us

Delattre, P. (1965). *Comparing the phonetic features of English, French, German and Spanish: an interim report*. Heidelberg, Germany: Groos.

Derwing, T. M., & Munro, M. J. (2005). Second language accent and pronunciation teaching: A research-based approach. *TESOL Quarterly*, (3), 379.

Eckman, F. (1981). On the naturalness of interlanguage phonological rules. *Language Learning, 31*, 195-216.

Eckman, F. (1991). The structural conformity hypothesis and the acquisition of consonant clusters in the interlanguage of ESL learners. *Studies in Second Language Acquisition, 13*, 23-41.

EF EPI (2016). *Education First - English Proficiency Index.* Retrieved from: http://www.ef.edu/epi/regions/europe/germany/

Ellis, R. (1994). *The study of second language acquisition*. Oxford, England: Oxford University Press.

Flege, J. E. (1981). The phonological basis for foreign accent: A hypothesis. *TESOL Quarterly, 15*(4*),* 443-455

Flege, J. E. (1995). Second language speech learning: Theory, problems, findings. In W. Strange (Ed.), *Speech perception and linguistic experience: Issue in cross-language research* (pp. 233-277). Baltimore, MD: York Press.

Flege, J. E., Munro, M. J., & Mackay, I. R. A. (1995). Factors affecting strength of perceived foreign accent in a second language. *Journal of the Acoustic Society of America, 97,* 3125- 3134.

Flynn, S. (1987). Contrast and construction in a parameter-setting model of L2 acquisition. *Language Learning, 37*(1), 19-62.

Foote, J. A., Trofimovich, P., Collins, L., & Urzúa, F. S. (2016). Pronunciation teaching practices in communicative second language cases. *Language Learning Journal*, *44*(2), 181-196.

Gut, U. (2009). *Non-native speech. A corpus-based analysis of phonological and phonetic properties of L2 English and German.* Frankfurt, Germany: Peter Lang.

Hymes, D.H. (1972). On communicative competence. In J. Pride & J. Holmes (Eds.), *Sociolinguistics.* Harmondsworth, England: Penguin Books.

Jackobson, R. (1941). *Kindersprache, Aphasic, und allgemeine Lautgesetze* [Child language, aphasia and phonological universals]. Uppsala, Sweden: Almqvist & Wiksell.

Ishihara, N., & Cohen, A. D. (2010). *Teaching and learning pragmatics: Where language and culture meet.* New York, NY: Longman.

Kennedy, S. (2012). Exploring the relationship between language awareness and second language use. *TESOL Quarterly: A Journal for Teachers of English to Speakers of other Languages and of Standard English as a Second Dialect*, *46*(2), 398-408.

Kennedy, S., & Trofimovich, P. (2010). Language awareness and second language pronunciation: A classroom study. *Language Awareness*, *19*(3), 171-185.

Krashen, S. (1973). Lateralization, language learning, and the critical period: Some new evidence. *Language Learning, 23,* 63-74.

Lado, R. (1957). *Linguistics across cultures.* Ann Arbor: University of Michigan Press.

Langenscheidt Online Dictionaries (2017). English-German and German-English. Retrieved from: https://en.langenscheidt.com/

Larsen-Freeman, D., & Anderson, M. (2011). *Techniques and principles in language teaching*. (3rd ed.). Oxford, England: Oxford University Press.

Lenneberg, E. H. (1967). *Biological foundations of language*. New York, NY: John Wiley and Sons.

Lev-Ari, S., & Keysar, B. (2010). FlashReport: Why don't we believe non-native speakers? The influence of accent on credibility. *Journal of Experimental Social Psychology*, *46*, 1093–1096.

Li, A., & Post, B. (2014). L2 Acquisition of prosodic properties of speech rhythm. *Studies in Second Language Acquisition*, *36*(2), 223.

Lippi-Green, R. (2011). *English with an accent: Language, ideology, and discrimination in the United States* (2nd ed.). London; New York, NY: Routledge.

Macken, M.A., & Ferguson, C. (1987). Phonological universals in language acquisition. In G. Ioup & S.H. Weinberger (Eds.), *Interlanguage phonology: The acquisition of a second language sound system* (pp. 3-22). New York, NY: Newbury House.

Munro, M. J., & Derwing, T. M. (1995). Foreign accent, comprehensibility, and intelligibility in the speech of second language learners. *Language Learning*, *45*(1), 73-97.

Naiman, N. (1992). A communicative approach to pronunciation teaching. In P. Avery, & S. Ehrlich (Eds.). *Teaching American English pronunciation* (pp. 163-171). Oxford, England: Oxford University Press.

OECD (2015). *Programme for International Student Assessment (PISA).* Retrieved from: http://www.oecd.org/pisa/pisa-2015-Germany.pdf

Olive, J. P., Greenwood, A., & Coleman, J. (1993). *Acoustics of American English speech: A dynamic approach*. New York, NY: Springer-Verlag.

Oller, J., & Ziahosseiny, S. (1970). The contrastive analysis hypothesis and spelling errors. *Language Learning, 20*, 183-189.

Park, M. S. (2015). Phonological awareness and degree of foreign accent: An exploratory study. *English Teaching*, *70*(3), 23-47.

Piske, T., Mackay, I. R. A., & Flege, J.E. (2001). Factors affecting degree of foreign accent in an L2: A review. *Journal of Phonetics, 29,* 191-215.

Richards, J.C. (1971). A non-contrastive approach to error analysis. *English Language Teaching Journal, 25*(3), 204-219.

Scovel, T. (1969). Foreign accents, language acquisition, and cerebral dominance, *Language Learning, 19,* 245-253.

Scovel, T. (2000). A critical review of the critical period research. *Annual Review of Applied Linguistics, 20,* 213-223.

Savignon, S. (1983). *Communicative competence: Theory and classroom practice.* Reading, MA: Addison-Wesley.

Selinker, L. (1969). Language transfer. *General Linguistics, 9*, 67-92.

Selinker, L. (1972). Interlanguage. *International Review of Applied Linguistics, 10*, 209-231.

Thomson, R. I., & Derwing, T. M. (2015). The effectiveness of L2 pronunciation instruction: A narrative review. *Applied Linguistics*, *36*(3), 326-344.

Trillo, J. R. (2002). The pragmatic fossilization of discourse markers in non-native speakers of English. *Journal of Pragmatics*, *34,*769-784.

Trofimovich, P., & Isaacs, T. (2012). Disentangling accent from comprehensibility. *Bilingualism: Language And Cognition*, *15*(4), 905-916.

Trubetzkoy, N.S. (1939). *Grundzüge der Phonologie* [Principles of Phonology]. Prague, Czech Republic: Cercle Linguistique de Prague.

Ulbrich, C. (2013). German pitches in English: Production and perception of cross-varietal differences in L2. *Bilingualism*, *16*(2), 397-419.

Venkatagiri, H. S., & Levis, J. M. (2007). Phonological awareness and speech comprehensibility: An exploratory study. *Language Awareness*, *16*(4), 263–277.

Wardhaugh, R. (1970). The contrastive analysis hypothesis. *TESOL Quarterly, 4*(2), 123-130.

Widdowson, H. G. (1990). *Aspects of language teaching.* Oxford, England: Oxford University Press.

APPENDIX

Phonological Awareness and Foreign Accent: A Handbook for German EFL Teachers

This page intentionally left blank.

Phonological Awareness and Foreign Accent: A Handbook for German EFL Teachers

intonation foreign linking

accent phonological word

awareness Pronunciation pausing

stress

Kerstin Menzer
December 2017

Table of Contents

November 2, 2017

Dear German EFL teachers,

This project is an effort to help you teach American English pronunciation effectively, based on cutting-edge research findings. Traditionally, pronunciation instruction focused on segmental aspects: sounds of consonants, vowels and diphthongs. However, this approach ignores the importance of the suprasegmental aspects: stress, intonation, connected speech, linking, and pausing.

Suprasegmentals are extremely important in the communication of meaning, because ill-formed sounds can often be ignored and meaning can still be grasped through context. Wrongly applied suprasegmentals, however, may severely interfere with comprehensibility. Research has shown that judgment about the credibility of an accented foreign speaker rises and falls depending on how well native speakers can perceive utterances. Therefore, a more natural speech pattern will help learners of American English to be better understood in the first place, and ultimately gain higher credibility ratings.

For the purpose of this project, I decided to narrowly focus on two suprasegmental elements of American English: (1) word stress and (2) sentence stress. I selected those two elements, because it is the combination of word stress and sentence stress that is so quintessential for the creation of the rhythm of an English utterance.

If L2 learners could raise their phonological awareness just for word stress and sentence stress, they would be more likely to move in regular, rhythmic beats from stress to stress, no matter how many unstressed syllables fall in between. Native speakers are likely to perceive such a speech pattern as more intelligible and comprehensible, and possibly even less accented.

While this handbook offers support for L2 learners of any background, it is specifically customized to the needs of German-speaking learners. It addresses similarities and differences between American English and German phonological systems. Examples of German words, phrases, or sentences are directly compared and contrasted to their American English counterparts in order to illustrate differences in prosody. However, instruction should be given entirely in target language.

I hope you will find this handbook useful and inspiring for your own teachings of American English pronunciation.

Sincerely,

Kerstin Menzer

How to use this Handbook

This handbook consists of five main parts:

Part A

discusses the essentials on how to teach word stress.

Part B

discusses the essentials on how to teach sentence stress.

Part C

offers a sample implementation of a mini lesson devoted to word stress.

Part D

offers a sample implementation of a mini lesson devoted to sentence stress.

Part E

addresses copyright permissions that were necessary for the creation of this project.

This handbook is customized to the needs of German-speaking learners. Similarities and differences between American English and German phonological systems are addressed both in the context of word stress and sentence stress. Examples of German words, phrases, or sentences are directly compared and contrasted to their American English counterparts in order to raise awareness about differences. However, all instruction is entirely given in the target language.

Content

1. Why is Word Stress important?
2. Syllabification
3. Stressed vs. Unstressed Syllables
4. Vowel Reduction
5. Listening to Authentic Speech
6. Other Topics to Teach
7. Student Self-Assessment
8. Summary

1. Why is Word Stress important?

German and English are both stress-timed languages, and listeners focus on stressed syllables to decipher meaning. However, many Germans are completely unaware of the use of word stress in their own language.

When a student does not produce utterances with the appropriate English rhythm, the results can range from incomprehension to annoyance on the part of the listener. So, incorrect stressing of polysyllabic words greatly affects comprehensibility.

Word stress is especially challenging, as many words are similar or even shared between German and English, but syllables are stressed differently.

Kalender [kaˈlɛndər] *vs. calendar* [ˈkæləndə(r)]

Enzyklopädie [ɛntsyklopɛˈdiː] *vs. encyclopedia* [ɛnˌsaɪkləˈpidiə]

Geografie [geograˈfiː] *vs. geography* [dʒiˈ(ɒ)grəfi])

Errors in word stress are often a result of transfer from the learner's first language. Increased awareness of word stress may aid the students' own production. It is important to raise students' awareness of how American English is actually spoken. In turn, students will find it easier to comprehend the speech of native speakers. The ultimate goal of word stress work is to teach students to produce utterances whose rhythm is English-like.

2. Syllabification

Why teach about syllables?

Dividing words into parts, or "chunks" helps speed the process of decoding.

It is important for students to notice how English words split into syllables, because it is an important prerequisite for the determination of stressed and unstressed syllables.

Knowing the rules for syllable division can help students read words more accurately and fluently.

Key points for Teaching

Every word in English consists of one or more syllables. Syllables are units of breath. Syllabification is the process of breaking a word into syllables correctly.

en:cy:clo:pe:di:a

Each syllable contains at least one vowel; many syllables contain diphthongs. Diphthongs are complex vowel sounds, whereas a vowel is followed by another vowel or semi-vowel.

a:loud

Syllables may not or may not contain consonants; many syllables contain consonant clusters.

plumb:er

Work on syllabification lends itself nicely to a review of sounds for American English consonants, consonant clusters, vowels, and diphthongs.

Sample Activity

Break words into syllables and clap, tap, or jump after each syllable. This activity allows you to bring movement into the classroom and build phonological awareness for syllables. It is especially suited for kinesthetic learners.

3. Stressed vs. Unstressed Syllables

Sample Activity

Use hand signals while speaking. A fist indicates an unstressed syllable, while an open palm indicates a stressed syllable.

This activity is not only beneficial for kinesthetic learners, but for visual learners as well. It helps to foster phonemic awareness for word stress.

Key Points for Teaching

■ Native speakers distinguish three levels of stress: (1) unstressed syllables, (2) lightly stressed syllables , and (3) the most stressed syllable.

en:cy:clo:PE:di:a
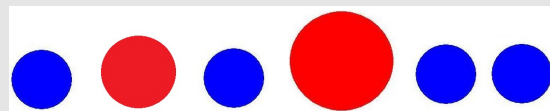
ɛnˌsaɪkləˈpidiə

■ Each word has only one highly stressed syllable. But which one is it?
■ A stressed syllable is pronounced louder, longer, and with higher pitch. Vowels of stressed syllables are always pronounced very clearly
■ Unstressed syllables appear not only shorter, less loud and with a lower pitch, but vowels are actually reduced.
■ Unfortunately: the stress pattern for every word must be memorized when first learning the word.
■ Emphasize to students that learning new words should not be limited to the memorization of spelling. Teach them word stress from the very beginning.

4. Vowel Reduction

Key Points for Teaching

There are two important rules on how to treat vowels in syllables.

RULE A: Vowels in stressed syllables are never reduced.

RULE B: Vowels in unstressed syllables are reduced.

Emphasize to your students that vowel reduction is not a form of sloppy speech, but is expected by native speakers!

Vowel reduction helps to elevate stressed syllables, because that's what native speakers look for.

Sample Activity

Find the vowels or diphthongs of an unstressed syllable. Review how that phoneme is pronounced by itself. Guide the students how to pronounce the phoneme using the rules for vowel reduction. For example, in the word encyclopedia both 'o' in the third syllable and 'a' in the last syllable are turned into the schwa sound /ə/).

en:cy:clo:PE:di:a

ɛnˌsaɪkləˈpidiə

5. Listening to Authentic Speech

Key Points for Teaching

Listening to authentic and culturally relevant materials can not only help your students with acculturation, but can also increase phonological awareness!

Bring "listen and read along" materials into your classroom to showcase how native speakers of American English actually speak. In this way, you can make the rules of word stress accessible to students.

National Public Radio (NPR) is an organization which is committed to the highest journalistic ethics and standards and to independent, noncommercial journalism, both in fact and in appearance. For example, NPR's program "Fresh Air" covers not only a wide variety of contemporary topics, but offers downloadable podcasts along with transcripts. These materials are excellent listening materials for EFL students. You can use these materials as long as you adhere to NPR's "Terms of Use":

http://www.npr.org/about-npr/179876898/terms-of-use

Sample Activity

Select a podcast which is likely to meet the interest of your students. Decide on a short passage that exemplifies what you want to teach (e.g., word stress). Provide a snippet from the transcript as reading material. First, ask students to read the passage. Second, elicit from the students what they already know about word stress for the words that appear in the text. Third, listen to the passage and focus on word stress. Fourth, teach proper word stress for all words that appear in the passage. Fifth, provide a color-coded version of the reading passage. Sixth, listen again and have students read along to the color-coded version of the passage.

6. Other Topics to Teach

Greenhouse [ˈgrinˌhaʊs] **vs. green house** [grin haʊs]

Yellowjacket [ˈjɛloʊˌdʒækɪt] **vs. yellow jacket** [jɛloʊ dʒækɪt]

Blackbird [ˈblækˌbɜrd] **vs. black board** [blæk bɜrd]

Key Points for Teaching

Other topics that should be explored in the context of word stress are:

1. Reflexes
2. Cardinal vs. Ordinal Numbers
3. Noun-Noun Compounds
4. Adjective-Noun Compounds
5. Single vs. Complex Compounds
6. Germanic vs. Latinate Prefixes
7. Stress-neutral Suffixes
8. Stress-demanding Suffixes
9. Suffixes that cause Stress Shift
10. Noun / Verb Pairs

Students will not master word stress by being instructed once, or by listening to authentic materials alone. Instead, students need to practice word stress actively through speaking. Therefore, activities that address word stress should be made an integral part of every EFL lesson.

project (n) [ˈprɑˌdʒɛkt] **vs. project (v)** [proʊˈdʒɛkt]

alloy (n) [ˈælɔɪ] **vs. alloy (v)** [əˈlɔɪ]

produce (n) [ˈproʊˌdus] **vs. produce (v)** [prəˈdus]

minute (n) [ˈmɪnɪt] **vs. minute (adj)** [maɪnuːt-]

7. Student Self-Assessment

Self-assessment is important, because it helps learners to realize that they are responsible for their own learning.

Self-monitoring is an important step on the path to phonological awareness.

Sample Activity

Provide students with a list of words. First, ask them to divide each word into syllables. Second, ask them to identify which syllables are unstressed, lightly stressed and most stressed. Third, ask them to find vowels or diphthongs in the stressed syllable and pronounce them clearly. Fourth, ask them to find vowels and diphthongs in the unstressed syllables and pronounce them by using vowel reduction. Fifth, ask them to pronounce the entire word. Finally, provide them with the correct answers.

Part A: How to Teach Word Stress

8. Summary

1. English is a stress-timed language, which means that syllables of a word are not pronounced with equal length, loudness and pitch.

2. One syllable is always more stressed than the others (= appears louder, longer, and with higher pitch). Vowels in stressed syllables are always pronounced very clearly.

3. Unstressed syllables appear not only less loud, shorter, and with lower pitch, but vowels are actually reduced.

4. Unfortunately, the stress pattern for every word must be memorized when first learning the word. Do not just learn the spelling.

5. Often, students already have an impressive knowledge of vocabulary. Ask them to go back and review proper "word stress" for words that interest them.

Teacher Tip

A mini lesson on word stress is available at

https://vimeo.com/240243883

password: 12152017

length: 16 minutes

See Part C for more information.

Overview

1. Why is Sentence Stress important ?
2. Content words vs. Function words
3. Main Stress in Sentences
4. Contrasting Patterns
5. Listening to Authentic Speech
6. Other Topics to Teach
7. Student Self-Assessment
8. Summary
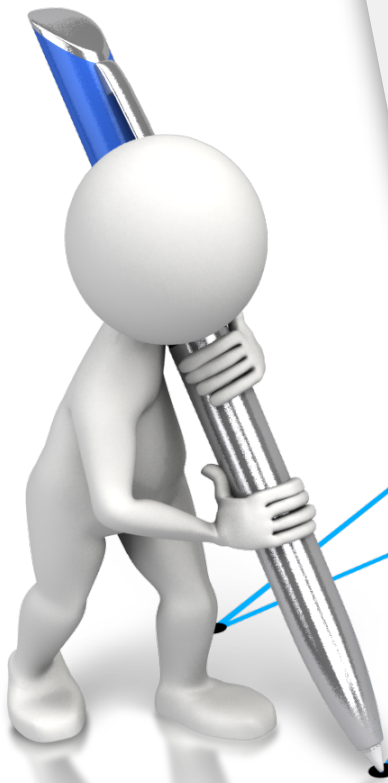
Part B: Teaching Sentence Stress

1. Why is Sentence Stress important?

The ultimate goal of sentence stress work is to teach students to produce utterances with English-like rhythm.

English is a stress-timed language, and native speakers may either fail to comprehend, or they may grow impatient with the lack of selective stress on key words.

As far as sentence stress is concerned, one word typically appears more prominent than all others.

For students to produce sentences that have the appropriate stress patterns and thus the appropriate rhythm, it is necessary that they know which words of a sentence are stressed and which are not stressed.

Errors related to sentence stress are often due to the lack of phonological awareness for the rhythm of American English, content words and function words.

It is important to raise students' awareness of how American English is actually spoken. This can be accomplished by listening to authentic speech. In turn, increased awareness of rhythm and sentence stress may aid the students' own production of sentences.

2. Content Words vs. Function Words

Key points for Teaching

All words have their individual stress in isolation.

However, when words are connected into sense groups, and sense groups are connected into sentences, content words keep their stress, and function words lose their stress.

His _sister-in-law_ _recently_ _graduated_ from the _university._

Sample Activity

First, underline all content words in a given sentence. Next, determine the word stress for all content words. Last, determine the word stress for all function words.

3. Main Stress in Sentences

Key points for Teaching

While all content words receive major word stress, one content word within the sentence will receive greater stress than all others.

Main sentence stress typically falls on the last content word within each sentence, unless the speaker wants to emphasize a different content word.

This means the stress on the most prominent word must surpass all other stressed syllables in the sentence.

My mother bought a new car.

Sample Activity

Sharpen listening discrimination for main sentence stress. Provide students with a sentence and ask them to identify all content words. Ask them to apply stress for all words in isolation. Now, let the students listen to the sentence. Ask them to identify which word received the most prominent stress. Was it the last content word? If not, ask them why the speaker might have chosen a different word.

4. Contrastive Stress

Key points for Teaching

It is also possible for main sentence stress to function contrastively. Contrastive stress can be even heavier and louder than the normal main sentence stress.

A: I hear Susan got the measles.

B: No, she got rubella.

Sample Activity

Sharpen listening discrimination for contrastive sentence stress. Provide students with a dialog. Speaker A makes a statement, but speaker B intervenes because it is not true. Ask students to predict which word will receive prominent stress. Now, let the students listen to the dialog. Ask them to identify which word received the most prominent stress. Was it the last content word? If not, ask them why the speaker might have chosen a different word.

Part B: Teaching Sentence Stress

5. Listening to Authentic Speech

Key Points for Teaching

Listening to authentic and culturally relevant materials can not only help your students with acculturation, but can also increase phonological awareness!

Bring "listen and read along" materials into your classroom to showcase how native speakers of American English actually speak. In this way, you can make the rules of word stress accessible to students.

National Public Radio (NPR) is an organization which is committed to the highest journalistic ethics and standards and to independent, noncommercial journalism, both in fact and in appearance. For example, NPR's program "Fresh Air" covers not only a wide variety of contemporary topics, but offers downloadable podcasts along with transcripts. These materials are excellent listening materials for EFL students. You can use these materials as long as you adhere to NPR's "Terms of Use":

http://www.npr.org/about-npr/179876898/terms-of-use

Sample Activity

Select a podcast which is likely to meet the interest of your students. Decide on a short passage that exemplifies what you want to teach: sentence stress. Provide a snippet from the transcript as reading material. First, ask students to read the passage. Second, elicit from the students what they already know about sentence stress. Third, listen to the passage and focus on word stress and sentence stress. Fourth, teach proper stress for all words that appear in the passage as well as the main sentence stress. Fifth, provide a color-coded version of the reading passage. Sixth, listen again and have students read along to the color-coded version of the passage.

6. Other Topics to Teach

Key Points for Teaching

Other topics that could be explored in the context of sentence stress are:

1. Nursery Rhymes
2. Limericks
3. Classical English Poetry

because they are all centered around rhythm and metrical foot.

Instead of explaining rhythm academically, let students experience rhythm and metrical foot through kinesthetic activities (e.g., clapping, tapping, snapping, jumping).

Students will not master sentence stress by being instructed once, or by listening to authentic materials alone. Instead, students need to practice sentence stress actively through speaking. Therefore, activities that address sentence stress should be made an integral part of every EFL lesson.

Also, the study of sentence stress can be combined well with a lesson on intonation.

Jack and Jill went up the hill
To fetch a pail of water
Jack fell down and broke his crown,
And Jill came tumbling after.

7. Student Self-Assessment

Self-assessment is important, because it helps learners to realize that they are responsible for their own learning.

Self-monitoring is an important step on the path to phonological awareness.

Sample Activity

Provide students with one sentence, for example a statement. First, ask them to identify content words. Second, ask them to identify the correct word stress for all content words; function words remain unstressed. Third, ask them to identify the content word that should receive the main sentence stress (default). Fourth, ask them to pronounce the sentence. Finally, provide them with the correct answers.

8. Summary

The amount of time it takes to say a sentence in English does not depend on the number of syllables.

All words have their individual stress in isolation.

However, when words are connected into sense groups, and sense groups are connected into sentences, content words keep their stress, and function words lose their stress.

Sentence stress requires that one content word is more prominent than all others. In most cases, the major sentence stress falls on the last content word within a sentence.

Teacher Tip

A mini lesson on sentence stress is available at

https://vimeo.com/241434348

password: 12152017

length: 15 minutes

See Part D for more information.

Part C: Mini Lesson - Word Stress

https://vimeo.com/240243883

password: 12152017

length: 16 minutes

Part C offers the transcript for a mini lesson on word stress.

It is my goal that the video may serve as an inspiration to German EFL Teachers when it comes to the creation of their own materials, either for classroom-based teaching or distance learning. While the above video addresses teachers, you can easily adapt it to a different audience. I, therefore, decided to share the steps that led to the creation of the video.

The mini lesson was designed as a whiteboard animation video, based on Powerpoint. The Powerpoint slides were created from powerpoint templates, animated pictures and clipart from PresentationMedia.org.

The slide show was first recorded in Powerpoint, which was done in an effort to estimate the timing requirements for the transition of slides. The slide show was then exported as an MP4 video file, which was post-processed in iMovie.

iMovie tools were used to add the final voice-over as well as a soundtrack, transitions, a title, and a trailer.

Hello, teachers! Welcome to my show on how to teach "American English Pronunciation". My name is Kerstin, and in today's lesson we are going to talk about how to teach the suprasegmental

stress

to German speakers!

Lesson 1: How to Teach Word Stress

American English is a Stress-Timed Language!

Stress applies to the individual syllables of a word, but also at the sentence level. Some words are more important than others. Two stress-related concepts exist:
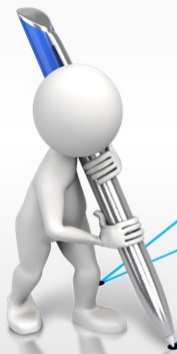
WORD STRESS and SENTENCE STRESS.

This lesson only looks into WORD STRESS and how native speakers highlight a stressed syllable!

What is **word stress**, and why is it so important for American English?

American English is a Stress-Timed Language!

Let's listen to an example:
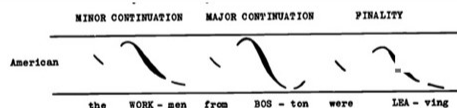
MINOR CONTINUATION	MAJOR CONTINUATION	FINALITY
American		
the WORK - men	from BOS - ton	were LEA - ving

American English is a Stress-Timed Language!

	MINOR CONTINUATION	MAJOR CONTINUATION	FINALITY
American			

the WORK - men from BOS - ton were LEA - ving
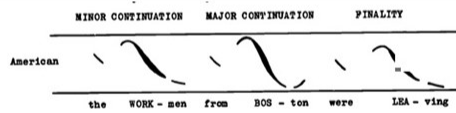
Actually, German is a stress-timed language too!

American English is a Stress-Timed Language!

	MINOR CONTINUATION	MAJOR CONTINUATION	FINALITY
American			

the WORK - men from BOS - ton were LEA - ving

German

die TAN - te der Frau SCHNEI - der ist LEH - re-rin
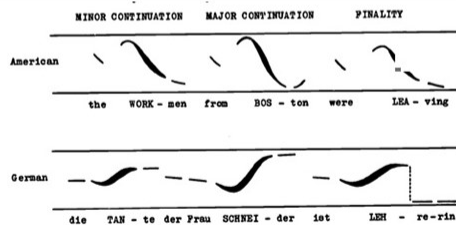
... as you can see, German and English both use stressed and unstressed syllables. However, from the two diagrams you see that intonation differs dramatically between English and German. But intonation is a topic for another lesson.

Actually, native speakers distinguish among three levels of stress: (1) unstressed syllables, (2) lightly stressed syllables, and (3) the most stressed syllable.

In this lesson, we will use small blue dots for unstressed syllables, middle-sized red dots for lightly stressed syllables, and large red dots to mark the most stressed syllable.

most stressed syllable

lightly stressed syllables

unstressed syllables

Here is an example:

claustrophobia

clau : stro : PHO : bi : a

Rule #1: Syllables

1. Words consist of one or more syllables (= units of breath).

Each syllable contains at least one vowel.

Example: claustrophobia

clau : stro : pho : bi : a

Rule #2: Stressed Syllables

2. A stressed syllable is pronounced louder, longer, and with higher pitch.

Vowels of stressed syllables are always pronounced very clearly.

Rule #3: Unstressed Syllables

3. Unstressed syllables appear not only shorter, less loud and with a lower pitch, but vowels are actually reduced!!!

Rule #4: Memorize word stress!

4. Unfortunately: the stress pattern for every word must be memorized when first learning the word

TIP: When learning new words, do not just learn the spelling!!!

Example 1

Let's look at the English equivalent of the German word Taverne.

tavern
ta:vern
ta:vern

The word has two syllables.

Stress falls on the first syllable.

Let's pronounce the word together!

/ **ˈtæ**vərn /

... and that is the transcription you will find in a good English dictionary, except that dictionaries do not use red and blue colors to indicate stress.

The first syllable is pronounced louder, longer, and with a higher pitch. In this case, the vowel 'a' is pronounced very clearly as /æ/.

The second syllable is pronounced less loud, shorter, and using lower pitch. The vowel 'e' is reduced to a schwa sound /ə/.

Stress markings in a dictionary?

Let's review this.

/ **ˈtæ**vərn /

A good dictionary tells you how a word is pronounced in terms of sound units and stress. Sound units (of any language) are represented by symbols collectively known as the International Phonetic Alphabet (IPA). Note, American English makes use of 44 different symbols!

How is stress marked?

a) The superscript mark (ˈ) indicates the strongly stressed syllable.

b) If the word has more than two syllables, the subscript mark (ˌ) is used as well, which indicates a lightly stressed syllable.

c) No symbol is used before an unstressed syllable.

Here is one online dictionary which I found useful because it shows both American English sounds and stress marks:

https://www.collinsdictionary.com

Example 2

Let's look at the English equivalent of the German word unklar

Stress falls on the second syllable.

unclear

un:clear

The word has two syllables.

un:clear

Let's pronounce the word together!

The first syllable is pronounced less loud, shorter, and using lower pitch. The vowel 'u' is reduced to the sound /ʌ/.

The second syllable is pronounced louder, longer, and with a higher pitch. The vowel combination 'ea' is pronounced as /ɪ/.

/ ʌnˈklɪə /

Did you know that many German and English words are similar, but word stress may differ?

Here are some more examples!

German	English
Enzyklopädie	encyclopedia
brutal	brutal
Kalender	calendar
Violine	violin
Geografie	geography
atypisch	atypical

Did you know that many German and English words are similar, but word stress may differ?

Oh well, there is only one way to solve the dilemma:

Remember the appropriate word stress in American English right from the beginning - or go back and check your dictionary!

Let's practice!

Lesson 1: Word Stress

Activity #1

Divide words into syllables

Teacher Tip

Activity #1

In working with word stress, students need to become clear about how a given word divides into syllables.

Again, even for similar words, there might be differences between German and English.

So, let's first look into

Dividing words into syllables
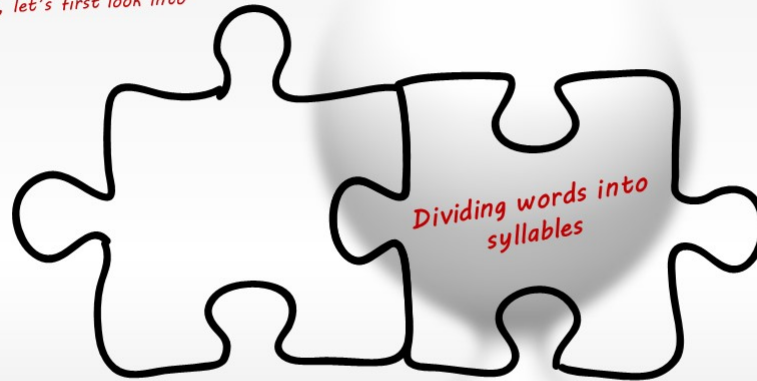
#1a - Divide words into syllables

Here are six words! In your mind, divide each word into syllables. For each word use your fingers and show me how many syllables it has.

Let's begin!

words	
encyclopedia	en : cy : clo : pe : di : a (6)
pesticide	pes : ti : cide (3)
calendar	cal : en : dar (3)
violin	vi : o : lin (3)
geography	ge : og : ra : phy (4)
kleptomaniac	klep : to : ma : ni : ac (5)

#1b - Divide words into syllables

Let's practice some other words:

1. In your mind, divide the word into syllables.
2. Read aloud and clap once after each syllable.
3. You may begin.
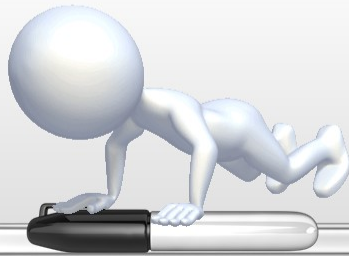
word	
	Now, let's read and clap together!
villain	vil : lain
aloud	a : loud
allay	al : lay
allot	al : lot
foresee	fore : see
alley	al : ley

Lesson 1: Word Stress

Activity #2

Distinguish stressed and unstressed syllables

Teacher Tip

Activity #2

Once students know how to divide words into syllables, they need to become aware about which syllables are stressed and which are unstressed.

So, our next question is:

What kind of stress does each syllable receive?

#2a - Distinguish stressed and unstressed syllables

Remember, each word has only one highly stressed syllable. But which one is it? Listen as I pronounce each word. After I reveal each word, use your fingers to show me a number indicating which syllable is the most stressed one. Ready?

words
encyclopedia
pesticide
calendar
violin
geography
kleptomaniac
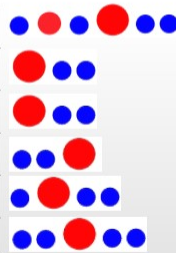
en : **cy** : clo : **PE** : di : a

PES : ti : cide

CAL : en : dar

vi : o : **LIN**

ge : **OG** : ra : phy

klep : to : **MA** : ni : ac

Teacher Tip

Here is another way of working with listening discrimination for two-syllable words. Students have two stress pattern cards:

and
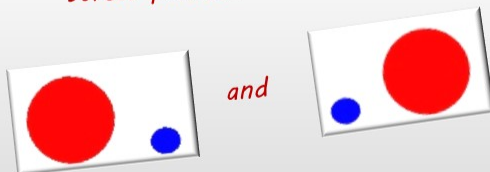
Activity #2

#2b - Distinguish stressed and unstressed syllables

Let's play a game. Show me the card for the stress pattern you hear!

word		Group 1 ●.	Group 2 .●
villain		VIL : lain	
aloud			a : LOUD
allay			al : LAY
allot			al : LOT
foresee			fore : SEE
alley		AL : ley	

Did you notice that the stressed syllables were always pronounced lounder, longer, and with a higher pitch?

Alright!

Lesson 1:
Word Stress

Activity #3

Vowel Reduction

Teacher Tip

Activity #3

By now, the students can identify stressed and unstressed syllables based on pitch, length, and volume.

It's time for us to talk about the pronunciation of vowels in syllables!

#3 – Vowel Reduction

There are two important rules on how to treat vowels in syllables!

RULE A:

Vowels in stressed syllables are never reduced.

RULE B:

Vowels in unstressed syllables are reduced.

#3a – Vowel Reduction

Here is a hint from the dictionary for correct vowel pronunciation!

You found the vowels!

Pronounce the vowel in the stressed syllable clearly, but reduce the vowel in the unstressed syllable.

word	Stress pattern		
villain	🔴⚫	V**I**L : lain	➲ / ˈvɪlən /
aloud	⚫🔴	a : **LOUD**	➲ / əˈlaʊd /
allay	⚫🔴	al : **LAY**	➲ / əˈleɪ /
allot	⚫🔴	al : **LOT**	➲ / əˈlɑt /
foresee	⚫🔴	fore : **SEE**	➲ / fɔrˈsi /
alley	🔴⚫	**AL** : ley	➲ / ˈæli /

What you just witnessed is called "vowel reduction"!

It applies to all unstressed syllables.

Teacher Tip

Emphasize to your students that vowel reduction is not a form of sloppy speech, but is expected by native speakers!

Vowel reduction helps to elevate stressed syllables, because that's what native speakers look for.

Activity #3

#3b - Vowel Reduction

Another round of practice! Try to say each word using vowel reduction, but only in the unstressed syllable.

word	Stress pattern	
palace	🔴 ·	➲ / ˈpæləs /
tonight	· 🔴	➲ / təˈnaɪt /
suggest	· 🔴	➲ / səˈdʒest /
promise	🔴 ·	➲ / ˈprɑmɪs /
abide	· 🔴	➲ / əˈbaɪd /
college	🔴 ·	➲ / ˈkɑlɪdʒ /

Wow, that was hard work!

By now, your students should be able to pronounce individual words with proper word stress according to the information they find in dictionaries with IPA transcriptions!

Activity #4

Lesson 1:
Word
Stress

Other things to know ...

Teacher Tip

There are still a few more things related to word stress which you should teach:

1. *Stress patterns for compound words*

2. *Stress patterns for words with certain prefixes and suffixes*

3. *Changing stress patterns depending on how a word is used (parts of speech)*

Activity #4

#4a – One word, but two different pronunciations?

Hmm, some people say PRO-duce and some say pro-DUCE? What is going on … ?

#4b – One word, but two different pronunciations?

It's time for another game!

Show me one finger, if you hear that the first syllable is stressed. Show me two fingers, if you hear the second syllable is stressed. Ready?

word	1st	2nd
contract	ˈkɑnˌtrækt	
present		priˈzɛnt
produce		prəˈdus
record		rɪˈkɔrd
subject		səbˈdʒɛkt
project	ˈprɑˌdʒɛkt	

#4c – One word, but two different pronunciations?

Let's pronounce each word in two different ways!

word	1st	2nd
contract	ˈkɑnˌtrækt	kənˈtrækt
present	ˈprɛzənt	priˈzɛnt
produce	ˈproʊˌdus	prəˈdus
record	ˈrɛkərd	rɪˈkɔrd
subject	ˈsʌbdʒɪkt	səbˈdʒɛkt
project	ˈprɑˌdʒɛkt	proʊˈdʒɛkt

Well, it is true!

Some words have
more than one pronunciation.

Do you know why?

Correct!

Pronunciation may
vary depending on how
a given word is used
(e.g., as a verb,
a noun, an adjective).

Lesson 1: Word Stress

Activity #5

Independent Practice

Teacher Tip

Activity #5

Listening to authentic and culturally relevant materials can not only help your students with acculturation, but can increase phonological awareness!

Bring "listen and read along" materials into your classroom to showcase how native speakers of American English actually speak.

#5a - Independent Practice

Let's listen for word stress!

#5b - Independent Practice

Read the transcript of the passage you just heard.

Round 1: Read silently for content.

Round 2: Read again and decide the stress pattern for all polysyllabic words.

"This is FRESH AIR. I'm Terry Gross. Muhammad Ali may be the most famous American athlete ever. His life is the subject of books, documentaries and feature films. But our guest, writer Jonathan Eig, says he was surprised to discover that no one had ever done a complete, unauthorized biography."

Source: National Public Radio transcript for the show "New Muhammad Ali Biography Reveals A Flawed Rebel Who Loved Attention".

#5c - Independent Practice

Let's read the highlighted words together!

"This is FRESH AIR. I'm Terry Gross. Muhammad Ali may be the most *famous American athlete ever*. His life is the *subject* of books, *docuMENtaries* and *feature* films. But our guest, *writer* Jonathan Eig, says he was *surprised* to *discover* that no one had *ever* done a *complete*, *unAUthorized biography*."

Source: National Public Radio transcript for the show "New Muhammad Ali Biography Reveals A Flawed Rebel Who Loved Attention".

#5d - Independent Practice

Now, let's listen to the passage again!

"This is FRESH AIR. I'm Terry Gross. Muhammad Ali may be the most *famous American athlete ever*. His life is the *subject* of books, *docuMENtaries* and *feature* films. But our guest, *writer* Jonathan Eig, says he was *surprised* to *discover* that no one had *ever* done a *complete*, *unAUthorized biography*."

Source: National Public Radio transcript for the show "New Muhammad Ali Biography Reveals A Flawed Rebel Who Loved Attention".

Self-Assessment

Pronounce the following words using appropriate word stress!

word	Stress pattern	
palace	● ●	➲ / **ˈpæl** əs /
tonight	● ●	➲ / tə **ˈnaɪt** /
suggest	● ●	➲ / sə **ˈdʒest** /
promise	● ●	➲ / **ˈprɑ** mɪs /
record (v)	● ●	➲ / rɪ **ˈkɔrd** /
college	● ●	➲ / **ˈkɑ** lɪdʒ /

Congratulations!

This brings us close to the end of today's lesson!

Lesson 1: Word Stress

Summary

American English is a Stress-Timed Language!

It means:

1. The amount of time it takes to say a sentence in English does not depend on the number of syllables!!!

2. Instead, it depends entirely on the number of syllables that are highlighted (emphasized, articulated or stressed).

3. Consequently, syllables of a given word are not pronounced with equal length, loudness and pitch.

4. Please, do not pronounce every syllable clearly, with equal loudness or the same pitch. It confuses native speakers, because they do not know what they should focus on as listeners. For them, such speech is monotonous, and it's exhausting to listen to! Therefore, get into the habit of only stressing the key words: words that carry important information.

This presentation was brought to you by

Kerstin Menzer

with permissions from
PresentationMedia·com and
NPR·org

Thank you

© 2017 Kerstin Menzer

Part D: Mini Lesson - Sentence Stress

Part D provides the transcript for a mini lesson on sentence stress. The format of the video is identical to the mini lesson on word stress. It was designed and produced in the exact same way (see Part C). In addition, this video utilizes a tool called Audacity. Audacity is a free open source digital audio editor and recording computer software application, available for Windows, macOS/OS X, Linux and other operating systems (see www.audacityteam.org).

https://vimeo.com/241434348

password: 12152017

length: 15 minutes
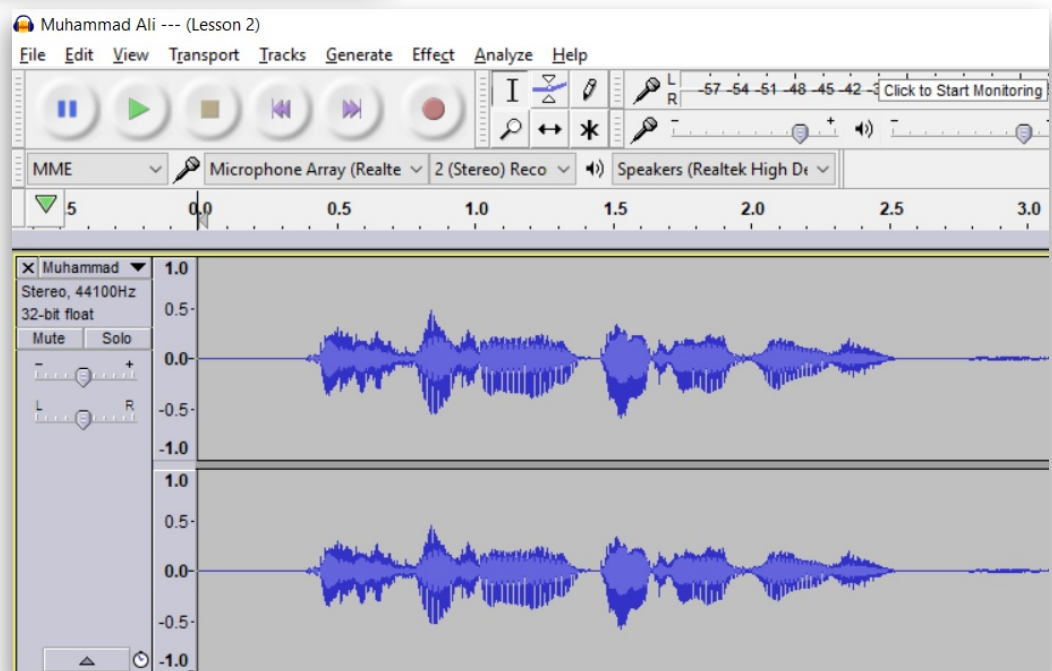
Audacity can help students to sharpen phonological awareness, because the tool visualizes how word and sentence stress manifest themselves in a given sample of spoken language. In turn, students can view recordings of their own voice and compare them to recordings of native speakers.

Hello, teachers! Welcome to my show on how to teach "American English Pronunciation". My name is Kerstin, and in today's lesson we are going to talk about how to teach the suprasegmental

stress

to German speakers!

Lesson 2: How to Teach Sentence Stress

American English is a Stress-Timed Language!

Stress applies to the individual syllables of a word, but also at sentence level. Some words are more important than others. Two stress-related concepts exist:

WORD STRESS and SENTENCE STRESS.

This lesson only looks into SENTENCE STRESS and which words native speakers highlight because they are more important!

What is *sentence stress*, and why is it so important for American English?

To begin with, let's talk about three important concepts for sentence stress:

rhythm (metrical foot)
content words
function words

Rule #1: Rhythm

❑ Syllables of a sentence are grouped together causing American English to sound like

DUM di-di / DUM di-di / DUM di-di / DUM

This is called a metrical foot. Think of using a metronome for speech!

Rule #1: Rhythm

❑ Stress is important at word level, but functions beyond it.

It is the combination of unstressed, lightly stressed, and strongly stressed syllables that creates the overall rhythm of American English.

Here is our example again. Do you recognize the rhythm?

The workmen from Boston were leaving.

American   the   WORK - men   from   BOS - ton   were   LEA - ving

DUM di di DUM di di DUM
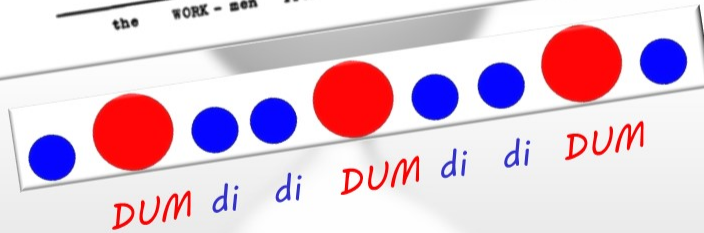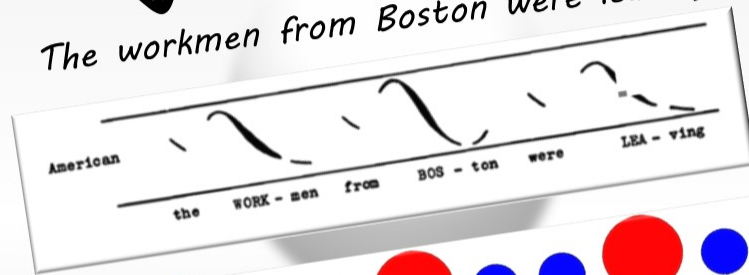
Rule #1: Rhythm

❏ *Maintaining a regular beat from stressed to stressed syllable and reducing the intervening unstressed syllables is really important for spoken American English.*

The length of unstressed syllables is shortened through vowel reduction !!!!

Rule #2: Content Words

Which words must be stressed in a sentence?

Content words (= words that carry information)

Content words:

nouns, main verbs, adverbs, adjectives, question words, demonstrative pronouns, possessive pronouns, negative contractions

Back to our example: Which words carry the important information?

The workmen from Boston were leaving.

American the WORK - men from BOS - ton were LEA - ving

Who? The WORKman Where? from BOSton What? were LEAving.

Rule #3: Function Words

Which words must not be stressed in a sentence?

Function words (= words that do not carry information but are important for grammatical reasons)

Function words:

determiners, prepositions, auxiliaries, conjunctions, personal pronouns, possessive adjectives, demonstrative adjectives.

Let's practice!

Lesson 2:
Sentence
Stress

Activity #1

Content Words
vs. Function Words

KEY POINT

All words have their individual stress in isolation.

When words are connected into sense groups, and sense groups are connected into sentences, content words keep their stress, and function words lose their stress.

So, let's first identify
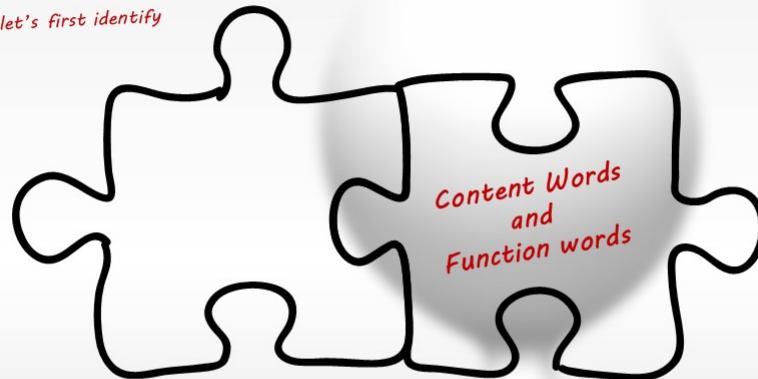
Content Words
and
Function words

in a given sentence!

#1a - Content Words

Find the content words in the following sentence and underline them!

Dogs chase cats.

Content words:

nouns, main verbs, adverbs, adjectives, question words, demonstrative pronouns, possessive pronouns, negative contractions

#1a - Content Words

Correct! All three are content words.

Dogs chase cats.

Remember, content words keep their stress.

#1b – Function Words

Let's change the sentence and add some function words.

Dogs   chase   cats.

My dogs   chase   cats.

Function words:

determiners, prepositions, auxiliaries, conjunctions, personal pronouns, possessive adjectives, demonstrative adjectives.

Remember, function words lose their stress.

#1b – Function Words

I will add more function words. Try to pronounce each sentence before I reveal the correct sentence stress.

My dogs   chase   cats.

My dogs   like to chase   cats.
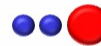
My dogs   might have been chasing   cats.

My dogs   might have been chasing   some of the cats.

KEY POINT

Stressed syllables tend to occur at regular intervals, no matter how many unstressed syllables fall in between.

#1c - Sentence Stress: Step-by-Step

Let's do an example together for a sentence with poly-syllabic words.

His sister-in-law recently graduated from the university.

Step 1: Identify and underline all content words.

His <u>sister-in-law</u> <u>recently</u> <u>graduated</u> from the <u>university</u>.
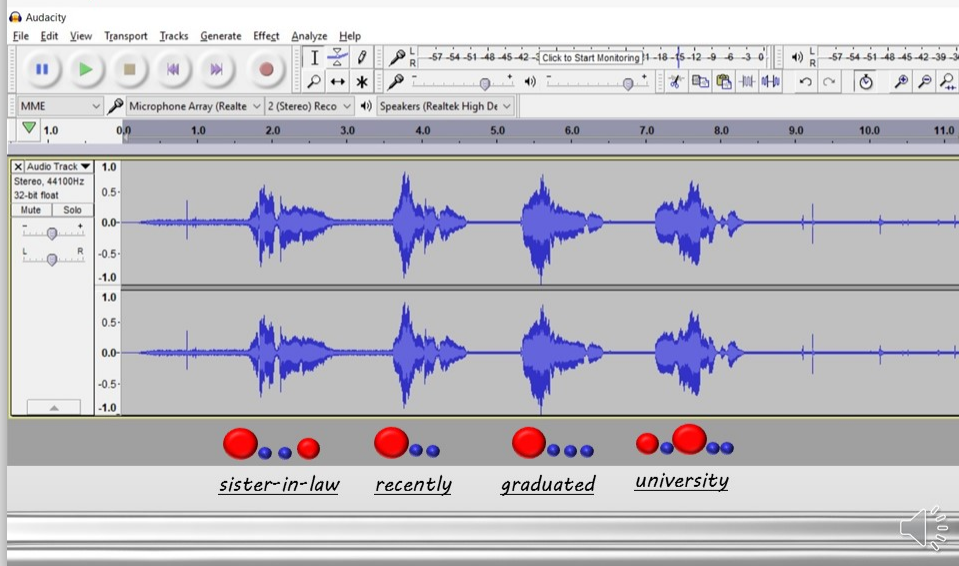
#1c - Sentence Stress: Step-by-Step

Step 2: Identify the word stress for each content word.

His _sister-in-law_ _recently_ _graduated_ from the _university_.

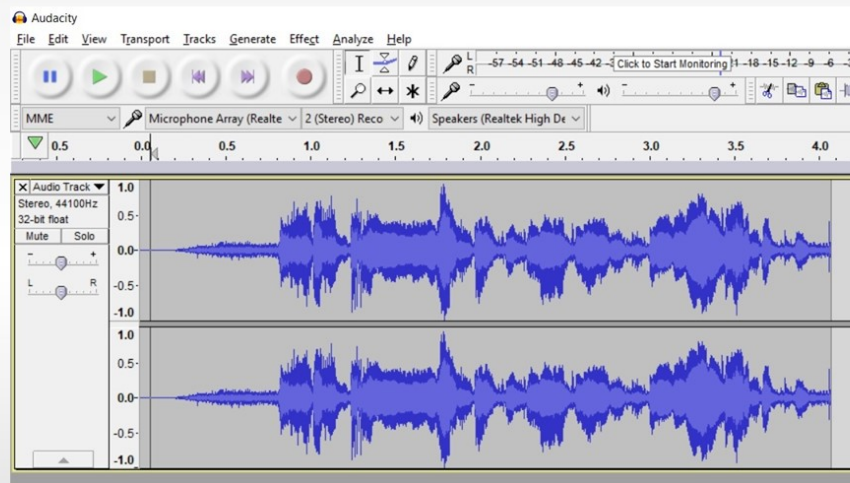Let's look at the stress pattern for these words again through the lens of a spectrum analyzer.
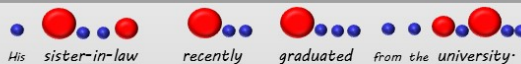
sister-in-law   _recently_   _graduated_   _university_

TIP

www·audacityteam·org

The tool I just used is called

Audacity®

It is free, open source,
cross-platform
audio software
for multi-track recording and
editing·

#1c – Sentence Stress: Step-by-Step

Step 3: Back to our
sentence· Let's add the
correct type of stress to
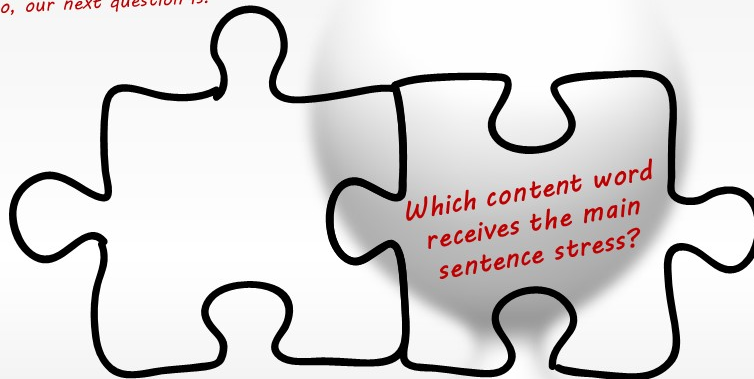all function words·

His sister-in-law recently graduated from the university·

KEY POINT

While all content words receive major word stress, one content word within the sentence will receive greater stress than all others.

So, our next question is:

Which content word receives the main sentence stress?

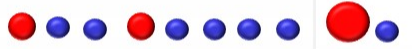## #2 - Main Sentence Stress

I will say a few sentences. Predict which content word receives the main sentence stress.

My <u>mother</u> <u>bought</u> a <u>new</u> <u>car</u>.

<u>Peter</u> has <u>eaten</u> all of the <u>pretzels</u>.

<u>Little</u> <u>Susan</u> <u>always</u> wants to <u>play</u> with <u>me</u>.

<u>Bob</u> <u>likes</u> <u>Mike's</u> <u>last</u> <u>suggestion</u> <u>best</u>.

Did you notice that the main sentence stress fell always on the last content word within each sentence?

73

KEY POINT

In most cases, the main sentence stress falls on the last content word within a sentence.

However, it also depends on what the speaker intends to emphasize (=intonation)!

Alright!

Activity #3

Lesson 2: Sentence Stress

Contrastive Stress

KEY POINT

In most cases, the main sentence stress falls on the last content word within a sentence.

Here are two different cases:

(1) To emphasize contradictions
(2) To emphasize choices

#3a - Contradictions

Listen to the following dialog. Predict which content word receives the main stress in each sentence.

A: I hear Susan got the measles .
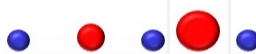
B: No, she got rubella.

#3b - Choices

Another dialog. Predict which content word receives the main stress in each sentence.

A: Did Susan buy a new car or a second-hand one?

B: She bought a new car.

Bare in mind ...

Main sentence stress falls typically on the last content word unless the speaker wants to redirect the listener's attention to a different content word.

Activity #4

Lesson 2: Sentence Stress

Other things to know ...

Teacher Tip

There are still a few more things related to sentence stress which you could teach:

1. Nursery Rhymes

2. Limericks

3. Classical English Poetry

Activity #4

#4 - What's the metrical foot you hear?

Read aloud the following poem, and try to find the metrical foot in this classical nursery rhyme:

Jack and Jill went up the hill
To fetch a pail of water
Jack fell down and broke his crown,
And Jill came tumbling after.

Teacher Tip

Activity #5

Listening to authentic and culturally relevant materials can not only help your students with acculturation, but can increase phonological awareness!

Bring "listen and read along" materials into your classroom to showcase how native speakers of American English actually speak.

#5a – Independent Practice

Let's look at the following passage and underline the content words.

Content words:
nouns, main verbs, adverbs, adjectives, question words, demonstrative pronouns, possessive pronouns, negative contractions

"This is FRESH AIR. I'm Terry Gross. Muhammad Ali may be the most famous American athlete ever."

Source: National Public Radio transcript for the show "New Muhammad Ali Biography Reveals A Flawed Rebel Who Loved Attention".

#5a - Independent Practice

Here are the content words:

Content words:

nouns, main verbs, adverbs, adjectives, question words, demonstrative pronouns, possessive pronouns, negative contractions

"This is FRESH AIR. I'm Terry Gross. Muhammad Ali may be the most famous American athlete ever."

Source: National Public Radio transcript for the show "New Muhammad Ali Biography Reveals A Flawed Rebel Who Loved Attention".

#5b - Independent Practice

Now, let's listen to the same passage!

Part D: Mini Lesson - Sentence Stress

Let's listen again while viewing the passage in the spectrum analyzer:

This is FRESH AIR.

I'm Terry Gross.

Muhammad Ali may be the most famous American athlete ever.

#5c - Independent Practice

Let's slow down. Find the content word that has the main sentence stress.

This is FRESH AIR.

I'm Terry Gross.

Muhammad Ali may be the most famous American athlete ever.

Source: National Public Radio transcript for the show "New Muhammad Ali Biography Reveals A Flawed Rebel Who Loved Attention".

Lesson 2:
Sentence
Stress

Self-Assessment

Self-Assessment

Peter always wants to work alone.

1. Underline all content words in the following sentence.

2. Decide the word stress for each word.

3. Which content word receives the main sentence stress?

4. Read the sentence aloud.

5. Listen as I say the sentence.

Peter always wants to work alone.

Congratulations!

This brings us close to the end of today's lesson!

Lesson 2: Sentence Stress

Summary

American English is a Stress-Timed Language!

It means:

1. The amount of time it takes to say a sentence in English does not depend on the number of syllables!!!

2. Instead, it depends entirely on the number of syllables that are highlighted (emphasized, articulated or stressed).

3. Consequently, syllables of a given word are not pronounced with equal length, loudness and pitch.

4. Please, do not pronounce every syllable clearly, with equal loudness or the same pitch. It confuses native speakers, because they do not know what they should focus on as listeners. For them, such speech is monotonous, and it's exhausting to listen to! Therefore, get into the habit of only stressing the key words: words that carry important information.

American English is a Stress-Timed Language!

5. In a given sentence, content words are important. Those must be stressed. Function words remain unstressed.

6. Sentence stress requires that one content word is more prominent than all others. In most cases, the main sentence stress falls on the last content word within a sentence.

7. However, this rule may change if the speaker chooses to redirect the listener's attention!

This presentation was brought to you by

Kerstin Menzer

with permissions from
PresentationMedia.com and
NPR.org

Thank you

© 2017 Kerstin Menzer

Part E: Copyright Permissions

1. PresenterMedia.com

The powerpoint template, powerpoint animations, and presentation clipart are used with permission from presentermedia.com. At the time when this project was created, the author had purchased a one-year subscription license for unlimited downloads.

Order receipt #245562 - PresenterMedia.com   Inbox   x

PresenterMedia.com <support@presentermedia.com>
to me ▼

Hello Kerstin,

This is the receipt of your order placed on
www.PresenterMedia.com on 10/06/2017.
4416 S. Technology Ln
Sioux Falls, SD 57106 USA
(605) 274-2424
support@presentermedia.com

Order Number: 245562
Login Username: kerstin.dora.menzer@gmail.com

SOLD TO:
Kerstin Menzer

United States

Your Order

	Price	Total

ONE YEAR Save 40%

Full access for 365 days!
Save 40% now. $59.95 $59.95

  • Save 40%
  • Unlimited Downloads

Retail Price
$99.95 USD

$59.95

One Year Subscription

	Subtotal:	$59.95
	Tax:	$
	TOTAL PAID:	$

Paid using PayPal

THANK YOU FOR YOUR PURCHASE!

2. npr.org

The author obtained permission from National Public Radio (NPR) to utilize podcasts and their transcripts as part of this project as long as NPR's "Terms of Use" are not violated

(http://www.npr.org/about-npr/179876898/terms-of-use).

From: NPR Audience & Community Relations [mailto:npr_response@npr.org]
Sent: Sunday, October 22, 2017 5:12 PM
To: Permissions
Subject: Case #667019 - Dear Sir or Madam,I'm a graduate student writi…

Message: Dear Sir or Madam,

I'm a graduate student writing my masters thesis in teaching
English as a Second Language (ESL) at the University of San Francisco.
My thesis project is to illustrate how teachers can use authentic
listening materials to teach ESL pronunciation.

Having been a long-time fan of NPR's program "Fresh Air", I
would like to get permission to utilize podcasts and the corresponding
transcripts for demo lessons as part of my master's thesis. I plan on using
NPR's materials for the analysis of stress, intonation, linking and pausing in American
English.
I won't be making any money off this, it's purely for nonprofit/educational purposes.

Thank you very much for looking into my case.

Kind regards,
Kerstin Menzer

Listener name: Kerstin Menzer
Email: kmenzer@usfca.edu
Country: United States
Zip: 94954
Station: KQED-FM
Case #: 667019
Date: 22 Oct 17
Time: 05:11PM EDT

2. npr.org (continued)

The author obtained permission from National Public Radio (NPR) to utilize podcasts and their transcripts as part of this project as long as NPR's "Terms of Use" are not violated

(http://www.npr.org/about-npr/179876898/terms-of-use).

RE: Case #667019 - Dear Sir or Madam,I'm a graduate student writi... Inbox ×

Permissions <Permissions@npr.org>
to kmenzer

8:30 AM (3 hours ago)

People (2)

Permissions
permissions@npr.org

Mon, Oct 23, 2017 at 8:30 AM

No details

Hi Kerstin,

You are welcome to link or embed to NPR content from your page, along with a description of the report, if you would like.

Here are the rules for linking:

(from NPR's Terms of Use page at NPR.org)

NPR encourages and permits links to content on the NPR Services. However, NPR is an organization committed to the highest journalistic ethics and standards and to independent, noncommercial journalism, both in fact and in appearance. Therefore, the linking should not (a) suggest that NPR promotes or endorses any third party's causes, ideas, web sites, products or services, or (b) use NPR content for inappropriate commercial purposes or in any way that is unlawful or harmful to any other person or entity. We reserve the right to withdraw permission for any link.

I hope this meets your needs.

Thanks,
Jenna

NPR | Jenna Molster | Manager, Rights & Permissions | jmolster@npr.org |202.513.2057
1111 North Capitol St., NE, Washington, DC 20002

Content Word	words that carry meaning. Examples: nouns, main verbs, adjectives, possessive pronouns, demonstrative pronouns, interrogatives, not / negative contractions, adverbs, adverbial participles
Diphthong	a sound formed by the combination of two vowels in a single syllable, in which the sound begins as one vowel and moves toward another (as in *coin*, *loud*, and *side*). ◦ a digraph representing the sound of a diphthong or single vowel (as in *feat*). ◦ a compound vowel character; a ligature (such as *œ*).
Function Word	words that are important for grammatical / structural reasons. Examples: determiners, auxiliary verbs, personal pronouns, possessive adjectives, demonstrative adjectives, prepositions, conjunctions.
Intonation	manner of utterance; specifically**:** the rise and fall in pitch of the voice in speech
Rhythm	a strong, regular, repeated pattern of movement or sound.
Sentence Stress	the manner in which stresses are distributed on the syllables of words assembled into sentences
Syllable	a unit of pronunciation having one vowel sound, with or without surrounding consonants, forming the whole or a part of a word; e.g., there are two syllables in *water* and three in *inferno*.
Syllabification	the division of words into syllables, either in speech or in writing.

Vowel	a speech sound that is produced by comparatively open configuration of the vocal tract, with vibration of the vocal cords but without audible friction and is a unit of the sound system of a language that forms the nucleus of a syllable. ◦ a letter representing a vowel sound, such as *a,e,i,o,u*.
Vowel Reduction	In phonetics, *vowel reduction* is any of various changes in the acoustic quality of *vowels*, which are related to changes in stress, sonority, duration, loudness, articulation, or position in the word, and which are perceived as "weakening". It most often makes the *vowels* shorter as well.
Word Stress	the manner in which stresses are distributed on the syllables of a word