Back to Basics: Accent Modification
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- [Amy] At this time it is a pleasure to introduce Robert McKinney to all of you. He is going to be presenting on Back to the Basics: Accent Modification. Robert McKinney is the author of "Here's How to do Accent Modification, "A Manuel for Speech Language Pathologists." He's on the part time faculty at SDSU where he supervises graduate students in the Accent and Communication Training Program and teaches undergraduate phonetics. He is the lead SLP at the Sweetwater Union High School District and is, and he had a 26 year career teaching ESL and conducting teaching training. He holds an MA in communication disorders, an MA in education, and an MA in international relations. He has served on the Board of Directors of the California Speech-Language-Hearing Association and CoreSpan. Bob speaks six languages, has lived in six countries, and has worked with clients from over 80 nations. So welcome Robert, it's a pleasure to have you with us. You can go ahead and turn on your mic.

- [Robert] Thank you Amy and Kathleen, and thank you to everyone at speechpathology.com for all of your help in making this presentation possible. I'm a longtime subscriber to speechpathology.com, so it's truly an honor to be invited today to give this presentation. Welcome to Back to Basics: Accent Modification. Several years ago, I came across a post on social media and it read in the following way: "I've been working as a speech language pathologist "for several years now, "but I'm interesting in changing it up a little, "and have been looking into getting involved "in accent modification. "I know it's part of our scope of practice, "but it's a foreign area to me, "and I have no idea where to begin." This presentation is designed to give SLPs an idea about where to start in the wonderful world of accent modification. We are, as SLPs, experts in communication, and even though it is something that's a part of our scope of practice, a lot of SLPs are unsure about how it works. So this introductory presentation is designed to give you an overview of accent modification. We will be diving into some advanced topics, so don't get discouraged if anything looks a little bit too intricate. This is designed to really just give you an overview of how this work, and I would really encourage anyone who's interested in working with this wonderful group

of clients to give it a try as soon as you have the opportunity. The learning outcomes for today's webinar are the following. After this course, participants will be able to: explain the roles of accentedness, intelligibility, comprehensibility, and naturalness in second language phonological acquisition, select appropriate segmental targets for accent modification based on the principles of contrastive analysis, functional load, intelligibility, and naturalness, identify suprasegmental targets for clients to maximize their ability to communicate effectively. Let's have a look at some accent frameworks. I'll start with a question: what is an accent, and most of us know intuitively what an accent is. We have our understanding of it. In fact as infants, we can identify them, and yet to really understand them in detail, it can be a little bit complicated. There are two main types of definitions of an accent, and I'm gonna give you examples of both.

A broad definition could be exemplified by the words of David Crystal in 2008, and he stated that an accent represents features of pronunciation which identify where a person is from regionally and socially. So this is a very broad definition. If you look at this definition, it implies that we all have accents. In fact, if you think about it, that's a logical idea: we all have accents. An example of a more narrow definition would be the words of Thomas Scovel from 1969, and he stated that an accent represents phonological cues, either segmental or suprasegmental, which identify the speaker as a nonnative user of the language. Now, if we look at this more narrow definition of an accent, then we can say that some people have an accent and others don't. If you're a native speaker of a language, we would say you don't have an accent, and then nonnatives do have an accent. So we have these two, almost in some ways, competing definitions. Which one do you think is used more often out in the real world when people are talking about accents? Well I think it's clear that it is actually the narrow definition. We constantly hear people talking about, they'll make statements such as, "He has an accent," or, "I don't have an accent," "Do you think she has an accent?" So we're using the narrow definition quite a bit, and it leads us to wonder, why do we use that narrow definition? Well, I think we do use the narrow definition

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because accents are so powerful. Accents are something that can really bind us and create this group community feeling. Everyone has their individual idiolect, and yet we have some commonalities that can join us so that we identify as a group, that we speak a particular way and we can identify where we are from. Then the problem with that, because that's extremely powerful and has helped our species, but the problem with that is it also creates an otherness fact, so there, some factor, so there are some people who feel outside of the group, and this creates, at times, some tension and some problems. So accents are extremely powerful, but because of that, we can have some difficult situations for those who do not fit in a particular accent group.

And accents are extremely powerful and they're extremely salient. So here are a couple accent facts that have been demonstrated by research. We can recognize an accent in as little as 30 milliseconds of speech. We can recognize accents when the speech is provided backwards, or if it's heavily filtered. We can even recognize accents in languages we don't speak, and we presume that infants can recognize accents. So they're extremely salient and powerful. Why do we have accents?

Well, there's no clear answer on that, but we often look at this idea called the critical period hypothesis, and I'll be looking at a subset of that called alternate attainment, but to demonstrate the idea of critical period, we're looking at what happens when you acquire a language at a specific age. So I'm going to give you two, basically two ideas here, two different examples of how this may work. We're gonna start with a younger girl, and we'll imagine that she's six years old, and she comes from another country. An American couple adopts her. She doesn't speak English at all, but they adopt her, bring her to the United States, and they raise her speaking entirely in English. She goes to school in English and makes all her friends, communicates with her family in English. If we visit her at the age of 20, do you think that she would sound like a native speaker of English or a nonnative speaker of English? Most people agree that she would sound like a native speaker of English, that we wouldn't be able to distinguish her from

someone who had been born in the United States. Now, we can compare that to a woman in her, let's say that she's 20 years old, and she's also from another country, doesn't matter which one, and she's learned a little bit of English in high school and perhaps in college. She marries an American, they communicate in English, he doesn't speak her language. So she continues to, she moves to the United States, speaks English with her new husband, she raises children and talks to them primarily in English. She gets a job and communicates all day long in English. Now, we can give her even some extra time, and we can visit her when she's 40 years old, so we, she's been in the country about 20 years. The question here is, do you think she would sound like a native speaker of English or a nonnative speaker of English?

Now, most people would say that she would sound like a nonnative speaker of English. In fact, I would say it's virtually guaranteed that we can assure that it's essentially 100% that you would be able to identify her as someone who was not born in this country. So because of that factor, we know that something seems to change here. Something happens in the period between six and 20, and we don't know exactly when it happens. It's sometimes called a sensitive period, because there's no clear cutoff. It seems to happen around puberty, even though it's not related to puberty.

So something seems to happen at a critical point, and after that point, what we call ultimate attainment, in other words, if you can sound exactly like a native speaker and acquire second language phonology exactly in the same way as a native speaker, something seems to happens to prohibit that after a certain point. So what does that mean for us, because we know that accent modification, a lot of clients are coming to us and are really looking for this goal, and many people out in the real world are thinking about this as their goal. So we have to examine this. Now the other area that I looked into when I was researching for my book was I tried to look at some other forms of evidence, and I had a look at acting and espionage, because I believe that these are the only two professions in the world where sounding like a nonnative speaker can

create some difficulties for you if you don't sound exactly like a native speaker. So every other job, air traffic controller, lawyer, no matter what it is, people can do proficiently and extremely well if they have an accent. It shouldn't interfere at all. Yet acting, if you're trying to portray someone from a particular country, then it wouldn't be possible if people right away couldn't imagine that you were born in that country. The same thing with an undercover spy. It would be extremely challenging if you were trying to infiltrate an organization and people could right away tell that you were not born in that country, if you're pretending to be a native speaker. When I looked through, I was not able to find any real examples of this in acting or espionage. Now, people are welcome to add in the chatroom later if they can think of some examples, but often what happens is when I mention this to people, they'll quickly talk about actors who speak English as their first language.

So you might imagine somebody from England who's able to pass for an American on a television show or movie, and there are many examples of that. So we know that that's possible. But if we're talking about someone whose language is something other than English and with no prepubescent exposure to English, is able to portray an American in a movie or television show, and you're probably not gonna be able to find many examples. It has been attempted a few times, and if we do find examples in the chatroom or later, you're probably going to find that they're speakers of a closely related languages, one of the Germanic languages of the Indo European language families, for example, it might be somebody from Holland or Denmark for example or Germany. But you're not gonna find somebody even from the Romance Branch. So we know that this is not something that really is attainable. It's extremely rare if not impossible for someone who's acquiring the phonology of a second language after puberty to pass for or sound exactly like a native speaker. But what we need to do then is we really have to flip this around for our clients, and when we work in the world of accent modification, we have to say, and look at it from the other angle and say it's normal to have an accent. We have to encourage our clients to think they're not doing

anything wrong. Everything is going the right way. They're supposed to have an accent. But what we have to do is we have to change the focus of accent modification, and we have to change it to effective communication. So to some extent, and we'll get into more details about this later, even though this seminar is called accent modification, we are really not focused on the accent itself. We're going to take that part off the table. What we're focused on is effective communication, and when we ask our clients at times, we'll ask them, "Do you think you can be "a more effective communicator in English "than a native speaker," they at times are a little bit hesitant to answer yes, but we encourage them to shout it out, "Yes, of course!"

We, I think each of us, we know nonnative speakers who are equally effective or more effective communicators in English than native speakers. In fact, I hope in today's audience, I hope we have many nonnative speakers here who are SLPs, and I know out there in the real world there, or in the future, there are many SLPs who are nonnative speakers. My wife is one of those as well. So we know that it's achievable to be an effective communicator in English, even more effective than a native, even if you have an accent, so we are going to try to take that piece off of the table.

But we do know that accents have some significant impacts for people, and I'm going to start by reading some words that were written by a former client. She stated, "I moved to the U.S. at the age of 20, "and starting a new life "required speaking as a second language. "Even though learning a new language "brings a new identity and culture "and it's a way to express that we're the same, "an accent barrier can translate to: we're different. "In addition, people express their excitement "when they meet you, "but the first question they ask is where are you from? "And sometimes based on the answer, "there will be judgment. "If you've never experienced learning another language "and you meet someone who has a pronounced accent "when they speak English, "the fact that they can't speak like you "reinforces your judgment. "Maybe you feel they're less intelligent, "less trustworthy, or less educated. "However, if the person

who doesn't look like you "speaks English fluently with no accent, "you will have a different perspective. "Having an accent can have a significant impact "on your career and social life." I think she worded it extremely well. So the accent can have a significant impact in a variety of ways. It can have an impact on communication of course, and this is sometimes called linguistic stereotyping, so when someone, when a native speaker hears someone speaking with a nonnative accent, they will use some form of accommodation.

For example, they may acknowledge the accent or change their speaking style. At times it can lead to some negative consequences such as becoming impatient, a power imbalance can be created, sometimes native speaker will feign comprehension, or they'll overaccommodate, for example, by using foreigner-talk. We know from the research as well that nonnatives are considered to be less intelligent, less diligent, less loyal, less trustworthy. I almost hate to read that. There are very many impacts on relationship as well. So we know that there are impacts on employment, housing, legal system, education, educational opportunities of course, customer service, even in our own field.

So again, we are really in desperate need of nonnative speakers or speakers of other languages in our field because of the linguistic diversity in our country, and yet it can be extremely challenging for someone whose native language is not English to get through our rigorous graduate programs and undergraduate programs. So really, we need to make sure that we have this focus that we are also, in our own field, very aware of the barriers that accent can prevent, and in case, just for all the nonnative speakers who are listening to today's talk, there's good evidence that nonnative speakers can provide excellent accent modification as well, and the accented self should not interfere with that. Now let's take a look at some different accent frameworks. Well, we talked about accentedness, and the idea of accentedness here is that the accented self, as much as possible, we're trying to take that away from any

kind of effect on communication, as much as possible. So what we're imagining here is, if you meet somebody from Ireland, for example, and you know that they're not from the United States, so you know that they're not a native speaker of your particular dialect of English, and yet even though they have an accent, it really, we would presume, have very little impact on your communication. So that's the piece that we're trying to take off the table, right, just the accent itself, what sounds different. We have the idea of intelligibility. Now, this is extremely important because all communication involves sharing ideas. You have an idea in your head, you communicate it, and you hope as much of that translates as possible into your listener's head. So that's the idea of communication.

So if you have intelligibility, if you have any issues with intelligibility, then that's going to interfere. So basically these two ideas over time have been contrasted, and there was a movement in the ESL world many, many years ago to kind of challenge these two ideas, to sort of, they battled each other out. Accentedness, in a sense, was called the nativist principle, in other words, everyone should sound like a native speaker, and intelligibility, the intelligibility principle was, no, they don't have to sound like native speakers, they just have to intelligible. So these two formed the key framework for many, many years in the world of pronunciation instruction or accent modification. Now, two researches from Canada, Derwing and Munro, who are pioneers in the field, and many of us in the accent owe a great deal to them for the amazing work that they have done and continue to do.

They basically looked and separated out accentedness and intelligibility as much as they could. They added a third dimension I'll talk about in a second, but they were very instrumental in pointing out that, for example, you can have some speakers, you could take a group of speakers who have 100% intelligibility rating, so they're highly intelligible, and yet their accentedness rating can vary greatly. So you might have someone who's 100% intelligible who's considered to be highly accented, and another

person who's 100% intelligible with very little trace of an accent that raters might say, "I really could barely hear the accent at all." So we see that in that direction, the connection is not clear. Now, in the other direction, it's a little more complicated of course, because if someone is, has very little intelligibility, then the accentedness rating is almost automatically always going to be higher. So we can see that this relationship we can separate out to some extent, but the main point is that you can be highly intelligible, and still have very high accentedness ratings. Now, they added a third dimension. I think this was a great idea, a very brilliant idea. They added the idea of comprehensibility. What they were getting at here was they were saying it's not really enough to be just intelligible, because often, if someone is intelligible, you may be able to write down or transcribe everything that they said, and yet it may cause challenges, it may take longer to process, it may be difficult. So they really just defined comprehensibility as ease of understanding.

Now people have pointed out that to some extent, intelligibility and comprehensibility are synonymous, and they were trying to separate these out, and I think it made a lot of sense, the area that they were going for, trying to decide, trying to describe the fact that intelligibility alone is not enough for our communicative success. I would propose, actually, a different way of looking at this framework here, and I have been arguing that we need to include naturalness. Now naturalness is something that we do use in our field quite a bit, so SLPs are familiar with the concept of naturalness of course. So many of you work with, for example, clients who stutter, or you might have clients who are dysarthric or with alaryngeal speech, we have clients on the autism spectrum disorder. So basically, we are focused on naturalness to some extent. This is something that we have done some work with in the past, we have some good research. I think as SLPs, this is our take on it. I think this fits in with the way we view communication, because we do understand that it's not really enough to just be understood, but you also have to not stand out so much, because if you're not speaking naturally, then people are going to focus much more on how you're saying

something versus the way that you said it, and so this can cause some challenges. For example, if I said, "I will be working "on accent frameworks," of course that would be highly intelligible. Sounded strange though, didn't it? So that caused you to wonder what I was doing, and that was the problem and interfered with communication. So what I'm proposing then is that I think the best way to view this is to really take accentedness off the table. We don't have to talk about the accented self. It's something that's unrealistic and unattainable for our clients, and it's not important. It doesn't matter, we don't need to worry about the accented self. Then we can also collapse comprehensibility into intelligibility, and add this new factor of naturalness.

So it's just a little bit of a reworking of the traditional frameworks that were created by Derwing and Munro. I think it fits a little bit better with the way we as speech language pathologists view communication, and in our clinic at SDSU in the Accent Communication Training Program, we refer to this as being clear and natural. It's just a little bit easier for the clients to absorb it that way, and, but we view this as the main way to achieve effective communication. SLPs have a bias towards intelligibility, so I see this all the time when I talk about accent modification, because we are so focused on accuracy, and yet we also know that a big part of our field involves creating natural speech, and I think we have to balance this out just a little bit more when we're working with our accent modification clients.

Let's take a look at accent modification, a little bit of background about the providers and the settings et cetera. Well, who are the providers? Well, the frontline providers, of course, the majority of providers in the world, really are the ESL teachers, because if someone is learning English for the first time, they are also getting a form of accent modification right from the beginning. Because if you're learning a new word, then you have to learn how it's pronounced, and of course introductory courses in English are going to teach you the phonemic inventory of English to some extent. So those are the number one providers, because anyone who's learning the language is going to be

getting some training on how to pronounce the words. But accent modification can be provided by virtually anyone. So it's often provided by ESL teachers, it can be provided by voice coaches, dialect coaches, and of course SLPs, and that's what we're gonna be focusing on today. So for the rest of today's talk, we will be focused on SLPs providing accent modification. We know, we've mentioned this a few times, that it is in the scope of practice, and ASHA mentions it several times in the scope of practice as an elective service for SLPs. There can be at times a little bit of a, sort of a misunderstanding. You'll hear people say things like, "Well, my friend is certified in accent modification." So we get this term certified. That often refers to someone who took a particular program. It might be a, so someone who has a business and offers a certain type of training system.

But ASHA is very clear that we can do everything in our scope of practice, we're trained to do that right out of the gate, as long as we follow the code of ethics, and the code of ethics really is very clear about the fact that if there are any areas that you feel that you're not well-prepared for, you need to close that gap, and that's part of what we're gonna talk about today, is just trying to give you the background so that you can go and figure out what kind of additional training you might need to get. But there's no need for any kind of extra certification or anything like that. SLPs are wonderful providers of accent modification. Where is it provided? Well, we have a variety of settings.

These photos are from the SDSU Accent Communication Training Program, and that's a common place, a common place. So if we imagine this is not a disorder or disability, so insurance doesn't pay for this, and that's why it's often provided at graduate communication clinics, because this is something that can be provided. We have a need for it, and people can come and get some training in that. But the number one setting for accent modification provided by SLPs would be in private practice. So there are many, many private practitioners out there, and there are a variety of models for

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that, too. So probably the most common would be someone who's in private practice and has a variety of different clients, maybe fluency clients, for example, and then takes on additional accent modification clients. That's very common. We also have some practitioners who are full-time accent modification providers. Then we also have many SLPs who are, for example, working full-time in the hospitals or in the schools, and then on the side, decide that they want to take a few accent modification clients. So there are a variety of different ways that this is provided, but it's very often in a one-on-one setting with the client paying for the services, or it can be in small groups or even onsite, onsite training.

Now, who are the clients? Well, the clients come from all over, and before I talk about, a little more about where they come from, I wanna mention that when you ask people about accent modification, why they got into accent modification, what they enjoy about it, clients comes up almost every time very quickly. We love the clients in this field. The clients are wonderful, they're highly motivated, educated individuals, and it can be an amazing relationship that you can have with these individuals. So that, in a lot of ways, is the number one draw to this field, and one of the most attractive elements about it. The clients come from all over, and it really depends on the demographics of the particular community.

So you could just imagine, it really depends on where you are and where the nonnative speakers are from in your particular community. They come from all over the world, and there's really no limit to that. I wanna talk for a few minutes about efficacy. When I started accent modification, there was not as much research, so people were really going on conjecture, and there were some ideas about it. There was research. Most of the research, in fact a lot of the research I'll be mentioning today comes from the ESL world, and, but it's very well done, most of it. But as far as applying it to what we do has been challenging at times over the years. But the good news has been that in the last five to 10 years, there have been some wonderful studies including two meta

studies that I'm going to mention that really demonstrate the positive effect that we have with accent modification. So I wanna talk first about Saito in 2012, and Saito reviewed 15 quasi experimental intervention studies published since 1990, and found that all intervention studies demonstrated significant improvement resulting from instruction, except for two studies, and these two studies were really just involving mechanical drills and didn't have any broader activities. The studies showed efficacy in terms of both listener judments of comprehensibility, and specific aspects of phonology at both the segmental and suprasegmental level. Lee, Jang, and Plonsky in 2015 reviewed 86 studies and found a large effect for pronunciation instruction stating that the learners who received instructional treatments improved by .89 standard deviation units in comparison with their pretreatment performance, but between group analyses, demonstrated that learners and experimental groups outperformed those in control groups by .80 standard deviation units, and according to the authors, that represents medium to large affects.

Finally, these two are very powerful studies. The last one I refer the, even though it's not a meta study, I think that it's nice because it did involve ESL teachers who are well-trained, but it was done onsite for medical professionals. So in some ways I think this really applies, a lot of these other studies were based on more of a classroom environment, so this is probably a little more similar to what a lot of SLPs do in accent modification. A statistical analysis in this study of the subject's pre and post-training self-evaluation showed higher ratings after accent modification, and the greatest impact came in terms of increased confidence. Now this last point is actually extremely important, because our clients determine whether accent modification is successful, because they chose it and they report positive outcomes. So even though it's important, of course, to have objective measurements of increased intelligibility or naturalness, this improved confidence in client's communication skills is another sign of success, and there's good research on that, too, that the, that increased confidence can really help with the communicative efficacy. Let's take a look at the strengths that

SLPs bring to the table. That should be obvious, I think, in some ways, because we are the experts in communication, and most of us are obsessed with communication, with language, with speech and language. That's why we got into this field, I think all of us, I can safely say. So we are the experts in the world, really, on communication. So it is a natural fit for us. We also have some good technical knowledge. So this can be important because in comparison to our peers from other fields, for example, ESL teachers or voice and dialect coaches, and I don't mean to discourage any of the other professions at all, but we do have a strong technical knowledge, so we're often able to explain the anatomy and physiology of what's going on. So we have that good technical knowledge and that background from our training that's going to go a long way in helping our clients become more effective communicators. We also have that clinical experience.

So we have our graduate clinical experience that is supervised, we have our CFY that's also supervised, and then many years of working with our clients. So this is going to give us a powerful background that will help, and the training that we've had through our experiences no matter what setting we have, whether we're working with children out in the schools or in hostiles or in any other setting, private practice, for example. We also have a background in counseling.

So even though not all of us have had specific courses designed to address counseling, we all have experience in working with some form of counseling, no matter who our clients are, and I think this gives us, in some ways, also a little bit of an advantage, because even though this is not the primary focus of most of our sessions when we're working with nonnative speakers, you can see because of the profound effect, social and emotional effects that having an accent can have, it's important to be able to relate and to understand and to counsel these clients, and this is something that I think is a strength for our profession. But we also have to think about how it differs, and these are the areas where I would recommend getting some additional

training or to use materials to find some resources to really bridge the gap. Because there are some differences for SLPs, some things that make this a slightly different area to practice in. Well first, we're working with non-disordered adults. So the non-disordered part is extremely important because we spend our lives working with individuals who have disorders, so this particular group of clients is non-disordered. So that's a difference right there. It's also generally adults. We hardly ever work with children because of that critical period hypothesis. So even though of course it's certainly possible to work with younger children on their accents, we generally assume that by growing up in a particular environment, that this will occur naturally. So we, most of our clients are adults. So that can be different for some people who work primarily with children.

This is very important: it's an elective service, and there has been, and so that can be different, because we're often, many of us are working. If you work in a hospital or a school, the clients show up and it's really not by choice versus our clients who come in accent modification, they're coming to us because they're looking for some help in a particular area. Now, over the last couple of years, I think most of us working in accent modification have noticed that some people have been critical of accent modification, and have basically argued that, are you trying to impose a particular way of speaking, and sometimes it's called a form of cultural imperialism, and I think, I wanna make a strong case right here.

I think we need to really push back on this, those of us who do accent modification, or anyone who works with nonnative speakers to really push back on this and to say, we need to advocate for our clients. This is an elective service, so the clients are making the choice. They want to change the way they communicate, because we can't ignore the fact that having an accent can have a profound impact on your ability to be successful in life, it can. These clients are coming to us because they want us to help them, and we are the experts, we are the ones that can help them the best. So really I

16

would tell someone who feels that accent modification is not appropriate to tell that to the client, to tell them that they don't have the freedom of choice to pick the best professionals to help them in the area where they want to improve. As an analogy, I would point to the world of transgender voice, which is an amazing part of our field, at the moment is growing rapidly, which is a similar area where clients are coming to us because they want to make changes in the way that they communicate, and we are the experts who are providing it. So I think we need to be very forceful on this and really not feel that there's anything that we're doing that is in any way inappropriate when we work with accent modification. We need to advocate for our clients. Now, the terminology can, at times, be a little bit different in the world of accent modification. In fact, accent modification is not always the term that's used to describe this. I use this term and we're calling this seminar accent modification, so it is probably the most common term used by SLPs, and it's the one used by ASHA at the moment. It could change.

There are many other options. You can see that we really are trying to educate the world that the accent itself is not the issue, it's really the other areas that we talked about in the frameworks. But you'll often hear, and the accent reduction was a popular one. It's falling out of favor a little bit because there's kind of an implication there that you're trying to reduce or eliminate somebody's accent, so that one's kind of falling out of favor. It can be called accent enhancement, or one that's also gaining popularity is intelligibility enhancement. It's called, in the SLP world, is pronunciation instruction. So there are many, many terms, and I'm not going to make the case for any one being better than any other. I think SLPs can use their judgment, especially those in private practice. Whatever they think is the best way to explain how they provide the services, I think that's entirely up to them. Now, it's also not a disorder, it's a difference, but I think anyone coming out of a graduate program in the last 20 years is very familiar, I would hope, with that concept of difference, not disorder, because we talk about that quite a bit when we're working with our bilingual clients. So that's something that we

use differently. We also try to avoid the words treatment or therapy because those imply, again, a disability or disorder. So we, I use the word training, other people have maybe other ways of describing this, but I think we probably should stay away, if we can, from treatment or therapy. We also don't say patient, but we usually use the word client. Now a harder one is to avoid using sort of judgmental adjectives such as good, bad, strong, thick, et cetera. It's more challenging because it's so much a part of human nature to some extent, and our clients use these terms all the time. So we generally do, though, prefer to have neutral vocabulary. So we're just trying to describe accents the way they are and not really have any judgment there. Now let's take a look at suprasegmentals as well.

So this is an area that is not really a strength in some ways for SLPs. Just to give you a quick definition of this, and we'll go into a lot of detail later in today's workshop, but suprasegmentals refer to the elements of speech above or beyond the individual segments, or phonemes for example. So you might imagine yourself in a hotel room and you listen to somebody talking next door and you can't make out the individual words or sounds, the phonemes, and yet you can tell if someone's asking a question or if someone's speaking quickly or if there's an argument, et cetera.

So a lot of that has to do with suprasegmentals, which include the intonation, phrasing, rate, et cetera. So this is not always a strength for SLPs. I think intuitively, we are, of course, familiar with this, but a lot of times, SLPs need some additional training in really focusing on how suprasegmentals work in English, especially compared to other languages. Some of us who work with the autism spectrum disorder for example may be familiar with some of these, or you, other areas of our practice, but this is such an important field for us in accent modification. Sometimes it becomes almost everything we're doing with particular clients. But it generally, on average, it's at least half of what we're doing with our clients. So if you're unfamiliar with some of this, and I hope today's talk will inspire you and give you some ideas of how it works in English, but

then this would be an area where you would probably need some additional training. Now I mentioned naturalness, and I think some of us work quite a bit with naturalness, it depends who your clients are, but that's not always the biggest factor for many people. So for example, if you're working with children all day long on articulation, then the naturalness itself is probably not an issue because you're focused so much on accuracy, getting those accurate productions, and then the children are going to basically use them, and once they generalize, they'll be speaking naturally in English. So that's another area that I, that's my particular bias. I think we need to focus on that area as much as possible. Now we are the experts on consonants, and that is a strength for us. But, it can be a different set of consonants, so we just have to be aware of that factor.

The R, there's some overlap, so the American R is something that SLPs work on with children all the time, and that's also something that we work on, but the S, which is something that SLPs are very familiar with if they work with children, is extremely rare. I can't remember ever working with a client on an S. So it's just a different set of consonants. Sometimes there's a little overlap, but some are ones that you might not be familiar with or working with, have experience working with. But to wrap it up here, one of the key areas where I really recommend getting some additional support and dusting off your phonetics book, is to take a look at the vowels, because SLPs really learn about vowels in undergraduate phonetics courses, and then they don't come up very often.

We think about things like the Goldman and Fristoe test or some of these standardized assessments, and they don't test the vowels. Why don't they test them? Because we really assume that the normally develop, or the, all children, normally and non-normally developing, are going to have their vowels by age three in most cases. So we don't really have norms for those in most cases. If you imagine, if you think about your bookshelf at home, then, you know, how many books do you have that are focused on

consonants versus do you have any books on vowel disorders? Probably not. So this is an area that SLPs often feel a little bit unsure of, and I think I'm making a case here for avoiding that bias, because we're so comfortable with the consonants, to really spend our time exclusively focused on the consonants that our clients are working on and forget about the vowels, because vowels can be very challenging. English has many more vowels than a lot of languages, and it's an area where we see a lot of impact. If we work on these, we can really improve communication significantly. Let's take a look at some training principles of accent modification. Well, we've talked about this many, many times that we are talking about effective communication. So that's our goal. We're not really focused so much on the particular accent itself but really that idea of effective communication.

Again, I'm making the case for clear and natural, to just balance it out. So we're always balancing these things out in our daily lives, and this is something that I would advocate as well, that we need to balance being clear and natural. We have to focus on those suprasegmentals, because I mentioned that a lot of times, the way people are communicating is different because of the suprasegmental elements, and this will help in a great deal to help our clients sound much more natural when they're speaking. We do a lot of work at the segmental level, but again, so this is something that is a strength for us, and we will do a lot of traditional work.

So this is an area that should be, SLPs should feel fairly confident with that. Production and perception, now the reason I'm pointing this out in terms of training principles is that it's just slightly different, the research on this, because with production and perception, we traditionally in our field feel that we're going to look for that perception first and then move on to production or we have an implication that perception has to happen before production, and yet in the accent modification world, the research is really not very clear on that link. So an example for that, for example, I would say, is the trilled R, the sound that is used in Spanish or Russian or many other languages. If we

ask about perception, we would say, all of us here in this webinar would easily be able to identify if someone's using the trilled R or not, and yet many of us are not able to produce it and would have to work on that quite a bit. So even though we can perceive it, we're not able to produce it. Then we have where this applies to accent modification. We're often surprised when, in the other direction, really, we have, for example, Japanese clients who are working on their R and their L sounds, and in Japanese, those two phonemes are really, collapse into one phoneme that's not an R or an L, it's in the other characters on the IPA chart.

Many of our Japanese clients are able to produce distinct versions of the R and the L. So we can identify, okay, he produced the R in that word and the L in the other word, and yet those same clients who are very effective at distinguishing, at producing distinct versions, are not able to distinguish them even at the, basically they come out at chance level. So if we say, "Right, was that an R or an L," they might say, "Well, I think that was an L" or, "I think that was an R." So there's not that clear connection, and I wanna point this out, because we don't wanna really get hung up in our field if a client is not really able to perceive, we are still able to move on to production.

Now here are some techniques that are often used in accent modification, and I'm not going to go through every single thing here, but just to point out a few them. Modeling and feedback of course is key. So this is something that is natural for us, that we use this all the time. In comparison to, well I think the, the way that I really finally decided that this was so important was when I listened to my ESL instructor colleagues and they would provide modeling and feedback, but they would also sometimes throw in comments to shape the productions, but the comments were not accurate. So, but I noticed that the clients were still doing well because of that modeling and feedback. So basically this is a lot of what we're doing with the clients. We're also, of course, using auditory discrimination, we have phonetic training. When we're working on the suprasegmentals we often use role plays. We do quite a bit of work with minimal pairs,

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and I'll go into some more details about that later in the presentation. We use self-rating, visual feedback, and by that I mean very low tech. So we're talking mirrors, or the cellphones, the clients' cellphones, ultrasound, once the price drops. We also use tongue twisters, reading aloud, conversation starters, et cetera, recording and review. We do quite a bit of work with awareness building, because a lot of times this is a big part of what we're doing. We're really trying to get the clients to be aware of the difference in the way they're communicating versus the native speakers, and then the generalization and the practice will come later. We also work on identifying stress and we have the counseling component I've mentioned before.

Quite a bit of generalization training, and those of us, all of us as SLPs, we know how important generalization is, and it's sometimes half the battle. We also say sometimes it's the whole battle. With a lot of our clients, this is a great deal of what we focus on. Shadowing involves really just having the client mimic what they hear very quickly afterward. So that's a technique that has been used in some areas. Then mirroring is a wonderful idea where clients are able to pick something, for example a video, and then copy and imitate as much as they can at the segmental and suprasegmental level, and then even look into some of the body language.

So that's been very effective. But there are many, many more, so really the limits are just your own imagination. Let's take a look here for a minute at assessment. The goals of the assessment, of course we wanna look at the client's goals. What does the client need? Why, where is the client using English? Where are the difficulties arising? So we're focused on those client goals of course, but it's, the goals in general are very different than some of the areas we work on, because we're not really trying to track. We're not saying, "Well, this is where you are "in relation to other people in, "who are nonnative speakers of your language," or something like that. We're not focused on that, because there aren't really norms for second language acquisition. I think for any of us who have tried to learn another language, we see a variety of levels of success.

So we have some friends who decide they wanna speak French, and they learn it in three weeks and they're in Paris and they're communicating effectively, and others who have tried for years to learn another language and it's, and are not successful. So we don't have those same expectations. So we're not really looking for that type of a comparison. What we're doing is trying to step back a little bit and say, what is it about this person's speech that really jumps out and makes them, that interferes with communication at the segmental and the suprasegmental level? The resources, too. Now, there are, a lot of times I think in our field we get used to purchasing a test kit. You may go out and some of the classic tests and it's already in a nicely packaged kit there for you.

Now, we don't really have that in our field, and there are some of course, these are usually provided by individual practices or businesses that have their own set or their own methodology for accent modification. Many of these are popular and you can find out more about those, but I'm going to make the strong case today and really just say that we can do this ourselves. So you can design your own assessment instrument that's going to be meaningful for you. So once you get involved in accent modification, you should be able to put together an assessment package on your own that is going to get you the information that you need to get those results.

So I don't think it's that challenging. I'm gonna walk through a couple of ideas here, and I think anyone should feel empowered after this talk to just go out and design a type of assessment. But before we get into some of the ideas that we use in our clinic, we're going to talk about just some ways to measure intelligibility, because that can be challenging if you're trying to measure exactly whether someone is 100% intelligible or not, for example, if you want an objective rating. Of course people ballpark this all the time, and what we know about that, though, is you can ballpark things. The problem is that we also know from the research that familiarity with a client is going to lead to increased intelligibility. So the more time you spend communicating with someone, the

easier it is for you to understand them. It doesn't matter if they've made any changes in the way that they produce the speech. So we have to watch for that effect a little bit. Some people have used unfamiliar listeners. So you might have somebody listening at the beginning, listen later, so that's one way of trying to avoid that. You can use nonsense sentences. So you can generate some kind of nonsense sentence, and at that point, if you do it that way, then presumably, you're going to eliminate any contextual effects there. You can also use comprehension questions, so you could, you can, or statements, so you might have a statement like, a whale is a large animal that lives in the ocean, and then you can present that to an unfamiliar listener, and they can say true or false, and then we would assume that if they got the answer right that that implied intelligibility.

So there are some ways that you can measure and there are some very technical ways that if you really wanna get it, you can. But what I'm going to outline for you is the way we do this in the SDSU Accent Communication Training Program, we have an assessment, and really it takes about 30 minutes to 60 minutes to do this, so I think that's enough time to get the information that you need to get started. Of course you're always going to be doing some form of ongoing assessment as you work with the client. But we think that 30 to 60 minutes is really enough time to give you a good place to start.

Now, we start with a segmental assessment, and the idea here is really just to have the client produce the sounds in all of the, in the initial position and final position for the consonants, possibly in the medial position if necessary, and the vowel. So we're looking at the phonemic inventory of English and you wanna at least one production of the, all of the phonemes. We don't have to have the clients, for example, looking at a picture, because they're literate, so you could actually just give them a list of words and have them read the word. They often, there's a tradition in our field to have the client read the word and then produce it in a sentence, and that gives us sort of two

24

productions of that. So that's one way to do that. We also use a diagnostic passage, and "The Caterpillar" passage is one of the, is the more up to date one, I would say, but of course there's "The grandfather Passage," "Rainbow Passage." We like to use our own passage. I think anyone can create one, and it probably should be 100 to 200 words, and this will help you because it can give you some specific context if you're looking for phonemes or a particular area of connected speech, this is a good way to make sure and have that available so that you'll hear the client producing it. Also with the suprasegmentals. So this can be very, very effective. We also use a spontaneous speech sample, and this is a good way to hear. Sometimes we'll hear a great difference there. In the more structured activities, the clients will sound a certain way, and then when they're producing spontaneous speech, it sounds very, very different. This is really easy to generate because you can just ask the client questions or you can have some sentence starters, that kind of thing. It should be easy to generate some types of spontaneous speech.

Then finally, well, not finally, but another area here is the questionnaire. This has been very effective for us, because it can be difficult to get some objective information about some of these things like suprasegmentals, but what we can do is we can measure our client's confidence and awareness by asking them questions about particular aspects of the way they communicate.

Again, one of the goals of accent modification is to increase that confidence and that awareness so we are able to quantify that with a questionnaire. We could do one at the beginning and at the end we can say, "Okay, now you feel more confident "in this particular area," or, "You have more awareness of how the vowels," for example, "work in English." We also use role play, and this can be great at the suprasegmental level, because this gives us some additional information. You can have the clients, it could be very simple, you can ask them to imagine that they're in a job interview, or you can have them also maybe meet you at a party. You can have much more elaborate ways

as well, but this gives great information, especially about what we call communication style. There are some other considerations. So for example, sometimes, well, one thing that I do wanna point out is that we always make sure to ask the client about particular words that may be causing them difficulty, because we want to keep this relevant for them. So that's often the first thing that we focus on because clients have jobs and they may have particular words that are causing them trouble. So we do wanna focus on that. I also wanna point out under other considerations that a lot of SLPs focus on language, others don't. So in other words, we generally, and I believe the majority of accent modification providers focus on the phonology, not exclusively, but that's the focus. But others have a broader view and will also work on syntax or vocabulary.

So that's really just up to you to decide how you want to approach that. If you do need to look at the client's language or vocabulary, then that would be another consideration for you. We won't be addressing that in today's talk. Let's take a look at some of the principles of segmentals and target selection there. Again, we wanna be clear and natural. We need to balance those out. Contrastive analysis: we'll be talking about this in more detail later, but this is very intuitive.

The idea here is we're really just comparing the phonology of the client's L1, their native language, to English, and so we're just contrasting. These are the sounds that they're not producing accurately. Functional load: I'll be going into some detail on this because this is a great way to prioritize targets for the clients. It can be a little tricky, and we're not looking for, there's no specific set way to do this, but the overall theory is very useful, and that's why I wanna talk about that today. Phonotactics: we have to look at the fact that the client may be producing the phonemes accurately, but not in every context. So you might have a client who's able to produce, for example, the voiced cognates, the duh, tuh for example, a pair that he can produce both of those, and yet when the voiced version, the duh, is at the end of the word, they might devoice it. So we have this phonotactic area that we have to look at. Every language works

26

differently, and we can't just assume that the client produced a particular phoneme that they're gonna produce it accurately in every situation. I mentioned that perception versus production, we really don't wanna get hung up on that. So if a client is really having a tough time with perception, it doesn't mean we have to master that. We can move on to production. Again, we do also have to think about stimulability and ease, because in some cases, we could go for that low-hanging fruit. We might have a phoneme that we could work on with the client and get some success, and that will increase confidence and trust, and so that might be an easier target even though it may not be the most important one in terms of communicative efficacy. We're gonna have a look at the idea of contrastive analysis, which goes back to the works of Lado in the '50s.

The basic idea here is you're just comparing phonemic inventories, so every language is different, and the clients have the phonology of their language, and we're gonna compare that to English. You can do this to some extent. It's almost like just having a Venn Diagram, and it might look like this. So I'm using Spanish here, and of course there are many dialects of Spanish and there are many ways of deciding whether something's a phoneme or allophone in Spanish, so I'm using this just to illustrate. But the idea here is this is a type of Venn Diagram, and I'm gonna illustrate here with the pointer that this area would be Spanish only.

So these are the sounds that only Spanish has, and where we're gonna be less focused on that, because we're not using those in English. On the other hand, we want to be aware of this, because the clients may use these phonemes to substitute, so it's good to have some awareness of this. Here we have the shared, these are the shared phonemes. So we're gonna assume that the client's able to produce these because they have them in their language, but we're gonna be a little bit careful about that, and I'll talk about that in a minute, because we do need to look at the allophones. Then English only, this is where the majority of our focus will be because these are the ones

that the client doesn't have. So how do you get this information? We're not assuming that everybody speaks lots of languages, or it would be impossible with all the languages our clients speak. You don't have to speak the language, you don't have to be an expert on the language, anything like that. All you have to do is do a little bit of basic research, go on the internet. ASHA has some resources, there are many books out there, and you can just get an idea and just inform yourself as much as possible about the phonology of the client's native language, their L1, and that's gonna inform a lot of what you do. Remember I mentioned the allophones. So with the shared phonemes, even though we know they have the phoneme, but do they have the allophone, do they produce it in the same way in English? So that can be important. Also take a look at the phonotactics, because we wanna make sure that even if they can produce the phoneme, can they produce it in every context the same way that it's produced in English?

Just to illustrate, I'm gonna also show you a couple other samples. We've got Hungarian here and I've got Russian here. I don't wanna intimidate anyone, because some of this looks very complicated. You may see some IPA characters you haven't seen in a long, long time if ever, but the point here is just to really inform yourself, and you can learn some things. For example, Hungarian has a length distinction of the vowels, so that would be something if you think, well, learning about that is going to help me understand how my client's producing English. Or Russian has palatalization of many of the consonants. So informing myself about that is going to make me a better clinician when I work with these clients, because I know that this may be something that they're going to do in English. So the point here is not to intimidate anyone but just encourage you to get out there and make some comparisons. The idea of functional load is that we are saying that not all phonemes are equal or have an equal impact in each language. So that's the definition. How do you decide which ones have more, which ones are more important in a particular language? Well, there are several factors that you can look at. We look at minimal pairs, because minimal pairs

are words that differ in one phoneme, different words, different meanings, but one phoneme is gonna change that, and that's gonna have a huge impact on communication. So if somebody says, "I leave here now," and you say, "Oh, you, are you leaving?" "No, no, I live in San Diego," right, "Oh, live." So we know that those minimal pairs can create a lot of difficulties for our clients, and so that's important in increasing functional load if there are a lot of minimal pairs. Also the frequency, so you might have, for example, the ege sound in English like measure is challenging for many of our clients and yet it's not very frequent, so that may be less important for effective communication.

We also have the lexical class. So the minimal pairs, are they the same types of words? Because if the minimal pairs, one is a noun and one's a verb, it may not, it may be easier from the context to tell if somebody's, which one somebody is using. Finally dialects, at the, the argument here is to say, well, if there are dialects of English that have, don't feature a particular sound or have a type of variation, then it's going to be less important. So for example, again, I mentioned the ege, the juh sound or the, compared to the shu sound, so we have a lot of Spanish-influenced American English in our country, and so, where the juh might be devoiced, and yet that doesn't cause significant miscommunication, so it's part of a common dialect in our country, so.

Or for example, the THs might have dentalized in African American English, so we're much more familiar with these variations and we would say they have less a functional load because of that. So what are some examples? If we looked at, let's take a look at a client who is having difficulty with some of the vowels here, and if we compare E and eh versus ooh and uh, and we try to decide which one has a higher functional load, which one do you think would be more important if we're working with the client? Well, if we think about minimal pairs with E and eh, we can come up hundreds of those. It shouldn't be too hard to think of seat, sit, beat, bit, feet, fit, et cetera, versus ooh uh. Can you think of minimal pairs? We might have odd ones like cooed, could, or kook,

cook, something like that. We have names: Luke, look, but they're not many. So we could clearly see if we're going by minimal pairs. If we're going by frequency, right, e, eh are very frequent. The uh for example is, even though it's in some high frequency words like good and book and should, would, could, it's really not overall very frequent, so we would say in this case that it's very clear. If your client is having difficulties with the eh versus uh, you're gonna go with the eh to increase the communicative efficacy in the most effective way. Now, I'm not gonna spend too much time on this, but this just shows some of the research, and that's, my point here is not to really, we're not looking for a specific set that you have to do it this way and this is how they're ranked. It's much more the theory that we're, you're gonna make your individual determination about which of these phonemes is most important.

So for example, the research showed that these are some of the top function load consonants and these are the lower ones, but, and I'll just go kind of quickly through this, if we take this chart and the information from this type of chart and compare it to what goes on in the real world of accent modification, we see quite a bit of mismatch. So Spanish, for example, we've got the low functional load consonants are listed here, and yet, what do we work on with our Spanish clients? And I put them as contrasts. Many of these that are considered to be low functional load are actually where we spend a lot of our time. So I don't think you want to, with the consonants, really, look for specific information. Instead, use your judgment, use the idea of functional load, the theory itself to say that not all targets are created equally. You wanna decide which one's gonna have the greatest impact. The vowels, by the way, do line up just a little bit better. So here we could see at the top, functional load vowel, if you've got e, eh, very high up here, or aa, ah, for example. So it may line up just a little bit better in that way. So how does some of this training work here? The typically targets for accent modification for the segmentals are listed here, and this is not, this is really highly dependent on the client's L1. So were not gonna assume that clients need to work on all of these, but it just depends on which language they speak. But these tend to be

typical targets that we work on. We also of course are working quite a bit on the allophones. So this is important. I wanna take a minute here to talk about these. We've got the tap, the alveolar tap, so for example, in the word water, we've got the tap there. Now, if the client produces the word water as what er, it's going to be highly intelligible, and that kind of supports my case for this naturalness, that yes, it's intelligible, but it's not very natural. So we do wanna focus on that, something like the alveolar tap to improve the naturalness of our clients. The nasal tap in words like, that's in free variation in words like winter, where we could say last winter or last winter, either one of those, or center center, or internet, internet. This is also something we want our clients to focus on if they wanna be more natural and be aware of that. The glottal stop to use before vowels or as a substitution for a T in a word like atmosphere, the alveolized L, the dark L, so a client might say something like ball instead of ball. So we need that for the naturalness.

The syllabic consonants, like the L in bottle, the N in cotton, the M in rhythm, we really want the clients to avoid using a vowel there like cot ton or something like that, cot on. So what are some of the techniques we use? Well, we use all the typical articulation techniques that SLPs are very familiar with, but we tend to focus on minimal pairs. Clients love these and they're very, very effective. The way we do this is we just arrange our minimal pair charts and we put the words in there. Here we have right and light, we number them, and then we practice.

So you can have the clients produce, give you the number, "I'm doing number two now," or they could just read straight through. Then, if we're doing production, and we can decide if it was A or B, and the client's gonna tell us if that's what they intended, and this is a good way, almost a very scientific way, to improve the accuracy of the phonemes. We can use minimal sets. So we could just add a column for additional contrasts. How about for the vowels? The typical targets tend to be those mid central vowels, the, also the, and the schwa of course for the vowel reductions. We have all of

the rhotic diphthongs are very important because that's challenging. It's not very common for languages to really have rhotic vowels. Then we have the aa, which is not an area that's used in many languages, and the ih, uh, eh are examples of the fact that the lax vowels often are not very common in other languages. It's highly dependent on L1 of course. We do, in this case, recommend using the IPA because just a little bit of familiarity, not training the clients to transcribe, but just a little bit of awareness, because the vowels are, really don't line up well with English orthography, so the IPA is useful here to get them to focus on, okay, this is the vowel sound that you're working on.

We use the same methods in a lot of ways. So actually even though a lot of SLPs are unsure about how to work with vowels, it really comes down to using a lot of the same techniques that we use with the consonants, and of course we use a great deal of minimal pair work. Now let's move on to the suprasegmentals, and I'll try to walk through some of the features of English and the way they work. This can be very useful and helpful for our clients. I'm gonna start with rate, because rate is something that we can focus on at any stage with the clients and can have a really profound effect on how they communicate.

This is going to surprise a lot of SLPs, 'cause SLPs love to slow everyone down, and I think that's a real bias. I'm not going to imply here that you never want to slow your clients down, because you can when you're developing accuracy, you certainly should think about doing that. But the overall goal should be you want your clients in most cases to increase their rate. This is actually a table of just some average rates. You're always going for what should be natural. You don't wanna follow exactly something like this, but you're tryin' to get your clients to sound natural. So I'm gonna refer to a groundbreaking study by Munro and Derwing in 1998, and they looked at which rates native speakers prefer when they're listening to nonnative speakers. They found that the listeners actually rated speech produced at a faster rate as more intelligible and

less accented, and they followed that up in 2001 with a similar study. So this is something that's news, I think, to many SLPs, but we want our clients to speed up a little bit as long as they still sound natural. Now to demonstrate this, Kathleen's gonna help me out here. I'm going to play you someone, a client, speaking at about three syllables per second.

- [Client] Although children can easily learn to speak a second language with a native accent, adults are not as fortunate. Every language has different sounds and speaking patterns, and learners have to readjust their mouth.

- [Robert] Okay, I'm gonna stop there and we're going to compare that to someone, well actually the same person, we're gonna have the same client now producing that same passage at four syllables per second.

- [Client] Although children can easily learn to speak a second language with a native accent, adults are not as fortunate. Every language has different sounds and speaking patterns, and learners have to readjust their mouths and minds in order to adapt.

- [Robert] Okay, so I think most people agree, and this was done, I did it, basically electronically, digitally, so it may not be 100% natural, but it's a good illustration of the fact that by speeding up just a little bit, I think that second version does sound better. It's a better way to communicate, and it's going to cause the speakers not to focus so much on how the speech is produced. So I do wanna make the case for, in most cases, we're not saying 100%, but for most clients, you want them to speak faster. Now often, this doesn't involve faster articulatory rate, but really working on some of those pauses that are unnatural. Some other major features that we work on in accent modification are syllables and endings. So English has words with a variety of numbers of syllables. So we have some short words, long words. We need our clients to get that number to match the way we produce the words. So for example, you might have

clients who are not adding syllables at a particular time. They might say, "Yesterday I decide to go," instead of decided. So in that case, they're going to need to add a syllable. Or we might have somebody saying, "I work in a laboratory," or "I like chocolate," and they're adding a syllable that's really not there: laboratory, chocolate. So we need to develop that awareness so that the clients know that they're producing the words with the same number of syllables. This ties in to the endings, because I mentioned, for example, the word decided, we have very regular rules in English, and as native speakers, we don't think about this, but for example, we produce the regular past tense if the word ends, the infinitive ends in T or D, like decide ends in a D, then we're gonna add a syllable: decided. But if a word ends in, you know, if it doesn't, if it ends in a K like something like, or it could be a va, love, loved, we don't add a syllable. So the clients do need to be aware of those very regular rules for the endings, including the S ending, which has six different phonemes that require the addition of a syllable. Syllable stress, so English jumps up on a particular part of the word, on a stressed syllable. If you wanted to study stress in Hungarian, I could tell you right now that every single Hungarian word is stressed on the first syllable, so if anyone ever asks you, where's the stress on this Hungarian word, you just say first syllable, you're gonna be right. That's not true for English. So we have a lot of words where the stress comes in an unexpected place, and we also have words or, words that alternate, and you have some stress shiftings. So you might have photo, photographer, photographic, where the stress is moving throughout those different versions, related versions of that word. So clients need to be aware of where the stress is, and they have to commit to that stressed syllable, because clients are often hesitant. They might be from a language where it's more natural to say something like photographic instead of photographic. So English jumps up quite a bit, and it just depends on what the client's native language is. The vowel reduction, so English is a language that features reduced vowels. So instead of saying organization, right, we say organization, and we reduce the vowels significantly when they're unstressed. So clients need to be aware of this and that can be challenging because it involves that central vowel space that is not

commonly used in the world's languages. So this can be something that's going to make, have a profound effect on how naturally the clients communicate. Linking: so linking is connecting the sounds, and we do link up our consonants in different ways in English. If the consonant falls between vowels, then it just floats and really links up very naturally. So if you say the word an, the definite article, an apple, an apple, an apple, it just flows together, and clients don't always do that. They might put in a glottal stop there. A lot of other things might happen, too. If you have a T that's between vowels, it's going to turn into that tap again. So if I say, I ate it, ate it instead of I ate it, or something like that, right. So the consonants and how they link up, when they, two consonants bump up against each other, you also have assimilation, like, would you like to? Would you instead of would you is a possibility. So we need to inform our clients about how linking works with the consonants of English. The vowels in English people forget about the fact that we tend to link two vowels by putting a glide in there. We're gonna put a palatal glide in for example, when the vowel is a front vowel. So we might say, "I yate it, I yate," versus, "You ate it," "You wate it." That's a wa now. So we do need to make sure that the clients understand that the ya goes after the front vowels, the wa for the back vowels, and to link them up. They might stop the flow of air and use a glottal stop in that case as well. Reduced speech: so most people are, we know that when people are speaking in connected speech normal, natural speech, that they will sometimes reduce the phonemes or the phonemes will disappear entirely, so we all know that I am going to go is sometimes I'm gonna go, I'm gonna go, and we even write it that way. But even in this audience today are people familiar with the fact that, what do people normally say, "What are you doing after the webinar?" "I'm gonna go out and get," "I'mmana," there's not even a guh in there. "I'm gonna go and do that." When we try to first think about these, as native speakers we often think, well, I don't do that, or that sounds strange, and yet the more we develop our awareness, we see that this is a huge factor of the way that we communicate naturally. And we're not talking about, many SLPs I think are reticent because they'll think, well this is teaching sloppy or bad speech. Well, go out and listen to a, any type of conference call or even

something like this, like a webinar, you're gonna hear all kinds of examples of reduced speech, and we really owe it to the clients to develop their awareness of that so that they can be effective and natural speakers. A couple of other major features, we have phrasing. So if I have a sentence like, "I went to the store to buy some milk," I could break it up in different ways. I could say, "I went to the store "to buy some milk," or, "I went to the store to buy some milk." So I could break it up in different ways, and I wouldn't say, "I went to the, store, "to buy some milk." So we have some ways that work, some ways that don't, and our clients need to be aware of that. Phrasal stress is key here because the way this works is if we take that same sentence and we just randomize the words here: by the to went store I to milk some, we'd have equal stress on the words, versus put that in a sentence: I went to the store to buy some milk. A lot of thing happen that are different, and this is so natural and normal for us as native speakers of English, and yet for our clients who are speakers of, for example, tonal languages, this can be very different. So when we think about the way it works in English, it comes out something like this: I went to the store to buy some milk, and milk, really as our focus word, is going to get the most stress, and then these other content words are getting some stress as well. There, everything's de-stressed in English unless it's really the focus word here, everything's getting de-stressed. But the content words tend to preserve some stress versus the function words like to the, I went to the store, it's almost, there's not even a vowel in there: I went to the store. I don't produce that in normal speech with a vowel of any kind. Then to continue on, Major Features 3, we have emphasis, so the idea here is who went to the store to buy some milk? I went to the store to buy some milk. Now I need to jump up on I, and not all languages work that way, so it's, again, it's so normal and natural for us as speakers, native speakers of English. We just think, well, they're gonna, clients are gonna understand that intuitively. Well, they might not, because their language may use word order, they may use particles there, or they may use, add pronouns, et cetera, to show this emphasis, but in English we need to be able to say, "Who's that man, who's that man," that kind of thing. So that's important. Then we're coming

almost to the final frontier of accent modification which is intonation, and intonation is incredibly powerful. If I have a sentence like this, I could read it in a neutral way: it's a beautiful day, or I could say it's a beautiful day? And that would really change the grammar by turning it into a question. I could say it's a beautiful day, and change the meaning by making it sarcastic, so I actually am trying to imply that it's a terrible day. I can also say, it's a beautiful day, and really increase the emotion. So intonation's extremely powerful, it's a large part of the way that we communicate. It can effect the grammar, meaning, and emotion of any utterance, and nonnatives really need to be aware of how intonations affects their message, because they may not understand that as well. They're, at times, nonnatives are influenced by the intonation patterns of their own language, so they may use patterns from their language, and not the ones that we use in English. But when I say patterns, that's just, that just gives you an idea, because native speakers are very imaginative and creative with intonation, so I hear different versions and different ways that people produce sentences all the time.

So there's a wide variety of ways to produce different intonation patterns by native speakers, so this is a key area. A lot of times we'll find clients who are very advanced speakers and have very little to work on, and yet intonation is where we end up spending a great deal of time. On the other hand, the great thing about it is you can start it at the very beginning. So even someone who's just learning English or is not that proficient can still work on intonation. This is a huge part of how we communicate. It's really extremely important focusing on this. Finally I'm gonna mention communication style, because this is something that, we're really referring to the way somebody uses, for example, body language, facial expression, and this can be very different in, from different cultures. As SLPs, we're trained to respect cultures of all the languages of the world, but when we work in accent modification, we often have to be the ones to point out to clients, to say, "Oh, I see, in your culture, "this is the way that people may use "facial expressions or body language, "but when you do that, "it may give a different meaning "to native speakers of English." So we have to be the ones to

make sure that there's an awareness at that level. So really just to wrap things up, I hope this gave you a very good overview of how accent modification works in general. If you are interested in more advanced topics, I would encourage you to reach out to speechpathology.com and just let them know because it would be great, I think, for all of us in this field, to have more talks where we could really get into some advanced areas. I would also encourage anyone who is interested in being involved in this field to go out there and give it a go, because these are just wonderful clients, it's a wonderful subfield of the, of speech language pathology, and it's something that's within our scope of practice and something we're all capable of doing very, very well. So if you love languages and you love accents, you love cultures, I would encourage you to get out there and start working with this wonderful group of clients. With that, I am going to open it up to questions, Amy, if you have any for me.

- [Amy] Absolutely, let's see when we have here. I think going back, you probably touched on this a little bit, but maybe just kind of, if you could go over it again, Jacqueline is asking, when I share my interest with accent modification with people unfamiliar with the topic, I often get the reaction that I'm trying to Americanize foreign people. Any advice on how to respond?

- [Robert] Exactly, so I hope was making a strong case that really what we're saying is we're not the ones trying to impose a particular accent on anyone, and we're trying to separate that accent out, and we're not saying everyone has to sound like a native speaker. That's the opposite of what we're really doing. We're really saying, we want people to communicate effectively, and it, I think it would be a disservice to imagine that the world didn't function where people with accents run in to difficulties for a variety of reasons, because they're not communicating effectively due to intelligibility or naturalness or other factors. So really these are clients coming to us asking for our help, and I would just tell, encourage you to just tell that person, well, are you really trying to restrict someone's freedom of choice to get the best services they can to

38

improve their communicative efficacy? We're not try to make everyone sound alike. That's the opposite of what we're doing. We're just tryin' to help everybody become an effective communicator in the same way we do with all of our clients.

- [Amy] Great, thank you so much. I do see a couple questions asking if you can review recommended approach, or approaches, to targeting R.

- [Robert] Oh, well, you know what, I would say speechlanguagepathology.com, speechpathology.com I'm sure has some wonderful topics that deal just with that area, and we, really there's a lot of overlap on the way we work with R with our clients. Again, if they're able to produce a version of R like the clients who trill the R, then clearly there's not gonna be an intelligibility issue in most cases, so we are focused on the naturalness, but we do spend a lot of work, just like the SLPs who work with the kids do. So I think that's really something where you can go out and use those resources that are available either on speechpathology.com or from many of the books that are written about how to target Rs. And we're all in the same boat, it's very challenging.

- [Amy] Sure, and basically, I think they're, what you're getting at, is just working on the naturalness, correct?

- [Robert] Yeah, and it can also be accuracy in that case, too. So this is really like working with the kids who are developing their Rs. We were talking about this recently how we're also looking at the ultrasound, because that's coming, I think, for all of us in the future. As the prices drop, people are gonna be using more types of visual feedback to help clients achieve Rs.

- [Amy] Okay great, thank you. I've just, clarification, are you saying that we should concentrate on low functional load vowels? Perhaps I misheard.

- [Robert] Oh, okay, okay, yeah. No, we're looking at the high functional load. So we're basically saying that not all the phonemes are created equally, that some phonemes are going to have a much more significant impact on communication than others. So if a client comes to you and instead of saying measure says meshure, that's gonna have much less of an impact, 'cause people are gonna understand that in most cases, versus a client who's really struggling and e and eh. That has a high functional load, so if a client is saying something like, "I heat it, I heat it," "Oh, do you mean you hit it?" So heat, hit, you know, these are common and, eh. So we need to find those sounds that are causing the greatest impact on intelligibility, and that's the point of functional load.

- [Amy] Can you clarify how clients can produce phonemes even if they don't perceive them?

- [Robert] Oh yeah, I know that is a little tricky, and it really surprised me, I think. I think when we start working in accent modification, it can be a little bit surprising, but what we're talking about is, so you imagine the Japanese clients, 'cause they're really the best example for that. They've got the one phoneme that they've collapsed the L and the R into one phoneme that's different, and so they, but they recognize, so they know, okay, this word starts with an L, and they know how to produce, and they can up to their tongue up there and produce it, and then they know this word starts with an R. So they're able to, in a lot of cases, produce a distinct version of each of those phonemes, and yet they're still not able, to when they hear the word, they know the word from spelling, and that they've learned the word, okay, this is an Lord word, that's an R word, but when they hear it, they're still not perceiving it. We've had advanced clients who are still at chance level. So yes, it's surprising, but that, and there's quite a bit. That Derwing and Munro book from 2015 is wonderful, and they talk quite a bit about some of the evidence about the perception and production.

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- [Amy] Thank you. Would you suggest an SLP or SLPA that has an accent be trained? How would you open this topic of discussion?

- [Robert] Oh, okay, I know this is a, this is an interesting one, it's a hot topic. So ASHA's very clear about this, too, and again, I hope the message was clear. We're encouraging nonnative speakers to join our field and to do wonderful work. We have many nonnative speakers, we wanna have more and more. So having an accent, being nonnative, that's not the issue. But we do occasionally have nonnative speakers who are entering our field or practicing who may have some challenges with intelligibility or naturalness. So again, it's elective service. ASHA has quite a bit of information about graduate students, because graduate students at times, it's possible for someone to have, because they have an accent or challenges with intelligibility or naturalness, they may have difficulties. So then at times, programs Will recommend, well, you'll need to go to accent modification or do something like that. It can be very challenging and very tricky, and we really, I think all of us really, are concerned about this because we want to make sure to encourage as much as nonnatives as possible. We don't wanna have any unnecessary obstacles put in their way to become SLPs. But on the other hand, we also recognize that people have to be intelligible for the clients. You have to be able to work with them and also in a natural way. So again, it's an elective service in grad school. There may be a recommendation. Somebody may have to, in a sense, or be, like a strong suggestion to do accent modification, but I think that's up to the individual to decide if they need that to be practicing effectively.

- [Amy] Thank you. Are you able to help yourself when you are speaking a foreign language, or do you need to seek a native speaker's?

- [Robert] Oh, and again, it does, anyone working in accent modification does not have to be a native speaker, I think so. But there's clearly, a lot of times, there's client expectations. So if a client may prefer, even though the evidence says that the

nonnatives are equally effective, but yeah. But accent modification and working in accent modification can be very helpful if you're trying to learn a foreign language, and any good understanding of how phonetics and phonology work is gonna go a long way if you are try got learn another language. But that happens too. So you often find SLPs in this country who are looking for someone who can help them produce, maybe, phonemes in French or other languages. So yeah, I think it could definitely.

- [Amy] Okay, thank you. Do you feel that teletherapy could be an effective way to provide accent modification services?

- [Robert] Absolutely, absolutely. So we do also do that in our clinic. It can be wonderful, and I think that opens up the world to us. So I, yeah, I don't see any barriers there at all. Now, people do talk about different types of licensing issues, and I don't really want to get into that, because it just depends on how you interpret things, but I think the idea in general of teletherapy is absolutely wonderful.

- [Amy] All right, lots of questions, so I'm just kind of keep moving here.

- [Robert] Oh good, good.

- [Amy] In regards to English, in regards to English phrasal stress, words in a phrase tend to receive equal stress, correct? So when a word receives more stress, we are to understand that the person is communicating something different?

- [Robert] Well, I wouldn't say that they do receive equal stress. So everything's de-stressed except generally what we call the function word, but the content words are still, preserve some stress. So in a normal phrase we are jumping up at different places. It's a little different than some other languages that may have less of that effect, but English really does tend to, the stress jumps around, so you can hear

specific points where people are jumping up and down. Now, when we're doing emphasis, then we're shifting that focus word. So again, my example was, you know, who's that man in the black hat, who's that man in the black hat, who's that man in the black hat, who's that man in the black hat. So those all convey different ideas and as native speakers of English we're very familiar with that, keeping in mind that languages don't all work like that. So many languages would use word order, which we can't do in English, so they put the, whatever they're emphasizing at the beginning of the sentence, or they might use a particle or they might add a pronoun that they would otherwise drop. So we do need to be aware of that. It's something I think people forget about 'cause it's so natural for us, but our clients are not always that proficient in that aspect.

- [Amy] Okay, thank you. What are your thoughts on foreign accent syndrome due to brain damage?

- [Robert] Oh, you know, that does come up. My understanding, I'm not an expert in that area as a disclaimer, but it does seem to be extreme, fairly rare is my understanding, but yeah, I know. There's a little bit overlap there. I don't know if it ever sounds like a specific language. It's a fascinating field, but it's not really directly related, so I probably shouldn't comment on anything 'cause it's not my area of expertise.

- [Amy] All right, thank you. Then in regards to suprasegmentals, are there any consolidated references that list the rules in English, like the linking of vowels by glides?

- [Robert] Oh yeah, I know, that's a tough one. Yeah, apart from book, I think there are other resources out there, but you do, if you find a good book, I'm, I can't think of any ones that might have just everything with the suprasegmentals. A lot of this you can

find and, with anything working on accent modification, especially pitched to the ESL market, they do tend to have quite a bit of materials devoted to suprasegmentals. Most of those books that are successful in the ESL market are, by the way, written by SLPs, but they do tend to focus on the suprasegmentals. My background comes originally from the ESL world, and so that's why when we, when I was first trained, which is over 30 years ago in this accent modification type of work, the suprasegmentals were presented right away, as were the vowels, and then when I entered our profession, those were de-emphasized because of what we do with our other clients. So that's why I've always been trying to get those back so that we understand how important they are, the suprasegmentals and the vowels.

- [Amy] All right, well we can go ahead and wrap it up there for today. We certainly do appreciate you joining us today, Robert, and we appreciate all of our participants for joining us as well, and we hope you have a great rest of the day. Take care everybody.