A discussion of second language (L2) pronunciation looks at the ways in which native-like pronunciation can be defined. It addresses, through review of relevant literature and more detailed examination of a study by the author, these issues: how to identify native-like pronunciation; how to measure pronunciation in comparison with native speakers' performance; what variety of the language is to be used for comparison; how stringent the criteria used should be; and how the experimental definition relates to real-life language use. Spanish is used as the example. It is concluded that native-like pronunciation is that accepted by native speakers as native, which in an experimental context means that carefully selected and trained native speakers must evaluate L2 pronunciation under conditions that control non-pronunciation variables. Further, it is proposed that in real-life situations these variables, such as nativeness of grammar and vocabulary, speaker behavior, listener's linguistic experience, and social and linguistic context of the interaction, may work for or against the advanced learner who aspires to completely native-like pronunciation. In real life, it is argued, the listener decides what native-like pronunciation is. (MSE)
What Is Native-like L2 Pronunciation, Anyway?

Second language (L2) learners have realized the importance of achieving an accurate L2 pronunciation since biblical times, and probably before. Judges 12.4-6 describes how the Gileadites fought and defeated the Ephraimites. Many of those Ephraimites who had escaped attempted to return to their territory by masquerading as Gileadites. To verify place of origin, the Ephraimites asked people to pronounce Shibboleth, but the Ephraimites could not pronounce the palatal sibilant "sh" and replied "Sibboleth". The Gileadites recognized the Ephraimites by their accent and executed them. Except perhaps in the case of international spies or severe ethnic antagonisms, a foreign accent rarely is lethal in modern times. However, if severe, it can impede communication. Even in phonologically accurate L2 speech, slight phonetic variances can produce negative reactions in listeners. Negative reactions to accentedness vary from rating the speaker as more cruel or stupid to social rejection of the accented speaker (Oyama 1976). Of course, in appropriate situations—perhaps if the accent is from a prestigious language community—a foreign accent may appear exotic and may produce a positive reaction (eg. Van Stichel 1986). In
most cases, if a speaker wants to be accepted by the L2 group as a member of that group, a near native-like pronunciation (P) is desirable.

If advanced learners of a second language should aspire to a native-like or near native-like L2 pronunciation, it becomes important to know just what native-like pronunciation means. Certainly native speakers' pronunciation represents the logical yardstick with which L2 pronunciation should be measured. How do we make this measurement? What variety of the target language should we use as the yardstick of measurement? How stringent should our criteria be? Finally, how does our experimental definition relate to real-life experience in L2 use? I shall address each of these questions generally using Spanish as the second language.

I pause here to explain that I reserve the use of "native" to describe a person's primary language or languages, that or those whose acquisition begins well before puberty; I describe L2 speech acquired after puberty using different degrees of "native-like" (eg. not at all, near or completely native-like).

Returning to our question of what variety of Spanish should be used as our point of comparison, much as Wieczorek (1991) argues for teaching Spanish pronunciation from a cross-section of dialects I think it advisable not to limit ourselves to any one variant or geographical dialect. From a linguistic perspective, no dialect is superior to another. For example, it would be unfair to judge someone whose pronunciation is patterned after a Latin
American accent by comparing it with a Castilian accent. I advise flexibility in focusing on different levels of formality as well. A L2 language sample taken from an informal speech situation requires informal native speech as its point of comparison; formal L2 speech should be compared with formal L1 speech to determine if it is completely native-like, and so on. In essence, in terms of speech context, we need a variety of yardsticks, one for each context. In terms of geographical dialect, no one dialect should represent our standard of comparison, but rather a variety. Admitting multiple dialects and different levels of formality complicates our defining native Spanish pronunciation for use as a point of comparison.

Advances in acoustical technology allow us to make acoustic measurements of native speech and to compare those measurements with samples of L2 pronunciation. However, just which of the many acoustic components which form an accent should we measure and use to compare with the L2 pronunciation? Speakers' speed, rhythm, intonation (Suter 1976), voice quality features (Esling and Wong 1982), stress (Flege 1981), length of breath groups (Gynan 1985), syllabification (Tarone 1987), numerous articulatory characteristics associated with each phonological segment, and other features (Scovel 1988) all enter into their accent. At the present time there are not complete measurements for all of these components even in the more frequently spoken languages, such as Spanish. Measurements vary even from one dialect to another and between native bilinguals and monolinguals (Flege 1981). Even
though it is likely that these components in L2 speech probably progress towards native-like production at about the same rate, and therefore we could focus on one or two of these components, we cannot assume that this is always the case for all L2 speakers. Nor do we know the relative contribution of these components to a perceived L2 accent so we do not know which of them to focus on (Flege and Hammond 1980). In addition, our measurements would have to include multiple dialects and levels of formality, further complicating their use.

Even with accurate acoustical measurements of pronunciation samples from different dialects and with different levels of formality, we are really interested in the relationship between these measurements and native speaker reactions to P samples with the different measurements. Only by studying native speaker reactions to P samples with differing measurements in the different components across the major dialects will we be able to define the range of measurements and the interaction of the different components which represent native or native-like P. We would be dealing with an incredible number of measurements and relationships. Perhaps increased use of computers and additional analyses and understanding of each of the pronunciation components will make acoustic measurement of P samples a real possibility for determining native-like pronunciation in the future.

For now, defining native P and native-like L2 P generally must rely on native speaker evaluation of speech samples. In most cases native speakers assess speech samples globally without
consciously breaking down the sample between P and grammar (G) (Yorozuya and Oller 1980, Yager in press) nor breaking P down into its component parts. Using a group of native speaking judges from different regions would allow alleviate the problem of having one region’s dialect used as the point of comparison. Accent recognition forms part of a native speakers’ linguistic competence (Scovel 1977). With limited training, native speaking judges also can consider such factors as level of formality in their pronunciation assessments.

For native speakers to adequately assess a pronunciation sample for nativeness a number of factors must be controlled. If we want to assess only P and not the use of vocabulary (V) or grammar (G), then these factors must be constant between assessed language samples. Judges probably tend to downgrade even native pronunciation of a text when it contains obvious grammatical errors and inappropriate use of vocabulary. Having speakers read from a native text will control these factors. In this way G and V would be native; judges informed of that fact could focus on P. Another possibility would be to select short excerpts of a natural conversation with the person whose P is to be evaluated. The text would be evaluated to determine which parts of it were native-like, then the native-like portions would be presented to native speaking judges for evaluation of P. Of course, this presupposes that the L2 speaker is sufficiently advanced to produce some native-like conversation. Although more complicated and time consuming, samples assessed in this way would be pronounced in a
conversational way.

Just as important as controlling the effect of G and V is controlling for the possibility that even L1 speech samples may not be judged as completely native-like (Yager, in press). Here we return to the use of L1 P samples as our yardstick. Any experimental rating of P samples must include some L1 P samples as a point of comparison. Including some samples of beginning L2 P will also provide a baseline point of comparison. In a sense, we are keeping the L1 judges honest by including these control samples. Any L2 P sample judged at a level not significantly less native-like than the L1 P samples should be considered completely native-like.

L2 P research uses a number of evaluative instruments for assessing whether a P sample is native-like or not. Neufeld (1979, 1980) has his 85 native speaking French judges assess his seven samples of advanced L2 French as 1) a French speaker from Canada 2) a French speaker from another country, or 3) a non-native speaker of French. Judges consistently evaluated five of the seven non-native speakers as either 1 or 2. In this type evaluative instrument, assessing speakers as belonging to category 1 or 2 indicates a belief that they are native speakers. However it is difficult to compare how native speakers fair in this type of instrument with the L2 speakers. To know how many judges have to rate L2 speakers as 1 or 2 for their pronunciation to be considered native-like we must know how many of those same judges rate native speakers of French as 1 or 2. Only then can we
compare the first and second language pronunciation with each other to see if our advanced L2 speakers produce native-like P. A statistical comparison is somewhat more difficult because we are dealing with discrete categories rather than an evaluative scale.

Yager (in press) uses a conceptual scale of 1 (not at all native) to 7 (completely native) in his comparison of L2 Spanish G with P. In this study 29 native speakers of Spanish from 11 countries judge P samples from 15 advanced learners and 8 controls. Four L1 and four beginning students serve as the controls which provide reference points for the advanced L2 P. All 29 judges rate each speaker’s P on the 1 to 7 scale; then the average of these 29 ratings represents each speaker’s pronunciation score. Direct statistical comparison of each speaker’s P score with the native controls’ group P score using paired student t-tests allows us to determine if each P score is significantly less native than that of the controls.

In Yager’s study the native speaking controls scores ranged from 6.43 to 6.83 out of the 7 point scale, 7 being completely native P. This indicates native speaking judges do not always rate even native P as being completely native. The 6.43 score indicates that more judges assessed that sample as 6--still very native-like--than 7. This underlies the importance of using L1 controls as a point of reference. If native judges do not consistently rate all samples of native P as being completely native, we certainly should not insist that advanced learner P be rated as completely native for us to consider it as native-like P. In Yager, four of
the fifteen advanced learner P scores were over 6.0. This means that some judges assessed them as being completely native. Even so, of these advanced learner scores of 6.03, 6.28, 6.28 and 6.45, only the latter, 6.45, was not significantly different from the native control P scores ($p < .05$). We can say with confidence that this person's speech is native-like. As for the other three with 6+ scores, some native judges did assess their P as being completely native, but not as many as assessed the L1 P as being completely native. In an experimental situation we cannot conclude that their P is completely native.

Unlike the laboratory situation where linguists control extraneous variables to arrive at a rigorous evaluation of pronunciation, the real world provides many confounding variables and distractions which can either help or interfere with the advanced speaker of Spanish appearing to have a native-like accent.

Spanish is the official language of 18 Latin American countries and Spain and is widely spoken in the U.S. as well. Obviously, with such a wide geographic distribution and varied historical and sociolinguistic background, the Spanish language includes an amazing variety of geographical and social variants. Advanced speakers of Spanish as a second language whose grammar and pronunciation approximate that of native speakers, even those who would not be evaluated as completely native-like in experimental situations, may often be judged as native speakers of Spanish, but from some undefined Spanish speaking country. I must
emphasize that one's grammar and choice of vocabulary must also be near native-like before a native speaker will consider the advanced speaker to have a native accent. Anecdotal evidence of this phenomenon abounds. One close friend of mine is often asked by native speakers of Spanish in Mexico and New Mexico what part of Spain she is from when in reality she is Belgian. Another American friend when in Spain is often queried about what part of Latin America he is from. When in Argentina he has been asked about being from Spain. Many of us have had similar experiences. Frequently native speakers, having recognized non-native speakers as very proficient in Spanish, intend to compliment them on their Spanish in this way. On the other hand, many times native speakers believe that they are dealing with native speakers from other parts of the Spanish speaking world. In this day and age, most Spanish speaking people have traveled to other Spanish speaking regions, have spoken to tourist from other regions, have watched television programs from other Spanish speaking countries or have listened to music from other countries. They are aware of the wide variety of Spanish variants, but probably can only recognize a few of them accurately. Therefore, when they meet someone who acts and talks like a hispanic, they naturally assume that the person is indeed a hispanic, but with an accent from some Spanish speaking area which they cannot quite identify. In this situation, the advanced learner's Spanish accent can be considered native-like. The exception is when the advanced learner uses a specific variant of Spanish in the area of that variant. For example, if I use my
best Mexico City accent in Mexico City, it had better be completely native-like if I hope for Mexico City residents to consider my pronunciation to be native.

Unfortunately for those who aspire to native-like pronunciation, other factors work against them. Even if our pronunciation is so native-like that in telephone conversations native speakers would consider us as native, when speaking in person, our clothing, physical attributes, and mannerisms may lead the native speaker to the conclusion that the advanced speaker is American, Japanese, Danish or whatever, even before he or she speaks. The context of the conversation also may contribute to advanced speakers, or even native speakers, being identified as non-natives, even in the face of contrary evidence. Some years ago I was with my Mexican girlfriend (now my wife) at the pyramid of Teotihuacán. We were speaking with a Mexican man there who insisted on speaking to my girlfriend in his very limited English in spite of her explaining in her native Spanish that she did not understand or speak any English at all. His mind was pre-set to believe that she was American because she was with an American at a popular tourist attraction. Obviously, in this type of situation, not even a completely native-like grammar and pronunciation is likely to pass as native.

How do we identify native-like pronunciation? Until the acoustic parameters are defined in relation to native speaker reactions, we are left in a similar situation to that of the Supreme Court Justice, who when asked what pornography was, said
that although he could not define pornography he certainly recognized it when he saw it. Insufficient research limits our ability to objectively define the difference between slightly accented pronunciation and native or native-like pronunciation, but a native speaker can certainly recognize a foreign accent when he or she hears one. So, what is native-like pronunciation? It is that pronunciation that native speakers of the target language accept as native. In an experimental context this means that carefully selected and trained native speakers must evaluate the L2 pronunciation as being as native as L1 pronunciation under conditions that control non-pronunciation variables. In real life situations, these variables, including the nativeness of the speaker’s grammar and vocabulary, the way the speaker acts, the linguistic experience of the listener, and the social and linguistic context in which the conversation takes place, may work for or against the advanced learner who aspires to completely native-like pronunciation. In real-life the listener decides what native-like pronunciation is.
REFERENCES


