#### TECHNOLOGY REVIEW

## Accent Perfect: American English Pronunciation App

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### INTRODUCTION

Second language learning can be fostered when language learners pay attention and notice the target language input and structures and understand the importance of what they notice (Schmidt, 2012). Computers may promote autonomous learning through individualized instruction, practice through listening and repetition exercises and automatic visual support (Levis, 2007). There have been numerous computer and smartphone apps developed as additional resources for language learners; these applications seek to aid users in becoming self-supporting learners and practice their language skills outside of traditional classrooms.

In this context, *Accent Perfect: American English Pronunciation App* is an app for iOS and Android smartphones that was developed by MNS C DEV LLC in 2016 (AppBrain). The app can be downloaded from iTunes Store or Google Play for \$19.99. The developer claims that the app seeks to help ESL learners develop reading, listening, speaking and intonation skills (MNSC). The app seeks to achieve this goal by having its users "recognize common words that share the same sound with the help of [its] guided audio recordings and practice sessions" (MNSC).

#### Overview

The app consists of four sections: (1) sounds, (2) minimal pairs, (3) intonation and (4) games. When the user launches the app for the first time, they are asked to specify their native language. The app only gives the user seven language options to choose from: German, French, Chinese, Spanish, Hindi, Korean, Italian and an "English or Other" option for all other languages (Figure 1).

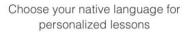




Figure 1. Language selection menu.

Once the user has indicated their native language, they are directly taken to the main interface without any training on how to use or navigate the app. However, in the main menu, the user can open "Instructions," which gives them a brief overview on how they can utilize the app's functions

(Figure 2).

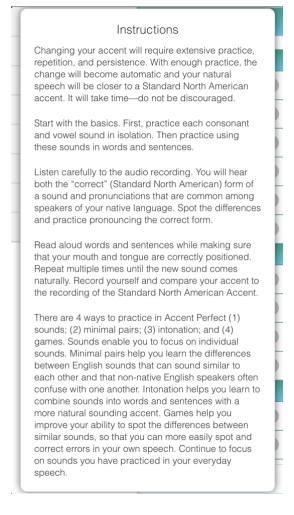


Figure 2. Instructions on how to use the app properly.

After reading the instructions, the user selects between "Arpabet" (orthographies) and "International Phonetic Alphabet" (IPA) symbols to represent consonants and vowels (Figure 3). "Phonetic system" is also among the options that the user can select but selecting "Phonetic system" and "Arphabet" result in the same representations of sounds.

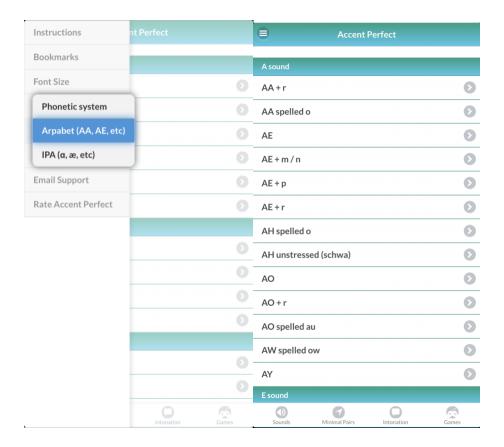


Figure 3. Phonetic system selection and the main menu.

As can be seen in Figure 3, the user can navigate by touching "Sounds," "Minimal Pairs" or "Intonation" categories at the bottom of the screen. Each category consists of a short audio lecture about the item in question and word- or sentence-level repetition exercises. It is important to note that the user gets to choose from two different voices in the listen-and-repeat exercises, though, both voices are women (Figure 4.)

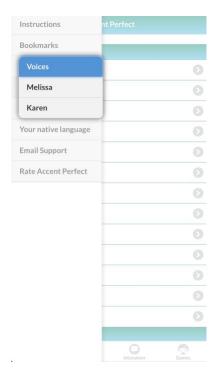


Figure 4. Speaker selection menu.

### **Sounds**

In "Sounds," the user can listen to lectures and complete word- and sentence-level repetition exercises on certain sounds such as consonants, pronunciation of simple past *-ed* that follows various consonants (such as /d/ or /t/), /s/ consonant in final position, and "silent sounds" (such as /n/, /p/, /d/, or /k/). Lectures consist of instructions about why a particular sound may be difficult to produce for some non-native speakers of English and how production of that sound can be improved. Exercises include listening to the correct pronunciation of the sound. The user also gets to record themselves and play the recording to compare their pronunciation to that of the speaker the app provides (Figure 5). It should be noted that the app does not provide any feedback to its users on their performances.



Figure 5. "Sounds" section and exercises.

# Minimal pairs

The user can find lectures and repetition exercises on minimal pairs of consonants (such as  $/s/-/\int /$  or /f/-/p/) and vowels. There is also a section for homophones (such as *bare-bear*, *tear-tier* and *soar-sore*) where the user can listen to similar repetition exercises and practice their pronunciation by recording themselves/ (Figure 6).

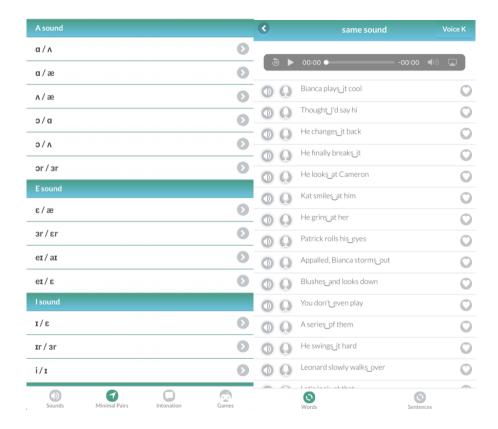


Figure 6. "Minimal Pairs" section and sentence-level exercises.

### **Intonation**

This component includes four main categories of exercises, namely, consonant to vowel, similar consonant, same consonant, vowel to vowel: w and vowel to vowel: y. The user can practice intonation of these elements of connected speech through sentence repetitions; however, the app does not provide a lecture that the user can listen to in this component (Figure 7).

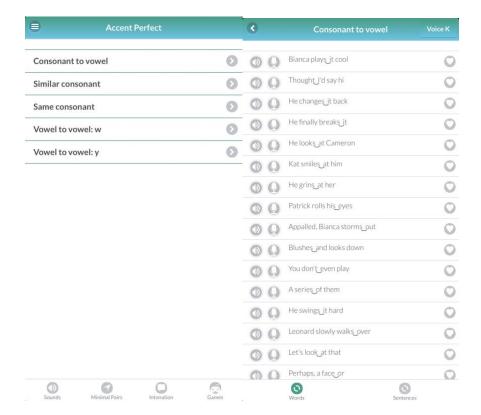


Figure 7. "Intonation" section and exercises.

### Games

Games consists of one short where the user listens to the pronunciation of a single word or a keyword uttered in a sentence and is asked to identify the word that they heard. The keywords are based on what the user practices in the four main sections of the app. There is a progression; the user advances if they complete a "level" consisting of fifteen questions without exceeding three wrong answers. However, there are no rewards that the app offers for completing levels, and the levels do not seem to get harder as the user makes progress (Figure 8).

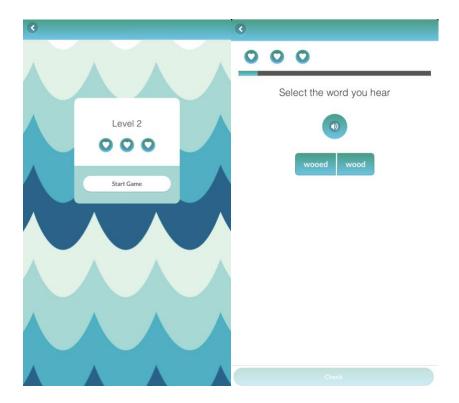


Figure 8. "Games" section of the app.

#### **EVALUATION**

The various word- and sentence-level drilling exercises that Accent Perfect consists of can be beneficial for learners who are used to learning and improving pronunciation through repetition. Learners may also find two different representation of sounds and lectures with brief instructions on how to produce certain sounds useful. However, what can immediately be noticed in Accent Perfect is the lack of variety in the exercise types that it provides. The app only includes listening and repetition exercises but lacks automatic visual support such as graphical displays of the speaker's vocal tract or face that Levis (2007) suggests. It also does not provide any sort of feedback to its users, expecting them to engage in self-evaluation by repeatedly listening to the correct form and their own productive, and try to replicate the correct form without any guidelines. Saito (2012) suggests that pronunciation exercises should not only be in the form of drilling exercises that are strictly controlled; instead, exercises should promote communicative practice to teach learners meaningful, spontaneous speech abilities. Accent Perfect is clearly far from achieving what Saito (2012) puts forth as it seems to fail to implement communicative exercises that would foster both pronunciation teaching and speaking ability. Implementation of automated visual and textual feedback through speech recognition would help learners understand their errors and correct themselves better instead of trying to improve their pronunciation on their own (Levis, 2007).

It is also worth mentioning that the app utilizes Arpabet and IPA symbols to represent sounds. Erdener and Burnham (2005) noted that English has an opaque orthography in which one sound may be shown by different orthographic representations. The use of Arpabet can become an issue for many speakers with a native language that has a transparent orthography as they would transfer

their L1 knowledge into their L2, which would lead to interference. The app attempts to cope with this issue by including the IPA symbols and by providing lectures and drilling exercises with words that have the same vowel but spelled differently.

The app attempts to employ game-based learning but lacks depth in its implementation. Gros (2007) notes that game-based learning should foster environments in which "skills and attitudes play an important role" (p. 26). What the game in the app offers is essentially more listening and drilling exercises which the user has done (or should do) numerous times before playing the game. There is a need of more exercise types based on game-based learning theories to reduce such repetitiveness and offer varied, meaningful activities that the user can benefit from. If the developers intend is to give the users an opportunity to practice their perception of American English in a simple game, the "Games" section can be renamed to more accurately reflect the nature of the activity that users experience.

The app also lacks authentic tasks representing the pronunciation features found in real-life communication. Chapelle (2001) defines "authenticity" as the connection between computer-assisted language learning (CALL) activities and communication skills that are used outside of the classroom. Therefore, the exercises could be representative of the pronunciation features one can experience in daily life. *Accent Perfect* provides only repetition exercises at word- and sentence-level, failing to deliver meaning- and content-based (Chapelle, 2001) pronunciation exercises to users.

#### CONCLUSION

Despite its weaknesses in terms of speech recognition, visual feedback and varied communicative exercises, *Accent Perfect* can still be beneficial for a language learner who would like to be exposed to the features of American English outside of classrooms through short lectures, listening activities, and repetition exercises on minimal pairs and intonation of consonants and vowels. The developers might consider inclusion of meaning- and content-based exercises and a progression system in the "Games" section to foster game-based learning. This app will be more beneficial for ESL learners if these issues are addressed based on previous research and theory in the field of pronunciation.

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