APPENDIX A

AUDITORY DISCRIMINATION TASK

You are going to hear two words. Say whether they are the same or different.

<table>
<thead>
<tr>
<th>Pair #</th>
<th>Pairs of words</th>
<th>Type</th>
<th>Sound contrasts</th>
<th>Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>SEAT-SIT</td>
<td>minimal pair</td>
<td>vowels /i/-/ɪ/</td>
<td>different</td>
</tr>
<tr>
<td>2</td>
<td>RAIN-RAIN</td>
<td>Distractor</td>
<td></td>
<td>the same</td>
</tr>
<tr>
<td>3</td>
<td>POT-PART</td>
<td>minimal pair</td>
<td>vowels /θ/-/θ/</td>
<td>different</td>
</tr>
<tr>
<td>4</td>
<td>LESION-LEGION</td>
<td>minimal pair</td>
<td>intervocalic consonants /ʒ/-/ʤ/</td>
<td>different</td>
</tr>
<tr>
<td>5</td>
<td>TEN-TEN</td>
<td>Distractor</td>
<td></td>
<td>the same</td>
</tr>
<tr>
<td>6</td>
<td>BAT-VAT</td>
<td>minimal pair</td>
<td>word-initial consonants /b/-/v/</td>
<td>different</td>
</tr>
<tr>
<td>7</td>
<td>GONE-GUN</td>
<td>minimal pair</td>
<td>vowels /ɔ/-/ʌ/</td>
<td>different</td>
</tr>
<tr>
<td>8</td>
<td>MAN-MEN</td>
<td>minimal pair</td>
<td>vowels /æ/-/æ/</td>
<td>different</td>
</tr>
<tr>
<td>9</td>
<td>PLAIN-PLAIN</td>
<td>Distractor</td>
<td></td>
<td>the same</td>
</tr>
<tr>
<td>10</td>
<td>BUILT-BELT</td>
<td>minimal pair</td>
<td>vowels /t/-/ð/</td>
<td>different</td>
</tr>
<tr>
<td>11</td>
<td>STILL-STEAL</td>
<td>minimal pair</td>
<td>vowels /ɪ/-/i/</td>
<td>different</td>
</tr>
<tr>
<td>12</td>
<td>BAD-BED</td>
<td>minimal pair</td>
<td>vowels /æ/-/æ/</td>
<td>different</td>
</tr>
<tr>
<td>13</td>
<td>FEEL-FEEL</td>
<td>Distractor</td>
<td>vowels /i/-/ɪ/</td>
<td>the same</td>
</tr>
<tr>
<td>14</td>
<td>COP-CUP</td>
<td>minimal pair</td>
<td>vowels /ɔ/-/ʌ/</td>
<td>different</td>
</tr>
<tr>
<td>15</td>
<td>CART-CARD</td>
<td>minimal pair</td>
<td>word-final consonants /t/-/ð/</td>
<td>different</td>
</tr>
<tr>
<td>16</td>
<td>READ-READ</td>
<td>Distractor</td>
<td>vowels /ɪ/-/i/</td>
<td>the same</td>
</tr>
<tr>
<td>17</td>
<td>ROBE-ROPE</td>
<td>minimal pair</td>
<td>word-final consonants /b/-/p/</td>
<td>different</td>
</tr>
<tr>
<td>18</td>
<td>CUT-CUT</td>
<td>Distractor</td>
<td></td>
<td>the same</td>
</tr>
<tr>
<td>19</td>
<td>*BOOT-BOOK</td>
<td>false distractor</td>
<td>vowels and consonants /ʊt/-/ʊk/</td>
<td>different</td>
</tr>
<tr>
<td>20</td>
<td>PRICE-PRIZE</td>
<td>minimal pair</td>
<td>word-final consonants /s/-/z/</td>
<td>different</td>
</tr>
</tbody>
</table>

Note: Only actual pairs of words were presented on tape (numbers of pairs were not included in the presentation of stimuli).
## APPENDIX B

### IMITATION TASK

*And now repeat:*

<table>
<thead>
<tr>
<th>word #</th>
<th>words</th>
<th>sound(s) to be studied</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>pad</td>
<td>/d/ in word-final position</td>
</tr>
<tr>
<td>2</td>
<td>am</td>
<td>/m/ in word-final position</td>
</tr>
<tr>
<td>3</td>
<td>loath</td>
<td>/θ/ in word-final position</td>
</tr>
<tr>
<td>4</td>
<td>pens</td>
<td>/z/ in word-final position</td>
</tr>
<tr>
<td>5</td>
<td>box</td>
<td>/ks/ in word-final position</td>
</tr>
<tr>
<td>6</td>
<td>tests</td>
<td>/ts/ in word-final position</td>
</tr>
<tr>
<td>7</td>
<td>going</td>
<td>/ŋ/ in word-final position</td>
</tr>
<tr>
<td>8</td>
<td>helps</td>
<td>/ps/ in word-final position</td>
</tr>
<tr>
<td>9</td>
<td>films</td>
<td>/mz/ in word-final position</td>
</tr>
<tr>
<td>10</td>
<td>bumped</td>
<td>/t/ in word-final position</td>
</tr>
<tr>
<td>11</td>
<td>dream</td>
<td>/dr/ in word-initial position</td>
</tr>
<tr>
<td>12</td>
<td>stream</td>
<td>/str/ in word-initial position</td>
</tr>
<tr>
<td>13</td>
<td>train</td>
<td>/tr/ in word-initial position</td>
</tr>
<tr>
<td>14</td>
<td>sky</td>
<td>/sk/ in word-initial position</td>
</tr>
<tr>
<td>15</td>
<td>this</td>
<td>/ð/ in word-initial position</td>
</tr>
<tr>
<td>16</td>
<td>speak</td>
<td>/sp/ in word-initial position</td>
</tr>
<tr>
<td>17</td>
<td>zoo</td>
<td>/z/ in word-initial position</td>
</tr>
<tr>
<td>18</td>
<td>day</td>
<td>/d/ in word-initial position</td>
</tr>
<tr>
<td>19</td>
<td>red</td>
<td>/r/ in word-initial position</td>
</tr>
<tr>
<td>20</td>
<td>hat</td>
<td>/h/ in word-initial position</td>
</tr>
<tr>
<td>21</td>
<td>jam</td>
<td>/dʒ/ in word-initial position</td>
</tr>
<tr>
<td>22</td>
<td>very</td>
<td>/v/ in word-initial position</td>
</tr>
<tr>
<td>23</td>
<td>pen</td>
<td>/p/ in word-initial position</td>
</tr>
<tr>
<td>24</td>
<td>tea</td>
<td>/t/ in word-initial position</td>
</tr>
<tr>
<td>25</td>
<td>she</td>
<td>/ʃ/ in word-initial position</td>
</tr>
<tr>
<td>word #</td>
<td>words</td>
<td>sound(s) to be studied</td>
</tr>
<tr>
<td>--------</td>
<td>------------</td>
<td>--------------------------------------</td>
</tr>
<tr>
<td>26</td>
<td>reading</td>
<td>/d/ in intervocalic position</td>
</tr>
<tr>
<td>27</td>
<td>Asia</td>
<td>/z/ in intervocalic position</td>
</tr>
<tr>
<td>28</td>
<td>pleasure</td>
<td>/z/ in intervocalic position</td>
</tr>
<tr>
<td>29</td>
<td>it</td>
<td>/t/</td>
</tr>
<tr>
<td>30</td>
<td>but</td>
<td>/ʌ/</td>
</tr>
<tr>
<td>31</td>
<td>went</td>
<td>/w/ in word-initial position</td>
</tr>
<tr>
<td>32</td>
<td>again</td>
<td>/ə/</td>
</tr>
<tr>
<td>33</td>
<td>back</td>
<td>/æ/</td>
</tr>
<tr>
<td>34</td>
<td>pleasant</td>
<td>/z/ in intervocalic position</td>
</tr>
</tbody>
</table>

Note: The sounds that were intended to be studied are also represented by letters (under the column of words) in bold typeface. Like in the auditory discrimination task, only the actual words were delivered by the taped model voice.
APPENDIX C

INSTRUCTIONS STUDY 1

(a) Ratings on words

Instructions – JAM

You are being asked to judge the degree of foreign accent in a number of recordings of the word JAM.

Some of the recordings will be of native speakers of English, while most others will be of learners of English.

The model of English that these learners will have been exposed to is most often a general British model.

The recordings you will hear will have a great deal of background noise. Please ignore the noise as much as you can in making your judgements; concentrate on the individual pronunciation.

Please rate each individual pronunciation on a 9-point scale, where 0 means no foreign accent, 4 means a moderate amount of foreign accent, and 8 means a very strong foreign accent. Try to use all 9 points on the scale.

The first 5 practice items you will hear will be the model voice (that of a native speaker) that the learners were asked to imitate. This will familiarize you with the British pronunciation that was the model. You must “rate” the pronunciation, but it does not matter what answer you give to these first 5 items. You may practice using the software by hitting any of the buttons to answer.

Once we have proceeded to the real test items, it is important that you take care in making your judgements and choosing your rating in each case.

You may hear any item as many times as you wish before making your judgement. If you do not answer, a dialog box will appear, giving you the opportunity to hear the item again.

A progress bar will show your progression through the items.

Your concentration is needed to make meaningful, accurate judgements. If your concentration is wandering, or if you need to take a break for any reason, simply do not respond to an item. When you return to the task, simply click “yes” to hear the item again, and proceed from there. By this means you may take a break whenever you feel the need for one.

Are there any questions?

[The parts of the instructions in roman are read on any trial of the experiment. The parts in italic are read on the first and second trials of a given subject only.]
Instructions – READING

You are being asked to judge the degree of foreign accent in a number of recordings of the word **READING**.

Some of the recordings will be of native speakers of English, while most others will be of learners of English.

*The model of English that these learners will have been exposed to is most often a general British model.*

The recordings you will hear will have a great deal of background noise. Please ignore the noise as much as you can in making your judgements; concentrate on the individual pronunciation.

Please rate each individual pronunciation on a 9-point scale, where 0 means no foreign accent, 4 means a moderate amount of foreign accent, and 8 means a very strong foreign accent. Try to use all 9 points on the scale.

*The first 5 practice items you will hear will be the model voice (that of a native speaker) that the learners were asked to imitate. This will familiarize you with the British pronunciation that was the model. You must “rate” the pronunciation, but it does not matter what answer you give to these first 5 items. You may practice using the software by hitting any of the buttons to answer.*

Once we have proceeded to the real test items, it is important that you take care in making your judgements and choosing your rating in each case.

You may hear any item as many times as you wish before making your judgement. *If you do not answer, a dialog box will appear, giving you the opportunity to hear the item again.*

A progress bar will show your progression through the items.

Your concentration is needed to make meaningful, accurate judgements. *If your concentration is wandering, or if you need to take a break for any reason, simply do not respond to an item. When you return to the task, simply click “yes” to hear the item again, and proceed from there. By this means you may take a break whenever you feel the need for one.*

Are there any questions?
Instructions – RED

You are being asked to judge the degree of foreign accent in a number of recordings of the word RED.

Some of the recordings will be of native speakers of English, while most others will be of learners of English.

The model of English that these learners will have been exposed to is most often a general British model.

The recordings you will hear will have a great deal of background noise. Please ignore the noise as much as you can in making your judgements; concentrate on the individual pronunciation.

Please rate each individual pronunciation on a 9-point scale, where 0 means no foreign accent, 4 means a moderate amount of foreign accent, and 8 means a very strong foreign accent. Try to use all 9 points on the scale.

The first 5 practice items you will hear will be the model voice (that of a native speaker) that the learners were asked to imitate. This will familiarize you with the British pronunciation that was the model. You must “rate” the pronunciation, but it does not matter what answer you give to these first 5 items. You may practice using the software by hitting any of the buttons to answer.

Once we have proceeded to the real test items, it is important that you take care in making your judgements and choosing your rating in each case.

You may hear any item as many times as you wish before making your judgement. If you do not answer, a dialog box will appear, giving you the opportunity to hear the item again.

A progress bar will show your progression through the items.

Your concentration is needed to make meaningful, accurate judgements. If your concentration is wandering, or if you need to take a break for any reason, simply do not respond to an item. When you return to the task, simply click “yes” to hear the item again, and proceed from there. By this means you may take a break whenever you feel the need for one.

Are there any questions?

[The parts of the instructions in roman are read on any trial of the experiment. The parts in italic are read on the first and second trials of a given subject only.]
Instructions – SPEAK

You are being asked to judge the degree of foreign accent in a number of recordings of the word SPEAK.
Some of the recordings will be of native speakers of English, while most others will be of learners of English.
The model of English that these learners will have been exposed to is most often a general British model.
The recordings you will hear will have a great deal of background noise. Please ignore the noise as much as you can in making your judgements; concentrate on the individual pronunciation.
Please rate each individual pronunciation on a 9-point scale, where 0 means no foreign accent, 4 means a moderate amount of foreign accent, and 8 means a very strong foreign accent. Try to use all 9 points on the scale.
The first 5 practice items you will hear will be the model voice (that of a native speaker) that the learners were asked to imitate. This will familiarize you with the British pronunciation that was the model. You must “rate” the pronunciation, but it does not matter what answer you give to these first 5 items. You may practice using the software by hitting any of the buttons to answer.
Once we have proceeded to the real test items, it is important that you take care in making your judgements and choosing your rating in each case.
You may hear any item as many times as you wish before making your judgement. If you do not answer, a dialog box will appear, giving you the opportunity to hear the item again.
A progress bar will show your progression through the items.
Your concentration is needed to make meaningful, accurate judgements. If your concentration is wandering, or if you need to take a break for any reason, simply do not respond to an item. When you return to the task, simply click “yes” to hear the item again, and proceed from there. By this means you may take a break whenever you feel the need for one.

Are there any questions?

[The parts of the instructions in roman are read on any trial of the experiment. The parts in italic are read on the first and second trials of a given subject only.]
Instructions – THIS

You are being asked to judge the degree of foreign accent in a number of recordings of the word THIS.

Some of the recordings will be of native speakers of English, while most others will be of learners of English.

The model of English that these learners will have been exposed to is most often a general British model.

The recordings you will hear will have a great deal of background noise. Please ignore the noise as much as you can in making your judgements; concentrate on the individual pronunciation.

Please rate each individual pronunciation on a 9-point scale, where 0 means no foreign accent, 4 means a moderate amount of foreign accent, and 8 means a very strong foreign accent. Try to use all 9 points on the scale.

The first 5 practice items you will hear will be the model voice (that of a native speaker) that the learners were asked to imitate. This will familiarize you with the British pronunciation that was the model. You must “rate” the pronunciation, but it does not matter what answer you give to these first 5 items. You may practice using the software by hitting any of the buttons to answer.

Once we have proceeded to the real test items, it is important that you take care in making your judgements and choosing your rating in each case.

You may hear any item as many times as you wish before making your judgement. If you do not answer, a dialog box will appear, giving you the opportunity to hear the item again.

A progress bar will show your progression through the items.

Your concentration is needed to make meaningful, accurate judgements. If your concentration is wandering, or if you need to take a break for any reason, simply do not respond to an item. When you return to the task, simply click “yes” to hear the item again, and proceed from there. By this means you may take a break whenever you feel the need for one.

Are there any questions?

[The parts of the instructions in roman are read on any trial of the experiment. The parts in italic are read on the first and second trials of a given subject only.]
Instructions – VERY

You are being asked to judge the degree of foreign accent in a number of recordings of the word VERY.

Some of the recordings will be of native speakers of English, while most others will be of learners of English.

The model of English that these learners will have been exposed to is most often a general British model.

The recordings you will hear will have a great deal of background noise. Please ignore the noise as much as you can in making your judgements; concentrate on the individual pronunciation.

Please rate each individual pronunciation on a 9-point scale, where 0 means no foreign accent, 4 means a moderate amount of foreign accent, and 8 means a very strong foreign accent. Try to use all 9 points on the scale.

The first 5 practice items you will hear will be the model voice (that of a native speaker) that the learners were asked to imitate. This will familiarize you with the British pronunciation that was the model. You must “rate” the pronunciation, but it does not matter what answer you give to these first 5 items. You may practice using the software by hitting any of the buttons to answer.

Once we have proceeded to the real test items, it is important that you take care in making your judgements and choosing your rating in each case.

You may hear any item as many times as you wish before making your judgement. If you do not answer, a dialog box will appear, giving you the opportunity to hear the item again.

A progress bar will show your progression through the items.

Your concentration is needed to make meaningful, accurate judgements. If your concentration is wandering, or if you need to take a break for any reason, simply do not respond to an item. When you return to the task, simply click “yes” to hear the item again, and proceed from there. By this means you may take a break whenever you feel the need for one.

Are there any questions?

[The parts of the instructions in roman are read on any trial of the experiment. The parts in italic are read on the first and second trials of a given subject only.]
(b) Ratings on segments

Instructions – jAm

You are being asked to judge the degree of foreign accent on a single sound in a number of recordings of the word “jam”. We would like you to make a judgement of the degree of foreign accent in the vowel highlighted in CAPS (A) in the word jAm.

Please do NOT judge the global or overall foreign accent on the word, but only the degree to which the vowel-sound /æ/—spelled <A>—sounds like a native speaker of English. Please do not permit a strong or weak foreign accent on other parts of the word affect your judgement of this one sound.

Some of the recordings will be of native speakers of English, while most others will be of learners of English.

The model of English that these learners will have been exposed to is most often a general British model.

The recordings you will hear will have a great deal of background noise. Please ignore the noise as much as you can in making your judgements; concentrate on the individual pronunciation.

Please rate each individual pronunciation on a 9-point scale, where 0 means no foreign accent, 4 means a moderate amount of foreign accent, and 8 means a very strong foreign accent. Try to use all 9 points on the scale.

The first 5 practice items you will hear will be the model voice (that of a native speaker) that the learners were asked to imitate. This will familiarize you with the British pronunciation that was the model. You must “rate” the pronunciation, but it does not matter what answer you give to these first 5 items. You may practice using the software by hitting any of the buttons to answer.

Once we have proceeded to the real test items, it is important that you take care in making your judgements and choosing your rating in each case.

You may hear any item as many times as you wish before making your judgement. If you do not answer, a dialog box will appear, giving you the opportunity to hear the item again.

A progress bar will show your progression through the items.

Your concentration is needed to make meaningful, accurate judgements. If your concentration is wandering, or if you need to take a break for any reason, simply do not respond to an item. When you return to the task, simply click “yes” to hear the item again, and proceed from there. By this means you may take a break whenever you feel the need for one.

Are there any questions?
Instructions – rEAding

You are being asked to judge the degree of foreign accent on a single sound in a number of recordings of the word “reading”. We would like you to make a judgement of the degree of foreign accent in the *vowel-sound* highlighted in CAPS (EA) in the word *rEAding*.

Please do NOT judge the global or overall foreign accent on the word, but only the degree to which the vowel-sound /i/—spelled <EA>—sounds like a native speaker of English. Please do not permit a strong or weak foreign accent on other parts of the word affect your judgement of this one sound.

Some of the recordings will be of native speakers of English, while most others will be of learners of English.

*The model of English that these learners will have been exposed to is most often a general British model.*

The recordings you will hear will have a great deal of background noise. Please ignore the noise as much as you can in making your judgements; concentrate on the individual pronunciation.

Please rate each individual pronunciation on a 9-point scale, where 0 means no foreign accent, 4 means a moderate amount of foreign accent, and 8 means a very strong foreign accent. Try to use all 9 points on the scale.

*The first 5 practice items you will hear will be the model voice (that of a native speaker) that the learners were asked to imitate. This will familiarize you with the British pronunciation that was the model. You must “rate” the pronunciation, but it does not matter what answer you give to these first 5 items. You may practice using the software by hitting any of the buttons to answer.*

Once we have proceeded to the real test items, it is important that you take care in making your judgements and choosing your rating in each case.

*You may hear any item as many times as you wish before making your judgement. If you do not answer, a dialog box will appear, giving you the opportunity to hear the item again.*

*A progress bar will show your progression through the items.*

Your concentration is needed to make meaningful, accurate judgements. If your concentration is wandering, or if you need to take a break for any reason, simply do not respond to an item. When you return to the task, simply click “yes” to hear the item again, and proceed from there. By this means you may take a break whenever you feel the need for one.

Are there any questions?

[The parts of the instructions in roman are read on any trial of the experiment. The parts in italic are read on the first and second trials of a given subject only.]
Instructions – reD

You are being asked to judge the degree of foreign accent on a single sound in a number of recordings of the word “red”. We would like you to make a judgement of the degree of foreign accent in the consonant highlighted in CAPS (D) in the word reD.

Two possible ways, among others, that speakers may mispronounce the “d” of red are: (1) to pronounce it as a “t” (devoicing), or (2) to drop the “d” from the pronunciation (elision). Count either of these mispronunciations as foreign accent when you are doing the rating.

Please do NOT judge the global or overall foreign accent on the word, but only the degree to which the consonant-sound /d/ sounds like a native speaker of English. Please do not permit a strong or weak foreign accent on other parts of the word affect your judgement of this one sound.

Some of the recordings will be of native speakers of English, while most others will be of learners of English.

The model of English that these learners will have been exposed to is most often a general British model.

The recordings you will hear will have a great deal of background noise. Please ignore the noise as much as you can in making your judgements; concentrate on the individual pronunciation.

Please rate each individual pronunciation on a 9-point scale, where 0 means no foreign accent, 4 means a moderate amount of foreign accent, and 8 means a very strong foreign accent. Try to use all 9 points on the scale.

The first 5 practice items you will hear will be the model voice (that of a native speaker) that the learners were asked to imitate. This will familiarize you with the British pronunciation that was the model. You must “rate” the pronunciation, but it does not matter what answer you give to these first 5 items. You may practice using the software by hitting any of the buttons to answer.

Once we have proceeded to the real test items, it is important that you take care in making your judgements and choosing your rating in each case.

You may hear any item as many times as you wish before making your judgement. If you do not answer, a dialog box will appear, giving you the opportunity to hear the item again.

A progress bar will show your progression through the items.

Your concentration is needed to make meaningful, accurate judgements. If your concentration is wandering, or if you need to take a break for any reason, simply do not respond to an item. When you return to the task, simply click “yes” to hear the item again, and proceed from there. By this means you may take a break whenever you feel the need for one.

Are there any questions?

[The parts of the instructions in roman are read on any trial of the experiment. The parts in italic are read on the first and second trials of a given subject only.]
Instructions – _Speak_

You are being asked to judge the degree of foreign accent on a single sound in a number of recordings of the word “speak”. We would like you to make a judgement of the degree of foreign accent in the **consonant** highlighted in CAPS (S) in the word **Speak**.

Note that one way speakers may mispronounce the “s” of speak is to insert an extra vowel in front of it. Count this extra vowel as if it were a foreign accent on the “s” itself.

Please do NOT judge the global or overall foreign accent on the word, but only the degree to which the consonant-sound /s/ sounds like a native speaker of English. Please do not permit a strong or weak foreign accent on other parts of the word affect your judgement of this one sound.

Some of the recordings will be of native speakers of English, while most others will be of learners of English.

The model of English that these learners will have been exposed to is most often a general British model.

The recordings you will hear will have a great deal of background noise. Please ignore the noise as much as you can in making your judgements; concentrate on the individual pronunciation.

Please rate each individual pronunciation on a 9-point scale, where 0 means no foreign accent, 4 means a moderate amount of foreign accent, and 8 means a very strong foreign accent. Try to use all 9 points on the scale.

The first 5 practice items you will hear will be the model voice (that of a native speaker) that the learners were asked to imitate. This will familiarize you with the British pronunciation that was the model. You must “rate” the pronunciation, but it does not matter what answer you give to these first 5 items. You may practice using the software by hitting any of the buttons to answer.

Once we have proceeded to the real test items, it is important that you take care in making your judgements and choosing your rating in each case.

You may hear any item as many times as you wish before making your judgement. If you do not answer, a dialog box will appear, giving you the opportunity to hear the item again.

A progress bar will show your progression through the items.

Your concentration is needed to make meaningful, accurate judgements. If your concentration is wandering, or if you need to take a break for any reason, simply do not respond to an item. When you return to the task, simply click “yes” to hear the item again, and proceed from there. By this means you may take a break whenever you feel the need for one.

Are there any questions?

[The parts of the instructions in roman are read on any trial of the experiment. The parts in italic are read on the first and second trials of a given subject only.]
Instructions – thIs

You are being asked to judge the degree of foreign accent on a single sound in a number of recordings of the word “this”. We would like you to make a judgement of the degree of foreign accent in the vowel highlighted in CAPS (I) in the word thIs.

Please do NOT judge the global or overall foreign accent on the word, but only the degree to which the vowel-sound /I/ sounds like a native speaker of English. Please do not permit a strong or weak foreign accent on other parts of the word affect your judgement of this one sound.

Some of the recordings will be of native speakers of English, while most others will be of learners of English.

The model of English that these learners will have been exposed to is most often a general British model.

The recordings you will hear will have a great deal of background noise. Please ignore the noise as much as you can in making your judgements; concentrate on the individual pronunciation.

Please rate each individual pronunciation on a 9-point scale, where 0 means no foreign accent, 4 means a moderate amount of foreign accent, and 8 means a very strong foreign accent. Try to use all 9 points on the scale.

The first 5 practice items you will hear will be the model voice (that of a native speaker) that the learners were asked to imitate. This will familiarize you with the British pronunciation that was the model. You must “rate” the pronunciation, but it does not matter what answer you give to these first 5 items. You may practice using the software by hitting any of the buttons to answer.

Once we have proceeded to the real test items, it is important that you take care in making your judgements and choosing your rating in each case.

You may hear any item as many times as you wish before making your judgement. If you do not answer, a dialog box will appear, giving you the opportunity to hear the item again.

A progress bar will show your progression through the items.

Your concentration is needed to make meaningful, accurate judgements. If your concentration is wandering, or if you need to take a break for any reason, simply do not respond to an item. When you return to the task, simply click “yes” to hear the item again, and proceed from there. By this means you may take a break whenever you feel the need for one.

Are there any questions?

[The parts of the instructions in roman are read on any trial of the experiment. The parts in italic are read on the first and second trials of a given subject only.]
Instructions – Very

You are being asked to judge the degree of foreign accent on a single sound in a number of recordings of the word “very”. We would like you to make a judgement of the degree of foreign accent in the consonant highlighted in CAPS (V) in the word Very.

Please do NOT judge the global or overall foreign accent on the word, but only the degree to which the consonant-sound /v/ sounds like a native speaker of English. Please do not permit a strong or weak foreign accent on other parts of the word affect your judgement of this one sound.

Some of the recordings will be of native speakers of English, while most others will be of learners of English.

The model of English that these learners will have been exposed to is most often a general British model.

The recordings you will hear will have a great deal of background noise. Please ignore the noise as much as you can in making your judgements; concentrate on the individual pronunciation.

Please rate each individual pronunciation on a 9-point scale, where 0 means no foreign accent, 4 means a moderate amount of foreign accent, and 8 means a very strong foreign accent. Try to use all 9 points on the scale.

The first 5 practice items you will hear will be the model voice (that of a native speaker) that the learners were asked to imitate. This will familiarize you with the British pronunciation that was the model. You must “rate” the pronunciation, but it does not matter what answer you give to these first 5 items. You may practice using the software by hitting any of the buttons to answer.

Once we have proceeded to the real test items, it is important that you take care in making your judgements and choosing your rating in each case.

You may hear any item as many times as you wish before making your judgement. If you do not answer, a dialog box will appear, giving you the opportunity to hear the item again.

A progress bar will show your progression through the items.

Your concentration is needed to make meaningful, accurate judgements. If your concentration is wandering, or if you need to take a break for any reason, simply do not respond to an item. When you return to the task, simply click “yes” to hear the item again, and proceed from there. By this means you may take a break whenever you feel the need for one.

Are there any questions?

[The parts of the instructions in roman are read on any trial of the experiment. The parts in italic are read on the first and second trials of a given subject only.]
APPENDIX D

INSTRUCTIONS STUDY 2

(a) FA rating task

Instructions – bAck

You are being asked to judge the degree of foreign accent on a single sound in a number of recordings of the word “back”. We would like you to make a judgement of the degree of foreign accent in the vowel highlighted in CAPS (A) in the word bAck.

Please do NOT judge the global or overall foreign accent on the word, but only the degree to which the vowel-sound /e/-spelled <A>--sounds like a native speaker of English. Please do not permit a strong or weak foreign accent on other parts of the word affect your judgement of this one sound.

Some of the recordings will be of native speakers of English, while most others will be of learners of English.

The model of English that these learners will have been exposed to is most often a general British model.

The recordings you will hear will have a great deal of background noise. Please ignore the noise as much as you can in making your judgements; concentrate on the individual pronunciation.

Please rate each individual pronunciation on a 9-point scale, where 1 means no foreign accent, 5 means a moderate amount of foreign accent, and 9 means a very strong foreign accent. Try to use all 9 points on the scale.

The first 5 practice items you will hear will be the model voice (that of a native speaker) that the learners were asked to imitate. This will familiarize you with the British pronunciation that was the model. You must “rate” the pronunciation, but it does not matter what answer you give to these first 5 items. You may practice using the software by hitting any of the buttons to answer.

Once we have proceeded to the real test items, it is important that you take care in making your judgements and choosing your rating in each case.

You may hear any item as many times as you wish before making your judgement. If you do not answer, a dialog box will appear, giving you the opportunity to hear the item again.

A progress bar will show your progression through the items.

Your concentration is needed to make meaningful, accurate judgements. If your concentration is wandering, or if you need to take a break for any reason, simply do not respond to an item. When you return to the task, simply click “yes” to hear the item again, and proceed from there. By this means you may take a break whenever you feel the need for one.

Are there any questions?
Instructions – pAd

You are being asked to judge the degree of foreign accent on a single sound in a number of recordings of the word “pad”. We would like you to make a judgement of the degree of foreign accent in the vowel highlighted in CAPS (A) in the word pAd.

Please do NOT judge the global or overall foreign accent on the word, but only the degree to which the vowel-sound /æ/--spelled <A>---sounds like a native speaker of English. Please do not permit a strong or weak foreign accent on other parts of the word affect your judgement of this one sound.

Some of the recordings will be of native speakers of English, while most others will be of learners of English.

The model of English that these learners will have been exposed to is most often a general British model.

The recordings you will hear will have a great deal of background noise. Please ignore the noise as much as you can in making your judgements; concentrate on the individual pronunciation.

Please rate each individual pronunciation on a 9-point scale, where 1 means no foreign accent, 5 means a moderate amount of foreign accent, and 9 means a very strong foreign accent. Try to use all 9 points on the scale.

The first 5 practice items you will hear will be the model voice (that of a native speaker) that the learners were asked to imitate. This will familiarize you with the British pronunciation that was the model. You must “rate” the pronunciation, but it does not matter what answer you give to these first 5 items. You may practice using the software by hitting any of the buttons to answer.

Once we have proceeded to the real test items, it is important that you take care in making your judgements and choosing your rating in each case.

You may hear any item as many times as you wish before making your judgement. If you do not answer, a dialog box will appear, giving you the opportunity to hear the item again.

A progress bar will show your progression through the items.

Your concentration is needed to make meaningful, accurate judgements. If your concentration is wandering, or if you need to take a break for any reason, simply do not respond to an item. When you return to the task, simply click “yes” to hear the item again, and proceed from there. By this means you may take a break whenever you feel the need for one.

Are there any questions?
Instructions – spEAk

You are being asked to judge the degree of foreign accent on a single sound in a number of recordings of the word “speak”. We would like you to make a judgement of the degree of foreign accent in the vowel-sound highlighted in CAPS (EA) in the word spEAk.

Please do NOT judge the global or overall foreign accent on the word, but only the degree to which the vowel-sound /i/--spelled <EA>--sounds like a native speaker of English. Please do not permit a strong or weak foreign accent on other parts of the word affect your judgement of this one sound.

Some of the recordings will be of native speakers of English, while most others will be of learners of English.

The model of English that these learners will have been exposed to is most often a general British model.

The recordings you will hear will have a great deal of background noise. Please ignore the noise as much as you can in making your judgements; concentrate on the individual pronunciation.

Please rate each individual pronunciation on a 9-point scale, where 1 means no foreign accent, 5 means a moderate amount of foreign accent, and 9 means a very strong foreign accent. Try to use all 9 points on the scale.

The first 5 practice items you will hear will be the model voice (that of a native speaker) that the learners were asked to imitate. This will familiarize you with the British pronunciation that was the model. You must “rate” the pronunciation, but it does not matter what answer you give to these first 5 items. You may practice using the software by hitting any of the buttons to answer.

Once we have proceeded to the real test items, it is important that you take care in making your judgements and choosing your rating in each case.

You may hear any item as many times as you wish before making your judgement. If you do not answer, a dialog box will appear, giving you the opportunity to hear the item again.

A progress bar will show your progression through the items.

Your concentration is needed to make meaningful, accurate judgements. If your concentration is wandering, or if you need to take a break for any reason, simply do not respond to an item. When you return to the task, simply click “yes” to hear the item again, and proceed from there. By this means you may take a break whenever you feel the need for one.

Are there any questions?
Instructions – tEA

You are being asked to judge the degree of foreign accent on a single sound in a number of recordings of the word “tea”. We would like you to make a judgement of the degree of foreign accent in the vowel-sound highlighted in CAPS (EA) in the word tEA.

Please do NOT judge the global or overall foreign accent on the word, but only the degree to which the vowel-sound /i/–spelled <EA>–sounds like a native speaker of English. Please do not permit a strong or weak foreign accent on other parts of the word affect your judgement of this one sound.

Some of the recordings will be of native speakers of English, while most others will be of learners of English.

The model of English that these learners will have been exposed to is most often a general British model.

The recordings you will hear will have a great deal of background noise. Please ignore the noise as much as you can in making your judgements; concentrate on the individual pronunciation.

Please rate each individual pronunciation on a 9-point scale, where 1 means no foreign accent, 5 means a moderate amount of foreign accent, and 9 means a very strong foreign accent. Try to use all 9 points on the scale.

The first 5 practice items you will hear will be the model voice (that of a native speaker) that the learners were asked to imitate. This will familiarize you with the British pronunciation that was the model. You must “rate” the pronunciation, but it does not matter what answer you give to these first 5 items. You may practice using the software by hitting any of the buttons to answer.

Once we have proceeded to the real test items, it is important that you take care in making your judgements and choosing your rating in each case.

You may hear any item as many times as you wish before making your judgement. If you do not answer, a dialog box will appear, giving you the opportunity to hear the item again.

A progress bar will show your progression through the items.

Your concentration is needed to make meaningful, accurate judgements. If your concentration is wandering, or if you need to take a break for any reason, simply do not respond to an item. When you return to the task, simply click “yes” to hear the item again, and proceed from there. By this means you may take a break whenever you feel the need for one.

Are there any questions?
Instructions – rEd

You are being asked to judge the degree of foreign accent on a single sound in a number of recordings of the word “red”. We would like you to make a judgement of the degree of foreign accent in the vowel highlighted in CAPS (E) in the word rEd.

Please do NOT judge the global or overall foreign accent on the word, but only the degree to which the vowel-sound /ɛ/ --spelled <E>-- sounds like a native speaker of English. Please do not permit a strong or weak foreign accent on other parts of the word affect your judgement of this one sound.

Some of the recordings will be of native speakers of English, while most others will be of learners of English.

The model of English that these learners will have been exposed to is most often a general British model.

The recordings you will hear will have a great deal of background noise. Please ignore the noise as much as you can in making your judgements; concentrate on the individual pronunciation.

Please rate each individual pronunciation on a 9-point scale, where 1 means no foreign accent, 5 means a moderate amount of foreign accent, and 9 means a very strong foreign accent. Try to use all 9 points on the scale.

The first 5 practice items you will hear will be the model voice (that of a native speaker) that the learners were asked to imitate. This will familiarize you with the British pronunciation that was the model. You must “rate” the pronunciation, but it does not matter what answer you give to these first 5 items. You may practice using the software by hitting any of the buttons to answer.

Once we have proceeded to the real test items, it is important that you take care in making your judgements and choosing your rating in each case.

You may hear any item as many times as you wish before making your judgement. If you do not answer, a dialog box will appear, giving you the opportunity to hear the item again.

A progress bar will show your progression through the items.

Your concentration is needed to make meaningful, accurate judgements. If your concentration is wandering, or if you need to take a break for any reason, simply do not respond to an item. When you return to the task, simply click “yes” to hear the item again, and proceed from there. By this means you may take a break whenever you feel the need for one.

Are there any questions?
Instructions – tEsts

You are being asked to judge the degree of foreign accent on a single sound in a number of recordings of the word “tests”. We would like you to make a judgement of the degree of foreign accent in the vowel highlighted in CAPS (E) in the word tEsts.

Please do NOT judge the global or overall foreign accent on the word, but only the degree to which the vowel-sound /ɛ/ --spelled <E>-- sounds like a native speaker of English. Please do not permit a strong or weak foreign accent on other parts of the word affect your judgement of this one sound.

Some of the recordings will be of native speakers of English, while most others will be of learners of English.

The model of English that these learners will have been exposed to is most often a general British model.

The recordings you will hear will have a great deal of background noise. Please ignore the noise as much as you can in making your judgements; concentrate on the individual pronunciation.

Please rate each individual pronunciation on a 9-point scale, where 1 means no foreign accent, 5 means a moderate amount of foreign accent, and 9 means a very strong foreign accent. Try to use all 9 points on the scale.

The first 5 practice items you will hear will be the model voice (that of a native speaker) that the learners were asked to imitate. This will familiarize you with the British pronunciation that was the model. You must “rate” the pronunciation, but it does not matter what answer you give to these first 5 items. You may practice using the software by hitting any of the buttons to answer.

Once we have proceeded to the real test items, it is important that you take care in making your judgements and choosing your rating in each case.

You may hear any item as many times as you wish before making your judgement. If you do not answer, a dialog box will appear, giving you the opportunity to hear the item again.

A progress bar will show your progression through the items.

Your concentration is needed to make meaningful, accurate judgements. If your concentration is wandering, or if you need to take a break for any reason, simply do not respond to an item. When you return to the task, simply click “yes” to hear the item again, and proceed from there. By this means you may take a break whenever you feel the need for one.

Are there any questions?
Instructions – thIs

You are being asked to judge the degree of foreign accent on a single sound in a number of recordings of the word “this”. We would like you to make a judgement of the degree of foreign accent in the vowel highlighted in CAPS (I) in the word thIs.

Please do NOT judge the global or overall foreign accent on the word, but only the degree to which the vowel-sound /ɪ/ --spelled <I>-- sounds like a native speaker of English. Please do not permit a strong or weak foreign accent on other parts of the word affect your judgement of this one sound.

Some of the recordings will be of native speakers of English, while most others will be of learners of English.

The model of English that these learners will have been exposed to is most often a general British model.

The recordings you will hear will have a great deal of background noise. Please ignore the noise as much as you can in making your judgements; concentrate on the individual pronunciation.

Please rate each individual pronunciation on a 9-point scale, where 1 means no foreign accent, 5 means a moderate amount of foreign accent, and 9 means a very strong foreign accent. Try to use all 9 points on the scale.

The first 5 practice items you will hear will be the model voice (that of a native speaker) that the learners were asked to imitate. This will familiarize you with the British pronunciation that was the model. You must “rate” the pronunciation, but it does not matter what answer you give to these first 5 items. You may practice using the software by hitting any of the buttons to answer.

Once we have proceeded to the real test items, it is important that you take care in making your judgements and choosing your rating in each case.

You may hear any item as many times as you wish before making your judgement. If you do not answer, a dialog box will appear, giving you the opportunity to hear the item again.

A progress bar will show your progression through the items.

Your concentration is needed to make meaningful, accurate judgements. If your concentration is wandering, or if you need to take a break for any reason, simply do not respond to an item. When you return to the task, simply click “yes” to hear the item again, and proceed from there. By this means you may take a break whenever you feel the need for one.

Are there any questions?
Instructions – It

You are being asked to judge the degree of foreign accent on a single sound in a number of recordings of the word “it”. We would like you to make a judgement of the degree of foreign accent in the *vowel* highlighted in CAPS (I) in the word It.

Please do NOT judge the global or overall foreign accent on the word, but only the degree to which the vowel-sound /ɪ/ --spelled <I>-- sounds like a native speaker of English. Please do not permit a strong or weak foreign accent on other parts of the word affect your judgement of this one sound.

Some of the recordings will be of native speakers of English, while most others will be of learners of English.

The model of English that these learners will have been exposed to is most often a general British model.

The recordings you will hear will have a great deal of background noise. Please ignore the noise as much as you can in making your judgements; concentrate on the individual pronunciation.

Please rate each individual pronunciation on a 9-point scale, where 1 means no foreign accent, 5 means a moderate amount of foreign accent, and 9 means a very strong foreign accent. Try to use all 9 points on the scale.

The first 5 practice items you will hear will be the model voice (that of a native speaker) that the learners were asked to imitate. This will familiarize you with the British pronunciation that was the model. You must “rate” the pronunciation, but it does not matter what answer you give to these first 5 items. You may practice using the software by hitting any of the buttons to answer.

Once we have proceeded to the real test items, it is important that you take care in making your judgements and choosing your rating in each case.

You may hear any item as many times as you wish before making your judgement. If you do not answer, a dialog box will appear, giving you the opportunity to hear the item again.

A progress bar will show your progression through the items.

Your concentration is needed to make meaningful, accurate judgements. If your concentration is wandering, or if you need to take a break for any reason, simply do not respond to an item. When you return to the task, simply click “yes” to hear the item again, and proceed from there. By this means you may take a break whenever you feel the need for one.

Are there any questions?
Instructions – bOx

You are being asked to judge the degree of foreign accent on a single sound in a number of recordings of the word “box”. We would like you to make a judgement of the degree of foreign accent in the vowel highlighted in CAPS (O) in the word bOx.

Please do NOT judge the global or overall foreign accent on the word, but only the degree to which the vowel-sound /ɒ/ --spelled <O>-- sounds like a native speaker of English. Please do not permit a strong or weak foreign accent on other parts of the word affect your judgement of this one sound.

Some of the recordings will be of native speakers of English, while most others will be of learners of English.

The model of English that these learners will have been exposed to is most often a general British model.

The recordings you will hear will have a great deal of background noise. Please ignore the noise as much as you can in making your judgements; concentrate on the individual pronunciation.

Please rate each individual pronunciation on a 9-point scale, where 1 means no foreign accent, 5 means a moderate amount of foreign accent, and 9 means a very strong foreign accent. Try to use all 9 points on the scale.

The first 5 practice items you will hear will be the model voice (that of a native speaker) that the learners were asked to imitate. This will familiarize you with the British pronunciation that was the model. You must “rate” the pronunciation, but it does not matter what answer you give to these first 5 items. You may practice using the software by hitting any of the buttons to answer.

Once we have proceeded to the real test items, it is important that you take care in making your judgements and choosing your rating in each case.

You may hear any item as many times as you wish before making your judgement. If you do not answer, a dialog box will appear, giving you the opportunity to hear the item again.

A progress bar will show your progression through the items.

Your concentration is needed to make meaningful, accurate judgements. If your concentration is wandering, or if you need to take a break for any reason, simply do not respond to an item. When you return to the task, simply click “yes” to hear the item again, and proceed from there. By this means you may take a break whenever you feel the need for one.

Are there any questions?
Instructions – zOO

You are being asked to judge the degree of foreign accent on a single sound in a number of recordings of the word “zoo”. We would like you to make a judgement of the degree of foreign accent in the **vowel-sound** highlighted in CAPS (OO) in the word zOO.

Please do **not** judge the global or overall foreign accent on the word, but only the degree to which the vowel-sound /u/ --spelled <OO>-- sounds like a native speaker of English. Please do not permit a strong or weak foreign accent on other parts of the word affect your judgement of this one sound.

Some of the recordings will be of native speakers of English, while most others will be of learners of English.

*The model of English that these learners will have been exposed to is most often a general British model.*

The recordings you will hear will have a great deal of background noise. Please ignore the noise as much as you can in making your judgements; concentrate on the individual pronunciation.

Please rate each individual pronunciation on a 9-point scale, where 1 means no foreign accent, 5 means a moderate amount of foreign accent, and 9 means a very strong foreign accent. Try to use all 9 points on the scale.

*The first 5 practice items you will hear will be the model voice (that of a native speaker) that the learners were asked to imitate. This will familiarize you with the British pronunciation that was the model. You must “rate” the pronunciation, but it does not matter what answer you give to these first 5 items. You may practice using the software by hitting any of the buttons to answer.*

Once we have proceeded to the real test items, it is important that you take care in making your judgements and choosing your rating in each case.

You may hear any item as many times as you wish before making your judgement. If you do not answer, a dialog box will appear, giving you the opportunity to hear the item again.

*A progress bar will show your progression through the items.*

Your concentration is needed to make meaningful, accurate judgements. If your concentration is wandering, or if you need to take a break for any reason, simply do not respond to an item. When you return to the task, simply click “yes” to hear the item again, and proceed from there. By this means you may take a break whenever you feel the need for one.

Are there any questions?
Instructions – bUt

You are being asked to judge the degree of foreign accent on a single sound in a number of recordings of the word “but”. We would like you to make a judgement of the degree of foreign accent in the vowel highlighted in CAPS (U) in the word bUt.

Please do NOT judge the global or overall foreign accent on the word, but only the degree to which the vowel-sound /ʌ/ --spelled <U>-- sounds like a native speaker of English. Please do not permit a strong or weak foreign accent on other parts of the word affect your judgement of this one sound.

Some of the recordings will be of native speakers of English, while most others will be of learners of English.

The model of English that these learners will have been exposed to is most often a general British model.

The recordings you will hear will have a great deal of background noise. Please ignore the noise as much as you can in making your judgements; concentrate on the individual pronunciation.

Please rate each individual pronunciation on a 9-point scale, where 1 means no foreign accent, 5 means a moderate amount of foreign accent, and 9 means a very strong foreign accent. Try to use all 9 points on the scale.

The first 5 practice items you will hear will be the model voice (that of a native speaker) that the learners were asked to imitate. This will familiarize you with the British pronunciation that was the model. You must “rate” the pronunciation, but it does not matter what answer you give to these first 5 items. You may practice using the software by hitting any of the buttons to answer.

Once we have proceeded to the real test items, it is important that you take care in making your judgements and choosing your rating in each case.

You may hear any item as many times as you wish before making your judgement. If you do not answer, a dialog box will appear, giving you the opportunity to hear the item again.

A progress bar will show your progression through the items.

Your concentration is needed to make meaningful, accurate judgements. If your concentration is wandering, or if you need to take a break for any reason, simply do not respond to an item. When you return to the task, simply click “yes” to hear the item again, and proceed from there. By this means you may take a break whenever you feel the need for one.

Are there any questions?
(b) Vowel identification task

**Vowel Identifications**

*(Ottawa 2002)*

**Instructions – tEA**

You are being asked to make judgements about the **vowel-sound** [ij] spelled and highlighted in CAPITALS (EA) in a number of recordings of the word “tea”: tEA.

Some of the recordings will be of British speakers of English, while most others will be of learners of English. The model of English that these learners have most often been exposed to is a general British model.

*The recordings you will hear will have a great deal of background noise. Please ignore the noise as much as you can in making your judgements, and concentrate on the individual pronunciation.*

On the computer screen you will see 15 buttons, each one corresponding to a different pronunciation: “[ij] good” means that the sound in question is pronounced in an English native-like way, “[ij] sl. dist.” means that it is still heard as [ij] but is slightly distorted, and “[ij] very dist.” means that [ij] is recognizable as [ij], but is produced in a very distorted way.

There are, of course, other possible pronunciations. The speaker may have pronounced [ij] as a pure vowel [i], as a lax vowel [r], slightly lowered and pure [e], slightly lowered but still a diphthong [ej], and so on. A variety of other possible pronunciations are visible on the screen, each one associated with a particular button.

You are asked to **click on one** of the 15 buttons—the one that best describes/characterizes the pronunciation of the sound [ij].

In order to familiarize you with the task, the first 10 items will provide you with some practice. Although answers given to these 10 items will not count, you are strongly encouraged to give the best answer you can, so that you can proceed to the real test items and make careful judgements.

*You may hear any item as many times as you wish before making your judgement. If you do not answer, a dialog box will appear, giving you the opportunity to hear the item again.*

A progress bar will show your progression through the items.

Your concentration is needed to make meaningful, accurate judgements. If your concentration is wandering, or if you need to take a break for any reason, simply do not respond to an item. When you return to the task, simply click “yes” to hear the item again, and proceed from there. By this means you may take a break whenever you feel the need for one.

Are there any questions?
Instructions – spE.Ak

You are being asked to make judgements about the vowel-sound [ij] spelled and highlighted in CAPITALS (EA) in a number of recordings of the word “speak”: spE.Ak.

Some of the recordings will be of British speakers of English, while most others will be of learners of English. The model of English that these learners have most often been exposed to is a general British model.

The recordings you will hear will have a great deal of background noise. Please ignore the noise as much as you can in making your judgements, and concentrate on the individual pronunciation.

On the computer screen you will see 15 buttons, each one corresponding to a different pronunciation: “[ij] good” means that the sound in question is pronounced in an English native-like way, “[ij] sl. dist.” means that it is still heard as [ij] but is slightly distorted, and “[ij] very dist.” means that [ij] is recognizable as [ij], but is produced in a very distorted way.

There are, of course, other possible pronunciations. The speaker may have pronounced [ij] as a pure vowel [i], as a lax vowel [ɪ], slightly lowered and pure [ɛ], slightly lowered but still a diphthong [eɪ], and so on. A variety of other possible pronunciations are visible on the screen, each one associated with a particular button.

You are asked to click on one of the 15 buttons—the one that best describes/characterizes the pronunciation of the sound [ij].

In order to familiarize you with the task, the first 10 items will provide you with some practice. Although answers given to these 10 items will not count, you are strongly encouraged to give the best answer you can, so that you can proceed to the real test items and make careful judgements.

You may hear any item as many times as you wish before making your judgement. If you do not answer, a dialog box will appear, giving you the opportunity to hear the item again.

A progress bar will show your progression through the items.

Your concentration is needed to make meaningful, accurate judgements. If your concentration is wandering, or if you need to take a break for any reason, simply do not respond to an item. When you return to the task, simply click “yes” to hear the item again, and proceed from there. By this means you may take a break whenever you feel the need for one.

Are there any questions?
Instructions – zOO

You are being asked to make judgements about the vowel-sound [uw] spelled and highlighted in CAPITALS (OO) in a number of recordings of the word “zoo”: zOO.

Some of the recordings will be of British speakers of English, while most others will be of learners of English. The model of English that these learners have most often been exposed to is a general British model.

The recordings you will hear will have a great deal of background noise. Please ignore the noise as much as you can in making your judgements, and concentrate on the individual pronunciation.

On the computer screen you will see 15 buttons, each one corresponding to a different pronunciation: “[uw] good” means that the sound in question is pronounced in an English native-like way, “[uw] sl. dist.” means that it is still heard as [uw] but is slightly distorted, and “[uw] very dist.” means that [uw] is recognizable as [uw], but is produced in a very distorted way.

There are, of course, other possible pronunciations. The speaker may have pronounced [uw] as a pure vowel [u], slightly lowered [o], slightly lowered but still a diphthong [ow], and so on. A variety of other possible pronunciations are visible on the screen, each one associated with a particular button.

You are asked to click on one of the 15 buttons—the one that best describes/characterizes the pronunciation of the sound [uw].

In order to familiarize you with the task, the first 10 items will provide you with some practice. Although answers given to these 10 items will not count, you are strongly encouraged to give the best answer you can, so that you can proceed to the real test items and make careful judgements.

You may hear any item as many times as you wish before making your judgement. If you do not answer, a dialog box will appear, giving you the opportunity to hear the item again.

A progress bar will show your progression through the items.

Your concentration is needed to make meaningful, accurate judgements. If your concentration is wandering, or if you need to take a break for any reason, simply do not respond to an item. When you return to the task, simply click “yes” to hear the item again, and proceed from there. By this means you may take a break whenever you feel the need for one.

Are there any questions?
Instructions – It

You are being asked to make judgements about the vowel-sound [ɪ] spelled and highlighted in CAPITALS (I) in a number of recordings of the word “it”. It.

Some of the recordings will be of British speakers of English, while most others will be of learners of English. The model of English that these learners have most often been exposed to is a general British model.

The recordings you will hear will have a great deal of background noise. Please ignore the noise as much as you can in making your judgements, and concentrate on the individual pronunciation.

On the computer screen you will see 15 buttons, each one corresponding to a different pronunciation of the vowel [ɪ]: “[ɪ] good” means that the sound in question is pronounced in an English native-like way, “[ɪ] sl. dist.” means that it is still heard as [ɪ] but is slightly distorted, and “[ɪ] very dist.” means that [ɪ] is recognizable as [ɪ], but is produced in a very distorted way.

There are, of course, other possible pronunciations. The speaker may have pronounced [ɪ] as a pure tense vowel [i], tense and diphthongized [ii], slightly lowered [e], and so on. A variety of other possible pronunciations are visible on the screen, each one associated with a particular button.

You are asked to click on one of the 15 buttons—the one that best describes/characterizes the pronunciation of the sound [ɪ].

In order to familiarize you with the task, the first 10 items will provide you with some practice. Although answers given to these 10 items will not count, you are strongly encouraged to give the best answer you can, so that you can proceed to the real test items and make careful judgements.

You may hear any item as many times as you wish before making your judgement. If you do not answer, a dialog box will appear, giving you the opportunity to hear the item again.

A progress bar will show your progression through the items.

Your concentration is needed to make meaningful, accurate judgements. If your concentration is wandering, or if you need to take a break for any reason, simply do not respond to an item. When you return to the task, simply click “yes” to hear the item again, and proceed from there. By this means you may take a break whenever you feel the need for one.

Are there any questions?
Instructions – thIs

You are being asked to make judgements about the vowel-sound [i] spelled and highlighted in CAPITALS (I) in a number of recordings of the word “this”: thIs.

Some of the recordings will be of British speakers of English, while most others will be of learners of English. The model of English that these learners have most often been exposed to is a general British model.

The recordings you will hear will have a great deal of background noise. Please ignore the noise as much as you can in making your judgements, and concentrate on the individual pronunciation.

On the computer screen you will see 15 buttons, each one corresponding to a different pronunciation of the vowel [i]: “[i] good” means that the sound in question is pronounced in an English native-like way, “[i] sl. dist.” means that it is still heard as [i] but is slightly distorted, and “[i] very dist.” means that [i] is recognizable as [i], but is produced in a very distorted way.

There are, of course, other possible pronunciations. The speaker may have pronounced [i] as a pure tense vowel [i], tense and diphthongized [ij], slightly lowered [e], and so on. A variety of other possible pronunciations are visible on the screen, each one associated with a particular button.

You are asked to click on one of the 15 buttons—the one that best describes/characterizes the pronunciation of the sound [i].

In order to familiarize you with the task, the first 10 items will provide you with some practice. Although answers given to these 10 items will not count, you are strongly encouraged to give the best answer you can, so that you can proceed to the real test items and make careful judgements.

You may hear any item as many times as you wish before making your judgement. If you do not answer, a dialog box will appear, giving you the opportunity to hear the item again.

A progress bar will show your progression through the items.

Your concentration is needed to make meaningful, accurate judgements. If your concentration is wandering, or if you need to take a break for any reason, simply do not respond to an item. When you return to the task, simply click “yes” to hear the item again, and proceed from there. By this means you may take a break whenever you feel the need for one.

Are there any questions?
Instructions – tEsts

You are being asked to make judgements about the vowel-sound [e] spelled and highlighted in CAPITALS (E) in a number of recordings of the word “tests”: tEsts.

Some of the recordings will be of British speakers of English, while most others will be of learners of English. The model of English that these learners have most often been exposed to is a general British model.

The recordings you will hear will have a great deal of background noise. Please ignore the noise as much as you can in making your judgements, and concentrate on the individual pronunciation.

On the computer screen you will see 15 buttons, each one corresponding to a different pronunciation of the vowel [e]: “[e] good” means that the sound in question is pronounced in an English native-like way, “[e] sl. dist.” means that it is still heard as [e] but is slightly distorted, and “[e] very dist.” means that [e] is recognizable as [e], but is produced in a very distorted way.

There are, of course, other possible pronunciations. The speaker may have pronounced [e] as a tense vowel [ɛ], as a diphthong [ɛj], as a lax vowel [ɪ], and so on. A variety of other possible pronunciations are visible on the screen, each one associated with a particular button.

You are asked to click on one of the 15 buttons—the one that best describes/characterizes the pronunciation of the sound [e].

In order to familiarize you with the task, the first 10 items will provide you with some practice. Although answers given to these 10 items will not count, you are strongly encouraged to give the best answer you can, so that you can proceed to the real test items and make careful judgements.

You may hear any item as many times as you wish before making your judgement. If you do not answer, a dialog box will appear, giving you the opportunity to hear the item again.

A progress bar will show your progression through the items.

Your concentration is needed to make meaningful, accurate judgements. If your concentration is wandering, or if you need to take a break for any reason, simply do not respond to an item. When you return to the task, simply click “yes” to hear the item again, and proceed from there. By this means you may take a break whenever you feel the need for one.

Are there any questions?
Instructions – rEd

You are being asked to make judgements about the vowel-sound \([e]\) spelled and highlighted in CAPITALS (E) in a number of recordings of the word “red”: rEd.

Some of the recordings will be of British speakers of English, while most others will be of learners of English. The model of English that these learners have most often been exposed to is a general British model.

The recordings you will hear will have a great deal of background noise. Please ignore the noise as much as you can in making your judgements, and concentrate on the individual pronunciation.

On the computer screen you will see 15 buttons, each one corresponding to a different pronunciation of the vowel \([e]\): “[e] good” means that the sound in question is pronounced in an English native-like way, “[e] sl. dist.” means that it is still heard as [e] but is slightly distorted, and “[e] very dist.” means that [e] is recognizable as [e], but is produced in a very distorted way.

There are, of course, other possible pronunciations. The speaker may have pronounced \([e]\) as a tense vowel [e], as a diphthong [ej], as a lax vowel [i], and so on. A variety of other possible pronunciations are visible on the screen, each one associated with a particular button.

You are asked to click on one of the 15 buttons—the one that best describes/characterizes the pronunciation of the sound \([e]\).

In order to familiarize you with the task, the first 10 items will provide you with some practice. Although answers given to these 10 items will not count, you are strongly encouraged to give the best answer you can, so that you can proceed to the real test items and make careful judgements.

You may hear any item as many times as you wish before making your judgement. If you do not answer, a dialog box will appear, giving you the opportunity to hear the item again.

A progress bar will show your progression through the items.

Your concentration is needed to make meaningful, accurate judgements. If your concentration is wandering, or if you need to take a break for any reason, simply do not respond to an item. When you return to the task, simply click “yes” to hear the item again, and proceed from there. By this means you may take a break whenever you feel the need for one.

Are there any questions?
Instructions – bAck

You are being asked to make judgements about the vowel-sound [æ] spelled and highlighted in CAPITALS (A) in a number of recordings of the word “back”: bAck.

Some of the recordings will be of British speakers of English, while most others will be of learners of English. The model of English that these learners have most often been exposed to is a general British model.

The recordings you will hear will have a great deal of background noise. Please ignore the noise as much as you can in making your judgements, and concentrate on the individual pronunciation.

On the computer screen you will see 15 buttons, each one corresponding to a different pronunciation of the vowel [æ]: “[æ] good” means that the sound in question is pronounced in an English native-like way, “[æ] sl. dist.” means that it is still heard as [æ] but is slightly distorted, and “[æ] very dist.” means that [æ] is recognizable as [æ], but is produced in a very distorted way.

There are, of course, other possible pronunciations. The speaker may have pronounced [æ] as a low central vowel [a], as a low back vowel [ə], front mid-vowel [ɛ], and so on. A variety of other possible pronunciations are visible on the screen, each one associated with a particular button.

You are asked to click on one of the 15 buttons—the one that best describes/characterizes the pronunciation of the sound [æ].

In order to familiarize you with the task, the first 10 items will provide you with some practice. Although answers given to these 10 items will not count, you are strongly encouraged to give the best answer you can, so that you can proceed to the real test items and make careful judgements.

You may hear any item as many times as you wish before making your judgement. If you do not answer, a dialog box will appear, giving you the opportunity to hear the item again.

A progress bar will show your progression through the items.

Your concentration is needed to make meaningful, accurate judgements. If your concentration is wandering, or if you need to take a break for any reason, simply do not respond to an item. When you return to the task, simply click “yes” to hear the item again, and proceed from there. By this means you may take a break whenever you feel the need for one.

Are there any questions?
Appendix D

Vowel Identifications
(2002)

Instructions – pAd

You are being asked to make judgements about the vowel-sound [æ] spelled and highlighted in CAPITALS (A) in a number of recordings of the word “pad”: pAd.

Some of the recordings will be of British speakers of English, while most others will be of learners of English. The model of English that these learners have most often been exposed to is a general British model.

The recordings you will hear will have a great deal of background noise. Please ignore the noise as much as you can in making your judgements, and concentrate on the individual pronunciation.

On the computer screen you will see 15 buttons, each one corresponding to a different pronunciation of the vowel [æ]: “[æ] good” means that the sound in question is pronounced in an English native-like way, “[æ] sl. dist.” means that it is still heard as [æ] but is slightly distorted, and “[æ] very dist.” means that [æ] is recognizable as [æ], but is produced in a very distorted way.

There are, of course, other possible pronunciations. The speaker may have pronounced [æ] as a low central vowel [a], as a low back vowel [ɑ], front mid-vowel [ɛ], and so on. A variety of other possible pronunciations are visible on the screen, each one associated with a particular button.

You are asked to click on one of the 15 buttons—the one that best describes/characterizes the pronunciation of the sound [æ].

In order to familiarize you with the task, the first 10 items will provide you with some practice. Although answers given to these 10 items will not count, you are strongly encouraged to give the best answer you can, so that you can proceed to the real test items and make careful judgements.

You may hear any item as many times as you wish before making your judgement. If you do not answer, a dialog box will appear, giving you the opportunity to hear the item again.

A progress bar will show your progression through the items.

Your concentration is needed to make meaningful, accurate judgements. If your concentration is wandering, or if you need to take a break for any reason, simply do not respond to an item. When you return to the task, simply click “yes” to hear the item again, and proceed from there. By this means you may take a break whenever you feel the need for one.

Are there any questions?
Instructions – bOx

You are being asked to make judgements about the vowel-sound [ɒ] spelled and highlighted in CAPITALS (O) in a number of recordings of the word “box”: bOx.

Some of the recordings will be of British speakers of English, while most others will be of learners of English. The model of English that these learners have most often been exposed to is a general British model.

The recordings you will hear will have a great deal of background noise. Please ignore the noise as much as you can in making your judgements, and concentrate on the individual pronunciation.

On the screen you will see 15 buttons, each one corresponding to a different pronunciation of the vowel [ɒ]: “[ɒ] good” means that the sound in question is pronounced in an English native-like way, “[ɒ] sl. dist.” means that it is still heard as [ɒ] but is slightly distorted, and “[ɒ] very dist.” means that [ɒ] is recognizable as [ɒ] but is produced in a very distorted way.

There are, of course, other possible pronunciations. The speaker may have pronounced [ɒ] as a back mid-vowel [ɑ], as a high back vowel [u], as a diphthong [ow], and so on. A variety of other possible pronunciations are visible on the screen, each one associated with a particular button.

You are asked to click on one of the 15 buttons—the one that best describes/characterizes the pronunciation of the sound [ɒ].

In order to familiarize you with the task, the first 10 items will provide you with some practice. Although answers given to these 10 items will not count, you are strongly encouraged to give the best answer you can, so that you can proceed to the real test items and make careful judgements.

You may hear any item as many times as you wish before making your judgement. If you do not answer, a dialog box will appear, giving you the opportunity to hear the item again.

A progress bar will show your progression through the items.

Your concentration is needed to make meaningful, accurate judgements. If your concentration is wandering, or if you need to take a break for any reason, simply do not respond to an item. When you return to the task, simply click “yes” to hear the item again, and proceed from there. By this means you may take a break whenever you feel the need for one.

Are there any questions?
Appendix D

Vowel Identifications
(Ottawa 2002)

Instructions – but

You are being asked to make judgements about the vowel-sound [ʌ] spelled and highlighted in CAPITALS (U) in a number of recordings of the word “but”: but.

Some of the recordings will be of British speakers of English, while most others will be of learners of English. The model of English that these learners have most often been exposed to is a general British model.

The recordings you will hear will have a great deal of background noise. Please ignore the noise as much as you can in making your judgements, and concentrate on the individual pronunciation.

On the computer screen you will see 15 buttons, each one corresponding to a different pronunciation of the vowel [ʌ]: “[ʌ] good” means that the sound in question is pronounced in an English native-like way, “[ʌ] sl. dist.” means that it is still heard as [ʌ] but is slightly distorted, and “[ʌ] very dist.” means that [ʌ] is recognizable as [ʌ] but is produced in a very distorted way.

There are, of course, other possible pronunciations. The speaker may have pronounced [ʌ] as a back low vowel [a], as a low central vowel [a], as a low front vowel [æ], and so on. A variety of other possible pronunciations are visible on the screen, each one associated with a particular button.

You are asked to click on one of the 15 buttons—the one that best describes/characterizes the pronunciation of the sound [ʌ].

In order to familiarize you with the task, the first 10 items will provide you with some practice. Although answers given to these 10 items will not count, you are strongly encouraged to give the best answer you can, so that you can proceed to the real test items and make careful judgements.

You may hear any item as many times as you wish before making your judgement. If you do not answer, a dialog box will appear, giving you the opportunity to hear the item again.

A progress bar will show your progression through the items.

Your concentration is needed to make meaningful, accurate judgements. If your concentration is wandering, or if you need to take a break for any reason, simply do not respond to an item. When you return to the task, simply click “yes” to hear the item again, and proceed from there. By this means you may take a break whenever you feel the need for one.

Are there any questions?
APPENDIX E

RESPONSE OPTIONS
VOWEL IDENTIFICATION TASK (STUDY 2)

Target sound: /i/

<table>
<thead>
<tr>
<th>[ij] good</th>
<th>[ij] slightly distorted</th>
<th>[ij] very distorted</th>
</tr>
</thead>
<tbody>
<tr>
<td>[i]</td>
<td>[e]</td>
<td>[ε]</td>
</tr>
<tr>
<td>[ɪ]</td>
<td>[e]</td>
<td>[æ]</td>
</tr>
<tr>
<td>[u]</td>
<td>[u]</td>
<td>[ɔ] or [ə]</td>
</tr>
</tbody>
</table>

Target sound: /ɪ/

<table>
<thead>
<tr>
<th>[i] good</th>
<th>[i] slightly distorted</th>
<th>[i] very distorted</th>
</tr>
</thead>
<tbody>
<tr>
<td>[i]</td>
<td>[ij]</td>
<td>[ε]</td>
</tr>
<tr>
<td>[ɛ]</td>
<td>[ε]</td>
<td>[æ]</td>
</tr>
<tr>
<td>[a]</td>
<td>[a]</td>
<td>[ʌ]</td>
</tr>
<tr>
<td>[u]</td>
<td>[u]</td>
<td>[ɔ] or [ə]</td>
</tr>
</tbody>
</table>
Target sound: /ɛ/

<table>
<thead>
<tr>
<th>[ɛ] good</th>
<th>[ɛ] slightly distorted</th>
<th>[ɛ] very distorted</th>
</tr>
</thead>
<tbody>
<tr>
<td>[i]</td>
<td>[ij]</td>
<td>[i]</td>
</tr>
<tr>
<td>[e]</td>
<td>[ej]</td>
<td>[æ]</td>
</tr>
<tr>
<td>[a]</td>
<td>[ʌ]</td>
<td>[ʌ]</td>
</tr>
<tr>
<td>[u]</td>
<td>[u]</td>
<td>[ɔ] or [ɔ]</td>
</tr>
</tbody>
</table>

Target sound: /æ/

<table>
<thead>
<tr>
<th>[æ] good</th>
<th>[æ] slightly distorted</th>
<th>[æ] very distorted</th>
</tr>
</thead>
<tbody>
<tr>
<td>[a]</td>
<td>[a]</td>
<td>[ø]</td>
</tr>
<tr>
<td>[ɔ]</td>
<td>[e]</td>
<td>[e]</td>
</tr>
<tr>
<td>[e]</td>
<td>[ʌ]</td>
<td>[u]</td>
</tr>
<tr>
<td>[u]</td>
<td>[i]</td>
<td>[ɔ] or [ɔ]</td>
</tr>
</tbody>
</table>

Target sound: /ɒ/

<table>
<thead>
<tr>
<th>[ɒ] good</th>
<th>[ɒ] slightly distorted</th>
<th>[ɒ] very distorted</th>
</tr>
</thead>
<tbody>
<tr>
<td>[a]</td>
<td>[ɔ]</td>
<td>[ʌ]</td>
</tr>
<tr>
<td>[u]</td>
<td>[u]</td>
<td>[ɔw]</td>
</tr>
<tr>
<td>[uw]</td>
<td>[i]</td>
<td>[æ]</td>
</tr>
<tr>
<td>[a]</td>
<td>[ɛ]</td>
<td>[ɔ] or [ɔ]</td>
</tr>
</tbody>
</table>
### Target sound: /ʊ/

<table>
<thead>
<tr>
<th>[uw] good</th>
<th>[uw] slightly distorted</th>
<th>[uw] very distorted</th>
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</thead>
<tbody>
<tr>
<td>[u]</td>
<td>[u]</td>
<td>[ɔ]</td>
</tr>
<tr>
<td>[ow]</td>
<td>[ʌ]</td>
<td>[ʊ]</td>
</tr>
<tr>
<td>[a]</td>
<td>[æ]</td>
<td>[a]</td>
</tr>
<tr>
<td>[ɛ]</td>
<td>[i]</td>
<td>[ɛ] or [ɛ̃]</td>
</tr>
</tbody>
</table>

### Target sound: /ʌ/

<table>
<thead>
<tr>
<th>[ʌ] good</th>
<th>[ʌ] slightly distorted</th>
<th>[ʌ] very distorted</th>
</tr>
</thead>
<tbody>
<tr>
<td>[æ]</td>
<td>[a]</td>
<td>[a]</td>
</tr>
<tr>
<td>[ʊ]</td>
<td>[o]</td>
<td>[u]</td>
</tr>
<tr>
<td>[u]</td>
<td>[ɛ]</td>
<td>[ɛ]</td>
</tr>
<tr>
<td>[ow]</td>
<td>[i]</td>
<td>[ɛ] or [ɛ̃]</td>
</tr>
</tbody>
</table>