

Problems of Discrepancy between English Vowels and Spelling

Hansa Mahn-Gunn Youe(Saunggyoun-Gwan Univ.)

<Contents>

- | | |
|---|-------------------------------------|
| 0. Introduction: Various sound values of one and the same letter or digraph | 4. Spellings for /u:/ |
| 1. Spellings for /i:/ | 5. Spellings for /a:/ |
| 2. Spellings for /ɪ/ | 6. Spellings for /ə/ |
| 3. Spellings for /ɔ:/ | 7. Conclusion |
| | Appendix: Basic Syllables of Corean |

<내용 요약>

영어 모음과 철자간 대응성 결여 문제

俞萬根(성균관대)

음성 영어교육에서 각 음소(모음·자음) 음가 인식이 중요한 것은 물론이지만, 실제로 영어를 듣고 말하는 데는 강세모음과 약음(주로 ə 음)이 번갈아들며 엮어내는 영어 특유 말씨 박자에 대한 이해가 오히려 더 중요한 면이 있다.

그런데 영어 철자가 자음 정보는 비교적 잘 보여주지만, 모음 정보는 정확히 알려 주지 못한다. 이를테면 i: / ɪ / ɔ: / u: / a: 를 적는 철자가 각각 20가지 이상이며, 특히 쪽정모음(schwa) ə를 적는 철자는 무려 90가지가 넘는다. 이 ə는 강세 그늘에서 비록 짧고 약하게 발음되지만 영어에서 딴 어느 모음보다도 훨씬 높은 빈도를 보이기 때문에 [ə] 음가와 그것이 있는 자리, 즉 철자 밑에 숨어 그 존재를 알기 어려운 ə 음의 소재를 철저히 파악하는 것은 영어를 잘 듣고 영어답게 말하는 데에 필수 요체라 할 수 있다.

이 글에서는 쪽정모음(schwa) [ə]를 포함한 영어 주요 모음 철자 다양성을 고찰하여 우리나라 음성 영어 교육(TEFL/TESOL)에 귀중한 참고 자료를 제공하고, 이를 통한 올바른 영어 발음 학습 태도를 제언한다.

* Keywords: Letter-to-sound correspondence, Discrepancy between sound and spelling, Schwa.

0. Introduction

There are two kinds of pronunciation difficulties that the learner of English has to surmount. One is the difficulty of English sounds themselves. In this case a lot of systematic and practical phonetic training is needed. The other kind of difficulty, which the writer intends to discuss now, is the discrepancy between sounds and spelling.

In order to learn the correct pronunciation of English it is necessary, to a certain extent, to ignore the general phenomenon of letter-to-sound correspondence which is usually seen in the phonemic writing systems of the Greek, Roman, and Korean/Corean alphabets.

Corean learners of English who are accustomed to the use of the phonemic alphabet of their own which is called Hanngul (see Youe. 1997:2) have a strong tendency to spelling pronunciation even when they read English.

Surveys over a couple of decades (Youe. 1976:169~183, 1998:83~87, etc.) show their English vowel discrimination ability remains around 30 marks out of 100 full marks. That may be said to be no wonder if we see the extent of discrepancies between English vowels and spelling, as partly listed below.

Examples of various sound values of one and the same letter or digraph

| <letter a> | < letter o > | <digraph ou> |
|------------------------------------|---------------------------------------|-----------------------------------|
| 1. a: (father) | 1. əʊ (home) | 1. əʊ (<u>soul</u>) |
| 2. eɪ (name) | 2. ɒ (box) | 2. ɔ: (<u>four</u>) |
| 3. æ (cat) | 3. ɔ: (cord) | 3. əə (<u>tour</u>) |
| 4. e (many) | 4. ʌ (sponge) | 4. aʊə (our) |
| 5. eə (spare) | 5. ɜ: (attorney) | 5. ɔ: (journey) |
| 6. ɒ (want) | 6. ə (bosom) | 6. o (Gloucester) |
| 7. ɔ: (all) | 7. u: (do) | 7. əʊ (<u>south</u>) |
| 8. i (village) | 8. ə (method) | 8. ʌ (<u>young</u>) |
| 9. ə (opera) | 9. ɪ (women) | 9. ʊ (<u>couldn't</u>) |
| 10. wɒ (Q <u>antas</u>) | 10. jʊ (Douglas-H <u>ome</u>) | 10. u: (<u>group</u>) |
| 11. silent (<u>total</u>) | 11. sil<u>ent</u> (button) | 11. ə (<u>famous</u>)... |

These examples stand out in striking contrast to Corean *Hannngul* spellings in which the vowel letters are used nearly like phonetic symbols as can be seen in the list of Corean Basic Syllables in *Appendix* at the end of this paper.

Examples of numerous spellings for one and the same vowel sound.

(British English/RP is transcribed here for the examples.)

1. / i:/

| | | |
|---------------------------|------------------|-----------------------|
| 1. <i>aint</i> | St. Maur | 'saimɔ: (cf. Seymour) |
| 2. <i>aiu</i> | Caius | ki:z |
| 3. (<i>u</i>) <i>ay</i> | quay | ki: |
| 4. <i>e</i> | even | 'i:vn |
| 5. <i>ea</i> | sea | si: |
| 6. <i>eau</i> | Beauchamp | 'bɛʃməm |
| 7. <i>ee</i> | tree | tri: |
| 8. <i>e'e</i> | e'en | i:n |
| 9. <i>eet</i> | Teetgen | 'ti:dʒən |
| 10. <i>egh</i> | Legh | li: |
| | | |
| 11. <i>ehe</i> | Cotehele | kə'ti:l |
| 12. <i>ei</i> | receive | rɪ'si:v |
| 13. <i>eig</i> | Teign | tɪ:n |
| 14. <i>eigh</i> | Keightley | 'ki:tli |
| 15. <i>el</i> | Belvoir | 'bɪ:və |
| 16. <i>eo</i> | people | 'pi:pl |
| 17. <i>ey</i> | key | ki: |
| 18. <i>i</i> | pizza | 'pi:tsə |
| 19. <i>ie</i> | field | fi:ld |
| 20. <i>ig</i> | Vignes | vɪ:nz |
| | | |
| 21. <i>igh</i> | Altsigh | 'æltʃi: |
| 22. <i>oe</i> | Phoebe | 'fi:bɪ |
| 23. <i>u</i> | Sulwen | 'sɪ:lwən |
| 24. <i>y</i> | Bampfyld | 'bæmfɪ:ld |
| 25. <i>ye</i> | Margolyes | 'mægəli:z |
| 26. <i>zea</i> | Gilzean | gɪ'lɪ:n... |

2. / ɪ /

| | | |
|--------------|-------------------|----------|
| 1. <i>a</i> | village | 'vɪlɪdʒ |
| 2. <i>ai</i> | Ardrishaig | a'drɪʃɪg |

| | | | |
|-----|----------------|---------------|------------|
| 3. | <i>ay</i> | Barclay | 'ba:kli |
| 4. | <i>dwi</i> | Childwickbury | 'ʃɪlk'bərɪ |
| 5. | <i>e</i> | pretty | 'prɪti |
| 6. | <i>ea</i> | Breadalbane | brɪ'dælbɪn |
| 7. | <i>ee</i> | coffee | 'kɔfi |
| 8. | <i>ehea</i> | forehead | 'fɔri:d |
| 9. | <i>eig</i> | foreign | 'fɔrən |
| 10. | <i>eigh</i> | Ardleigh | 'ɑ:dli |
| 10. | <i>ew</i> | Carew | 'keərɪ |
| 12. | <i>ey</i> | Boleyn | bə'lɪn |
| 13. | <i>hei</i> | Blenheim | 'blenɪm |
| 14. | <i>house</i> | Muirhouses | 'mʌrɪz |
| 15. | <i>i</i> | fizzy | 'fizi |
| 16. | <i>ie</i> | cities | 'sɪtɪz |
| 17. | <i>ieu</i> | Beaulieu | 'bju:lɪ |
| 18. | <i>ight</i> | Kirkcubright | kə'ku:bri |
| 19. | <i>ioch</i> | Garioch | 'gɪərɪ |
| 20. | <i>o</i> | women | 'wɪmɪn |
| 21. | (<i>u</i>)oy | Norquoy | 'nɔ:ki |
| 22. | <i>u</i> | busy | 'bizi |
| 23. | <i>ui</i> | building | 'bildɪŋ |
| 24. | <i>wi</i> | Anwick | 'æník |
| 25. | <i>wy</i> | Alswyck | 'æsík |
| 26. | <i>y</i> | symbol | 'simbl |
| 27. | <i>ye</i> | Adye | 'eidi… |

3. / ɔ:/

| | | | |
|----|------------|----------|-----------|
| 1. | <i>a</i> | all | ɔ:l |
| 2. | <i>aa</i> | Braal | brɔ:l |
| 3. | <i>aha</i> | Brahan | brɔ:n |
| 4. | <i>al</i> | talk | tɔ:k |
| 5. | <i>ar</i> | warm | wɔ:m |
| 6. | <i>as</i> | Arkansas | 'ɑ:kənsɔ: |
| 7. | <i>au</i> | author | ɔ:θə |

- | | | |
|-----------------------------|---------------------|----------------|
| 8. <i>augh</i> | Bradlaugh | brædłɔ: |
| 9. <i>augha</i> | Maugham | mɔ:m |
| 10. <i>augher</i> | Maughersbury | 'mɔ:zbərɪ |
| | | |
| 11. <i>ave</i> | Aveton | 'ætn |
| 12. <i>aw</i> | law | lɔ: |
| 13. <i>ea</i> | Sean | ʃɔ:n |
| 14. <i>eor</i> | Coleorton | kɔ'lɔ:tən |
| 15. <i>oa</i> | broad | b्रɔ:d |
| 16. <i>oar</i> | roar | rɔ: |
| 17. <i>oha</i> | Lohan | lɔ:n |
| 18. <i>oor</i> | door | dɔ: |
| 19. <i>or</i> | lord | lɔ:d |
| 20. <i>ore</i> | more | mɔ: |
| | | |
| 21. <i>ough bought</i> | | bɔ:t |
| 22. <i>ougha</i> | Youghal | jɔ:l |
| 23. <i>our pour</i> | | pɔ: |
| 24. <i>ower Powerscourt</i> | | 'pɔ:zku:t |
| 25. <i>oy Chysoyster</i> | | tʃai'sɔ:stə... |

4. / u: /

- | | | |
|----------|------------------|----------|
| 1. (e)au | beauty | 'bjutɪ |
| 2. euch | Buckleuch | bə'klu: |
| 3. ew | crew | kru: |
| 4. ewe | Carewe | kə'rū: |
| 5. ewoo | Brewood | bru:d |
| 6. o | move | mu:v |
| 7. oeu | manoeuvre | mə'nurvə |
| 8. ohu | Bohun | bʌ:n |
| 9. oe | shoe | ʃu: |
| 10. oo | food | fʊ:d |
| | | |
| 11. ou | soup | sʊ:p |
| 12. oud | Bertoud | 'bɜ:tʊ: |
| 13. ough | through | θru: |

| | | | |
|-----|--------------|------------------|----------------|
| 14. | <i>ougha</i> | Brougham | bru:m |
| 15. | <i>oul</i> | Boulmer | bu:mə |
| 16. | <i>oux</i> | Cadoux | kə'du: |
| 17. | <i>u</i> | rule | ru:l |
| 18. | <i>ue</i> | true | tru: |
| 19. | <i>ui</i> | fruit | fru:t |
| 20. | <i>ul</i> | Culross | 'ku:rəs |
| 21. | <i>w</i> | Aberffrwd | ,æbə'fru:d ... |

5. / a: /

| | | | |
|-----|--------------|---------------------|-------------|
| 1. | <i>a</i> | father | 'fa:ðə |
| 2. | <i>agha</i> | Aghanloo | a:n'lū: |
| 3. | <i>agher</i> | Magheramorne | ,ma:rə'mɔ:n |
| 4. | <i>ah</i> | ah | a: |
| 5. | <i>aha</i> | Cahan | kən |
| 6. | <i>aho</i> | McMahon | mək'ma:n |
| 7. | <i>air</i> | Shairp | ʃa:p |
| 8. | <i>al</i> | calm | kə:m |
| 9. | <i>ald</i> | Caldmore | 'kə:mə |
| 10. | <i>ar</i> | far | fa: |
| 11. | <i>arre</i> | Marre | ma: |
| 12. | <i>aru</i> | Barugh | bə:k/f |
| 13. | <i>ath</i> | McGrath | mə'gra: |
| 14. | <i>au</i> | laugh | la:f |
| 15. | <i>awar</i> | Hawarden | 'ha:dn |
| 16. | <i>awi</i> | Blawith | bla:ð |
| 17. | <i>ear</i> | heart | ha:t |
| 18. | <i>earr</i> | Cearr | ka: |
| 19. | <i>er</i> | serjeant | 'sa:dʒənt |
| 20. | <i>oir</i> | memoir | 'məmə: ... |

Lastly, for the schwa [ə], the empty vowel or the weak neutral vowel, more than 90 spellings are listed here. It has taken the writer over 20 years, on and off, to collect these examples. The number may reach one hundred in later years. So, the first thing to do for improving foreign accent of English may be to identify this weak

vowel schwa, and pronounce it properly whatever spelling it may be hidden in.

6. /ə/

- | | | |
|-----------------|-----------------------|--------------|
| 1. <i>a</i> | <i>opera</i> | 'ɒprə |
| 2. <i>aa</i> | <i>Isaac</i> | 'aɪzək |
| 3. <i>a'a</i> | <i>ma'am</i> | məm |
| 4. <i>ac</i> | <i>MacGregor</i> | mə'gregə |
| 5. <i>ach</i> | <i>Margach</i> | 'mɑ:gə |
| 6. <i>adh</i> | <i>Monadhliadh</i> | ,məʊnə'lɪə |
| 7. <i>ae</i> | <i>St. Dogmæls</i> | snt'dɒgməlz |
| 8. <i>aer</i> | <i>Caernavonshire</i> | kə'nærvnʃə |
| 9. <i>ai</i> | <i>mountain</i> | 'maʊntən |
| 10. <i>ag</i> | <i>Monaghan</i> | 'mənəhən |
| | | |
| 11. <i>agh</i> | <i>Ardagh</i> | 'ɑ:də |
| 12. <i>ah</i> | <i>Hannah</i> | 'hænə |
| 13. <i>aha</i> | <i>Wilbraham</i> | 'wilbrəm |
| 14. <i>air</i> | <i>Alastair</i> | 'ælistə |
| 15. <i>ar</i> | <i>leopard</i> | 'lepəd |
| 16. <i>arr</i> | <i>Bessacarr</i> | 'besəkə |
| 17. <i>au</i> | <i>Mauritius</i> | mə'rɪʃəs |
| 18. <i>auer</i> | <i>Warschauer</i> | 'wɔʃə |
| 19. <i>augh</i> | <i>Healaugh</i> | 'hi:lə |
| 20. <i>aw</i> | <i>Ushaw</i> | 'ʌʃə |
| | | |
| 21. <i>ay</i> | <i>Islay</i> | 'aɪlə |
| 22. <i>c</i> | <i>McGuire</i> | mə'gwaɪə |
| 23. <i>e</i> | <i>moment</i> | 'məʊmənt |
| 24. <i>ea</i> | <i>Eleanor</i> | 'elənə |
| 25. <i>ear</i> | <i>Winearls</i> | 'wɪnəlz |
| 26. <i>eau</i> | <i>bureaucrat</i> | ,bjʊərə'kræt |
| 27. <i>eha</i> | <i>Wykehamist</i> | 'wɪkəmɪst |
| 28. <i>ei</i> | <i>Blabhein</i> | 'bla:vən |
| 29. <i>eo</i> | <i>luncheon</i> | 'lʌnʃən |
| 30. <i>er</i> | <i>concert</i> | 'kɒnsət |

| | | | |
|-----|-------------------------|------------------------|---|
| 31. | <i>ere</i> | were* | wə |
| 32. | <i>erg</i> | Wyberg | 'waɪbə |
| 33. | <i>h</i> | Syzergh | 'saɪzə |
| 34. | <i>eu</i> | Ratcheugh | 'rætʃəf |
| 35. | <i>eur</i> | amateur | 'æmətə |
| 36. | <i>ewa</i> | Alrewas 'ɔ:lṛəs | |
| 37. | <i>eyr</i> | Le Lacheyr | lə 'læʃə |
| 38. | <i>gh</i> | Edinburgh | 'edinbərə |
| 39. | <i>gha</i> | Sebergham | 'sebərəm |
| 40. | <i>ghe</i> | Roxburghe | 'rɒksbərə |
| 41. | <i>ha</i> | Durham | 'dʌrəm |
| 42. | (<i>u</i>) <i>har</i> | Sanquhar | 'sæŋkə |
| 43. | <i>her</i> | Amherst | 'æməst |
| 44. | <i>ho</i> | Burhop | 'bʌrəp |
| 45. | <i>hol</i> | Chisholm | 'tʃɪzəm |
| 46. | <i>how</i> | Torpenhow | tri'penə |
| 47. | <i>i</i> | horrible | 'hɔrəbl |
| 48. | <i>ia</i> | parliament | 'pa:ləmənt |
| 49. | <i>iar</i> | White Friargate | 'waɪtf्रeɪgeɪt |
| 50. | <i>ier</i> | Bouchier | 'baʊʃə |
| 51. | <i>ieu</i> | lieutenant | lə'tenənt (<i>Br. navy. Cf. lef'tenənt in Br. army</i>) |
| 52. | <i>ir</i> | Virginia | və'dʒɪniə |
| 53. | <i>ire</i> | Berkshire | 'bə:kʃə |
| 54. | <i>iu</i> | Agius | 'eɪdʒəs |
| 55. | <i>o</i> | method | 'meθəd |
| 56. | <i>o'</i> | O'Grady | ə'greɪdi |
| 57. | <i>oa</i> | Heathcoat | 'hi:θkət |
| 58. | <i>oar</i> | cupboard | 'kʌbəd |
| 59. | <i>oe</i> | does* | dəz |
| 60. | <i>oh</i> | Mendelssohn | 'mendləsən |
| 61. | <i>oi</i> | tortoise | 'tɔ:təs |
| 62. | <i>oir</i> | Belvoir | 'bi:və |
| 63. | <i>ol</i> | Lincoln | 'lɪŋkən |

| | | | |
|-----|---------------|---------------------|---------------------------|
| 64. | <i>old</i> | Ingoldmells | 'ɪŋgəməlz |
| 65. | <i>olqu</i> | Colquhoun | kə'hu:n |
| 66. | <i>or</i> | effort | 'efət |
| 67. | <i>ou</i> | famous | 'feiməs |
| 68. | <i>ough</i> | borough | 'bʌrə |
| 69. | <i>our</i> | Melbourne | 'melbən |
| 70. | <i>o(u)re</i> | labo(u)red | 'lerbəd |
| 71. | <i>ow</i> | Wigtownshire | 'wɪgtənʃə |
| 72. | <i>to</i> | Uzmaston | 'ʌzməsən |
| 73. | <i>re</i> | massacre | 'mæsəkə |
| 74. | <i>rie</i> | Ruthrieston | 'rʌðəstən |
| 75. | <i>te</i> | often | əfən |
| 76. | <i>u</i> | focus | 'fəʊkəs |
| 77. | <i>ue</i> | guerilla | gə'rɪlə |
| 78. | <i>ur</i> | survival | sə'veɪvl |
| 79. | <i>ure</i> | pleasure | 'pleʒə |
| 80. | <i>urgh</i> | Bawburgh | 'beibə |
| 81. | <i>ul</i> | Uffculme | 'ʌfkəm |
| 82. | <i>wa</i> | Burwasher | 'bʌrəʃə |
| 83. | <i>wai</i> | boatswain | 'bəʊsən |
| 84. | <i>war</i> | Ruswarp | 'rʌsəp |
| 85. | <i>ward</i> | Bearwardcote | 'bærəkət |
| 86. | <i>wer</i> | answer | 'a:nsə |
| 87. | <i>wor</i> | Clapworthy | 'klæpərɪ |
| 88. | <i>y</i> | Mynachdy | mə'nækdi |
| 89. | <i>yr</i> | martyr | 'ma:tə |
| 90. | <i>yre</i> | martyred | 'ma:təd |
| 91. | <i>ywor</i> | pennyworth | 'penəθ |
| 92. | . | Arcedeckne | a:t'di:kən (= Archdeacon) |

* a weak form.

In phonology, English schwa is usually excluded from the vowel phoneme list because all the other vowels can become schwa in an unstressed position. In

phonetics, however, it is one of the 12 English simple vowels and one of the most important and difficult vowels for foreigners to learn correctly.

7. Conclusion

The above examples for the six English vowels may be enough to show foreigners' problems in learning correct English pronunciation, especially vowels. The main reason for these discrepancies is that English spellings has actually stopped changing for centuries although pronunciation has been changing all the time. This makes it easy for the descendants to read the language of their ancestors and follow tradition, while making it difficult for foreigners to learn English pronunciation.

When we learn the pronunciation of a new word in English, we are recommended to memorize it(word by word) like Chinese character pronunciation. While learning Chinese characters, we come to know that the similarity of character shapes does not necessarily tell the similarity of pronunciation. For instance, one character 土(meaning 'soil', where the bottom stroke is longer) pronounced [tʰo] and another 土(meaning 'gentleman', where the bottom stroke is shorter) pronounced [sʰa:] in Corean are similar to each other in shape, but there is no similarity at all in their pronunciation. So, if there were a new character in which the two horizontal strokes were of the same length, nobody could tell or guess the pronunciation of that new character.

Likewise, learners of English, being quite different from learners of Italian, Spanish or Corean, are strongly recommended to look up every new word in the dictionary for its pronunciation without relying on its spelling too much. Prior to that, it is needless to say that a full understanding of the vowel system of Modern English is indispensable.

〈Reference〉

- [1] G. E. Pointon, *BBC Pronouncing Dictionary of British Names*, 2nd ed., Oxford University Press, 1983.
- [2] J. C. Wells, *PRONUNCIATION DICTIONARY*, new ed., Longman, 2000.
- [3] MG. Youe, "A Survey of Vowel Discriminating Ability of Korean University Students", *Applied Linguistics*, Vol. 8, No. 2, pp.169-183, Language Research Institute, Seoul National University, 1976.
- [4] MG. Hansa Youe, *Readings in Corean with Seoul Pronunciation Transcribed in the Roman Alphabet*, Saunngyoun-Gwan University Press, 1997.
- [5] MG. Youe, "A Survey of Korean Students' English Vowel Discrimination Ability('97)", *JSEP Proc. Part II*, pp.83-87, English Phonetic Society of Japan & the Phonetic Society of Korea, 1998.
- [6] MG. Hansa Youe, "A Survey of the Korean Learner's Problems in Learning English Pronunciation", *The 2nd SICOPS 2000 JSEP Proc.*, pp.7-16, The Phonetic Society of Korea & English Phonetic Society of Japan, 2000.

접수일자: 11월 14일

제재결정: 12월 6일

▶ 유만근(Hansa Mahn-Gunn Youe)

주소: 110-745 서울 종로구 명륜동 3가 성균관대학교

소속: 어문학부 영어영문학과

전화: 02) 760-0255

E-mail: u-hansa@hanmail.net

<Appendix>

Basic Syllables of Seoul Corean

| | a | ai | au | e | o | ou | uh | u | i/y | |
|-----|---|----|----|-----|---|----|----|---|-----|----|
| | a | ɛ | ɔ | e | o | u | v | w | i | |
| m | 아 | 애 | 어 | 에 | 오 | 우 | :어 | 으 | 이 | |
| | 마 | 매 | 머 | 메 | 모 | 무 | :머 | 므 | 미 | |
| n | 나 | 내 | 녀 | 네 | 노 | 누 | :너 | 느 | 니 | |
| r/l | 라 | 래 | 러 | 레 | 로 | 루 | :러 | 르 | 리 | |
| b | 바 | 배 | 버 | 베 | 보 | 부 | :버 | 브 | 비 | |
| d | 다 | 대 | 더 | 데 | 도 | 두 | :더 | 드 | 디 | |
| g | 가 | 개 | 거 | 게 | 고 | 구 | :거 | 그 | 기 | |
| j | 자 | 자 | 저 | 제 | 조 | 주 | :저 | 즈 | 자 | |
| s | 사 | 새 | 서 | 세 | 소 | 수 | :서 | 스 | 시 | |
| h | 하 | 해 | 허 | 헤 | 호 | 후 | :허 | 흐 | 히 | |
| ph | 파 | 파 | 퍼 | 페 | 포 | 푸 | :퍼 | 프 | 피 | |
| th | 타 | 태 | 터 | 테 | 토 | 투 | :터 | 트 | 티 | |
| kh | 카 | 캐 | 커 | 케 | 코 | 쿠 | :커 | 크 | 키 | |
| ch | 차 | 채 | 처 | 체 | 초 | 추 | :처 | 츠 | 치 | |
| p | 빠 | 빠 | 빠 | 빠 | 뽀 | 뿌 | :빠 | 뽀 | 삐 | |
| t | 따 | 때 | 떠 | 떼 | 또 | 뚜 | :떠 | 뜨 | 띠 | |
| k | 까 | 깨 | 꺼 | 께 | 꼬 | 꾸 | :꺼 | 꼬 | 끼 | |
| cz | 짜 | 째 | 쩌 | 째 | 쪼 | 쭈 | :쩌 | 쓰 | 찌 | |
| ss | 싸 | 쌔 | 써 | 쎄 | 쏘 | 쑤 | :써 | . | 씨 | |
| y | 야 | 얘 | 여 | 예 | 요 | 유 | :여 | . | (의) | |
| w | 와 | 왜 | 워 | 웨/외 | . | . | :워 | . | 위 | |
| | 암 | 앰 | 엄 | 엠 | 옴 | 움 | :엄 | 음 | 임 | m |
| | 안 | 앤 | 언 | エン | 온 | 운 | :언 | 은 | 인 | n |
| | 앙 | 앵 | 엉 | 엉 | 옹 | 웅 | :엉 | 웅 | 잉 | ng |
| | 알 | 앨 | 얼 | 엘 | 울 | 울 | :얼 | 을 | 일 | l |
| | 압 | 앱 | 엄 | 엡 | 웁 | 웁 | :엡 | 웁 | 입 | b |
| | 안 | 앤 | 언 | 엔 | 온 | 운 | :언 | 온 | 인 | d |
| | 악 | 액 | 억 | 엑 | 옥 | 욱 | :엑 | 욱 | 익 | g |

(Yoe 1997. p.2)