Production of English Diphthongs: A Speech Study

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Abstract

In the 21th century, English is a key of all elements in education, politics, economy and international trade. English is even used in most of International events. This study aimed at analysing the official speech of Mr. Joko Widodo known as Jokowi, the seventh President of Republic of Indonesia, in APEC forum 2014 in China, focusing on the production of diphthongs. The researchers used conceptual framework of Roach that divides diphthong into two types; first, closing diphthong such as /et/, /at/, /ɔt/,/av/, au/ and second, centring diphthong like /tə/, /eə/,/və/. This study employed qualitative method while the data were collected through library research. This study found 71 data of English diphthong. Diphthong /et/ was produced 21 times, diphthong /at/ was used 15 times, diphthong /ɔt/ was mentioned once, diphthong /av/ was stated 7 times, diphthong /av/ was produced 16 times, diphthong /tə/ used 6 times, diphthong /eə/ was mentioned 3 times, and diphthong /oə/ was stated twice. In other words, this study showed that Mr. Jokowi could produce the diphthong sounds that matched the Oxford Advanced Learner's Dictionary. However, this study also found that he faced challenges in producing many diphthong sounds by frequently producing diphthongs sounds as pure vowels.

Key Words: diphthongs, speech production.

Introduction

Nowadays, having an ability to communicate in English is very important as English has become an international *lingua franca* and a tool for global communication (Ke, 2015). It has even further transformed into a key element in education, business, politics and international trade. Learning English is always associated with globalization where the nation needs to perform on the global stage for the sake of economy (Di Grapello, Kruse, & Tandon, 2011; Rido, 2011; Lauder, 2008). Hence, the growing importance of English in Indonesia have created new purposes and needs for learning English mainly by young Indonesians who have previously learned English as a foreign language (EFL) for communication purposes.

However, there are still growing concerns on the mastery of English among Indonesians. According to Haidara (2014), Indonesians think that English language is complicated so that they do not make much effort to learn it. In addition, Alam (2013) and Trudgil in Hakim (2012) assert Indonesians feels that their accents sound 'odd' because it is much influenced by their mother tongues. Even though Roach (1998) mentions that languages have accent and they are pronounced differently because it is influenced by the geographical places, ages, social status and educational background; however, Indonesians are still not confident using it in public.

In the Indonesian context, studies on English language production have been conducted for years. Some recent studies focus on English diphthong production by non-native speakers, error pronunciation of vowels, and consonants and pronunciation varieties (Azlina, 2016; Chandradewi, 2013; Mustikareni, 2013; Traditya, 2015). Azlina (2016) carried out 5 English speeches of Mr. Jokowi, the President of Republic of Indonesia, to identify the kinds of English pronunciation errors on consonant and vowel in his speech. He used descriptive qualitative and Cambridge dictionary as the tool of analyzing the data. The findings were 283 data consonants errors and five kinds of error as well as 114 data on vowels errors. Meanwhile, Chandradewi (2013) conducted a research on English language production by the Javanese. She found that the Javanese participants were unfamiliar with English vowels as they could not find them in Javanese language. They also faced difficulties in producing the vowels, except those who had ever learned them before. Besides, they had no information about diphthongs in Javanese pronunciation as their vocal cords could not produce that sounds. In the same vein, Mustikareni (2013) analyzed English diphthongs produced by Indonesian teenagers in English debate on in a TV station. The study showed that all English diphthongs were mispronounced by all of them. They pronounced the diphthongs as yowel such as /ei/ as be /ɛ/ and there was no effort to correct their pronunciation. Another study done by Traditya (2015) also investigated the speech of Mr. Jokowi and he did a documentation analysis to get the detail information of English pronunciation of Mr. Jokowi. This study used The OxfordAdvanced Learner's dictionary to compare receptive pronunciation and General American. This study found five consonant sound deletions such as /r/, /d/ or /t/, /s/, /l/, and /n/. In addition, there were five assimilations or consonant sound change.

To this end, an *in situ* study needs to be conducted to see how English sounds are produced by Indonesians. Thus, this study aimed at investigating the official speech of Mr. Jokowi, the President of Republic of Indonesia, in APEC forum 2014 in China, focusing on the production of diphthongs. Mr. Jokowi, the president of Republic of Indonesia, delivered his first speech in English in Asia Pacific Economic Forum (APEC) forum in 2014. In that event, Mr. Jokowi presented Indonesian economy which caught the world's attention. In Indonesia, his speech was widely discussed since he spoke English with thick Javanese accent.

Theory and Method

Roach (1998) states that diphthongs are sounds which consists of the movement or glide from one vowels to another because diphthongs are the combination of two pure vowels. Ramelan in Mustikareni (2013) mentions that diphthongs are divided into two sections: closing and centering diphthong. Closing diphthong is the diphthong sounds that the second vowel is closer than the first vowel because the movement of the tongue is carried out from the position of open vowel to the closer vowel, while centering diphthong is the second vowel that more center than the first vowels because the movement of the tongue is carried out towards the central vowel. For example, the English closing diphthongs are (/eɪ/, /aɪ/, /əɪ/, /əʊ/) and centering diphthong are (/ɪə/, /eə/, /və/) (Roach, 1998).

First, it is **Diphthong /e/.** The position of the tongue is from the vowel /e/ that a front vowel which a little lower than the half close position. After that, the tongue moves to the direction of the vowel position /i/. It is a little above the half close position and the lips are spread. Then, it is gradually closing such as *raid*, *pain*, *fail* and *tail* (Roach, 1998).

Second, it is **Diphthong /ai/**. It is a front-front closing full diphthong and it is a front vowel with a position in between /æ/ and /a:/. Then, the tongue moves to a closer position as if to produce /i/ vowel sound and the lips are apart and gradually closing. For example: *mine*, *file*, *rice*, and *lime* (Roach, 1998).

Third, it is **Diphthong /ɔɪ/**. Diphthong /ɔɪ/ is a back-front closing full diphthong because the back of the tongue is raised to a point midway between /ɔ/ and /ɔ:/. After that, the front tongue is gradually raised in the direction of /ɪ/ and the lips are rounded for the first element of the diphthong such as *soil*, *coil*, *point*, and *coin* (Roach, 1998).

Fourth, it is **Diphthong /au/**. It is a front-back closing full diphthong because the front part of the back of the tongue is slightly raised for the first element of the diphthong /au/. Then, the tongue moves in a direction of /u/ and the lips starts at the neutral position, and gradually rounded (Roach, 1998). For example *sow*, *found*, *foul* and *now*.

Fifth, it is **Diphthong**/əʊ/. This is closing half diphthong and the position of the tongue from the position of vowel /e/. After that, the tongue moves to a closer position of /ʊ/ (Roach, 1998). For example *also*, *go*, *boat* and *only*.

Sixth, it is **Diphthong /1a/**. It is a high-front-centering diphthong. The tongue starts from the vowel /1/ and not from the closer /i/ vowel sound. Then, it glides away in the direction of the central vowel /a/. The two lips are in neutral position (Roach, 1998). For example we can see it in *here*, *fear*, *dear* and *beard*.

Seventh, it is **Diphthong** /e³/. It is a low front-centering diphthong. The tongue starts from an open vowel position, slightly higher than the position for the English /æ/. Then, the lips spread or neutral and the lower jaw are clearly felt to be slightly moving upward (Roach, 1998). For example there are *hair*, *pair* and *rare*.

Eighth, it is **Diphthong** /və/. Diphthong /və/ is a high back centering diphthong. The tongue moves from /v/ position and not from the closer /u:/ and the direction of the central vowel /ə/. The lips are rounded for the first element. After that, it was drawn back to neutral position (Roach, 1998). For example there are *sure*, *tour* and *pure*.

This study used qualitative method while data were collected through library research. It was done in several steps: (1) finding the speech of Mr. Jokowi (Mr. Jokowi), (2) watching and listening to the speech carefully, (3) transcribing the speech orthographically and in the form of phonetic transcription, (4) reading the phonetic transcription of the speech (5), and (6) identifying English diphthong production from the phonetic transcription. Furthermore, the data were analyzed in some steps: (1) classifying English diphthong from the speech based on Roach (1998), (2) interpreting English diphthong from the speech, and (3) presenting the findings/data in tables.

Findings and Discussion

This study analysed the production of diphthongs in the speech of Mr. Jokowi in APEC forum 2014 in Beijing, China. Mr. Jokowi is the seventh president of Republic of Indonesia who presented the economic situation in Indonesia. Roach (1998) mentions that diphthong is a vowel with glide form and divided into two types, closing and centering diphthong. Closing diphthong consists of /eɪ/, /aɪ/, /oɪ/,/əʊ/, and /aʊ/ while centring diphthong comprises /ɪə/, /eə/, and /ʊə/.

After analysing the data, the findings revealed 71 data samples of English diphthongs produced by Mr. Jokowi which were classified into eight types. Diphthong /ei/ appeared in 21 data samples, diphthong /ai/ stated in 15 data samples, diphthong /oi/ mentioned only 1 data sample, diphthong /ao/ stated in 7 data samples, diphthong /oi/ appeared in 16 data samples, diphthong /io/ only stated in 6 data samples, diphthong /eo/ mentioned in 3 data samples, and the last, diphthong /oi/, appeared in 2 data samples.

Diphthong /ei/

Diphthong /eɪ/ is closer to sound /ɪ/ and it begins with sound /e/. In this study, the researchers found 21 data samples of diphthong /eɪ/ and Mr. Jokowi only produced diphthong /eɪ/ correctly in 8 words while in the rest of the words, he could not produce them based on the Oxford standard.

Data sample 1: /'leɪdɪz/

No	Word	Mr. Jokowi
I	ladies	/leˈdɪs/

First, in the word *ladies*, diphthong /ei/ was produced. Here, Mr. Jokowi produced the diphthong sound different from the Oxford standard. The word *ladies* should be pronounced / leidiz/, but he pronounced that word as /le dis/. It means that he produced diphthong /ei/ as pure vowel /e/.

Data sample 2: / təˈdeɪ/

No	Word	Mr. Jokowi
I	today	/ tʊˈdeɪ/

The word *today* which contains diphthong /eɪ/ appeared once in the beginning of the speech. Mr. Jokowi could produce the diphthong sound well, but he changed a vowel sound /ə/ into /v/ sound.

Data sample 3: / prezn teisn/

No	Word	Mr. Jokowi
I	presentation	/ persn tesn/
II	presentation	/ persn'tesn/

Mr. Jokowi also produced the word *presentation* in the beginning and at the end of the speech. *Presentation* in The Oxford should be pronounced /prezn'tesſn/, but he pronounced it as/,persn'tesn/ because he produced the diphthong /es/ as pure vowel /e/.

Data sample 4: / pppju'leisn/

No	Word	Mr. Jokowi
I	population	/ˌpɒpjuˈleʃn/

After that, the word *population* word was used only once in the speech and it contains diphthong /ei/. Here, he pronounced *population* as /pppju'leʃn/. Based on The Oxford it should be pronounced / pppju'leiʃn/. This means that he produced diphthong /ei/ as pure vowel /e/.

Data sample 5: / iri ˈgeiʃn/

No	Word	Mr. Jokowi
I	irrigation	/ˌɪrɪˈgeɪsn/

Next, the word *irrigation* only appeared once and he produced the English diphthong /eɪ/ correctly.

Data sample 6: /mein'tein/

No	Word	Mr. Jokowi
I	maintain	/men'ten/

Based on the Oxford standard, the target transcription of the word *maintain* is /mein'tein/, but he pronounced that word as /men'ten/. Thus, he produced diphthong sound different from the standard of Oxford.

Data sample 7: /reiz/

No	Word	Mr. Jokowi
I	raise	/rais/

Then, in the case of *raise* word, the target production should be /reiz/ but he produced that word similar to that of *rice* word in English. It means he produced the sound of diphthong /ei/ as diphthong /ai/ and this influences the meaning of the word.

Data sample 8: /rɪˈfrɪʤəreɪtə(r)/

No	Word	Mr. Jokowi
I	refrigerator	/rɪˈfrɪʤəretə(r)/

The word *refrigerator* appeared once in his speech and he pronounced diphthong /ei/ as /e/ sound.. It means he did not produce the diphthong based on the Oxford standard.

Data sample 9: /trænspo: 'teɪʃn/

No	Word	Mr. Jokowi
I	transportation	/trænspo:ˈtesn/
II	transportation	/trænspo:ˈtesn/
III	transportation	/trænspo:ˈtesn/
IV	transportation	/trænspo:ˈtesn/
V	transportation	/trænspo:ˈtesn/
VI	transportation	/trænspo:ˈtesn/

The word *transportation* appeared six times in the speech and he consistently pronounced it as /trænspo: 'tesn/ not /trænspo: 'tesʃn/. This means that he produced English diphthong /ei/ different from the Oxford standard.

Data sample 10: /reilwei/

No	Word	Mr. Jokowi
I	railway	/relweɪ/
II	railway	/relwei/

The word *railway* which contains English diphthong /eɪ/ appeared twice in his speech. Here, he only correctly produced the last diphthong sound while the first diphthong sound which should be pronounced /reɪlweɪ/ was pronounced as /relweɪ/.

Data Sample 11: /meɪk/

No	Word	Mr. Jokowi
I	make	/mek/
II	make	/mek/

The word *make* appeared twice in the middle of the speech, but Mr. Jokowi pronounced that word as /mek/.

Data sample 12: /seim/

No	Word	Mr. Jokowi
I	same	/sem/

Meanwhile, the word *same* was produced as /sem/ not /sem/. Here, he produced the diphthong /ei/ as pure vowel /e/ similar to that of other previous words that had already produced in his speech.

Data sample 13: /ðeɪ/

No	Word	Mr. Jokowi
I	they	/ðeɪ/
II	they	/ðeɪ/

Moreover, the word *they* appeared twice in the speech and all was produced consistently correct.

Data sample 14: /'a:lweiz/

No	Word	Mr. Jokowi
I	always	/ˈɔ:lweɪs/

Then, the word always appeared only once and it was also produced based on the Oxford standard.

Data sample 15: /kəmˈpleɪn/

No	Word	Mr. Jokowi
I	complain	/kpm'plen/

Next, the word *complain* appeared only once in the speech and it was produced different from the standard of diphthong sound production. It should be pronounced /kəmˈpleɪn/ not /kɒmˈplen/. Again, he produced diphthong /eɪ/ as pure vowel /e/.

Data sample 16: /eɪt/

No	Word	Mr. Jokowi
I	eight	/eɪt/

The word *eight* appeared once in the speech and it was produced correctly based on the Oxford standard.

Data sample 17: /kpmpen'seisn/

No	Word	Mr. Jokowi
I	compensation	/kpppen'seisn/

Similarly, the word *compensation* was produced correctly by Mr. Jokowi based on the Oxford standard.

Data sample 18: /fəˈsɪlɪteɪt/

No	Word	Mr. Jokowi
I	facilitate	/faˈsɪlɪtet/

Furthermore, this speech only produced the word *facilitate* once but he had a problem in producing the word. He should pronounce it as /fə'sılıteɪt/, not /fʌ'sılıtet/.

Data sample 19: /deiz/

No	Word	Mr. Jokowi
I	days	/deis/

English diphthong contained in the word days produced correctly based on the Oxford standard as well.

Data sample 20: /əˈgeɪn/

No	Word	Mr. Jokowi
I	again	/əˈgen/

Meanwhile, the word *again* appeared once and Mr. Jokowi produced the word as /əˈgen/ not /əˈgem/. Here, he did not produce the diphthong sound in this word.

Data sample 21: / weitin /

No	Word	Mr. Jokowi
I	waiting	η /wetɪ /
II	waiting	Ŋ /wetɪ/

Then, the word *waiting* appeared twice in the speech but all of sounds produced different from the standard of Oxford. Here, he produced the word as /weti /.

Diphthong /ai/

Diphthong /ai/ is produced between /æ/ and /a:/. After that, the tongue moves to a closer position to produce /i/ vowel sound. Based on the findings, there were 15 data samples which contain diphthong /ai/.

Data sample 22: / ai/ & /aəm/

No	Word	Mr. Jokowi
I	I'm	/aəm/
II	I'm	/aəm/
III	I	/ aɪ/
IV	I	/ aɪ/
V	I	/ aɪ/
VI	I	/ aɪ/
VII	I	/ aɪ/
VIII	I	/ aɪ/
IX	I	/ aɪ/
X	I	/ aɪ/
XI	I	/ aɪ/

Based on the data above, the word *I* appeared nine times and *I'm* word was twice during the speech of Mr. Jokowi and he could produce the diphthong relevant to the Oxford standard.

Data sample 23: /laɪk/

No	Word	Mr. Jokowi
I	like	/laɪk/
II	like	/laɪk/
III	like	/laɪk/

Meanwhile, the word *like* was mentioned three times in the speech and all could be produced correctly based on The Oxford standard as well.

Data sample 24: /mai/

No	Word	Mr. Jokowi
I	my	/ maɪ/
II	my	/ maɪ/
III	my	/ maɪ/
IV	my	/ maɪ/
V	my	/ maɪ/

In the case of the word *my*, Mr. Jokowi produced it five times and he produced all of them consistent with the Oxford standard.

Data sample 25: /'aɪlənd/

No	Word	Mr. Jokowi
I	island	/ˈaɪlənd/
II	island	/ˈaɪlənd/
III	island	/ˈaɪlənd/
IV	island	/ˈaɪlənd/
V	island	/ˈaɪlənd/
VI	island	/ˈaɪlənd/
VII	island	/ˈaɪlənd/
VIII	island	/ˈaɪlənd/

IX	island	/ˈaɪlənd/
X	island	/ˈaɪlənd/
XI	island	/ˈaɪlənd/
XII	island	/ˈaɪlənd/
XIII	island	/ˈaɪlənd/
XIV	island	/ˈaɪlənd/
XV	island	/ˈaɪlənd/
XVI	island	/ˈaɪlənd/

After that, the word *island* was stated sixteen times during the speech and he produced all the diphthong /ai/ contained in the word consistent with the Oxford standard, too.

Data sample 26: /'f3:tlaiz(r)/

No	Word	Mr. Jokowi
I	fertilizer	/ˈfɜ:tilaɪz(r)/

The word *fertilizer* was mentioned once in the speech and produced correctly based on the Oxford standard.

Data sample 27: /faiv/

No	Word	Mr. Jokowi
I	five	/faɪf/
II	five	/faɪf/
III	five	/faɪf/
IV	five	/faɪf/
V	five	/faɪf/

The word *five* was used five times in the speech and he could produce the diphthong sound correctly based on the Oxford standard. However, here he produced the consonant /v/ as /f/.

Data sample 28: /səˈplaɪ/

No	Word	Mr. Jokowi
I	supply	/sʊˈplaɪ/

Next, the word *supply* appeared once during the speech and he could produce the word and the diphthong correctly based on the Oxford standard.

Data sample 29: /prais/

No	Word	Mr. Jokowi
I	price	/prais/
II	price	/preis/
III	price	/preis/
IV	price	/preis/
V	price	/prais/

In the above table it can be seen that the word *price* was stated five times, but the diphthong was correctly pronounced only twice. The first and the last word that contains diphthong /ai/ were pronounced based on the Oxford standard while the second, the third and the fourth attempts were produced differently. Here, the diphthong /ai/ was produced as /ei/.

Data sample 30: /taim/

No	Word	Mr. Jokowi
I	time	/taɪm/
II	time	/taɪm/
III	time	/taɪm/
IV	time	/taɪm/

Based on the data above, he could produce the diphthong contained in the word *time* correctly based on the Oxford standard.

Data sample 31: /'maɪkrəu/

No	Word	Mr. Jokowi
I	micro	/ˈmaɪkrɑ/

Moreover, the word *micro* contains two English diphthong /ai/ and /əu/. Here, diphthong /ai/ was produced correctly while diphthong /əu/ was not pronounced in line with the Oxford standard.

Data sample 32: /'entəpraiz/

No	Word	Mr. Jokowi
I	enterprise	/'entərprais/

In the above table, the word *enterprise* which contains diphthong /ai/ was produced only once and Mr. Jokowi could produce it based on the Oxford standard.

Data sample 33: /nain/

No	Word	Mr. Jokowi
I	nine	/naɪn/

The word *nine* which contains diphthong /aɪ/ appeared once during the speech. Here Mr. Jokowi could also successfully produce the diphthong based on the Oxford standard.

Data sample 34: /'mæritaim/

No	Word	Mr. Jokowi
Ι	maritime	/ˈmærɪtaɪm/
II	maritime	/ˈmærɪtaɪm/

Meanwhile, the word *maritime* which contains diphthong /ai/ was mentioned twice in the speech. Here, the diphthong was consistently produced based on the Oxford standard.

Data sample 35: /in'vait/

No	Word	Mr. Jokowi
I	invite	/ɪnˈfaɪt/
II	invite	/ɪnˈfaɪt/
III	invite	/ɪnˈfaɪt/

Then, Mr. Jokowi produced the word *invite* three times and he could produce all diphthong /ai/ correctly. However, he could not produce /v/ sound based on the Oxford standard and pronounced it as /f/.

Data sample 36: /'faməli/

No	Word	Mr. Jokowi
I	finally	/ˈfaɪnəleɪ/

In data sample above, Mr Jokowi produced diphthong /ai/ in the word *finally* consistent with the Oxford standard. However, he produced pure vowel /i/ as diphthong /ei/.

Diphthong /ɔɪ/

Diphthong /ɔɪ/ is the position of the tongue is raised to a point midway between /ɔ/ and /ɔ:/ then, the front tongue is gradually raised in the direction of /ı/. The findings show that Mr. Jokowi only produced 1 word that contains diphthong /ɔɪ/ during his speech.

Data sample 37: /point/

No	Word	Mr. Jokowi
I	point	/point/

The word *point* contains diphthong /ɔɪ/ and it was mentioned once in the speech. Here, Mr Jokowi could produce the diphthong based on the Oxford standard.

Diphthong /au/

In producing this type of diphthong, the tongue moves in a direction of $/\upsilon$ / and the lips starts at the neutral position, and gradually rounded. In this study, there were 7 words which contain diphthong $/a\upsilon$ / found.

Data sample 38: /ə'baot/

No	Word	Mr. Jokowi
I	about	/əˈbɒt/
II	about	/əˈbɒt/
III	about	/əˈbɒt/
IV	about	/əˈbɒt/
V	about	/əˈbɒt/

The word *about* which contains diphthong /au/ appeared five times in the speech and the diphthong was produced different from the Oxford standard. The diphthong /au/ was pronounced as a pure vowel /p/.

Data sample 39: /ˈθaʊznd/

No	Word	Mr. Jokowi
I	thousand	/ˈtaʊsnd/
II	thousand	/ˈtaʊsnd/
III	thousand	/ˈtaʊsnd/
IV	thousand	/ˈtaʊsnd/
V	thousand	/ˈtaʊsnd/
VI	thousand	/ˈtaʊsnd/
VII	thousand	/ˈtaʊznd/

In the following data sample, Mr. Jokowi mentioned the word *thousand* which contains diphthong /au/. It was stated seven times and all was pronounced based on the Oxford standard.

Data sample 40: /əˈraund/

No	Word	Mr. Jokowi
I	around	/əˈraʊnd/
II	around	/əˈraʊnd/

Here, Mr Jokowi could also produce diphthong in the word around based on the Oxford standard.

Data sample 41: /nav/

No	Word	Mr. Jokowi
I	now	/naʊ/
II	now	/naʊ/
III	now	/naʊ/
IV	now	/naʊ/
V	now	/naʊ/

In the same vein, he produced the word *now* five times and was able to pronounce the diphthong /ao/ based on the Oxford dictionary.

Data sample 42: /'pauə(r)/

No	Word	Mr. Jokowi
I	power	/'pɒwə(r)/
II	power	/'pɒwə(r)/
III	power	/ˈpaʊə(r)/

Next, the word *power* appeared three times during the speech. In his first and second attempts, the production of diphthong were different from that of the standard production. Here, he produced *power* as /'ppə(r)/ not /'paoə(r)/, while his third attempt was relevant to the Oxford standard.

Data sample 43: /'autə(r)/

No	Word	Mr. Jokowi
I	outer	/'ptə(r)/

In the next data sample, Mr Jokowi produced the word *outer*. Here, his speech production was not relevant to the Oxford standard as he pronounced it as /'ptə(r)/ not /'autə(r)/.

Data sample 44: /graund/

No	Word	Mr. Jokowi
I	ground	/grɒnd/

Similar to the previous data sample, the word *ground* contains diphthong /au/ and he produced the diphthong /au/ as pure vowel /p/.

Diphthong /au/

This is closing half diphthong and the position of the tongue is in the position of vowel /e/. After that, the tongue moves to a closer position of /v/. The findings revealed that there were 16 words that contain diphthong /əv/ mentioned by Mr. Jokowi in his speech.

Data sample 45: /nəu/

No	Word	Mr. Jokowi
I	know	/npu/
II	know	/npu/
III	know	/nɒ/

Mr. Jokowi mentioned the word *know* three times in his speech. This word should be pronounced /nəʊ/, but he produced it as /nɒʊ/ and /nɒ/.

Data sample 46: /əˈgəʊ/

No	Word	Mr. Jokowi
I	ago	/əˈgɒ/
II	ago	/əˈgɒ/
III	ago	/əˈgɒ/
IV	ago	/əˈgɒ/

In the above data sample, Mr. Jokowi produced the word ago four times and all the sounds of diphthong /əu/ produced different from the standard production of Oxford. Here, he pronounced /ə'gəu/ as /ə'gu/.

Data sample 47: /səʊ/

No	Word	Mr. Jokowi
I	so	/sp/
II	so	/sp/
III	so	/səʊ/
IV	so	/sp/
V	so	/sp/
VI	so	/sp/
VII	so	/sp/

After that, the word *so* appeared seven times and Mr. Jokowi corrected it once in his third attempt, while the others were pronounced not based on the Oxford standard. Here, the word *so* was produced as /sp/, not /səʊ/.

Data sample 48: /ʃəʊ/

No	Word	Mr. Jokowi
I	show	/sɒ/
II	show	/sɒ/

Then, the word *shows* was produced twice and he produced diphthong /əu/ as pure vowel /p/.

Data sample 49: /'ɔ:lsəʊ/

No	Word	Mr. Jokowi
I	also	/ˈalsa/
II	also	/ˈalsa/
III	also	/ˈalsa/
IV	also	/ˈalsa/
V	also	/ˈalsa/
VI	also	/ˈalsa/

Meanwhile, in data sample above he produced the word *also* six times. Here, he produced diphthong /əu/ open not closer because he pronounced it as /'alsa/ not /'ɔːlsəu/ and this is not consistent with the Oxford standard.

Data sample 50: /'prəugræm/

No	Word	Pronouncer
I	program	/'pragræm/
II	program	/'pragræm/

The word *program* appeared twice during the speech and this time he produced the word different from the Oxford standard as well. Here, he produced the diphthong /əu/ as /a/.

Data sample 51: /təʊl/

No	Word	Mr. Jokowi
I	toll	/tɒl/
II	toll	/tpl/
III	toll	/tpl/
IV	toll	/tpl/
V	toll	/tpl/
VI	toll	/tpl/
VII	toll	/tpl/

In the following data sample, Mr Jokowi produced the word *toll* which appeared seven times in the speech. Here, his pronunciation was different from the Oxford standard since he produced diphthong /əʊ/ as /ɒ/.

Data sample 52: /həup/

No	Word	Mr. Jokowi
I	hope	/hɒp/
II	hope	/hɒp/

In the next data sample, Mr. Jokowi mentioned the word *hope* twice. This word contains diphthong /əu/ and he pronounced it as /b/. It means that he produced the word *hope* as /hpp/ not /həup/and this is not in line with the Oxford standard.

Data sample 53: /'əunli/

No	Word	Mr. Jokowi
I	only	/ˈɒnleɪ/

Similarly, while producing the word *only*, he produced diphthong /əu/ as /b/. In addition, he produced pure vowel /i/ as diphthong /eɪ/.

Data sample 54: /bout/

No	Word	Mr. Jokowi
I	boat	/bʊt/

The data above show that Mr. Jokowi produced the word *boat* once. The diphthong /əu/ which appeared in this word was pronounced different from that of the Oxford standard. Here, he produced /bəut/ as /but/.

Data sample 55: /ˈmaɪkrəʊ/

No	Word	Mr. Jokowi
I	micro	/ˈmaɪkrɑ/

In the same vein, the problem of the word *micro* is that he produced the diphthong /əu/ as /p/.

Data sample 56: /'o:moust/

No	Word	Mr. Jokowi
I	almost	/ˈɔ:mɒst/

Meanwhile, in the word *almost* he produced diphthong /əu/ as /b/. He pronounced the diphthong /əu/ as pure vowel /b/.

Data sample 57: /rəʊd/

No	Word	Mr. Jokowi
I	road	/rod/
II	road	/rod/

During the speech, Mr. Jokowi mentioned the word *road* twice. In this word, he produced diphthong /əu/ as pure vowel /p/. Thus he pronounced it as /rəud/ not /rud/.

Data sample 58: /zəun/

No	Word	Mr. Jokowi
I	zone	/zɒn/
II	zone	/zɒn/
III	zone	/zɒn/

During his speech, Mr. Jokowi also mentioned the word *zone* three times, but he produced the diphthong different from the Oxford standard. Here, he produced diphthong /əu/ as /v/.

Data sample 59: /gəʊ/

No	Word	Mr. Jokowi
I	go	/gɒ/

Furthermore, he also produced the word go and it was mentioned once in his speech. Again, he produced diphthong /əo/ as /p/.

Data sample 60: /'prouses/

No	Word	Mr. Jokowi
I	process	/'prɒses/

Similarly, Mr. Jokowi while producing the word process he pronounced diphthong /əu/ as /b/.

Diphthong /1ə/

In producing diphthong /1ə/, the tongue starts from the vowel /1/ and it glides away in the direction of the central vowel /ə/. In this study, the researchers found 6 words which contain diphthong /1ə/.

Data sample 61: /'eərɪə/

No	Word	Mr. Jokowi
I	area	/ˈʌrəʌ/

The word *area* appeared only once in his speech and he produced diphthong /1ə/ as pure vowel /ʌ/. Thus, the word sounded as /'ʌrəʌ/ not /'eərɪə/.

Data sample 62: /in'dastriəl/

No	Word	Mr. Jokowi
I	industrial	/ɪnˈdʊstrɪʌl/
II	industrial	/ɪnˈdʊstrɪʌl/

Next, the word *industrial* was mentioned twice and the production of diphthong was not consistent with the Oxford standard. The word sounded /in'dostrial/ not /in'dastrial/ because he produced diphthong /ia/ as /a/ and vowel /a/as / ν /.

Data sample 63: /jɪər/

No	Word	Mr. Jokowi
I	years	/jəs/
II	years	/jəs/
III	years	/ jɪə/
IV	years	/ jɪə/
V	years	/ jɪə/
VI	years	/ jɪə/
VII	years	/jəs/
VIII	years	/jəs/
IX	years	/ jɪə/

Moreover, the word *years* was produced nine times during the speech. In the first, second, seventh and the eighth attempts, he pronounced it /jəs/which was not consistent to the Oxford standard. In some other parts he sounded it as /jɪə/. In other words, he was not consistent in producing the diphthong contained in the word *years*.

Data sample 64: /kliə(r)d/ or /kliəri /

No	Word	Mr. Jokowi
I	clearing	r j /klırı /
II	cleared	/klɪ(r)d/

In the word *clearing* and *cleared*, Mr Jokowi could not produce them based on the Oxford standard because he pronounced diphthong /19/ as /1/.

Data sample 65: /hiə(r)/

No	Word	Mr. Jokowi
I	here	/hɪə(r)/

In this word, he could produce the diphthong that stated in word *here* correctly.

Data sample 66: /ik'spiəriəns/

No	Word	Mr. Jokowi
I	experience	/ekˈspərɪən/

After that, in the following data sample, he produced two similar diphthongs /1ə/ sound in two different parts. In the first part, he the production of diphthong was not relevant while the second part was relevant to the Oxford standard. Thus, the word *experience* was pronounced as/ek'spər1ən/ not /1k'sp1ər1əns/.

Diphthong /eə/

It is a low front-centering diphthong. The tongue starts from an open vowel position, slightly higher than the position for the English /æ/. Then, the lips spread or neutral and the lower jaw are clearly felt to be slightly moving upward. Based on the findings, Mr. Jokowi could not produce of /e/ and /ə/ sounds together, so he produced diphthong /eə/ as /e/.

Data sample 67: /ðeə(r)/

No	Word	Mr. Jokowi
I	their	/ðe(r)/

In the word *their*, he did not produce /ə/ sound because he only produced /e/ sound. Based on the Oxford standard, this word should be pronounced as $/\eth e_0(r)$ / not $/\eth e_0(r)$ /.

Data sample 68: /meə(r)/

No	Word	Mr. Jokowi
I	mayor	/meə(r)/

Meanwhile, the word *mayor* which contains diphthong /eə/ was produced based on the Oxford standard. It means that Mr. Jokowi had no problem in producing diphthong in this word.

Data sample 69: /ðeə(r)/

No	Word	Mr. Jokowi
I	there	/ðe(r)/

In the next data sample, he mentioned the word *there* and the word was pronounced as $/\eth e(r)/$ not $/\eth e \vartheta(r)/$. This indicates that he did not produce $/\vartheta/$ sound and only produced $/\varrho/$ sound. However, based on the Oxford standard, he should pronounce it as diphthong $/\varrho \vartheta/$ not pure vowel $/\varrho/$.

Diphthong /və/

Diphthong /və/ is produced when the tongue moves from /v/ position and not from the closer /u:/. This type of diphthong was found in 2 words in the speech.

Data Sample 70: /'ləvə(r)/

No	Word	Mr. Jokowi
I	lower	/ˈlɒʊə/

In data sample above, Mr. Jokowi mentioned the word *lower* which contains diphthong /və/ in this speech. Here, he could produce the diphthong based on the Oxford standard.

Data sample 71: /'pauə(r)/

No	Word	Mr. Jokowi
I	power	/'pɒwə(r)/
II	power	/'pɒwə(r)/
III	power	/'paʊə(r)/

Finally, Mr. Jokowi produced the word *power* three times in his speech and this word contains diphthong /və/. Here, again, he could not consistently pronounce the diphthong based on the Oxford standard. In the first and second attempts, he pronounced it as /'ppwə(r)/, but in his third attempt, he pronounced it /'pavə(r)/.

Conclusion

This research analysed English diphthong on the speech of Mr. Jokowi in APEC forum 2014 in Beijing, China. Based on the findings, the researchers formulated some conclusions. First, the researchers found diphthong /eɪ/ in 21 data samples and Mr. Jokowi only produced diphthong /eɪ/ correctly in 8 data samples. Next, he could produce diphthong /aɪ/ well and only had a problem in producing diphthong /aɪ/ in one word. After that, diphthong /oɪ/ could be produced based on The Oxford standard as well. Meanwhile, diphthong /au/ could not be consistently

produced based on The Oxford standard. Similarly, diphthong /əʊ/ was mostly produced different from the standard of diphthong as stated in The Oxford dictionary. Furthermore, he could produce diphthong /ɪə/ well and only had problem in producing the sound in some words. The last diphthong, /ʊə/, was also a challenge for him. To sum up, the results of this study showed that Mr. Jokowi could produce diphthong sounds like the standard of the Oxford Advanced Learner's Dictionary and the standard of diphthong production. In addition, he equally faced challenges in producing a number of diphthong sounds as well. However, the inaccuracy in producing the diphthongs did not hamper the intention or meaning of the words and statements he delivered.

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