

The Provision of Input on Elision and Its Effectiveness on Improving Native Mandarin Speakers' Listening Skills

Gareth Morgan *

Oxford Online

Pan Pan

School of Foreign Languages and Literature, Chongqing Normal University, University Town, Shapingba District, Chongqing, 401331, China

Abstract

This paper describes an action research project, which was undertaken to evaluate the effectiveness of input on elision on comprehension in the language classroom. Data was generated from first-year native Chinese undergraduates majoring as English teachers, who were provided with the input of 21 model sentences featuring 31 examples of elision, including those featuring a sound's voiced or unvoiced equivalent, with all the consonant sounds covered apart from /ʒ/, /h/ and /ŋ/. This was provided to 31 of the 51 participants, all of whom then listened to the output of a native speaker. The analysis of what was perceived to have been said illustrates the fact that input on this feature significantly increases learners' ability to comprehend such speakers. Therefore, it is recommended that the provision of input on this often-neglected language feature is undertaken in order to enhance learners' effectiveness in comprehending native speakers' oral production, as opposed to the common practice of using comprehension questions to test, for example.

Keywords: Connected Speech, Consonant Clusters, Elision, Native Chinese Speakers

INTRODUCTION

Connected Speech, which refers to vowel and consonant sounds not remaining intact, but being modified by deletions or additions, or even changed, as well as the occurrence of combinations of these, should be regarded as an integral part of language learning. Consequently, input on this issue needs to be viewed as a necessity, as it is an extremely common occurrence (Alameen & Levis, 2015), naturally taking place in almost all spoken registers and styles of speech (Celce-Murcia, Brinton, Goodwin, & Griner, 2010), with sounds regularly being pronounced differently compared to when they are said in isolation.

Though connected sounds can keep their phonetic qualities, as with consonant-vowel linking, the consequence is that a word pronounced in isolation, known as its citation form, can change noticeably when it is said in context. This causes intelligibility to become

more challenging (Alameen & Levis, 2015), so non-native listeners need to be made aware that, in context, speech often sounds different because of the significant changes taking place at word boundaries.

For example, the first consonant of two can be unreleased, as in *let down*, but if both sounds are identical at word boundaries, a prolonged variety ensues, as in *can never*, while consonant-to-vowel linking occurs when the final consonant of a word is followed by a vowel at the beginning of the next. Here, the tendency is to pronounce the final consonant of the preceding word as part of the following syllable, such as *found out* /faʊn daʊt/ (Celce-Murcia, Brinton, & Goodwin, 1996). This results in resyllabification and the acquisition of false boundaries (Field, 2003), which can cause issues with finding them, particularly if the context is limited.

Moreover, modification occurs when one phoneme is substituted for another, while intrusion takes place when /w/, /j/ and /r/ are used to separate vowel sounds, and, in assimilation, the alteration of phonemes at word boundaries happens, due to the influence of adjacent ones. Here, at least one preceding consonant becomes more similar to a subsequent sound. For example, *in bed* /ɪmbed/, as /m/ and /b/ are bilabial consonants, having the same place of articulation, meaning the lips are near each other. It occurs as the tongue may not reach the position connected with a particular sound before moving to the position of the next (Dalton and Seidlhofer, 1994).

On top of this, lexical combination involves multiple processes (Brown & Kondo-Brown, 2006). In *going to*, for example, /ŋ/ changes to /n/, vowel reduction occurs in *to*, there is modification of the vowel sounds in *going to* /ʌ/, as well as the elision of the /t/, which results in /gʌnə/.

Though non-native speakers making insufficient use of the features of connected speech sound stilted (Ladefoged, 2000), a reason for its lack of use has been claimed to be the fact that using weak forms and assimilation is regarded as being a sign of laziness. This is despite its previously mentioned extremely common occurrence in native speakers' normal oral discourse, to the extent that approximately every fifth function word, as well as 10% of content words (Johnson, 2004) contain a segmental reduction, which refers to when phonemes are changed, minimized or elided to make pronunciation easier (Brown & Kondo-Brown, 2006).

Shockey (2003) noted that the procedure even takes place in slow speech, as output is determined by habit, not speed, or inertia. Factors such as social distance also play a role in the frequency with which such processes occur (Anderson-Hsieh, Riney, & Koehler, 1994), as when the speaker and the listener are in the same social group, sharing similar speech conventions, the listener's comprehension load reduces, meaning there is less focus on distinctive articulation.

Also, though it has been found to be more prominent in spontaneous tasks (Anderson-Hsieh et al., 1994), more recent studies have shown unscripted and scripted speech to be phonologically similar, with the same processes applying, to an extremely similar degree, in both styles (Alameen, 2007).

In contrast, native Chinese speakers produce reduced syllables far less frequently, and such syllables undergo fewer phonetic changes, meaning more prominence is given. Consequently, Chinese learners stress too many syllables, with weak forms often provided with full pronunciation, or, perversely, being inadvertently omitted due to over-compensation (Chang, 2001).

Also, vocabulary in the second language tends to be learnt in isolation, meaning that study is often undertaken on the basis of words, or phrases (Gimson and Cruttenden, 2008). Consequently, there is the need for learners to familiarize themselves with assimilatory tendencies, and weak forms, as, in normal conversation, spoken language is a continuous sequence (Crystal, 1980).

With regard to weakening, or the reduction of vowel quality (Ladefoged, 2006), it tends to take place in prepositions, conjunctions, modal verbs, relative adverbs, relative pronouns, pronouns, and articles, which all possess both strong and weak forms, while most contractions occur with the *personal pronoun*, *be*, the auxiliary verb *have*, and *not*. They are rarely stressed but tend to be reduced for the sake of rhythm, and to economize on effort (Field, 2003) by moving the tongue with the maximum of ease and efficiency, so, instead of taking a new position for every sound, the organs of speech can connect them (Clarey & Dixon, 1963).

Though, as speakers do not always produce in the same manner, variation in degree is a characteristic, and a continuum tends to be produced, so, in contractions, cases of both full and weak form appear, as well as a range of potentially hard to detect intermediate stages (Wright, 1986). Also, as a consequence of minimizing effort, articulation is weakened, so a sound can totally disappear within a word, particularly the *schwa* /ə/, such as in *different* /'dɪfrənt/. As well as this, unless the succeeding sound is /r/, /t/ and /d/ are elided in a consonant cluster, with the process occurring across word boundaries, as exemplified by *must go* /mʌsgəʊ/ (Steele, n.d., para. 8), and *and* becoming /n/ in *fish and chips* (Knight, 2012). Moreover, the procedure of reduction, which mainly involves vowels, can also take place, such as the lack of release on stop consonants, with the /d/ in *bad boy* being an example (Brown & Kondo-Brown, 2006).

Such elision is part of the aforementioned connected speech procedure in which words undergo changes when their border sounds are blended with neighbouring sounds (Lass, 1984), with the modifications not always being predicted by the application of phonological rules (Anderson-Hsieh et al., 1994). Consequently, unlike in writing where white spaces exist between words, speech is a continuous sound stream without clear boundaries, even in formal situations (Owen, 2020).

Its main function is the promotion of the regularity of rhythm by compressing syllables between stressed elements and facilitating their articulation so that regular running speech timing is maintained (Clark & Yallop, 1995) in this stress timed language, where each stress group is afforded approximately the same prominence. Therefore, words such as prepositions are rarely stressed, and appear in their weak form in unstressed contexts to preserve rhythm, while elision takes place to economize on effort as difficult consonant sequences are avoided, such as *not* in *do not go* simply being /n/ (Field, 2003).

This can cause misunderstandings as native speakers do not pronounce in the way learners have been taught, as input, when it is provided, tends to be of the citation form (Wong, Dealey, Leung, & Mok, 2019), resulting in unfamiliarity with the differences between this, and the modifications in connected speech (Shockey, 2003). This can make its interpretation extremely challenging in normal, rapid speech, after phonological modification caused by elision, for example, takes place (Roach, 2001), as the sounds heard in the citation form are not audibly realised (Jones, 2006).

This helps explain why, when listening to authentic material, Brown (1990) claims learners hear an overall sound with moments of greater and lesser prominence and have to learn to make intelligent guesses from all the available clues regarding the content of a message, and to be prepared to revise their interpretation.

However, despite its extent, and its ability to cause comprehension issues, it tends to be an overlooked language feature (Wagner & Toth, 2014), afforded only a limited focus despite its importance in the development of listening skills (Field, 2008; Walker, 2010) and intelligible pronunciation (Celce-Murcia et al., 2010; Reed & Michaud, 2005).

Consequently, such features should be focussed on in the classroom, either when pre-teaching lexis or grammatical features. With reference to grammar, elision of /t/, where relevant, can be pointed out when superlatives are the focus, for example. Alternatively, as opposed to simply stating the feature, it could be elicited by asking for the number of sounds per word, before, and after, they have been pronounced. However, anything covered in class can be used as a basis for such work, and, when covering this, differences between the written and spoken forms due to natural speech being rich in simplifications and reductions should be highlighted (Hancock, 2013).

Jackson (2018) states that this issue is relevant, because if there is an unawareness of natural, fast speech and its simplifications and reductions (Hancock 2013), listening skills suffer, as it is a pivotal feature of authentic spoken English (Praver, 2013). Thus, it needs to be focussed on for comprehending native speakers, if this is a learner aim.

For example, in the KET listening exam, the tasks are pre-tested, with the material being statistically analysed to establish that items are adequately discriminated, and Rasch analysis is implemented to determine the level of difficulty. In the pilot sample, the most problematic question was found to be the one asking what must be taken when going swimming. As this was because of candidates not hearing the negative in one of the options, and, therefore, choosing it as the answer, it appears to be that elision was the probable cause (University of Cambridge ESOL Examinations, n.d., page 17).

It has been claimed the sooner it is introduced, the better, as Cauldwell (2013) comments on even CPE level learners being unable to comprehend native speakers. Also, learners can improve their decoding skills by attempting to implement it themselves, as, upon exposure, they become better at comprehending the feature. Furthermore, follow-up production practice activities provided post-input, aid in the production of natural speech, with Praver (2013) advocating controlled practice via the provision of dialogues full of this feature, followed by free practice, with the learners producing their own to aid in the avoidance of the production of the aforementioned stilted speech.

Learning English through the eye, as opposed to through the ear, is the procedure undertaken by most students when studying vocabulary, verb forms and language rules (Ferris, 2009). A regular issue is an inability to interpret native speakers, whose output is not monitored, as articulatory imprecision is more natural and functional than the production of precise versions of every sound, which, being a stylistic device, is only employed in limited instances, such as when emphasizing (Steele, n.d., para. 1).

Moreover, Hancock (2013) is of the belief that authentic short recordings need to be used in the development of pronunciation as a listening skill, as opposed to the presentation of texts and comprehension questions, which merely test. It involves micro-listening to raise learners' awareness of germane speech characteristics, such as elision, which cause misunderstanding, as the integration of naturally spoken listening practice, with its conversational shortcuts, will limit the demotivating inability to comprehend.

Regarding training and priorities, it is generally agreed that intelligibility is a more realistic aim than acquisition (Munro & Derwing, 1995), with this being important for the acquisition of perception, as well as production (Levis, 2005). However, Trudgill (2005) states that if non-native speakers want to achieve native speaker pronunciation, they should be catered for, particularly as he refutes Jenkins's (2000) claim that such speakers are a more intelligible model, and that learners do not understand non-native speakers more easily due to producing fewer phonological contrasts.

Though, of course, if English is the communicative medium of choice as it is the only option, its speakers do not need to use it with native speakers, but as the *lingua franca* with fellow non-native speakers. As the large majority of its speakers are in this category (Eberhard, Simons & Fennig, 2019), it is an unsurprisingly regular occurrence. Consequently, native speakers, if at all present in such interactions, are in the minority, meaning such input is redundant (Seidlhofer, 2011).

Despite only limited, sporadic research having been conducted on this, such work has been shown to have been effective. For example, after 5 hours of relevant input was provided over a 6-week period on word recognition, the result was the *Explicit Group* and the *Communicative Group* consistently had significantly higher adjusted means than the *Control Group*, in both contraction and elision patterns (Kuo, Kuo & Lee, 2016).

In a study on Japanese learners, though the intermediate group did not approximate the performance of native speakers due to the keeping of word boundaries through the insertion of a glottal stop before the second word-initial vowel (Anderson-Hsieh et al., 1994), the high proficiency group did. On the other hand, Alameen's study revealed that early proficiency, and intermediate proficiency participants, linked their words far less frequently than native speakers, (2007), with there being no significant difference between the spontaneous and the reading speech styles.

Also, work by Sardegna (2011), who trained graduates on improving their linking of sounds, reveals the maintenance of a significant improvement over time, regardless of native language, gender, or length of stay in the USA prior to instruction. Thus, training helps the improvement of speech production, with the frequency of practice, and the motivation to improve, also stated as being significant factors in the procedure.

Regarding comprehension, the reduced forms in connected speech affect this (Ito, 2006), with phoneme and word recognition being a major source of difficulty for low-level listeners (Goh, 2000). Of the problems reported, 50% were regarding perceptual processing, with low-level learners experiencing noticeably more difficulties.

In order to decipher connected speech, non-native speakers rely heavily on syntactic-semantic information, too, taking in a relatively large amount of spoken language. As it is not processed as it comes, the consequence is a time lag (Shockey, 2003), due to there being more difficulty with this procedure resulting from the less efficient use of lexical cues (Alameen and Levis, 2015).

Moreover, Henrichsen's research (1984) revealed that reduced forms in listening input decreases the saliency of the words, making comprehension more difficult. Comprehending input with reduced forms, compared to when the sentences were fully enunciated, was more difficult, regardless of student level, as non-native participants scored significantly higher on dictation tests with the absence of reduced forms. Scoring was markedly lower on phonological forms in comparison to lexical forms, as well, indicating that different types of reduced forms distinctively affect comprehension.

This is a language feature which plays an important accentuation role in all levels of speech (Cruttendon, 2001). It has also been shown to be teachable (Brown & Hilferty (1986a, 1986b), as exemplified above, despite Ito's claim that non-native speakers have an issue comprehending and producing its features, with its significance exemplified by its comprehension aiding non-native speakers understand native speakers (2001).

For example, after a mere month of input, learners' comprehension of natural native-speaker speech with reduced forms, almost doubled, from 35% to 61% in the work of Brown and Hilferty (1986a & 1986b). Also, Khaghaninejad and Maleki (2015) state that learners who had received pronunciation instruction outperformed those who had not, with those whose input featured supra-segmentals, an utterance's properties that apply to groups of segments, including elision, had better listening comprehension than the learners whose input was restricted to segmentals. Learners with better proficiency have been shown to be better at recognizing familiar words in continuous speech, too (Lin and Wang, 2018).

As well as improving listening comprehension, the majority of the 184 learners commented on their positive perception regarding such input, in the work of Musfirah, Razali, and Masna (2019). Moreover, Geranpayeh and Taylor (2013) claim that deriving words in connected speech becomes automatic with experience, enabling listeners to pay attention and infer, while it also facilitates the understanding of the differences between oral and written language, and promotes metacognition, an important factor in listening comprehension (Vandergrift & Goh, 2012).

Different languages have different sound combinations meaning that potential problems abound. With reference to consonant clusters, English can have 4 at a word's ending, such as /glimpst/, and 3 at the start, with /straip/ being an example. In fact, Hewings (2006) lists 34 permissible initial clusters with 2 consonants, and 11 for those with 3. In contrast,

Chinese, which refers to 8 dialect groups (Chang, 2001), contains limited consonants at word boundaries, let alone clustering. In fact, it is stated that initial consonant clusters are not a language feature, while few word final clusters exist, resulting in the elision of the final consonant, or the creation of an extra syllable due to addition of a vowel to separate them. This was exemplified as the four classes being taught when the research was conducted were comprised of 111 students, with /n/ and /ŋ/ being the only 2 consonant sounds their surnames ended in, neither of which formed a cluster.

With regard to production, amongst the most important features mentioned alongside the problematic consonants, vowel length, word stress and tonic words, have been consonant clusters (Hewings 2006), hence its focus here.

Jenkins (2000) calls aspects of pronunciation essential in producing comprehensible turns with other non-native speakers, as opposed to sounding like a native speaker, the *Lingua Franca Core*. As well as featuring all the consonant sounds, with the exception of /θ/ and /ð/, vowel length, and appropriate word grouping and placement of nuclear stress, most consonant clusters also feature.

She believes that those at a word's onset must be maintained, though the ones in the middle or at the end of words can be simplified if it eases articulation, but only according to rules of elision that also apply to native English varieties as previously mentioned, such as facts /fæks/. However, if their production is an issue, it is stated as being acceptable to insert the schwa, providing the syllable is unstressed. Its insertion is also said to be acceptable after a word ending with a consonant if it does not form another word, such as a comparative. She states, in contrast, the need to articulate /t/ between vowels, and in clusters in the middle of words, as opposed to it being replaced with a glottal stop. Furthermore, it needs to be aspirated in initial stressed syllable positions, as do /p/ and /k/.

As sounds are not produced in isolation, and turns rarely consist of mutually exclusive words, listeners can hear unfamiliar ones at word extremes, particularly in informal situations (Alameen and Levis, 2015) when individual word boundaries are not fully realised as not much attention is paid to full articulation (Hieke, 1984). While native speakers comprehend by taking into account the context, a familiarity with the lexis, and prior knowledge (Anderson & Lynch, 1988), these skills are not in the repertoire of most learners, who, consequently, tend to depend almost exclusively on sounds, due to their limited awareness of how spoken words are linked (Temperly, 1987).

Regarding production, if it is neglected, the consequence is unnaturally formal sounding language, with too many stressed forms, making it difficult for the listener to identify a speaker's focus (Brown, 1990). In contrast, developing awareness helps learners comprehend natural English.

However, input on this language skill tends to be neglected in the EFL classroom, with one reason being the tendency of published materials to overlook it, with only a limited number providing in-depth coverage (Brown & Kondo-Brown, 2006). For example, in *Straightforward Elementary* (Clandfield, 2012), pronunciation activities feature in all but

2 of the 12 units. One of the foci is on *can('t)*, with students being asked to differentiate between the positive and negative form. However, an opportunity has not been taken to introduce the elision of /t/ in the negative form, which is natural in all 6 of the examples provided.

Furthermore, *Word Linking* features twice. In the first activity, students are asked to write the number of words they hear in 6 sentences. Here, again, the features of connected speech are overlooked, even though the opportunity does present itself to introduce elision, such as with reference to *just the*. Contractions feature in the second exercise, but no development of the exercise is undertaken, such as the elicitation of when elision occurs. Moreover, *Language Reference* features at the end of each unit, but no mention of pronunciation is made in any of these, or any of the 12 *Review* sections, apart from the presented lexis featuring the *International Phonetic Alphabet* (IPA).

Also, in research conducted by Pell (n.d.), of four IELTS textbooks specialising in listening, only one covered connected speech, but in such limited detail, only a solitary exercise was contained, while both the general IELTS books only dealt with the feature in the context of speaking. To confound matters, Ernestus and Warner (2011) state that reduced forms are not included in the standard dictionary, nor can they be explained by most native speakers who tend to be unaware of this feature, while it is often neglected by non-native speaking teachers (Shockey, 2003). Understandably, then, there is a lack of confidence in this area, due to the absence of critical knowledge, as well as an underestimation of its relevance (Kelly, 2000; Saalfeld, 2011).

Consequently, as approximately 33% of all words can be reduced with regard to consonant clusters in normal speech (Bowen, 1975), with the feature occurring within lexical items, as well as at word junctions, it was the one which the students were provided with input on, with its effectiveness being subsequently analysed.

DATA

The participants in the research were all first-year undergraduates majoring as English teachers, with their course covering all the language skills, including pronunciation. The large majority were Mandarin speakers from Chongqing and Sichuan provinces, with females outnumbering their male counterparts.

They had been advised to pass *College English Test Band 6* and *Test for English Major Band 4/8*, which is the common requirement in China for graduates who want to teach English in both secondary and primary schools.

Input involved the provision of model sentences (Appendix A), which were listened to whilst being read, with the speaker being a male undergraduate with a neutral English accent. These totalled 21 sentences featuring 31 examples of elision, which included input on the elision of a sound's voiced or unvoiced equivalent.

All the consonant sounds were covered, some more than once, with the exception of /ʒ/, /h/ and /ŋ/. They were excluded because it is extremely rare for words to either start or end with /ʒ/, with those that do, such as *beige*, being loan words (Teflpedia, 2021), or end

with /h/ (Answers, 2010) while, /ŋ/ as the initial sound only occurs in very few borrowed words, such as Zambia's currency, the *ngwee* (English Language Club, 2020).

In rhotic accents where /r/ appears in the citation form, it is always pronounced (Underhill, 1994). For example, the tendency of Bruneians, as well as Indonesians, is to pronounce this sound whenever it appears in the spelling, meaning the latter's capital is /dʒæ'ka:rtæ/. However, most native English speakers have a non-rhotic pronunciation, meaning that the written /r/ tends not to be pronounced unless it ends a word succeeding a vowel sound, and the following word's initial sound is also a vowel. For example, *there are four eggs* is pronounced /ðerɑ:fɔ:regz/. Thus, input on it was regarded as being relevant as, in the original context of the research, future input included a focus on the intrusive nature of this sound. Despite Crystal's belief of their unimportance (2008), the intrusive /w/ and /j/ forms also featured, which are absent when words are pronounced in isolation (Trask, 1996), as they are used to make a smoother transition between words (Underhill, 1994), thus easing pronunciation.

31 of the 51 participants experienced this input. For these, it was explicitly stated that the procedure involved pronunciation as opposed to spelling. Also, the IPA was provided in which the 8 voiced and unvoiced pairs were highlighted (Tutorfair, n.d.), with one of the example sentences illustrating this, as both of the relevant sounds were pronounced /z/ despite the written form of the first being 's', as in *My friends Zhang and Deng...*

Regarding responses to the native speaker's output (Appendices B and C), spelling was ignored, as well as grammatical errors which played no part in the process of elision, such as *enough foods*, and the addition of lexis, as was the case with *We watched TV on yesterday*, and *I drive very much well*. Also ignored were answers following the rules of elision which were logical, even if the lexis given was not what was stated. However, if they were illogical, they were deemed as being incorrect. Therefore, while *I'm in a car because I'm going home*, was deemed to be permissible, *I'm in a cup because I'm going home*, wasn't, and, neither was *I can curl the curry*.

The sentence which this had the greatest effect on was *Which chair do you want?* as *chart* and *Chan* (Chinese surname), for example, were also accepted. In total, this procedure accounted for 89 responses, with the group receiving input being responsible for 59 of them.

With hindsight, *I sunbathe there when it is hot* would not have been used. This was due to it only being answered correctly by 2 students, in total, possibly because of its cultural inappropriateness. *I've visited* would also have been contextualised to avoid making the past simple correct, in contrast to *We watched TV yesterday*, where the present simple is incorrect in the written form, despite the elision of /d/ in the spoken form.

RESULTS

The group who had received input performed better than the group who hadn't with reference to all the examples, apart from /θ/ and /r/, and in both instances, the difference was a solitary reply, while the two groups performed equally well with regard to /n/. The statistics in their entirety are provided below.

	Elided Sound	Non-Input Group Errors		Input Group Errors	
		Total (31)	% =	Total (30)	%
1	p	6	19.4	4	13.3
2	g	3	9.7	1	3.3
3	t	10	32.3	8	26.7
	m	17	54.8	10	33.3
4	l	18	58.1	10	33.3
5	d	25	80.6	18	60
6	k	23	74.2	16	53.3
7	f	14	45.2	12	40
8	tʃ	11	35.5	6	20
9	n	10	32.3	5	16.7
	w	8	25.8	5	16.7
10	ʃ	30	96.8	25	83.3
11	ð	9	29.0	10	33.3
12	θ	2	6.5	3	10
13	ð	31	100	28	93.3
14	s	9	29.0	7	23.3
15	b	19	61.3	16	53.3
16	dʒ	28	90.3	23	76.7
	t	27	87.1	17	56.7
17	m	27	87.1	18	60
18	n	24	77.4	24	80
19	d	11	35.5	7	23.3
20	t	10	32.3	7	23.3
21	w	22	71.0	18	60
22	j	7	22.6	2	6.7
23	r	20	64.5	21	70
*24	z	30	96.8	21	70
*25	v	16	51.6	0	0

Totals of sounds appearing more than once (with potential totals in brackets)

t	47 (93)	50.5	32 (90)	35.6
d	36 (62)	58.1	25 (60)	41.7
w	30 (62)	48.4	23 (60)	38.3
ð	40 (62)	64.5	38 (60)	63.3
m	44 (62)	71.0	28 (60)	46.7
n	34 (62)	54.8	29 (60)	48.3

Totals of voiced and unvoiced sounds (with potential totals in brackets)

Voiced	325 (465)	69.9	237 (450)	52.7
Unvoiced	142 (310)	45.8	105 (300)	35.0

Overall Total

	467 (775)	60.3	342 (750)	45.6%
--	-----------	------	-----------	-------

**Input on /z/ and /v/ occurred after the provision of the other input, due to an oversight. This meant the learners, in theory, had been provided with input on their university course, which involved being tested to see if they could understand recorded content, before being provided with advice on production, and drilled. However, if this was received, it had no discernible benefit, with the learners still underperforming compared to the group who had been provided with input.*

Unsurprisingly, given the totals, the non-input group performed more poorly regarding both the voiced and unvoiced sounds. For the former, 325 errors were made out of a possible total of 465, while 142 out of 310 sounds were erroneously analysed with reference to the latter. In contrast, the statistics for the input group were 237 errors out of a possible 450 and 105 out of 300.

Regarding /z/, for the non-input group, only a solitary respondent stated the correct answer, *She loves zoos*. On the contrary, all the respondents from the input group were correct regarding the elision of /v/ in *I drive very well*.

The lack of input may also account for the higher number of single word answers accredited to the group who had not received any. Such answers totalled 102, as opposed to 85, though this is not a particularly significant difference. The same can be said of the lack of an answer which featured 39 times, as opposed to 27 times, with the non-input group, again, providing the higher number.

CONCLUSION

Despite the significance of pronunciation with regard to the ability to successfully communicate, it does tend to be the most neglected language skill. Many reasons have been stated for it being overlooked, such as the lack of time, motivation, resources, and materials (Gilakjani & Sabouri, 2016), as well as a lack of confidence (Bai & Yuan, 2019), because even experienced teachers have been found to lack training in this (Dauer, 2005). Moreover, the lack of exploitable resources has also been shown to be an issue, which may be why demotivating, non-communicative drills have been commented on as being over-emphasised (Gilbert, 2008). On top of this, there seems to be a lack of awareness of how focussing on elision, for example, has a benefit on learners' listening skills, as the results show, and, consequently, their communicative effectiveness.

Therefore, we shall continue to provide explicit input on such features in future classes, particularly the sounds which have proven to be noticeably problematic, such as /z/. This is because we are of the belief that a focus on this issue, as the results of the research reveal, should maximise English language learners' ability to communicate more effectively with native speakers, if that is one of the reasons for learning the language, even if the production of such a feature is, as has been stated, harder to attain. Though pronunciation input has been commented on as being time consuming, as well as intimidating, (Walker, 2001), we are of the view that it is time well spent, with this issue being directly responsible for successful communication (Veselovska, 2016).

As well as this, Walker (2014) says that such input is integral to improving all language skills. For example, a grammatical structure is avoided if issues arise with its pronunciation, as such structures have been found to be absent from learners' spoken repertoire, but not their written work. In the research, such issues included consonant clusters, as well as contractions and vowel reduction.

This research has also ascertained that learners tend to avoid using lexis in their speech if they find the pronunciation to be difficult, an issue which has traditionally been regarded as being caused by a limited repertoire.

Its impact on listening is also referred to, with the need to distinguish individual phonemes being integral to success in this skill, due to the inability to use contextual clues (Jenkins, 2000), making the ability to identify sounds, words and phrases integral to success. On top of micro-skills issues, with reference to extended listening, Walker (2014) states that learners can disengage with a speaker, as using the processing power of their short-term memories in recognising individual sounds results in the inability to process new data. He also comments on reading, with the impact being due to *sub-vocalisation*, the processing of the written word in the short-term memory, with words being said inside the head. However, if the correct pronunciation is unknown, it undergoes decay, resulting in inadequate processing and the failure to permanently store such items in the long-term memory, causing there to be no recollection of what has been read.

Therefore, covering this language issue, should, in theory, result in an improvement of all language skills, not only listening, making its absence from so many available resources and syllabi seem such an oversight.

BIBLIOGRAPHY

- Alameen, G. & Levis, J.M. (2015). *Connected speech*. In M. Reed & J.M. Levis (Eds.), *The handbook of English pronunciation* (pp. 159-174). Oxford: Wiley-Blackwell. <https://www.researchgate.net/publication/279852347>
- Alameen, G. (2007). *The use of linking by native and non-native speakers of American English*. Unpublished MA Thesis, Iowa State University, Ames, Iowa. <https://lib.dr.iastate.edu/cgi/viewcontent.cgi?article=5011&context=etd>
- Anderson, A. & Lynch, T. (1988). *Listening: Language and Teaching: A scheme for teacher education*. Oxford: Oxford University Press.
- Anderson-Hsieh, J., Riney, T., & Koehler, K. (1994). Connected speech modifications in the 22 English of Japanese ESL learners. *IDEAL*, 7, 31-52.
- Answers (2010). Words ending with the sound h? - Answers
- Bai, B. & Yuan, R. (2019). EFL teachers' beliefs and practices about pronunciation training. *ELT Journal*, 73(2), 134-143.
- Bowen, J. D. (1975). *Patterns of English pronunciation*. Rowley: Newbury House.
- Brown, G. (1990). *Listening to spoken English* (2nd ed.). London; New York: Longman.
- Brown, J. D., & Hilferty, A. G. (1986a). Listening for reduced forms. *TESOL Quarterly*, 20 (4), 759-763.
- Brown, J. D., & Hilferty, A. G. (1986b). The effectiveness of teaching reduced forms for listening comprehension. *RELC Journal*, 17 (2), 59-70.

- Brown, J. D., & Kondo-Brown, K. (2006). *Introducing connected speech*. In J. D. Brown & K. Kondo-Brown (Eds.), *Perspectives on teaching connected speech to second language speakers* (pp. 1–16). Manoa; Honolulu, HI: National Foreign Language Resource Center, University of Hawai'i at Manoa.
- Cauldwell, R. (2013). *Phonology for listening: Teaching the stream of speech*. Birmingham: Speech in Action.
- Celce-Murcia, M., Brinton, D. M., Goodwin, J. M., & Griner, B. (2010). *Teaching pronunciation paperback with audio CDs (2): A course book and reference guide* (2nd ed.). Cambridge: Cambridge University Press.
- Celce-Murcia, M., Brinton, D., & Goodwin, J. (1996). *Teaching pronunciation: A reference for teachers of English to speakers of other languages*. New York: Cambridge University Press.
- Chang, J. (2001). Chinese speakers. In M. Swan & B. Smith (Eds.), *Learner English: A teacher's guide to interference and other problems* (2nd ed., pp. 310-324). Cambridge: Cambridge University Press.
- Clandfield, L. (2012). *Straightforward A2: Elementary Student's Book* (2nd ed.). London: Macmillan.
- Clarey, M.E. & Dixson, R.J. (1963). *Pronunciation exercises in English*. New York: Regents.
- Clark, J., & Yallop, C. (1995). *An introduction to phonetics and phonology*. Oxford: Blackwell.
- Cruttenden, A. (2001). *Gimson's pronunciation of English (6th ed.)*. London: Arnold.
- Crystal, D. (1980). *A first dictionary of linguistics and phonetics*. London: Deutsch.
- Crystal, D. (2008). *Oxford: A dictionary of linguistics and phonetics*. Blackwell.
- Dalton, C. & Seidlhofer, B. (1994) *Pronunciation*. Oxford: Oxford University Press.
- Dauer, M.R. (2005). The lingua franca core: A new model for pronunciation instruction? *TESOL Quarterly*, 39(3), 543-550.
- Eberhard, D., Simons, G., & Fennig, C. (2019). *Ethnologue: Languages of the world (22nd ed.)*. Dallas: SIL International.
- English Language Club (2020). *The ng Sound (/ŋ/ Phoneme)*. The ng Sound (/ŋ/ Phoneme) - English Language Club
- Ernestus, M, & N. Warner, N. (2011). Editorial. *Journal of Phonetics*, 39, 253–260.
- Ferris, D.R. (2009). *Teaching College Writing to Diverse Student Populations*. Ann Arbor: The University of Michigan Press.
- Field, J. (2003). Promoting perception: Lexical segmentation in L2 listening. *ELT Journal*, 57(4), 325–334.
- Field, J. (2008). Bricks or mortar: Which parts of the input does a second language listener rely on? *TESOL Quarterly*, 42(3), 411–432.

- Geranpayeh, A. and Taylor, L. (2013). *Studies in language testing. #35: Examining listening research and practice in assessing second language listening*. Cambridge: Cambridge University Press.
- Gilakjani, A.P. & Sabouri, N. (2016). Why is English pronunciation ignored by EFL teachers in their classes? *International Journal of English Linguistics* 6(6):195-208.
- Gilbert, J. B. (2008). *Teaching pronunciation using the prosody pyramid*. New York: Cambridge University Press.
- Gimson, A.C. and Cruttenden, A. (2008). *Gimson's Pronunciation of English (7th ed.)*. London: Hodder Education.
- Goh, C. C. M. (2000). A cognitive perspective on language learners' listening comprehension problems. *System*, 28, 55–75.
- Hancock, M. (2013). In it up to your ears: preparing for authentic speech. *English Teaching Professional*, 84, 46-48.
- Henrichsen, L. E. (1984). Sandhi-variation: a filter of input for learners of ESL. *Language Learning*, 34(3), 103–123.
- Hewings, M. (2006). *Pronunciation practice activities: A resource book for teaching English pronunciation*. Cambridge, Cambridge University Press.
- Hieke, A. E. (1984). Linking as a marker of fluent speech. *Language and Speech*, 27, 343–354.
- Ito, Y. (2001). Effect of reduced forms on ESL learners' input-intake process. *Second Language Studies*, 20(1), 99-124.
- Ito, Y. (2006). *The significance of reduced forms in L2 pedagogy*. In J. D. Brown & K. Kondo-Brown (Eds.), *Perspectives on teaching connected speech to second language speakers* (pp. 17–26). Manoa; Honolulu, HI: National Foreign Language Resource Center, University of Hawai'i at Manoa.
- Jackson, E. (2018). *Teaching connected speech to improve learners' listening – Part 1*. Teaching Connected Speech to Improve Learners' Listening - Part 1 - More Tea? More Teaching! (moreteamoreteaching.com)
- Jenkins, J. (2000). *The phonology of English as an International Language*. Oxford: Oxford University Press.
- Johnson, K. (2004). Massive reduction in conversational American English. In K. Yoneyama & K. Maekawa (Eds.), *Spontaneous Speech: Data and Analysis. Proceedings of the 1st Session of the 10th International Symposium*. Tokyo, Japan: The National International Institute for Japanese Language (pp.29-54).
- Jones, D. (2006). *English Pronouncing Dictionary (6th ed.)*. Cambridge: Cambridge University Press.
- Kelly, G. (2000). *How to teach pronunciation*. Harlow: Pearson Education Limited.

- Khaghaninejad, M.S. & Maleki, A. (2015). The Effect of Explicit Pronunciation Instruction on Listening Comprehension: Evidence from Iranian English Learners. *Theory and Practice in Language Studies*, 5(6), 1249-1256.
- Knight, R-A. (2012). *Phonetics: A Coursebook*. Cambridge: Cambridge University Press.
- Kuo, F-l, Kuo, Y., & Lee, J-t. (2016). Effects of Communicative Instruction Versus Explicit Instruction on Taiwanese EFL Junior High Students' Word Recognition of Connected Speech. *International Journal of Language and Linguistics* 3(2),101-111. http://ijllnet.com/journals/Vol_3_No_2_June_2016/12.pdf
- Ladefoged, P. (2000). *A course in phonetics (4th ed.)*. New York: Heinle and Heinle.
- Ladefoged, P. (2006). *A course in phonetics (5th ed.)*. Boston: Thomson Wadsworth.
- Lass, R. (1984). *Phonology*. Cambridge: Cambridge University Press.
- Levis, J. M. (2005). Changing contexts and shifting paradigms in pronunciation teaching. *Tesol Quarterly*, 39(3), 369-377. <https://doi.org/10.2307/3588485>
- Lin, C. & Wang, M. (2018). The use of lexical and sublexical cues in speech segmentation by second language learners of English. *Journal of Second Language Studies*, 1(1), pp.166-188. https://www.researchgate.net/publication/322609771_The_use_of_lexical_and_sublexical_cues_in_speech_segmentation_by_second_language_learners_of_English
- Munro, M. J., & Derwing, T. M. (1995). Foreign accent, comprehensibility, and intelligibility in the speech of second language learners. *Language Learning*, 45(1), 73-97.
- Musfirah, S., Razali, K. & Masna, Y. (2019). Improving students' listening comprehension by teaching connected speech. *Englisia* 6(2), 64-74. <https://www.researchgate.net/publication/333870163>
- Owen, J. (2020, March). Connected speech: What happens during ordinary, spontaneous speech? *EFL Magazine*. <https://www.eflmagazine.com/connected-speech-what-happens-during-ordinary-spontaneous-speech/>
- Pell, C. (n.d.). *Improving IELTS Listening Through Connected Speech*. <https://www.ieltsadvantage.com/2015/03/26/ielts-listening-connected-speech/>
- Praver, M. (2013). *Teaching Common Reduced Forms in Connected Speech*. <https://www.tesol.org/docs/default-source/books/teaching-common-reduced-forms-in-connected-speech.pdf?status=Temp&sfvrsn=0.8819825217300636&status=Temp&sfvrsn=0.8819825217300636>
- Reed, M., & Michaud, C. (2005). *Sound concepts: An integrated pronunciation course*. New York: McGraw-Hill.
- Roach, P. (2001). *Phonetics*. Oxford: Oxford University Press.
- Saalfeld, A. (2011). Acquisition of L2 phonology in advanced learners: Does instruction make a difference? In J. Levis & K. LeVelle (Eds.). *Proceedings of the 2nd*

- Pronunciation in Second Language Learning and Teaching Conference* (pp. 144–152). Ames, IA: Iowa State University.
- Sardegna, V. G. (2011). Pronunciation learning strategies that improve ESL learners' linking. In J. Levis & K. LeVelle (Eds.), *Proceedings of the 2nd Pronunciation in Second Language Learning and Teaching Conference* (pp. 105–121). Ames, IA: Iowa State University.
- Seidlhofer, B. (2011). *Understanding English as a Lingua Franca*. Oxford: Oxford University Press. <https://elfpron.wordpress.com/2013/11/21/what-is-the-lfc/>
- Shockey, L. (2003). *Sound patterns of spoken English*. Malden, MA: Blackwell.
- Steele, V. (n.d.). *Connected speech 2*. <https://www.teachingenglish.org.uk/article/connected-speech-2>
- Teflpedia (2021). *Pronunciation exercises: /z/ vs /ʒ/*. Pronunciation exercises: /z/ vs /ʒ/ - Teflpedia
- Temperly, M.S. (1987) Linking and deletion in final consonant clusters. In J. Morley (Ed.), *Current perspectives on pronunciation: Practices anchored in theory* (pp. 59-82). Alexandria: TESOL.
- Trask, R.L. (1996). *A dictionary of phonetics and phonology*. London: Routledge.
- Trudgill, P. (2005). Native speaker segmental phonological models and the English lingua franca core. In K. Dziubalska-Kotaczyk, & J. Przedlacka (Eds.), *English pronunciation models: A changing scene* (pp. 77-98). Berlin: Peter Lang.
- Tutorfair. (n.d.). *Phonemic Chart*. ipa chart - Bing
- Underhill, A. (1994) *Sound Foundations*. Oxford: Heinemann.
- University of Cambridge. (n.d.). *ESOL Examinations / English for Speakers of Other Languages: Relating Language Examinations to the Common European Framework of Reference for Languages: Learning, Teaching, Assessment: Reading and Listening Items and Tasks: Pilot Samples*. <https://rm.coe.int/16806a6d18>
- Vandergrift, L., & Goh, C. C. (2012). *Teaching and learning second language listening: Metacognition in action*. New York, NY: Routledge.
- Veselovska, G. (2016). Teaching elements of English RP connected speech and CALL: Phonemic assimilation. *Education and Information Technologies* 21 (5). pp1-12.
- Wagner, E., & Toth, P. D. (2014). Teaching and testing L2 Spanish listening using scripted vs. unscripted texts. *Foreign Language Annals*, 47(3), 404–422.
- Walker, R. (2001). Pronunciation priorities, the Lingua Franca Core, and monolingual groups. *Speak Out! Newsletters of the IATEFL Pronunciation Special Interest Group*, 18 (September), 4-9.
- Walker, R. (2010). *Teaching the Pronunciation of English as a Lingua Franca*. Oxford: Oxford University Press.

- Walker, R. (2014). *Pronunciation Matters – Part 1*. Pronunciation Matters - Part 1 - Oxford University Press (oupeltglobalblog.com)
- Wong, S.W.L., Dealey, J., Leung, V.W.H., & Mok, P.P.K. (2019). Production of English connected speech processes: an assessment of Cantonese ESL learners' difficulties obtaining native-like speech. *The Language Learning Journal, July*, 1-16. <https://doi.org/10.1080/09571736.2019.1642372>
- Wright, S. (1986). The interaction of sociolinguistic and phonetically-conditioned CPSs in Cambridge English: Auditory and electropalatographic evidence. *Cambridge Papers in Phonetics and Experimental Linguistics*, 5.

APPENDIX A

Connected speech: Elision When a word ends, and the next begins with the same consonant sound (not letter), it is not repeated. Also, when /t/ and /d/ come between consonants, they are not pronounced (unless the sound after them is /r/, such as children in #12). Also, when a word ends in a sound, and the next begins with its voiced or unvoiced equivalent, it is not pronounced either. The pairs are:

/p/ and /b/ /t/ and /d/ /tʃ/ and /dʒ/ /k/ and /g/
 /f/ and /v/ /θ/ and /ð/ /s/ and /z/

The voiced sound is on the left, and the unvoiced is on the right of each pair. The lips, teeth, and tongue are in the same position. The difference is that the sound on the left is from the mouth, but the sound on the right is from the throat. Put your hand on your throat and say /p/. Now say /b/. Can you feel the difference? Now say:

I have a big cat.

I hate dancing.

Watch John do his trick.

Put the cup back please.

He loves swimming.

Is there a path there?

Do we have five fingers on each hand.

SET 1: Examples, with the elided sound shown

- | | |
|--|-------|
| 1. Stop, please. | p |
| 2. Look at that cab by the shop. | b |
| 3. I don't drink coffee or eat tomatoes. | tx2 k |

- | | | |
|--|-----|-----|
| 4. Have you played Dai at table tennis? | d | t |
| 5. Did you watch Chen play yesterday? | tʃ | j |
| 6. I walked near the edge just now. | tx2 | dʒ |
| 7. I can't speak Korean. | t | k |
| 8. My dog goes for a walk every day. | g | |
| 9. Don't laugh, Fang. | t | f |
| 10. You have to move very quickly. | v | |
| 11. I missed math three times last week. | tx2 | θ |
| 12. They clothe their children in expensive school uniforms. | ð | |
| 13. She likes soup. | s | |
| 14. My friends Zhang and Deng live very near the school. | z | d v |
| 15. That's the brush she uses. | ʃ | |
| 16. Can I have some money, please? | m | |
| 17. I learn ten new words every day. | n | w |
| 18. She's a very tall lady. | l | |
| 19. She likes wearing red dresses. | d | |

20. He's a slow worker. w

21. Play your music. j

As well as the same sound, it also affects the voiced and unvoiced consonant pairs, which are:

p and b	t and d	tʃ and dʒ	k and g	f and v	θ and ð	s and z	ʃ and ʒ
---------	---------	-----------	---------	---------	---------	---------	---------

For example: Watch Joe put the cup back.

APPENDIX B

SET 2:

NAME =

*Please circle i or ii: i I **did** set 1 ii. I **didn't do** set 1 then write in the missing words below:*

1. Can I have a _____?
2. Look at the _____ frog?
3. I _____ buy _____.
4. Please _____ of people.
5. I _____ house.
6. I can _____.
7. Do you have _____?
8. _____ do you want?
9. You have to _____.
10. That's the _____ broke.
11. I'm _____ people.
12. This _____ people will be away.
13. I _____ when it is hot.
14. She _____.

15. She's in a _____ she's going home.
16. We read that _____ now.
17. I like to _____ people.
18. She's _____.
19. Put your _____.
20. We _____ yesterday.
21. Do you _____ class begins?
22. Please _____ best.
23. Is your _____?
24. She _____.
25. I _____ well.

APPENDIX C

Set 2 answers:

1. Can I have a cup, please?
2. Look at the big green frog.
3. I want to buy some magazines.
4. Please call lots of people.
5. I've visited Deng's house.
6. I can cook curry.
7. Do you have enough food?
8. Which chair do you want?
9. You have to learn new words.
10. That's the dish she broke.
11. I'm with these people.
12. This month, three people will be away.
13. I sunbathe there when it is hot.
14. She walks slowly.
15. She's in a cab because she's going home.
16. We read that page just now.

17. I like to welcome many people.
18. She's been nowhere.
19. Put your hand down.
20. We watched TV yesterday.
21. Do you know when class begins?
22. Please try your best.
23. Is your teacher rich?
24. She loves zoos?
25. I drive very well.

Gareth Morgan has worked in Turkey, Thailand, Vietnam, Singapore, Cambodia, Saudi Arabia, Brunei and Libya, as well as the UK and online. He has been published on learner styles, grammar, and pronunciation, and has presented at conferences in Australia, Turkey, Cambodia, Myanmar, and Singapore.

Pan Pan has been working in Chongqing Normal University and is studying in her doctoral program in Nanjing University, majoring in applied linguistics. She has been teaching pronunciation for more than ten years, trying to provide teacher's major students with basic concepts in phonetics and phonology. She has previously responsible for a research project on vowel production in China and published some articles on L2 pronunciation production and English teaching. And she is working in L2 pronunciation assessment now.