A Native Japanese-Speaking Adult's Second Language Acquisition and Learning

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[1. Introduction]

The purpose of this project was to observe a native Japanese-speaking adult's English language perception, production, and development. I observed how the perception and production of words influenced spontaneous speech. I focused on categorical perception which is after second language learners have mastered their native language sounds, they may not be able to accurately perceive the sounds of the target language because some sounds of the target language do not exist in their native language. I observed my own phonological development by imitating a native English speaker's pronunciation, and by observing my own spontaneous speech.

[2. Informant]

When I started living in the United States in April 1980, I was 32 years old and was far beyond the critical period of natural language learning, and fossilised, which means that my speech characteristics were permanently fixed. Five years later I made the following observation concerning my English perception and production. Until I had gone to the United States, I hadn't had many opportunities to listen to English spoken by native English speakers. It wasn't until I attended California State University at Long Beach and started living with two elderly Americans that I really learned how to speak English.

[3. Procedure I]

For the first procedure, a native English speaker read minimal word pairs and word lists such as "pet-pat," "pin-pen," "sack-sag," "early" etc. and I listened to and repeated them. I recorded this procedure on tape so that I could play it back and listen to my own pronunciation. By means of this method, I wanted to observe how well I could imitate a native speaker's English pronunciation.

[4. Materials: Minimal word pairs and word lists]

- 1. pet[pst]-pat[pæt] pen[psn]-pan[pæn] bed[bsd]-bad[bæd]
- 2. pin[pɪn]-pen[pɛn] pat[pæt]-pet[pɛt] bait[bet]-bet[bɛt]
- 3. mitt[mɪt]-meat[mit] itch[ɪtʃ]-each[itʃ] fit[fɪt]-feet[fit] it[ɪt]-eat[it]
- 4. early[3'li] purple[p3'pl] circle[s3'kl]
- 5. afternoon[æftənun] faster[fæstər] hamburger[hæmbəgər]
- 6. brush[brʌʃ] sun[sʌn] study[stʌdi] touch[tʌtʃ]
- 7. pear[psr]-bear[bsr] cap[kæp]-cab[kæb] lap[læp]-lab[læb]

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- nap[næp]-nab[næb] tap[tæp]-tab[tæb] pig[pɪg]-big[bɪg]
 peg[pɛg]-beg[bɛg] puff[pʌf]-buff[bʌf]
- 8. and[ænd]-ant[ænt] build[build]-built[bilt] bend[bɛnd]-bent[bɛnt] door[dɔr] window[windo] bottle[bɔtəl] little[litəl] ghost[gost] gold[gold]
- 9. luck[lnk]-lug[lng] sack[sæk]-sag[sæg] rack[ræk]-rag[ræg] snack[snæk]-snag[snæg]
- 10. safe[sef]-save[sev] belief[bilif]-believe[biliv] love[lnv] variety[vəraləti] knife[naif] gloves[glnvz] laugh[lnf] leave[liv]
- 11. very[vɛri]-berry[bɛri] van[væn]-ban[bæn] verb[vʒb]-barb[bʒb] vest[vɛst]-best[bɛst] live[lɪv]-rib[rɪb] lover[lʌvəː]-robber[rʌbəː]
- 12. both[boθ]-boat[bot] thank[θæŋk]-tank[tæŋk] three[θri]-tree[tri] there[ðɛr]-dare[dɛr] they[ðe]-day[de] thin[θɪn]-fin[fɪn] three[θri]-free[fri] than[ðæn]-van[væn] that[ðæt]-vat[væt]
- 13. seem[sim]-theme[θim] sin[sIn]-thin[θIn] sum[sAm]-thumb[θAm] saw[sɔ]-thaw[θɔ] song[sɔŋ]-thong[θɔŋ] kiss[kIs]-kith[kIθ] face[fes]-faith[feθ] bass[bæs]-bath[bæθ] mass[mæs]-math[mæθ] worse[wəˈs]-worth[wəˈθ] miss[mIs]-myth[mIθ]
- 14. school[skul] dance[dæns] seat[sit] horse[hors] seed[sid] rest[rɛst] bus[bʌs] cost[kɔst] place[ples]
- 15. zebra[zibrə] zero[ziro] zoo[zu] lazy[lezi] easy[izi] museum[mjuzIəm] loves[lʌvz] Japanese[dʒæpəniz] knives[nɑɪvz]
- 16. $sugar[\Suga^{}]$ $she[\Si]$ $machine[ma\Sin]$ $shell[\Sel]$ $ocean[o\San]$ fashion[fas] $fish[fI\S]$ $lotion[lo\San]$ $wash[wa\S]$ $wish[wI\S]$
- 17. measure[mɛʒəː] usual[juʒuəl] beige[beʒ] garage[gərɑʒ] treasure[trɛʒəː] camouflage[kæməflɑʒ] mirage[mɪrɑʒ] division[dɪvɪʒən]
- 18. land[lænd] lily[lɪli] black[blæk] play[ple] kill[kɪl] tell[tɛl]
- 19. carry[kæri] brown[braun] merry[mɛri] red[rɛd] room[rum] ride[raɪd]
- 20. lake[lek]-rake[rek] let[lɛt]-rest[rɛst] lame[lem]-rain[ren] lust[lʌst]-rust[rʌst] leaf[lif]-reef[rif] lice[lɑɪs]-rice[rɑɪs] law[lɔ]-raw[rɔ] lied[lɑɪd]-ride[rɑɪd] lime[lɑɪm]-rhyme[rɑɪm]
- 21. leap[lip]-weep[wip] lent[lɛnt]-went[wɛnt] let[lɛt]-wet[wɛt] lane[len]-wane[wen] lacks[læks]-wax[wæks]
- 22. red[rɛd]-wed[wɛd] read[rid]-weed[wid] ride[raɪd]-wide[waɪd] rain[raɪn]-wane[wen] rise[raɪz]-wise[waɪz] row[ro]-woe[wo]
- 23. picture[pɪktʃər] catch[kætʃ] gesture[dʒɛstʃər] cheese[tʃiz] each[itʃ]
- 24. chip[t]p]-ship[Ip] cheap[t]ip]-sheep[Ip] chew[t]u]-shoe[Ip] chop[t]ap]-shop[Ip] chair[t]
- 25. etch[itʃ]-edge[εdʒ] March[mͽtʃ]-Marge[mͽdʒ]

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cheap[tsip]-jeep[dzip]
                            choke[t\ok]-joke[d3ok]
    cheer[tʃɪr]-jeer[dʒɪr]
                           chest[tsst]-jest[dzest]
                                                      chin[tsin]-gin[dzin]
                                                       huge[hjud3]
26. engine[εndʒən]
                      age[ed3]
                                   cabbage[kæbid3]
                                                                       orange[orInd3]
27. lamb[læm]
                  message[mesəd3]
                                       bomb[bam]
                                                       name[nem]
    human[hjumən]
                       room[rum]
                                      mark[mək]
                                                      salmon[sæmən]
    smile[smaIl]
                    same[sem]
                                   ham[hæm]
                      town[taun]
                                     only[onli]
28. garden[gardn]
                                                   nice[naIs]
                                                                no[no]
                                                                           nail[nel]
    animal [ænəməl]
                       sand[sænd]
                                       enjoy[End321]
                                                        sun[sʌn]
                                                                     soon[sun]
   can [kæn]
29. king[kIn]
                                 song[son]
                                              thing [\theta I \eta]
                                                            long[lon]
                 tongue[tʌŋ]
   spring[sprIn]
    bank[bænk]
                    pink[pIŋk]
                                  singer[sInat]
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[5. Results of the imitation]

From listening to my pronunciation, I could observe the substitution of sounds, final consonant devoicing, the deletion of sounds, and the addition of sounds.

(1) Substitution of sounds took place in my pronunciation of the following words:

```
pen[pεn]→
                   [pan]
                                          window[wIndo]→[wIndo:]
early[ʒ'li]→
                   [a:li]
                                          bottle[bɔtəl]→
                                                                 [botoRu]
faster[fəstə]→[fəsta]
                                          belief[bɪlif]→
                                                                 [bIli\Phi]
                                          thin [\theta In] \rightarrow
three [\theta ri] \rightarrow
                   [\theta Ri]
                                                                 [sIn]
than[ðən]→
                                          van[væn]→
                   zan
                                                                 [ban]
that[ðət]→
                   [zat]
                                          sag[sæg]→
                                                                 [sak]
\operatorname{snag}[\operatorname{snæg}] \rightarrow [\operatorname{snək}]
                                          believe[bɪliv]→ [bɪlibu]
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(2) Final consonant devoicing took place in my pronunciation of the following words:

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bed[bɛd]\rightarrow [bɛt] tab[tæb]\rightarrow [tæp] lug[lʌg]\rightarrow [lʌk] snag[snæŋ]\rightarrow[snək] seed[sid]\rightarrow [sit] edge[ɛdʒ]\rightarrow [ɛtʃ] cabbage[kæbɛdʒ]\rightarrow[kæbɛtʃ]
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(3) Deletion of sounds took place in my pronunciation of the following words:

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\begin{array}{ll}
    \text{nab}[\text{næb}] \rightarrow [\text{næ-}] & \text{love}[\text{lav}] \rightarrow [\text{la-}] \\
    \text{gold}[\text{gold}] \rightarrow [\text{go-d}] & \text{ghost}[\text{gost}] \rightarrow [\text{go-t}] \\
    \text{song}[\text{sp}] \rightarrow [\text{sp}-]
\end{array}
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(4) Addition of sounds took place in my pronunciation of the following words:

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save[sev] \rightarrow [sevu] leave[liv] \rightarrow [livu] believe[biliv] \rightarrow [bilibu] bus[bas] \rightarrow [basu] bottle[botel] \rightarrow [botoRu]
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[6. Procedure II]

For the second procedure, I looked at the minimal word pairs and word lists and read

them. I then recorded them on tape, played it back, and listened to my pronunciation.

[7. Results of my reading]

I could observe the substitution of sounds, final consonant devoicing, the deletion of sounds, and the addition of sounds.

(1) Substitution of sounds took place in my pronunciation of the following words:

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bus[bʌs]\rightarrow [bɑsu] early[ʒli]\rightarrow[ɑ:li] three[\thetari]\rightarrow[\thetaRi]
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(2) Final consonant devoicing took place in my pronunciation of the following words:

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\begin{array}{lll} bed[b\epsilon d] \rightarrow & [b\epsilon t] & bad[b\epsilon d] \rightarrow [b\epsilon t] \\ cab[k\epsilon b] \rightarrow & [k\epsilon p] & tab[t\epsilon b] \rightarrow [t\epsilon p] \\ lug[lng] \rightarrow & [lnk] & seed[sid] \rightarrow [sit] \\ cabbage[k\epsilon b\epsilon d_3] \rightarrow [k\epsilon b\epsilon t] & edge[\epsilon d_3] \rightarrow [\epsilon t] \\ red[r\epsilon d] \rightarrow & [r\epsilon t] \end{array}
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(3) Deletion of sounds took place in my pronunciation of the following words:

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gold[gold] \rightarrow [go-d] ghost[gost] \rightarrow [go-t]

free[fri] \rightarrow [-ri] love[lnv] \rightarrow [ln-]
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(4) Addition of sounds took place in my pronunciation of the following words:

```
save[sev] \rightarrow [sevu] \qquad \qquad believe[biliv] \rightarrow [bilivu]
love[lnv] \rightarrow [lnvu] \qquad \qquad leave[liv] \rightarrow [livu]
fish[fi] \rightarrow [fi]u \qquad \qquad wash[ws] \rightarrow [ws]u]
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land[lænd]→[lændo]

[8. Procedure III]

For the third procedure, I observed my spontaneous speech. One of my classmates interviewed me for her term paper and she recorded my speech. I then used a part of her tape for my project. A record of my spontaneous speech follows:

- (A) Spontaneous speech not under pressure
- 1. [ðer wəz no pətikjulə rizən] There was no particular reason.
- 2. [fəst talm al kem tə ðə junaltæd stets al wəz ə turist]
 First time I came to the United States, I was a tourist.
- 3. [əftə aı went hom aı həd ə gret dezalə tə stadi so aı prıperd for entrəns ıgzəmimesən for ə jiər ənd fainəli pasd for ə dzæpəniz junıvəsıti]
 - After I went home, I had a great desire to study, so I prepared for the entrance examination for a year and finally I passed for a Japanese university.
- 4. [aɪ lənd ɪŋglɪʃ lītərətʃə fər fər jīrz bʌt aɪ wəznt sətisfaid wið mai ɪŋglɪʃ lītərətʃə stʌdiz so aɪ disaidəd tu kʌm tə ðə junaitɛd stets tə stʌdi]
 - I learned English literature for four years but I wasn't satisfied with my English literature studies, so I decided to come to the United States to study.
- 5. [when at kem to do junated stets at wanted to bi o titso in mat kantri dzepon]

When I came to the United States, I wanted to be a teacher in my country, Japan.

- 6. [In dʒæpən ŏe ɔlwez həv edʒ lɪmɪteʃən so ɪvən ŏo aɪ want tə bi ə titʃə no:bɔdi wil haɪə mi] In Japan, they always have age limitations so even though I want to be a teacher in Japan, nobody will hire me.
- 7. [so mebi əftə aı go hom aı wil wək fər wan əv taıni kampəniz əz əkəuntənt bəkauz aı juzd tə wək fər ən əkuntnt əfıs fər əlməst ten jırz]
 - So maybe, after I go home, I will work for one of the tiny companies as accountant because I used to work for accountant for almost ten years.
- (B) Spontaneous speech under pressure and excitement
- 1. [aɪ fil bɛRi strɛndʒ] I feel very strange.
- 2. [If ze ask mi ar ju əmɛRIkən sıtizən ər ar ju fərInə]

 If they ask me, "Are you American citizen or are you foreigner?"
- 3. [It iz oke but when ze want tu no mai res blæk or hwait or orientəru or əmerikən indiən hwai du ze ask əs]
 - It is OK, but when they want to know my race, black, or white, or oriental, or American Indian, Why do they ask us?
- 4. [aɪ fiRu əŋgRi bʌt aɪm ə fɔrɪnə zət hwaɪ aɪ obe]
 I feel angry but I'm a foreigner that why I obey.
- 5. [aɪ tʃuzu] I choose.
- 6. [If aI wa ən əmɛrikən sItizən aI ignər aI sIŋk]
 If I were an American citizen, I ignore, I think.
- 7. [bʌt hwail ai əm ə fɔrinə ənd hwaiRu ai əm steiŋ ðə junaitəd stets ai siŋk ai ʃud fɔRo ði əmɛRikən RuRu ɔr ði əmɛrikən Ro:]
 - But while I am a foreigner and while I am staying the United States, I think I should follow the American rule or the American law.
- 8. [mai hobi iz lisnin tə mjuzik.] My hobby is listening to music.
- 9. [zət mjuzık ız min kRasıku mjuzık] That music means classic music.
- 10. [aɪ laɪk oRd oRd mjuzɪk] I like old old music.
- 11. [mai fevarəto kompo:zə iz bæk] My favorite composer is Bach.
- 12. [ɔ:lsɔ: In mɔnjumɛnt bali aI kən se ðə sem θIŋ]
 - Also in Monument Valley, I can say the same thing.
- 13. [no: ɛlɛktrosɪti or no: watə ivən zo təde stɪl ɪndɪənz lɪv ɪn ə mæd haus]

 No electricity or no water, even though today, still Indians live in a mud house.
- 14. [what du ze kal It hat do they call it? Hogan.
- 15. [bifor ai went ðer ai ekspekted ðət ðoz hogən wər for turist ətrækjən bat in ðiz ho:gənz pipl stil liv]
 - Before I went there, I expected that those hogans were for tourists attractions but in these hogans people still live.
- 16. [ðe juz bætæri for εlektrīk θīŋgz for tivi sæts]

 They use battery for electric things for T.V. sets.

- 17. [ðe həv tə kæri wɔtə frɔm ə far dɪstəns ənd kip ðɛr wɔtə ɪn ðə tæŋk]

 They have to carry water from a far distance and keep their water in the tank.
- 18. [Insaid ðə hə:gən ðer iz nə: rʌg ər ðer iz nə: mæt ənli dət]
 Inside the hogan, there is no rug or there is no mat. Only dirt.
- 19. [It luks rili pur] It looks really poor.
- 20. [ðət taim ai θot if samwən bilt hətelz ər restəranz əround ðer ðe kæn giv ə lət əv dʒəbs tə indiənz ðe kæn help]
 - That time, I thought if someone build hotels or restaurants around there, they can give a lot of jobs to Indians. They can help.
- 21. [ɔlso ɪf ðe bild mɔtɛlz ənd hɔtɛlz əroun ðer mɛni turɪsts wil kʌm]

 Also if they build motels and hotels around there, many tourists will come.
- 22. [It will help Indianz laivs ekanomikali] It will help Indians' lives economically.

[9. Results of the spontaneous speech]

From my conversation, I could observe the substitution of sounds, the deletion of sounds, and the addition of sounds.

- (1) Substitution of sounds took place in my pronunciation of the following words:
- (A) Spontaneous speech under neither pressure nor excitement

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\begin{array}{lll} particular[partIkjulav] \rightarrow [patikjulav] & passed[pæsd] \rightarrow [pasd] \\ they[\delta e] \rightarrow & [ze] & the[\delta a] \rightarrow & [za] \\ always[olwez] \rightarrow & [o:lwez] & office[ofIs] \rightarrow & [o:fIs] \\ limitations[limits[one]] & [limits[one]] & [office[ofIs]] & [o:fIs] \\ \end{array}
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 $\lim_{z \to \infty} \lim_{z \to \infty} \lim_{z$

(B) Spontaneous speech under pressure and excitement

very[vɛri]→	[beRi]	they[ðe]→	[ze]
Valley[væli]→	[bali]	though[ðo]→	[zo]
American[əmɛrɪkən]-	→[əmɛRIkən]	oriental[ɔrɪɛntəl]→	[oRIEntəRu]
feel [fil]→	[fiRu]	angry[æŋgri]→	[əŋgRi]
favorite[fevərīt]→	[fɛvɑrəto]	think[θ Iŋk] \rightarrow	[sIŋk]
while[hwaIl]→	[hwaIRu]	$\leftarrow [olch] \rightarrow$	[onct]
law[lɔ]→	[Ro:]	hobby[hobi]→	[hobi]
hobby[hɔbi]→	[hobi]	composer[kəmpozə]-	·[kompo:zə]
classic[klæsIk]→	[kRasIku]	no [no]→	[no:]
that[ðət]→	[zət]	$rule[rul] \rightarrow$	[RuRu]
also[olso]→	[o:lso:]		

- (2) Deletion of sounds took place in my pronunciation of the following words:
- (A) Spontaneous speech under neither pressure nor excitement There were no problems.
- (B) Spontaneous speech under pressure and excitement $race[res] \rightarrow [re-]$

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- (3) Addition of sounds took place in my pronunciation of the following words:
- (A) Spontaneous speech under neither pressure nor excitement There were no problems.
- (B) Spontaneous speech under pressure and excitement

classic[klæsIk]→ [kRαsIku]

[10. American English Vowel Phoneme Chart]

		Front	Central	Back
High	Tense Lax	i (beat) I (bit)		u (moon) U (pull)
Mid	Tense Lax	e (say) E (set)	3' (bird) ə (after) л (hut) ə (up)	o (over)
Low	Tense Lax	æ (sat)	a (father)	o (fall)

[11. American English Consonant Phoneme Chart]

			Bilabial	Labio- dental	Inter- dental	Alveolar	Alveo- palatal	Velar	Glottal
Stops		vl	р			t		k	
Stops		vd	b			d	_	g	
Fricatives	,	vl		f	θ				h
Filcatives		vd		V	ð				
Sibilants		vl				s	S		
Sibilalits		vd				Z	3		
Affricates		vl					t∫		
Amicales	5	vd					dз		
Nasals			m			n		Ŋ	
Liquida	Lateral	l				1			
Liquids	Retrofl	ex				r			
Glides							j		w

(vl=voiceless sound, vd=voiced sound)

[12. Japanese Vowel Phoneme Chart]

		Front	Central	Back
High	Tense Lax	i		u
Mid	Tense Lax	е		O
Low	Tense Lax		α	

[13. Japanese Consonant Phoneme Chart]

		Bilabial	Labio- dental	Inter- dental	Alveolar	Alveo- palatal	Velar	Glottal
Stops	vl	p			t		k	
Stops	vd	Ъ			d		9	
Fricatives	vl vd	Φ						h
Sibilants	vl				s	S		
	vd				Z	3		
Affricates	vl					t∫		
	vd					d ₃		
Nasals		m			n		ŋ	
Liquids					R			
Glides						j		W

(vl=voiceless sound, vd=voiced sound)

[14. Analysis of American English phonemes and Japanese phonemes]

The Japanese vowel and consonant systems are different from those of English; for example, the Japanese vowel system consists of [i], [e], [a], [o], and [u], and the consonant system consists of [p], [b], [t], [d], [k], [g], [Φ], [h], [s], [z], [ʃ], [ʒ], [tʃ], [dʒ], [m], [n], [n], [R], [j], and [w]. On the other hand, the English vowel system consists of [i], [I], [e], [e], [æ], [a], [o], [o], [u], [ə], [A], [ə], and [ʒ], and its consonant system consists of [p], [b], [t], [d], [k], [g], [f], [v], [θ], [θ],

If we compare vowel and consonant sounds between the Japanese and the English languages, [I], $[\epsilon]$, $[\epsilon]$, $[\epsilon]$, [0], [0], [0], [0], [0], [0], [0], [0], [0], and [1] are missing in the Japanese language. There is a bilabial fricative sound $[\Phi]$ ($[\Phi usuma] \& f \sharp$) in the Japanese language but there is no $[\Phi]$ sound in the English system. There is no [1] and [r] sounds in the Japanese but there is [R] in Japanese.

[15. Conclusion]

William T. Littlewood cites in his Foreign and Second Language Learning, "For many people, it is almost axiomatic that children can learn a second language better than adults. They refer especially to immigrant families where children have learnt the language of their new community with native or near-native proficiency, whereas the adults always show traces of foreignness. Also, studies of immigrants to North America (e.g. Ramsey and Wright, 1974) and West Germany (e.g. Klein and Dittmar, 1979) provide concrete evidence that the younger a person is on arrival in the new country, the more proficient he or she is likely to become in the new language." (Littlewood. page, 65) Littlewood also states, "The most common explanation for these observations is that there is a 'critical period', during which the brain is flexible and language learning can occur naturally and easily. Since this period ends around puberty, adolescents and adults can no longer call upon these natural learning capacities. The result is that language learning becomes an artificial, laborious process." (Littlewood, page 65) Moreover, he also cites, "Normally, we expect a learner to progress further along the learning continuum, so that his 'interlanguage' moves closer and closer to the target language system and contains fewer and fewer errors. However, some errors will probably never disappear entirely. Such errors are often described as fossilised meaning that they have become permanent features of the learner's speech. Obvious examples are the pronunciation errors which form part of the 'foreign accent' retained by most adolescent and adult learners. (Littlewood, page 33 & 34)

Hatch cites in his Psycholinguistics, "Krashen, Long, and Scarcella believe that the conflict among the studies can be explained in a number of ways. Primarily, they believe that the research should first be separated into studies that look at initial learning and studies that look at ultimate, long-term language attainment. In a careful review of the literature they give evidence for three generalizations regarding age, rate, and eventual attainment in the second language: (1) adults proceed more rapidly through the initial stages of syntactic and morphological development than children; (2) older children acquire language faster than younger children; and (3) acquirers who begin second languages in early childhood through natural exposure achieve higher proficiency than those beginning as adults. Their basic position is that adults do better in initial learning but that younger is better in the long run." (Hatch, page 196) Klein cites Krashen's monitor theory in his Second Language Acquisition, "There are two ways for adult learners to gain proficiency in a second language: subconscious acquisition and conscious learning. 'Learning' is always effected through a 'monitor' or an effort on the part of the learner to control his language output and to self-correct it whenever necessary. The monitor can become effective in a communication situation only if (a) there is enough time to operate it, (b) the speaker is concerned with the correctness of his speech production, and (c) the speaker knows the correct rule." (Klein, page 28)

From my observation of my own pronunciation, I found that I had difficulty perceiving the distinctions between [a] and [æ] [a] [a] [a] [a] [a] [a] [a] and [a]; [a] and [a]

[væn] \rightarrow [van]); [a] for[\land] (e.g. bus [bʌs] \rightarrow [bas]); [a] for [ə] (e.g. that [ðət] \rightarrow [ðat]); [a:] for [ʒ] and [ə] (e.g. early[ʒli] \rightarrow [a:li]; faster [fəstə] \rightarrow [fasta:]); [o] for [ɔ] (e.g. hobby [hɔbi] \rightarrow [hobi]); [o:] for[ɔ] (e.g. law [lɔ] \rightarrow [lo:]); [R] for [l] and [r] (e.g. rule [rul] \rightarrow [RuRu]); [s] for [θ] (e.g. think [θɪŋk] \rightarrow [sɪŋk]); [z] for [ð] (e.g. they [ðe] \rightarrow [ze]); [b] for [v] (e.g. very [veri] \rightarrow [beri]); and [Φ] for [f] (e.g. surf [sərf] \rightarrow [sərΦ]).

Japanese words consist of a consonant plus a vowel. Almost all word sounds end with a vowel except the words ending with [n]. Therefore, I added an extra vowel sound after a consonant in some English words; for example, save $[sev] \rightarrow [sevu]$, bottle $[botol] \rightarrow [botoRu]$, and fish $[fi] \rightarrow [fi] \cup [fi] \cup [fi]$. On the other hand, when I pronounced [v] without adding an extra vowel [u] after [v], [v] was deleted: for example, love $[lav] \rightarrow [la]$ and leave $[liv] \rightarrow [li]$. I had learned how to articulate the [v] sound, but my exhalation was not strong enough to make this sound audible.

Krashen, Long, and Scarcella mention that adults acquire a second language slowly. Even though I had been living in the U.S.A. for a long time, I still had trouble pronouncing English words but I realized which sounds I had trouble pronouncing. I also knew how to pronounce these sounds: [I], $[\epsilon]$, $[\epsilon]$, $[\epsilon]$, [a], [

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