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**Lee, Juhee. 2013. A discussion of the orthographic patterns of interdental fricatives with reference to loanword adaptation: from the period of enlightenment to the current situation.** *Studies in Phonetics, Phonology and Morphology* 19.3. 479-499. Loanwords are usually remodeled to fit the phonological and morphological structures of the borrowing language, at least in the early stages of language contact. Many studies have argued that loanword adaptation is perceptual mapping (Silverman 1992, Peperkamp and Dupoux 2003) or depends on the phonemic contrasts between the source and recipient language (Paradis and LaCharité 1997). In some cases, loans are based on orthography (Vendelin and Peperkamp 2006, Lee 2010). This means that there are a variety of factors that determine the input of loanwords to recipient languages. More recently, many researchers have taken into account the intermediate position (Steriade 2001, Kenstowicz and Suchato 2006, Ahn and Lee 2007, 2011), in which the adaptation process can account for a variety of factors for achieving the best match to the source word. In this paper, we shall consider the diachronic loanwords data from published materials that reflects the adaptation patterns of interdental fricatives during the enlightenment period. By analyzing the diachronic orthographic patterns of interdental fricatives, we argue that orthographic patterns could also reflect the nature of the input. (**Kyung Hee University**)

Keywords: interdental fricative, orthography, loanwords adaptation, perceptual analysis, gae-hwa-gi (enlightenment period)

# 1.

가  
가  
가  
(2000)  
가  
1894  
가  
20  
가  
1876  
가  
가  
(Crawford 2009, Kang 2012).

가 , Crawford (2009)

Kang (2012)

(1998)  
19

300

17

가  
19

가

(2009)

가

가  
(/θ/ /ð/)

<th><sup>1</sup>

(Silverman 1992, Yip 1993, Paradis and LaCharité 1997, Shinohara 1997, Lee 2003, Peperkamp and Dupoux 2003, LaCharité and Paradis 2005, Kenstowicz and Suchato 2006, Ahn and Lee 2007, 2011)

2.

2.1

Silverman (1992)

(input)

(Silverman 1992, Yip 1993, Paradis and LaCharité 1997, Shinohara 1997, Lee 2003,

<sup>1</sup> <> []

Peperkamp and Dupoux 2003, LaCharité and Paradis 2005, Kenstowicz and Suchato 2006, 가 ).

가 .  
(Silverman 1992, Yip 1993, Dupoux et al. 1999, Peperkamp and Dupoux 2003), 가

(Paradis and LaCharité 1997, LaCharité and Paradis 2005 ).

Silverman (1992) 가  
(perceptual level) (operative level) . (acoustic signal) Silverman

. Silverman Dupoux et al. (1999)  
Peperkamp and Dupoux (2003) 가 ,

Paradis and LaCharité (1997) LaCharité and Paradis (2005) 가  
(Category Preservation and Proximity) 가

LaCharité and Paradis(2005)  
가  
가

Silverman (1992) 가  
(2010) . 가 fry  
[ ] 가 가

LaCharité and Paradis (2005) 가  
가

가

, 10 (Steriade

2001, Kenstowicz and Suchato 2006, Ahn and Lee 2007, 2011).  
Vendelin and Peperkamp (2006)

가

가

가

가

(typological adaptation)

. Ahn and Lee (2007, 2011)

(2008)

가

(2010)

가

(2000)

<th>

2.2

(Schmidt 1996, Oh 2002, Ahn 2003, Lee 2006, Park and de Jong 2008,  
de Jong and Cho 2012, Cho 2012). 가

Oh (2002), Ahn (2003), Lee (2006)

. Oh (2002) Lombardi (2000)

[ ] [ ] Ident[vioce]가 Ident[cont] Ident  
[strident] , Ident[cont] Ident  
[strident] 가

. Ahn (2003) [+stiff vocal folds]  
/θ/ [s'] [-stiff vocal folds] /ð/  
[t] [s']

[ ] 가  
가

. Lee (2006) /θ/ [s], [s'], [t], [t'], [t<sup>h</sup>]  
[ ] [s'] [t'] [ ] [t<sup>h</sup>]  
Ident[feature] . Cho (2012)

가

Schmidt (1996), Park and de Jong (2008), de Jong and Cho  
(2012), Cho (2012)

Schmidt (1996) Park and de Jong (2008)

. Schmidt (1996)  
/θ/ /ð/ (goodness rate)  
Park and de Jong (2008) (Goodness rate)

(1) (Goodness rate)<sup>2</sup>

	Schmidt (1996) <sup>3</sup>		Park and de Jong (2008) <sup>4</sup>	
	/θ/	/ð/	/θ/	/ð/
/p/	3 (1.5)	5 (2.0)		15 (4.79)
/pʰ/	3 (3.5)		7 (4.45)	
/pʰ/	5 (2.3)		17 (4.38)	1 (5.00)
/t/	8 (2.0)	<b>48 (3.2)</b>	7 (3.82)	<b>78 (4.40)</b>
/tʰ/	23 (3.1)	45 (4.3)	24 (4.03)	1 (4.00)
/tʰ/	5 (3.7)			
/L/				
/s/	8 (2.6)		4 (3.86)	
/sʰ/	<b>40 (3.1)</b>	3 (1.0)	<b>40 (4.17)</b>	
/c/				
/cʰ/				
/cʰ/				
/m/				
/h/		1 (4.50)		1 (4.50)
others	N/A			2 (4.30)

가

가  
/p/ Schmidt (1996)  
/pʰ/ [97(4.8)] /p/ [3(2.5)]

가 (modal response)  
(1) 가

Cho (2012) Cho (2012) 가 de Jong and

<sup>2</sup>

<sup>3</sup> 60 ( 3 , 20 ), (Similarity ratings) 가 1-5

<sup>4</sup> 160 ( 4 , 40 ), (Similarity ratings) 가 1-7

. Cho (2012) de Jong and Cho (2012)  
(p169, 6). de Jong and Cho (2012)  
(2004) 21C (2006)  
( ),

160 ( 4 , 40  
)  
(CV, VCV, VCV, VC )

de Jong and Cho (2012)가

/θ/ Cho (2012)

가 .<sup>5</sup>

3.

3

---

<sup>5</sup>

가

,

(6)

가

Caxton  
가

3.1  
1930

가

가

가

1910

3.1

1890 1945

<th> 가가

가가 (2004) 가

(2010)

3

3.1

1900 (國文

國譯語) (官報) 1894 (學部)

1895 가 (國民小學讀本)

가 가

(1908) <th> ‘ox,

oE’ 6

---

<sup>6</sup> 1900 1804

1908



- (2) (1908)<sup>7</sup>
- <th> /θ/ <th> /ð/
- a) throat 옻로트  
through 옻
- b) birthday 썸옻테이 clotheshelf 옻
- c) teeth 테옻 mother 모옻  
smith 스미옻 father 옻이옻  
earth 이어옻 brother 썸로옻  
foot path 풋트파옻 elder brother 엘더 썸로옻  
north sea 노옻 씨 younger brother 영거 썸로옻  
brother-in low 썸로옻 인 로우  
smooth 스무썸

/θ/ <0ㅈ> /ð/ <0ㅊ>

(圈點)

가 ‘brother’ <0ㅈ> <0ㅊ>

가

<th> (兩字合音)

<th> 가

(3) (1908)

aw	au	ch	th	sh	wh	ng	nk
ㅏ	ㅑ	ㅈ	ㅊ	ㅅ		ㅇ	ㅇ
		ㅋ	ㅌ			ㄱ	ㅋ

- (3) (2) ‘birthday’, ‘teeth’, ‘earth’
- <ㅊ> <th>

<sup>7</sup>  
(2010)

(4)

지 지 후	チ チ フ	父	부 부	아 비 부
		ㄱ		
Father				
엠포아쑤				

아 니 교	ア ニ キ ョウ	兄	형 형	형 형
		ㄱ		
Elderbrother				
엘더,썬로쑤				

쓰 지 지	ツ チ チ	地	디 땅	지
		ㄱ		
Earth				
이어엿				

(2000) /θ/ &lt;θ&gt; /ð/ &lt;θ&gt;

(1897)

가

가

(2009)

가

가

θ

&lt;θ&gt;, &lt;θ&gt;, &lt;θ&gt;, &lt;θ&gt;

&lt;θ&gt;

가

&lt;th&gt;

가

가

(2009)

(2000)

가

/θ/

8

/ð/

&lt;th&gt;

가

&lt;θ&gt;, &lt;θ&gt;

가

(2009)

가

&lt;θ&gt;

(2)

'clotheshef'

'smooth'

&lt;θ&gt;

가

&lt;θ&gt;

(2000)

가

가

&lt;θ&gt;

8

가

가

&lt;θ&gt;

&lt;θ&gt;

(diacritic)

(2009)

가

· <人>

3  
가 < > < > 《 》

‘smooth’ <人> 가 ‘clotheshef’

Schmidt (1996), Park and de Jong (2008)

<ㅈ>  
(perceptual map) <ㅈ> 가

? (2010) <ㅈ> ? 가  
(1998) 18

· <ㅈ> <ㄷ>  
<ㅈ> 가  
(2002) 1930  
가 70 <ㅈ>  
가 가 (1998) 가  
가 <ㅈ> 가가  
가 18 <ㅈ> 19  
가 가  
Park and de Jong (2008)  
<ㅈ> 100  
<ㅈ>  
가 de Jong and Cho  
(2012) <ㅈ>  
Cho (2012)  
<ㅈ>  
] ‘Scythia’ (p. 178). < > 가 [ 가  
[ㅍ] 《 》  
가

9  
· <ㅈ> 가  
9 가 < > < > < >

《 》 1908 1914  
(1997) <ㅈ>  
가  
100  
(2) 가

(5)

	(1895)		(1897)	(1896)	(1908)	
ch	ㅈ	ㄱ, ㄴ	ㅅ		ㅅ	ㅋ
th	ㅊ	ㅌ	ㅆ		ㅊ	ㅍ
sh			ㅍ		ㅍ	
ng	ㅇ		ㅇ	ㅇ	ㅇ	ㄱ
ph	ㅎ				ㅇ	ㅋ

(5)  
1900 1910  
가 가  
(1997: 11)  
10가 (音寫語),

---

< > < > <

· (漢·韓) (漢譯) (併記語), (韓·英) (韓音)  
 , (韓)· (英音)· (漢譯) 가  
 《 》 《 》 ,  
 《 》 3 가 .

10

(6) (1900 1910 )

a.

— · (Thebes)  
 ; 王后 懇請 < 6.98>  
 ; 列國 < 15.21>  
 — (Theseus)  
 ; 當代 第一 大征服家 < 6.98>  
 — (Theodorick)  
 ; < 14. . 29>  
 (Correlius theodorick) < 14. . 29>  
 ; (Correlius theodorick)  
 — 寨 (Thirdbassman)  
 ; 寨 (Thirdbassman)第三壘 < 1.124>  
 텃 (Thank you)  
 ; 텃크유는 영어에 감사 한다는 말< 1909.4.7>

(6a) ‘thank’ <ㅌ>  
 <ㄷ> 가

10

11 (1997) /θ/ <ㄷ>

3

(1997)

丹 /ㄷ/ (b) 治 /ㅈ/ (a)  
 (a) 阿丹(Athenae); 阿丹及 秀巴陀 貨幣 <西遊見聞.513>  
 (b) 愛治那(Athena); 九 日 愛治那 ㄹ <西遊見聞.339>  
 (b) 治 /ㅈ/ (a)  
 /ㄷ/ /ㅈ/

b.

—(Matthew)  
 ; < 1913.2.15>  
 ; —(Matthew) 썰튼  
 ; 매슈 썰튼이란 사람이 출현되매< 6.34>  
 ; — (Pirithous); 가 < 6.100>  
 ; — (Malthus)  
 ; 人口原論 動機가 < 12.47>  
 ; (Elsasz Lothringen); < 2.6>  
 ; — (Scythia)  
 ; (Scythia) 王妃 區 < 6.98>  
 ; — (Bethlehem)  
 ; 酒幕 < 13.2>, 女子< 15.1>  
 ; 싱 혼 늘< 1908.12.17>  
 ; 싱 혼  
 ; < 1913.12.22>  
 ; —(Bentham)  
 ; 公利說 同價 < 1.21>  
 ; — (Othman)  
 ; 現存 原本 < 2.92>  
 ; 𐌲𐌿 (Gothic)  
 ; 今日 世界 中 𐌲𐌿 式 建築物 < 3.19>  
 ; — (King Arthur); 少年< 8.78>  
 ; — (Diphtheria)  
 ; 十一日 等< 14.105>  
 ; — (Ethiopia): < 2.79>  
 ; — 가 — (Catholic)  
 ; 教會 가 < 21.37>  
 ; 教 大本山< 1. .69>  
 ; 宗 半島 < 12.39>  
 ; < 12.38>

(6b) ‘mattew’ <Ε> <人>  
 < >, < >, < >  
 < >, < >  
 ‘Bethlehem’ . <  
 >, < >, < > <人> < >

1910

<sup>12</sup> < > ‘ ( ) < >  
 > 가

< > < > < >  
 1933 ‘  
 <ㄱ, ㄴ, ㄹ, ㅁ, ㅂ, ㅅ, ㅇ> 7가  
 <ㄷ, ㅌ, ㄴ, ㅅ, ㅈ, ㅊ>  
 < > < >  
 < > < > 가 18  
 < >  
 가  
 ‘bethel’ < >  
 (2004)  
 < > < > ‘kid’, < > ‘bed’, < > ‘pyramid’  
 de Jong and Cho(2012)  
 가  
 ‘bethlehem’ < > [pet.le.hem], < > [pet.ne.hem], <  
 > [pe.dil.le.hem] de Jong and Cho  
 /t/  
 /s/ /tʰ/

(6b) ‘Catholic’  
 1986  
 <가 > [ < > ], <가 >, <  
 >  
 < > 《 > < >  
 ‘Catholic’ < > < >  
 가  
 加特力 加 < >  
 14

c.  
 사우스(South)  
 ; 사우스街는 海軍을 專業하는 집이오<국민62.21>  
 싸우드웁(South work)  
 ; 싸우드웁(South work)숫막 金貨 金 亨이라<청춘6.97>

<sup>13</sup> 1933 가  
 , 65 . 1930 12 13  
 ,  
 1933 487  
<sup>14</sup> 加特力(Catholic); 加特力敦 侵溺 <萬國事物紀元歷史.1.73>

썸즈썸 (wife of Bath)

; 썸즈썸 (wife of Bath)이라는 서방을 다섯식이나 다리고  
<청춘6.97>

썸즈(General Booth)

; 救世軍大將 썸즈(General Booth)씨 <청춘4.99>

엘라자 베드·열잡예(Elizabeth)

; 엘라자 베드女皇은 남자를 凌駕하는 <청춘14.부.3>

; 영국 열잡예 녀황씨 도라가 알윈디 <대한1909.9.23>

위어드위어쓰·위어쓰위드·위어쓰위어드·위엇스위어드·위즈위드  
(William Wordsworth)

; 너의 손가락을 기다린다-위어드위어쓰 <소년15.62>

; 시인 위어쓰위어드가 썸리텐國 代議院에 上書하야  
<소년12.91>

; 위엇스 위어드(Wordsworth) <소년19.24>

; 위즈위드도나고 새 밀네도 나서 <청춘13.61>

맘모쓰(Mammoth); 맘모쓰樹는 四千年 以上 <소년7.46>

(6c)

2가 'south'  
< > < > 가 'Wordsworth' < > < > 2가  
5가 <人>, <ㄷ>, <ㄴ>

<0ㄷ> <0ㄴ>

<0ㄴ>

<ㅈ>

3.2

1986

. 1986

. [θ]

<人>

IPA

[ð]

<ㄷ>

< > < >

[v], [θ], [ð] ' , ' [s], [z], [f],  
, bathe[beið] ). ( . thrill[θril]

1986

<人>

<ㄷ>

[ , [ , [ ]



1894

1986

(7)

1894	<sup>15</sup>	, ( )
1933		, .
1941		, .
1948		, .
1958		1941 .
1986		( .)

1933 ‘ ,  
3.1 ,  
. 1933 1941  
1948 ‘ ,  
가 , 1958 1941  
, 1986 ‘ ,  
1958

---

<sup>15</sup> (1997: 11) 官報 1894 ( 31 7 9 )

4.

가  
(/θ/ /ð/) <th>

, 100

(Silverman 1992, Yip 1993, Paradis and LaCharité 1997, Shinohara 1997, Lee 2003, Peperkamp and Dupoux 2003, LaCharité and Paradis 2005, Kenstowicz and Suchato 2006, )  
(Steriade 2001, Kenstowicz and Suchato 2006, Ahn and Lee 2007, 2011, de Jong and Cho 2012, Cho 2012)  
가  
가 de Jong and Cho  
(2012), Cho (2012) 가

가  
(2010)

가  
가 ( )  
가 가

- (<http://www.korean.go.kr>)
- . 1997. 5( ). 14.2, ([http://www.korean.go.kr/nkview/nklife/2004\\_2/14\\_3.html](http://www.korean.go.kr/nkview/nklife/2004_2/14_3.html)).
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received : October 31, 2013

revised : December 3, 2013

accepted : December 6, 2013