

## Syllabus

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<b>Time</b>	Thursday 1-4 pm
<b>Place</b>	2-320
<b>Office Hours</b>	Wednesday 2:30-4:30 pm & by appointment (office: 3-407)
<b>E-mail/ Phone</b>	jongho@snu.ac.kr / 880-6169

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### Prerequisite: Phonology I (or any comparable courses)

Some basic knowledge of Optimality Theory is necessary.

### Description & Goals

This course reviews the previous studies on morphophonological processes in Korean for the purpose of obtaining an optimal description and analysis of relevant data. Specifically, I plan to discuss the following processes:

- sai-siot
- n-insertion
- vowel harmony in verbal inflection
- coronal palatalization

As you will see, most of these processes show variation, and thus their optimal accounts should be based on the currently accepted theories for the treatment of variation. Before I get into the discussion of Korean morphophonology, I will go over some of relevant statistical methods and probabilistic versions of Optimality Theory developed in recent years, while addressing how variable patterns can be learned and used.

The goals of this course include the following:

First, I want to address the issues involved in the description and analysis of the above morphophonological processes in Korean.

Second, I want to equip you with the software, shown below, that is useful when you deal with variation.

- OTSoft (<http://www.linguistics.ucla.edu/people/hayes/otsoft/>)
- Praat (<http://www.fon.hum.uva.nl/praat/>)
- Maxent Grammar Tool  
(<http://www.linguistics.ucla.edu/people/hayes/MaxentGrammarTool/>)
- UCLA phonotactic learner  
(<http://www.linguistics.ucla.edu/people/hayes/Phonotactics/Index.htm>)

In addition, I will sometimes use the free statistical package called R in class. If you do not have statistical software, it would be good to install it on your computer:

- ✓ R (<https://www.r-project.org/>), RStudio (<https://www.rstudio.com/>)

Much of the class material, especially for the first half of the course, will be drawn from handouts for my phonology seminar class, fall 2015.

Specific class topics, materials and even schedule may change depending on the result of the survey today.

## Readings

- Assigned readings will be posted to the class dropbox folder.
- If you do not know statistics at all, you may read:  
Johnson, Keith (2008) *Quantitative methods in linguistics*. Malden, MA: Blackwell.
- This book is recommended to a more advanced reader:  
Baayen, R. H. (2008) *Analyzing linguistic data: A practical introduction to statistics using R*.  
Cambridge: Cambridge University Press. (draft: <http://www.sfs.uni-tuebingen.de/~hbaayen/publications/baayenCUPstats.pdf>)

## Requirements

- Readings and class participation
- A final term paper and its presentation
- Homework assignments (?)
- To lead discussion of one of the assigned readings (?)

## Final term paper

- Select topic and meet with me by April 27.  
Your term paper should bear on the course content, but it doesn't have to be about Korean.
- Submit a one-page outline of the paper by May 18.
- Paper Presentation: Last week (June 8)
- Paper Due: June 12

If you have any questions, you can email or talk to me. For discussions, you can either take my office hours or make an appointment with me.

## Tentative Class Schedule

Week	Topics	Readings
1. 3/2	syllabus	
2. 3/9	Stat (1)	
3. 3/16	Stat (2)	
4. 3/23	Probabilistic OT models (1)	Coetzee & Pater (2011), Boersma & Hayes (2001)
5. 3/30	Probabilistic OT models (2)	Goldwater & Johnson (2003), Hayes & Wilson (2008)
6. 4/6	sai-siot	Zuraw (2011), Ito (2014)
7. 4/13	sai-siot	Ko (1992)
8. 4/20	<b>No class</b>	
9. 4/27	n-insertion	Kim et al. (2002), Lee & Kapatsinski (2014)
10. 5/4	n-insertion	Jun (2015)
11. 5/11	vowel harmony	Kang (2012)
12. 5/18	vowel harmony	Kim (2007), Hong (2008)
13. 5/25	palatalization	Cho (2009)
14. 6/1	conclusion	
15. 6/8	Paper presentation	
	Paper Due (6/12)	

- Papers will be added to the list of readings.
- No class on 4/20, but the 'no class' date might be changed to 5/4.

## Bibliography

- If important papers, in particular on Korean morphophonology, are missing below, please let me know.

### Probabilistic OT

- Anttila, Arto (1997a) *Variation in Finnish Phonology and Morphology*. Doctoral dissertation. Stanford, CA: Stanford University.
- Anttila, Arto (1997b) Deriving variation from grammar. *CILT* 146.
- Anttila, Arto (2002) Morphologically Conditioned Phonological alternations. *Natural Language and Linguistic Theory* 20.1: 1-42. [available at <http://www.stanford.edu/~anttila/research/papers.html>]
- \*Boersma, Paul & Bruce Hayes (2001) Empirical tests of the gradual learning algorithm. *LI* 32.1.
- Becker, Michael; Nihan Ketrez; and Andrew Nevins. (2011) The surfeit of the stimulus: Analytic biases filter lexical statistics in Turkish laryngeal alternations. *Language* 87.1: 84-125.
- \*Coetzee, Andries & Joe Pater (2011) The place of variation in phonological theory. In J. Goldsmith, J. Riggle & A. Yu (eds.) *The Handbook of Phonological Theory*, 2nd edition. Malden, MA and Oxford, UK: Blackwell, 401-434. [ROA-946]
- Hayes, Bruce and Zsuzsa Londe (2006) Stochastic phonological knowledge: the case of Hungarian vowel harmony. *Phonology* 23.1.
- Hayes, Bruce & James White (2013) Phonological naturalness and phonotactic learning. *LI* 44: 45-75.
- \*Hayes, Bruce & Colin Wilson (2008) A maximum entropy model of phonotactics and phonotactic learning. *Linguistic Inquiry* 39, 379-440.
- Hayes, Bruce; Kie Zuraw; Péter Siptár, and Zsuzsa Londe (2009) Natural and unnatural constraints in Hungarian Vowel Harmony. *Language* 85: 822-863.
- Ernestus, Mirjam & R. Harald Baayen. (2003) Predicting the unpredictable: Interpreting neutralized segments in Dutch. *Language* 79.5-38.
- \*Goldwater, Sharon & Mark Johnson (2003). Learning OT constraint rankings using a Maximum Entropy model. In Jennifer Spenador, Andres Eriksson & Östen Dahl (eds.) *Proceedings of the Workshop on Variation within Optimality Theory*. Stockholm: Stockholm University. 111-120.
- Kiparsky, Paul (1993) An OT perspective on Phonological variation. Handout. [available at <http://www.stanford.edu/~kiparsky/>]
- Pater, Joe (2008) Gradual learning and convergence. *LI* 39.2, 334-345.
- Wilson, Colin (2006) Learning phonology with substantive bias: an experimental and computational study of velar palatalization. *Cognitive Science* 30: 945-982.
- Zuraw, Kie. (2000) *Patterned exceptions in phonology*. PhD dissertation, UCLA.
- Zuraw, Kie. (2002) Aggressive reduplication. *Phonology* 19.3: 395-539.
- Zuraw, Kie (2010) A model of lexical variation and the grammar with application to Tagalog nasal substitution. *Natural Language and Linguistic Theory* 28.2: 417-472.

### Sai-siot

- Ahn, Sang-Cheol (1985) *The interplay of Phonology and Morphology in Korean*. Ph.D. dissertation, University of Illinois at Urbana-Champaign.
- Cho, Young-mee. Y. and Peter Sells (1995) A lexical account of inflectional suffixes in Korean. *Journal of East Asian Linguistics* 4: 119-174.
- Chung, Kook (1980) *Neutralization in Korean: A Functional View*. Ph.D dissertation, University of Texas at Austin, Seoul: Hanshin.
- Cook, Eung-Do (1987a) Sai-sios is a geminated consonant. In S. Kuno et al. (eds.), *Harvard Studies in Korean Linguistics II*, 360-366. Harvard University.
- Cook, Eung-Do (1987b) Sai-sios: A mistaken identity of gemination. *Language Research* 23, 595-605.
- \*Ito, Chiyuki (2014) Compound tensification and laryngeal co-occurrence restrictions in Yanbian Korean. *Phonology* 31: 349-398.
- Jun, Cheolwoong (1979) A study on phonemic change [umsopyentongey kwanhan ilkochal] *Sancheongeomun* 10: 65-95.
- Kim, Jong-mi (1986) *Phonology and syntax of Korean morphology*. Unpublished doctoral dissertation, University of Southern California, Los Angeles.
- Kim, Seoyoung (2016) *Phonological trends in Seoul Korean compound tensification*. MA thesis, Seoul National University.

- Kim-Renaud, Young-Key. (1974/1991) *Korean consonantal phonology*. Ph.D. dissertation, University of Hawaii, Honolulu. Seoul: Hanshin.
- \*Ko, Kwang-mo (1992) The n-epenthesis and sai-sios in Korean. [n chemkawa saisiejey tayhan yenku] *Eoneohak* 14: 31-51.
- Moon, Soo-Mee (1989) *A phonetic study of 'Sais-Sori' Current Korean – An experimental phonetic approach*. [hyentay kwukeuy saisiejey kwanhan umsenghakcek kochal – silhemumsenghakcek cepkun] MA thesis, Seoul National University.
- Moon, Yang-soo (1997) The 'Sais-sori' phenomena of Korean. [kwukeuy saisiejey hyensang] *Inmunnonchong* 63-80.
- Sohn, Hyang-Sook (1987a) *Underspecification in Korean Phonology*. PhD dissertation, University of Illinois at Urbana-Champaign.
- Sohn, Hyang-Sook (1987b) Derivational morphology and tensification in Korean. In S. Kuno et al. (eds.), *Harvard Studies in Korean Linguistics* II, 443-455. Harvard University.
- \*Zuraw, Kie. (2011) Predicting sai-siot in Korean compound nouns: Phonological and non-phonological factors. Handout presented at the 21st Japanese/Korean Linguistic Conference, Seoul National University.

#### n-insertion

- Ahn, Mee-Jin (2008) The Korean /n/-insertion before [j] as [nasal] insertion. *Studies in Phonetics, Phonology and Morphology* 14.3: 371-388.
- Ahn, Mee-Jin (2009) /n/-insertion and onset simplification in Kyungsang Korean. *Studies in Phonetics, Phonology and Morphology* 15.2: 263-282.
- Bae, Ju-Chae (2003). *The pronunciation of Korean*. [Hankwukeuy palum.] Seoul: Samkyong Munhwasa.
- Han, Eunjoo (1993) The phonological word in Korean. In Patricia M. Clancy (ed.), *Japanese/Korean Linguistics* 2, CSLI, Stanford University, 117-129.
- Hong, Soonhyun (2006) /n/-insertion in native Korean and Sino-Korean revisited. *Studies in Phonetics, Phonology and Morphology* 12.2: 391-413.
- \*Jun, Jongho (2015) Korean n-insertion: a mismatch between data and learning. In *Phonology* 32.3: 417-458.
- Ki, Se-kwan (1990) *A phonological study of /l/-deletion and /n/-addition in Korean word-formation*. Ph.D dissertation, Wonkwang University, Iksan, Korea.
- \*Kim, Yu-Pum, Sunwoo Park, Byoung-Sup Ahn & Bongwon Lee (2002) An overview on the studies of Korean /n/-insertion. *Emwunnoncip* 46, 43-71.
- Kim-Renaud, Young-Key. (1974/1991) *Korean consonantal phonology*. Ph.D. dissertation, University of Hawaii, Honolulu. Seoul: Hanshin.
- Ko, Kwang-mo (1992) The n-epenthesis and sai-sios in Korean. [niun chemkawa saisiejey tayhan yenku] *Eoneohak* 14: 31-51.
- Kook, Kyung-A, Ju-Won Kim & Ho-Young Lee (2005). A study of n-insertion preferences in Korean. [Senhoto cosalulthonghan niun chemkahyensanguy silhyenyangsang yenkwu.] *Malsori* 53. 37–60.
- Kwack, Dong-Kee (1992). *A phonological study on Korean prosodic structures*. [Wunyultanwiew uyhan kwuke umwunhyensanguy pwunsek.] PhD dissertation, Seoul National University.
- \*Lee, Ogyoung & Vsevolod Kapatsinski (2014) Frequency effects in morphologisation of Korean /n/-epenthesis. Ms, University of Oregon. (Downloadable from <http://blogs.uoregon.edu/ublab/files/2014/11/LeeKapatsinskiSub-s3ss6n.pdf>)
- Lee, Yongsung & Minkyung Lee. (2006) n-insertion as y-devocalization in Korean. *Korean Journal of Linguistics* 31.3: 413-440.
- Oh, Mira (2006). Reexamination of environments for /n/-insertion. [Niun-sapip hwankenguycaykemtho.] *The Linguistic Association of Korea Journal* 14:3. 117–135.
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#### Vowel harmony

- Ahn, Sang-Cheol (1985) *The interplay of Phonology and Morphology in Korean*. Ph.D. dissertation, University of Illinois at Urbana-Champaign.

- Cheun, Sang-buom (1975) *Phonological aspects of late middle Korean*. Ph.D. dissertation, Indiana University.
- Cho, Mi-Hui. (1994) Vowel harmony in Korean: A grounded phonology approach. PhD dissertation. Indiana University.
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- Chung, Chin-Wan (2000) An Optimality-Theoretic account of vowel harmony in Korean ideophones. *Studies in Phonetics, Phonology and Morphology* 6. 431-450.
- Han, Eunjoo (2009) Vowel harmony in hiatus contexts in Korean verbal morphology. *Studies in Phonetics, Phonology and Morphology* 15.2: 341-360.
- \*Hong, Sung-Hoon (2008) Variation and exceptions in the vowel harmony of Korean suffixes. *The Journal of Studies in Language* 24: 405-428.
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- Sohn, Hyang-Sook. (1987) *Underspecification in Korean phonology*. PhD dissertation, University of Illinois, Urbana-Champaign.

#### coronal palatalization

- \*Cho, Young-mee. Yu. (2009) A historical perspective on nonderived environment blocking: the case of Korean palatalization. In Kritin Hanson and Sharon Inkelas (eds.), *The Nature of the Word: Studies in Honor of Paul Kiparsky*, 461-486. Cambridge, MA: MIT Press.
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