

Chapter 6: Conclusion

In this dissertation, I have examined anti-homophony blocking in transparadigmatic relations. The main questions I raised in chapter 1 are: 1) whether or not anti-homophony principle is incorporated into the grammar of native speakers, 2) whether this principle is productive, 3) whether this principle is at work between words in transparadigmatic relations in addition to paradigmatic relations, 4) how we account for cases of homophony creation in transparadigmatic relations which qualify as counterevidence to the anti-homophony blocking.. If we claim this principle exists in the grammar, then it should be productive, which calls for evidence for productivity.

Previous research on anti-homophony blocking is reviewed in chapter 1 (Kisseberth and Abasheikh 1974, Mitchell 1993, Crosswhite 1999, 2001, Kenstowicz 2002, Morrill 2002, Kawahara 2003, Itô and Mester 2004b, Blevins 2004, Gessner and Hansson, to appear). Many researchers argue that the anti-homophony principle in paradigmatic relations is incorporated into the grammar of native speakers as a specific constraint within the framework of Optimality Theory (Prince and Smolensky 1993), although the constraints are defined slightly differently by different researchers (Crosswhite 1999, 2001, Kawahara 2003, Itô and Mester 2004b). I have also used Optimality Theory as a framework for my analyses.

In chapter 2, I used “contracted forms” in Japanese (Kikuzawa 1935, Toki 1975) as examples of anti-homophony blocking in transparadigmatic relations and in chapter 3, I conducted the analyses. I have focused on “nasal assimilation” among other contracted

forms. In nasal assimilation, *r* in a syllable at a morpheme boundary assimilates to *n* before *n* in a suffix as a result of syncope of the vowel following *r* (*wakar-anai* ‘understand, NEG’ → *wakannai*, *kure-nai* ‘give (me), NEG’ → *kunnai*). However, if a /re-nai/ or /ri-nai/ word has a /r-anai/ counterpart, only nasal assimilation of the /r-anai/ word occurs and nasal assimilation of the /re-nai/ word or the /ri-nai/ word is blocked: *kar-anai* ‘clip, NEG’ → *kannai*, *kare-nai* ‘wither, NEG’ → **kannai*, *kari-nai* ‘borrow, NEG’ → **kannai*. I concurred with previous research done in this area that anti-homophony principle is realized as an anti-homophony constraint in the grammar. However, I have claimed that the anti-homophony principle is also available in transparadigmatic relations. I have proposed that there is a specific constraint called CONTRAST (“Contrast in underlying forms between words with the same major lexical category must be maintained in surface forms”), which prohibits two underlyingly distinct inputs from surfacing as homophonous outputs.

In chapter 3, I have argued that INITIAL-C (“Every suffix is consonant initial”) and FINAL-C (“Every base of affixation is consonant final”) outrank the faithfulness constraint, which prohibits syncope MAX-V (“Every vowel in input has a correspondent in output”), in nasal assimilation. Thus contraction occurs. CONTRAST is ranked higher than INITIAL-C and FINAL-C, two driving constraints for contraction by syncope. In order to evaluate the interaction between outputs using CONTRAST, a “Minimal Pair Analysis” within Optimality Theory has been proposed. In the Minimal Pair Analysis, inputs and outputs are evaluated as a set. Total number of violations is counted in order to choose an optimal output set. Due to the crucial ranking of CONTRAST over INITIAL-C and FINAL-C, a

homophonous candidate set as a result of nasal assimilation violates CONTRAST and it is ruled out. Thus, homophony is blocked. When there are no other words which would become homophonous upon contraction, CONTRAST does not take effect in and contraction occurs.

In chapter 4, I have argued that there are two grammars: “contraction grammar” from which contracted forms are derived and “full-form grammar” in which contraction does not occur. Contracted form and full form share the same underlying forms but the different outputs surface due to specific constraint orders. In the contraction and full-form grammars, the markedness constraints have a single ranking but the faithfulness constraint MAX-V can be relativized. There are two positions available for the faithfulness constraints: one for the contraction grammar and the other for the full-form grammar. The relativized faithfulness constraint can be ranked in one of two positions in the hierarchy to provide different surface results by different grammars. This relativized faithfulness constraint model is an example of the “nonfixed model” where a constraint is rerankable within a single grammar, which in effect leads to two subgrammars (Anttila 1997, Anttila and Cho 1998).

Several cases of homophony creation in inflectional morphology, mainly in the full-form grammar, were reviewed in chapter 4, for example *kaw -ta* ‘buy, PAST’ → *katta*, *kar -ta* ‘clip PAST’ → *katta*. These cases of inflectional morphology are potentially counterevidence to my claim that the anti-homophony principle exists in transparadigmatic relations. Assuming that CONTRAST exists in the full-form grammar in addition to in the contraction grammar, I have demonstrated that the anti-homophony

effect emerges only when CONTRAST is violated but no constraints ranked higher than CONTRAST are violated. Also in this chapter, I demonstrated that CONTRAST is in fact a phonology-internal device. A phonology-external device merely prohibits homophony creation, however, it cannot see how to resolve the homophony creation. The “extended LO approach,” which is sensitive to phonology but not quite phonology-internal, fails to account for homophony creation, for example, homophony between /itta/ ‘go, PAST’ → *itta*, /iw-ta/ ‘say, PAST’ → *itta*, because it merely chooses the winner by the harmonic levels of the two outputs to the inputs. The extended LO approach is blind to the fact that SYLLSTRUC is more important than maintaining the contrast in the two outputs. The anti-homophony constraint CONTRAST, on the other hand, is heavily embedded in the phonology and its operation is inextricably linked with the operation of those other constraints. It is an outrankable and violable constraint. Since a violation of constraints ranked higher than CONTRAST is more costly than a violation of CONTRAST, homophony is allowed despite the fact the homophonous output set violates CONTRAST. It was concluded that the anti-homophony principle must be phonology-internal which is embedded in the phonological grammar.

A production experiment of nasal assimilation, discussed in chapter 5, was specifically designed to examine the productivity of anti-homophony blocking. A chi-square test was conducted for statistical analysis. The subjects applied nasal assimilation to nonce verbs and they blocked nasal assimilation when the application to nonce verbs would cause homophony with already existent. The results of the production experiment provide evidence that nasal assimilation and anti-homophony in transparadigmatic

relations are productive. I have argued that the anti-homophony principle and nasal assimilation process are productive because they are incorporated into the grammar of the native speaker.

In order to eliminate the possibility of word frequency and word familiarity factors upon anti-homophony blocking, the influence of word frequency and familiarity on whether or not the inputs undergoes contraction and are blocked in contraction, was examined using verbal and written corpus. No definite correlation was found between the occurrence of the contractions and word frequency. Words with a higher word frequency are not predisposed as an undergoer for the contractions. As for word familiarity, it was found that there was no positive influence of word familiarity of the lexical items on the occurrence of the contractions.

In conclusion, this dissertation has given two major contributions to the research on anti-homophony blocking. One is that it was demonstrated that the anti-homophony principle, incorporated into the grammar, is applicable to morphologically unrelated words, that is, in transparadigmatic relations. The other is that an attempt was made for the first time to demonstrate that anti-homophony blocking is a productive process. The results provide evidence for the productivity of anti-homophony blocking in transparadigmatic relations.

The next step in the study of anti-homophony blocking is to find cross-linguistic evidence of such blocking in transparadigmatic relations. I leave this research as the first step in building a foundation for future researchers to further explore anti-homophony blocking.