

Inventories

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Consonant Inventories

Coronals are less marked than labials (Paradis & Prunet, 1991):

Coronal \succ Labial


Languages


/t,p/	/t/	*p/
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Prince & Smolensky (1993); Kager (1999):


Universal Ranking: *[lab] \gg *[cor]


Language with coronals **and** labials

Input: t ₁	IDENT(Place)	*[lab]	*[cor]
 t ₁			*
p ₁	*!	*	


Input: p ₁	IDENT(Place)	*[lab]	*[cor]
t ₁	*!		*
 p ₁		*	


Language with coronals **only** (Ranking 1)

Input: t_1	*[lab]	IDENT(Place)	*[cor]
 t_1			*
p_1	*!	*	


Input: p_1	*[lab]	IDENT(Place)	*[cor]
 t_1		*	*
p_1	*!		


Language with coronals **only** (Ranking 2)

Input: t ₁	*[lab]	*[cor]	IDENT(Place)
 t ₁		*	
p ₁	*!	*	*

Input: p ₁	*[lab]	*[cor]	IDENT(Place)
 t ₁		*	*
p ₁	*!		

Language with labials **only**

Input: p ₁	*[cor]	*[lab]	IDENT(Place)
 p ₁		*	
t ₁	*!	*	*

Input: p ₁	*[cor]	*[lab]	IDENT(Place)
 p ₁		*	*
t ₁	*!		

Excluded because *[lab] \gg *[cor] is violated

Problem:

Otherwise constraints in OT are ranked freely


De Lacy (2002)


Coronal \succ Labial

*{labial} For every labial segment
assign a violation


*{labial,coronal} For every segment that is either labial or coronal
assign a violation


Language with coronals **and** labials

Input: t_1	IDENT(Place)	*{labial}	*{labial,coronal}
 t_1			*
p_1	*!	*	*

Input: p_1	IDENT(Place)	*{labial}	*{labial,coronal}
t_1	*!		*
 p_1		*	*

Language with coronals **only** (Ranking 1)

Input: t_1	*{labial}	IDENT(Place)	*{labial,coronal}
 t_1			*
p_1	*!	*	*


Input: p_1	*{labial}	IDENT(Place)	*{labial,coronal}
 t_1		*	*
p_1	*!		*


Language with coronals **only** (Ranking 2)

Input: t ₁	*{labial}	*{labial,coronal}	IDENT(Place)
 t ₁		*	
p ₁	*!	*	*

Input: p ₁	*{labial}	*{labial,coronal}	IDENT(Place)
 t ₁		*	*
p ₁	*!	*	

Reversed Ranking of *{labial} and *{labial,coronal}

Input: t ₁	*{labial,coronal}	*{labial}	IDENT(Place)
 t ₁	*		
p ₁	*	*!	*

Input: p ₁	*{labial,coronal}	*{labial}	IDENT(Place)
 t ₁	*		*
p ₁	*	*!	