

Alignment

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Voicing Assimilation in Dutch

Voicing Assimilation in Dutch

Stop + Stop → Regressive Voicing Assimilation

Fricative + Stop → Regressive Voicing Assimilation

Stop + Fricative → Voiceless Cluster

Fricative + Fricative → Voiceless Cluster

Voicing Assimilation in Dutch

Input: p+d

	Agr([-son],[vcd])	IDENT _{ONS} ([vcd])
p.d	*	
p.t		*!
➡ b.d		

Input: b+t

	Agr([-son],[vcd])	IDENT _{ONS} ([vcd])
b.t	*	
b.d		*!
➡ p.t		

Voicing Assimilation in Dutch

Input: d+z

	Agr([-son],[vcd])	IDENT _{ONS} ([vcd])
☞ d.z		
t.z	*!	
d.s	*!	*
☛ t.s		*!

Input: d+z

	*Obstr-Fric[+vcd]	Agr([-son],[vcd])	IDENT _{ONS} ([vcd])
d.z	*!		
t.z	*!	*	
d.s		*!	*
☞ t.s			*

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Stop + Stop → Regressive Voicing Assimilation

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NC-Conspiracy in Modern Greek

Input: pempo

	*NC	*m → Ø
pempo	*!	
pepo		*!
☞ pembo		

Input: epempsa

	*NC	*m → Ø
epempsa	*!	
☞ epepsa		*!
☞ epembsa		

NC-Conspiracy in Modern Greek

Input: epempsa

	Agr([-son],[vcd])	*NC	*m → Ø
epempsa		*!	
👉 epepsa			*
epembsa	*!		

Input: epempsa

	Agr([-son],[vcd])	*NC	*m → Ø
epempsa		*!	
👉 epepsa			*
epembsa	*!		
👉 epembza			

NC-Conspiracy in Modern Greek

Input: epempsa

	Agr([-son],[vcd])	*NC	*m → Ø
epempsa		*!	
☞ epepsa			*!
epembsa	*!		
☛ epembza			

Input: epempsa

	*Stop-Fric[+vcd]	Agr([-son],[vcd])	*NC	*m → Ø
epempsa			*!	
☛ epepsa				*
epembsa		*!		
epembza	*!			

Definition of Generalized Alignment

$\text{Align}(\text{Cat1}, \text{Edge1}, \text{Cat2}, \text{Edge2}) =_{\text{def}}$

$\forall \text{Cat1} \exists \text{Cat2}$

such that Edge1 of Cat1 and Edge2 of Cat2 coincide.

Where

$\text{Cat1}, \text{Cat2} \in \text{PCat} \cup \text{GCat}$

$\text{Edge1}, \text{Edge2} \in \text{Right}, \text{Left}$

Definition of Generalized Alignment

$\text{Align}(\text{Cat1}, \text{Edge1}, \text{Cat2}, \text{Edge2}) =_{\text{def}}$

Clause I:

For every Edge1 of Cat1

Count a violation for every x which intervenes
between Edge1 and the closest Edge2 of Cat2

Clause II:

Count a violation for every Edge1 of a Cat1
in a candidate without a Edge2 of a Cat2

Edges and Categories

Grammatical Word = [axtʊŋ]

Prosodic Word = [ʔaxtʊŋ]

Complete = [ʔ[axtʊŋ]]

Cat = GWord	Edge = Left		?[axtʊŋ]
Cat = GWord	Edge = Right		?axtʊŋ]
Cat = PWord	Edge = Left		[ʔaxtʊŋ]
Cat = PWord	Edge = Right		ʔaxtʊŋ]

Counting Violations: Clause I

Clause I:

For every Edge1 of Cat1

Count a violation for every x which intervenes
between Edge1 and the closest Edge2 of Cat2

	Align (PWord , Left, GWord , Left)
[[axtʊŋ]]	
[?[axtʊŋ]]	*
[??[axtʊŋ]]	**
[??[axtʊŋ]]	***

Counting Violations: Clause II

Clause II:

Count a violation for every Edge1 of a Cat1
in a candidate without a Edge2 of a Cat2

	Align (PWord , Left, GWord , Left)
[[axtʊŋ]]	
[axtʊŋ]	
[axtʊŋ]	*

Clause II and Reverting Arguments

	Align (PWord , Left, GWord , Left)
[[axtʊŋ]]	
[axtʊŋ]	
[axtʊŋ]	*

	Align (GWord , Left, PWord , Left)
[[axtʊŋ]]	
[axtʊŋ]	*
[axtʊŋ]	

Unexpected Effect of Clause I

Clause I:

For every Edge1 of Cat1

Count a violation for every x which intervenes
between Edge1 and the closest Edge2 of Cat2

	Align (GWord , Left, PWord , Left)
[[Hirn][Schwund]]	*
[[Hirn]]	
[[Schwund]]	

Reverting Arguments

Clause I:

For every Edge1 of Cat1

Count a violation for every x which intervenes
between Edge1 and the closest Edge2 of Cat2

	Align (PWord , Left, GWord , Left)
[[Hirn][Schwund]]	
[[Hirn]]	
[[Schwund]]	