

# Infinity

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Phonologie:Optimalitätstheorie – WS 2005/2006

# Infinite Candidate Sets: ba

	Delete none	Delete a	Delete b	Delete both
<b>Insert None</b>	ba	b	a	
<b>Insert One</b>	□ba b□a ba□	□b b□	□a a□	□
<b>Insert Two</b>	□□ba □b□a □ba□ b□□a b□a□ ba□□	□□b □b□ □b□ b□□ b□□ b□□	□□a □□a □a□ □□a □a□ a□□	□□
<b>Insert Three</b>	...	...	...	...

# Computing Infinite Candidate Sets I

**Initial Candidate Set** =  $\{a,b\}^*$

<b>0</b>	$\emptyset$
<b>1</b>	a, b
<b>2</b>	aa, ab, ba, bb
<b>3</b>	aaa, aab, aba, abb, baa, bab, bba, bbb
<b>4</b>	aaaa, aaab, aaba, aabb, abaa, abab, abba, abbb, baaa, ...
	...

# Computing Infinite Candidate Sets II

**ONSET:** Each a is preceded by at least one b

<b>0</b>	$\emptyset$
<b>1</b>	b
<b>2</b>	ba, bb
<b>3</b>	bab, bba
<b>4</b>	babb, bbab, bbba, baba
	...

# Computing Infinite Candidate Sets III

**MAX:** For each a,b in the input  
there should be at least one identical sound in the output

0	
1	
2	ba
3	bab, bba
4	babb, bbab, bbba, baba
	...

# Computing Infinite Candidate Sets IV

**NOCODA:** Each b immediately precedes an a

0	
1	
2	ba
3	
4	baba
	...

# Computing Infinite Candidate Sets V

**DEP:** The output shouldn't contain more sounds than the input

<b>0</b>	
<b>1</b>	
<b>2</b>	ba
<b>3</b>	
<b>4</b>	