## The following is the auxiliary grammar (G'), as per Bermudez and Logothetis 1989:

## **Auxiliary Grammar**

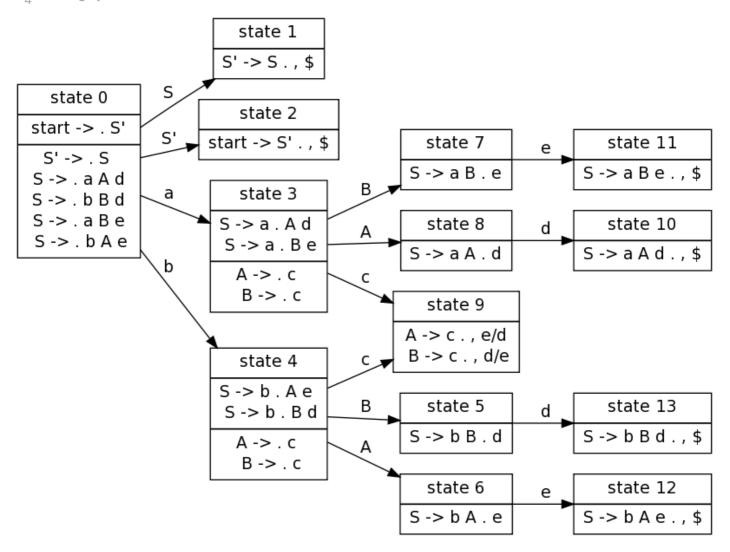
 $S'_0 \rightarrow S_0$ .  $S_0 \rightarrow a A_3 d$   $| b B_4 d$   $| a B_3 e$  $| b A_4 e$ .

 $A_3 \rightarrow c$ .

 $B_3 \rightarrow c$ .

 $A_4 \rightarrow c$ .

 $B_4 \rightarrow c$ .



Grammar								
S'	$\rightarrow$	S	۰					
S -	$\rightarrow$	а	А	d				
		b	В	d				
		а	В	е				
		b	А	е	٠			
Α -	$\rightarrow$	С	٠					
В -	$\rightarrow$	С	٠					

	\$	c	e	b	a	d	S'	$ \mathbf{S} $	A	B
0				s4	s3		s2	s1		
1	$r(S' \to S)$									
2	acc									
3		s9							s8	s
4		s9							s6	s
5						s13				
6			s12							

7		s11				
8				s10		
9		$r(A \rightarrow c)/r(B \rightarrow c)$		$r(A \rightarrow c)/r(B \rightarrow c)$		
10	$r(S \rightarrow a A d)$					
11	$r(S \rightarrow a B e)$					
12	$r(S \rightarrow b A e)$					
13	$r(S \rightarrow b B d)$					

It is not LALR(1) because:

• reduce/reduce conflict in state 9.

Return home to enter a new grammar.