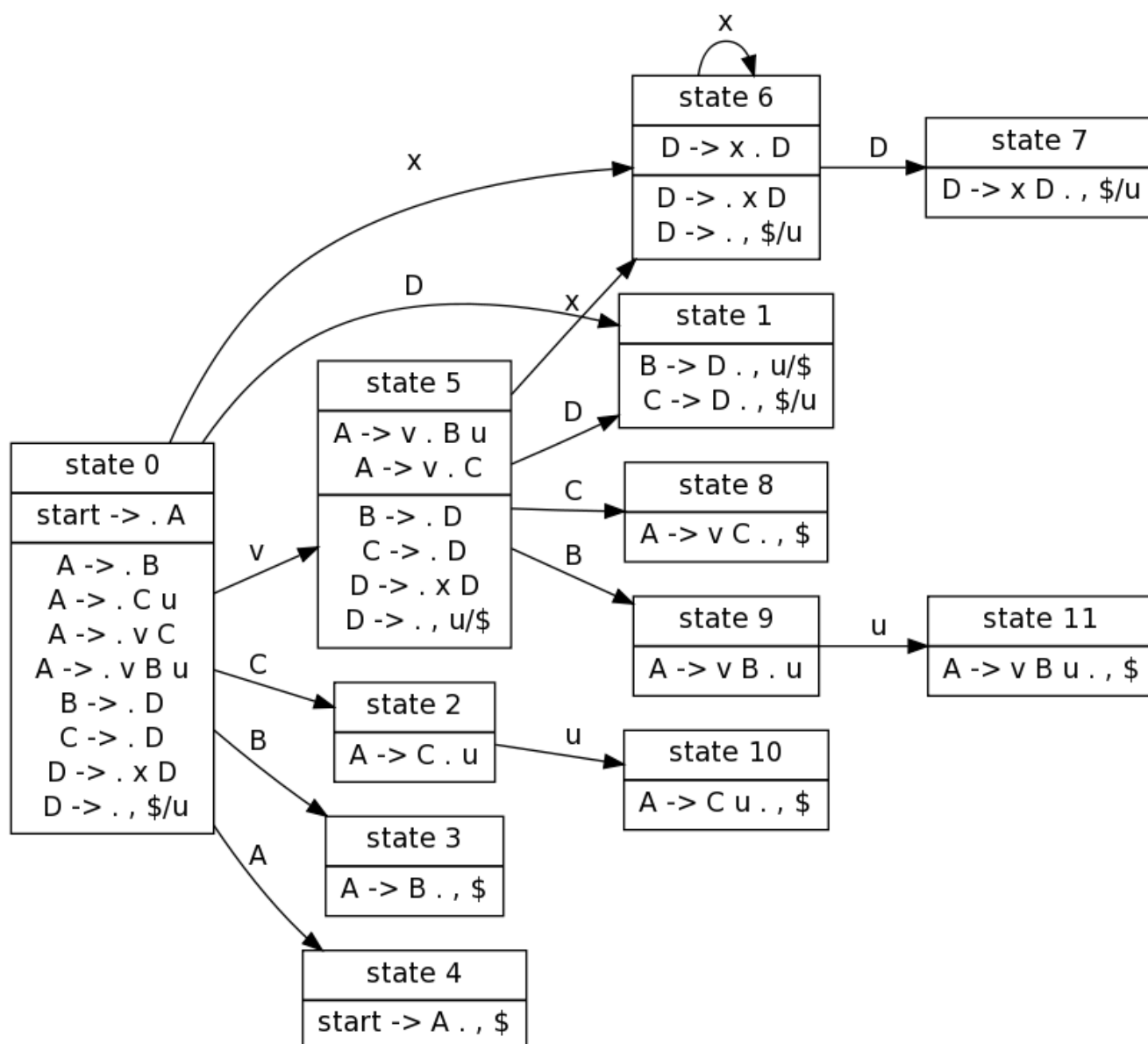


The following is the auxiliary grammar (G'), as per Bermudez and Logothetis 1989:

### Auxiliary Grammar

$A_0 \rightarrow B_0$   
 $\quad | C_0 u$   
 $\quad | v C_5$   
 $\quad | v B_5 u .$   
 $B_0 \rightarrow D_0 .$   
 $C_0 \rightarrow D_0 .$   
 $D_0 \rightarrow x D_6$   
 $\quad | .$   
 $B_5 \rightarrow D_5 .$   
 $C_5 \rightarrow D_5 .$   
 $D_5 \rightarrow x D_6$   
 $\quad | .$   
 $D_6 \rightarrow x D_6$   
 $\quad | .$



Grammar

A → B  
| C u  
| v C  
| v B u .  
B → D .  
C → D .  
D → x D  
| .

LALR(1) Table

	\$	x	u	v	A	B	C	D
0	r(D → &epsilon;)	s6	r(D → &epsilon;)	s5	s4	s3	s2	s1
1	r(B → D)/r(C → D)		r(B → D)/r(C → D)					
2			s10					
3	r(A → B)							
4	acc							
5	r(D → &epsilon;)	s6	r(D → &epsilon;)			s9	s8	s1
6	r(D → &epsilon;)	s6	r(D → &epsilon;)					s7
7	r(D → x D)		r(D → x D)					
8	r(A → v C)							
9			s11					
10	r(A → C u)							
11	r(A → v B u)							

It is not LALR(1) because:

- reduce/reduce conflict in state 1.

Return home to [enter a new grammar](#).