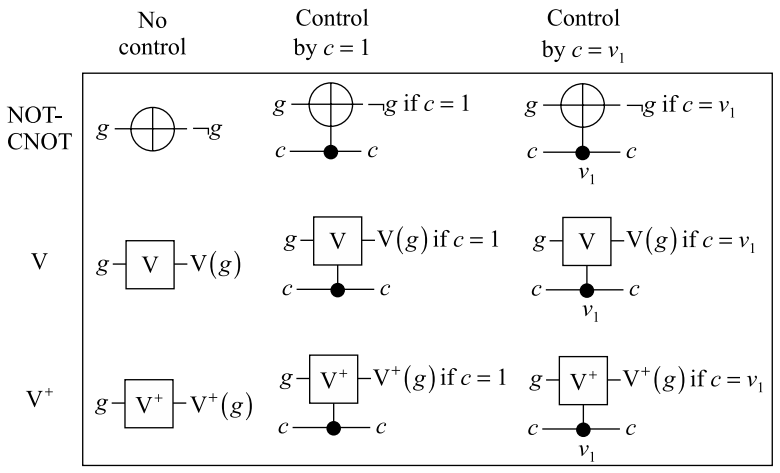
a



b

g	NOT(g)	V(g)	$V^+(g)$
0	1	v_0	v_1
v_0	v_1	1	0
1	0	v_1	v_0
v_1	v_0	0	1

Fig. 2. Quantum gates of NCV and NCV-$|v_1\rangle$ libraries:
a – quantum gates NOT, CNOT, V and V^+; *b* – operation of quantum gates in 4-level quantum system