

input memory	\emptyset	N	W	N+W
0				
1				
2				
3				

(a) State Machine of agent at state 1

input memory	\emptyset	N	E	N+E
0				
1				
2				
3				

(b) State Machine of agent at state 2

input memory	\emptyset	E	S	E+S
0				
1				
2				
3				

(c) State Machine of agent at state 3

input memory	\emptyset	S	W	S+W
0				
1				
2				
3				

(d) State Machine of agent at state 4

input memory	\emptyset	N	S	N+S
0				
1				
2				
3				

(e) State Machine of agent at state 9

input memory	\emptyset	N	E	W	N+E	N+W	E+W	N+E+W
0								
1								
2								
3								

(f) State Machine of agent at state 5

input memory	\emptyset	N	E	S	N+E	N+S	E+S	N+E+S
0								
1								
2								
3								

(g) State Machine of agent at state 6

input memory	\emptyset	E	S	W	E+S	E+W	S+W	E+S+W
0								
1								
2								
3								

(h) State Machine of agent at state 7

input memory	\emptyset	N	S	W	N+S	N+W	S+W	N+S+W
0								
1								
2								
3								

(i) State Machine of agent at state 8

Figure 0: Agent state machines at different positions on the patch, a tuple designates next memory state and a picked movement direction, or *do nothing* otherwise. Empty hatched cells should be treated as erroneous states. Input direction is a position of empty cell at the beginning of time tick. In the absence of neighboring empty cell.