

$\mathbf{Out}_t$	$\mathbf{Stack}_t$	$\mathbf{Buffer}_t$	$\mathbf{Action}$	$\mathbf{Out}_{t+1}$	$\mathbf{Stack}_{t+1}$	$\mathbf{Buffer}_{t+1}$	$\mathbf{Segments}$
$O$	$S$	$(\mathbf{u}, u), B$	SHIFT	$O$	$(\mathbf{u}, u), S$	$B$	—
$O$	$(\mathbf{u}, u), \dots, (\mathbf{v}, v), S$	$B$	REDUCE( $y$ )	$g(\mathbf{u}, \dots, \mathbf{v}, \mathbf{r}_y), O$	$S$	$B$	$(u \dots v, y)$
$O$	$S$	$(\mathbf{u}, u), B$	OUT	$g(\mathbf{u}, \mathbf{r}_\emptyset), O$	$S$	$B$	—