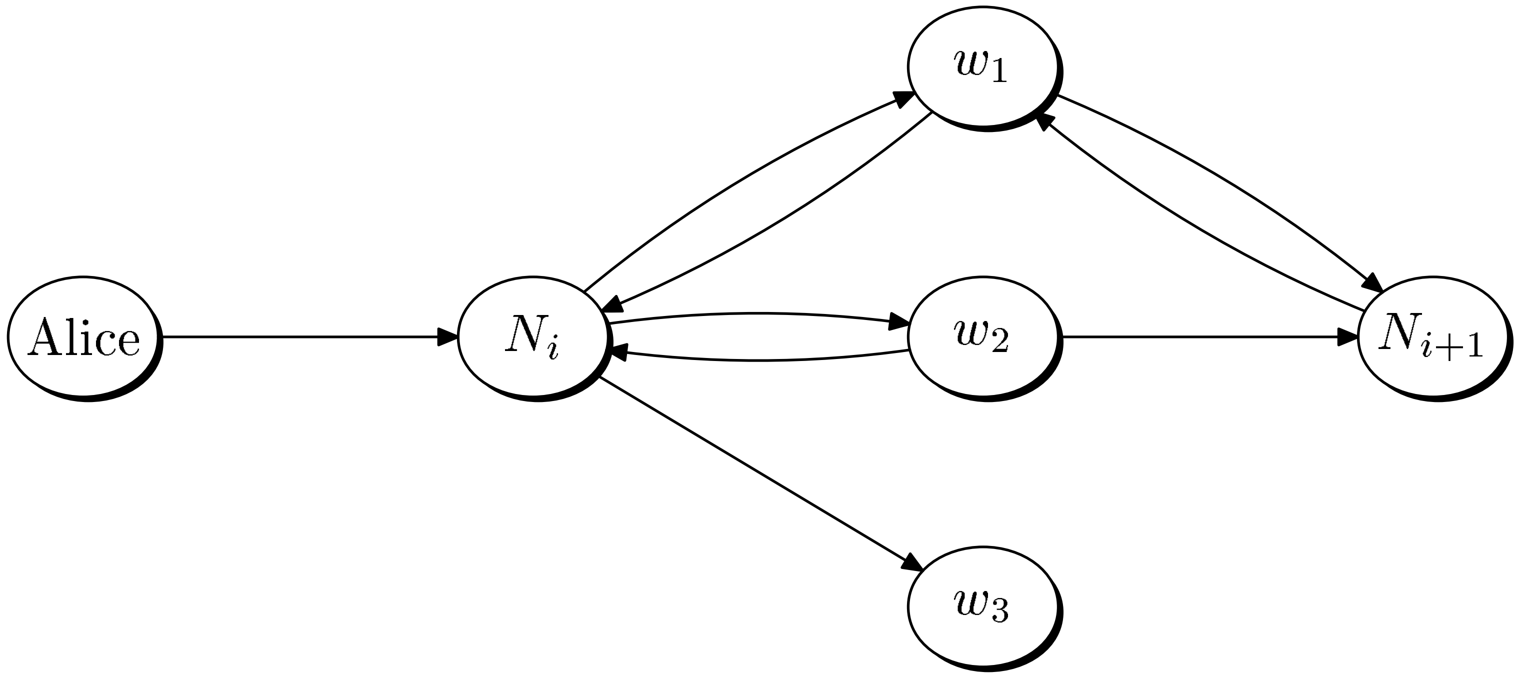


$N_i$ uses witnesses if $N_{i+1}$ is unreachable