Algorithm 1 Motor Babbling Paradigma

Initialize $\underline{\theta}_{target}$
for n_trials in $(1,000, 2,000, 4,000, 8,000, 16,000, 32,000)$ **do**
  function TRAINREACH(n_trials)
    for $i = 0$ to n_trials **do**
      $\underline{\theta}_{target}, \underline{x}_{target} \leftarrow$ GenerateRandomTarget()
      Simulate($50ms$) without Inputs
      $CM.r =$ PopulationCode($\underline{\theta}_{target}$)
      $S1.r =$ BivariateGauss($\underline{\theta}_{init}$)
      $PM.r =$ BivariateGauss($\underline{x}_{target}$)
      $SNc.r = 1.0$
      Simulate($450ms$)
      $\underline{\theta}_{init} \leftarrow \underline{\theta}_{target}$, $\underline{x}_{out} =$ ForwardKinematic($\underline{\theta}_{M1}$)
      ResetNetwork()
    end for
  end function
  function TESTREACH(trials $= 100$) **return** $error = \left\|\underline{x}_{target} - \underline{x}_{out}\right\|$
  end function
end for