```
 1: for t = 1 to T do
 2:     draw φ^(t) ∼ Dir(β, n)
 3: end for
 4: for c = 1 to C do
 5:     draw b^(c) ∼ N(0, σ₁²)
 6:     draw γ^(c) ∼ N(0, σ₂² I_P)
 7:     for a = 1 to A do
 8:         draw s_a^(c) ∼ N(0, σ₃² I_K)
 9:     end for
10:     for a = 1 to A do
11:         for r = 1 to A do
12:             if r ≠ a then
13:                 set p_{ar}^(c) = σ(b^(c) + γ^(c)ᵀ x^(ar) - ||s_a^(c) - s_r^(c)||)
14:             else
15:                 set p_{ar}^(c) = 0
16:             end if
17:         end for
18:     end for
19: end for
20: for t = 1 to T do
21:     draw l_t ∼ Unif(1, C)
22: end for
```