Repeat **N** times:

1. Select random agent A with probability = **1/15**

2. With probability = **1/100** let agent A add a new distributed vowel

3. Let all agents merge their vowels until no merges are possible

4. Select random neighbour B with probability = **1/4**

5. Play the imitation game:

   1. **A:** Select random vowel $v_A$ from repertoire, synthesise and send it. If no vowels in repertoire, generate random vowel.

   2. **B:** Receive synthesised vowel $v'_A$ and find the closest repertoire match $v_B$. If no vowels in repertoire, generate new vowel as close as possible to $v_A$.

   3. **B:** Send synthesised closest match $v'_B$ as response.

   4. **A:** Receive synthesised response $v'_B$ and find closest repertoire match.

   5. **A:** Send *True* if closest match is $v_A$, otherwise send *False*.

   6. **B:** Receive success boolean. If *True*, shift $v_B$ closer to $v_A$, if *False* and $v_B$ success rate is > 0.5, move $v_B$ away from $v_A$ and generate new vowel as close as possible to $v_A$, otherwise still shift $v_B$ closer to $v_A$.

6. With probability = 1/10 let all agents remove their bad vowels