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

4. 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.

5. Let all agents merge their vowels until no merges can be done

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