Human-Computer Interactive Game

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Overview

- Focus: Audio-Visual Perception

- Architecture: Online Studies

- Core Ideas:

  1. Escape Room Game

  2. Chinese Whisper Game

Escape Room Game

- Inspired by the game: We Were Here

- Two players are placed in two separate rooms, they can't see each other's monitor

- Player 1 relies on clues in Player 2's room to escape

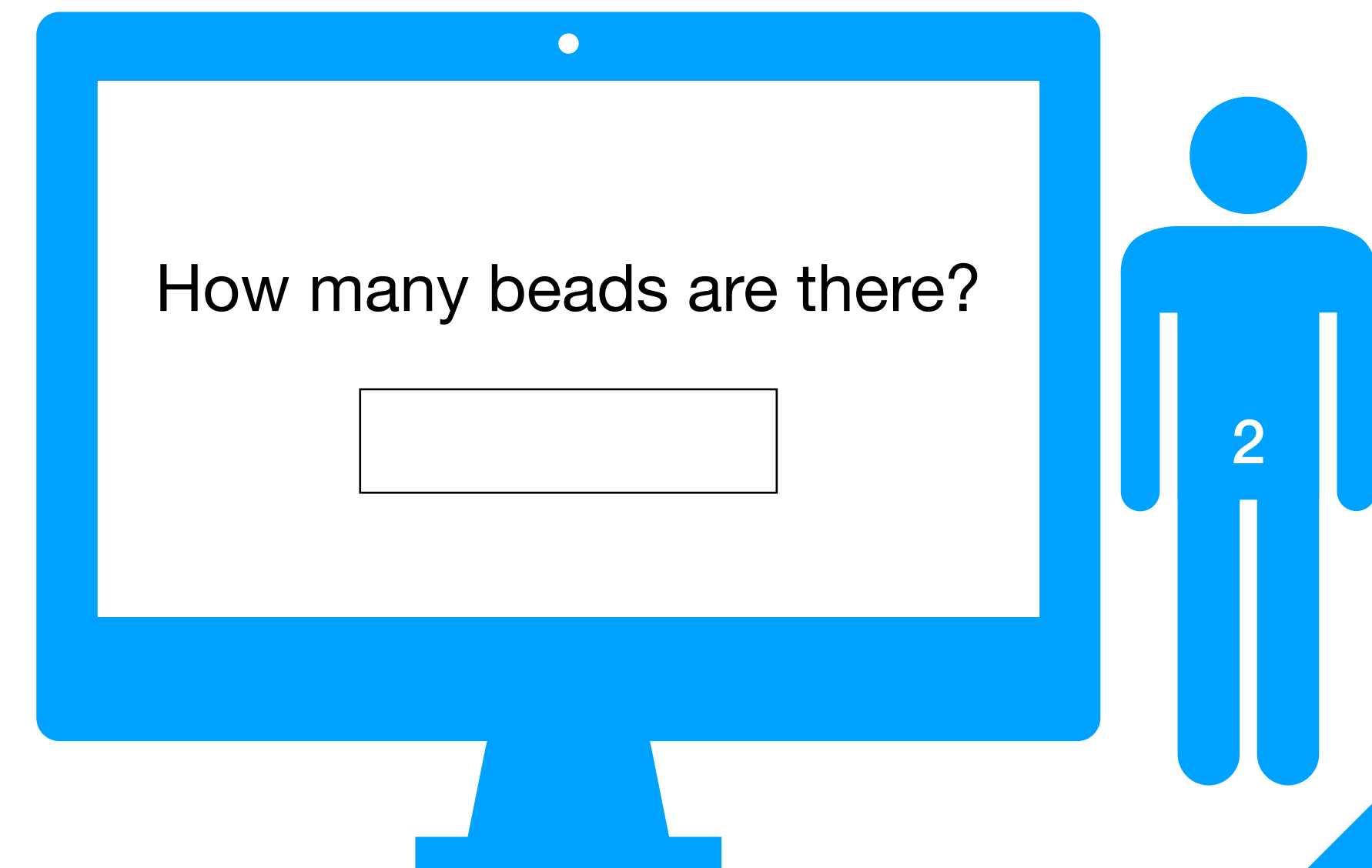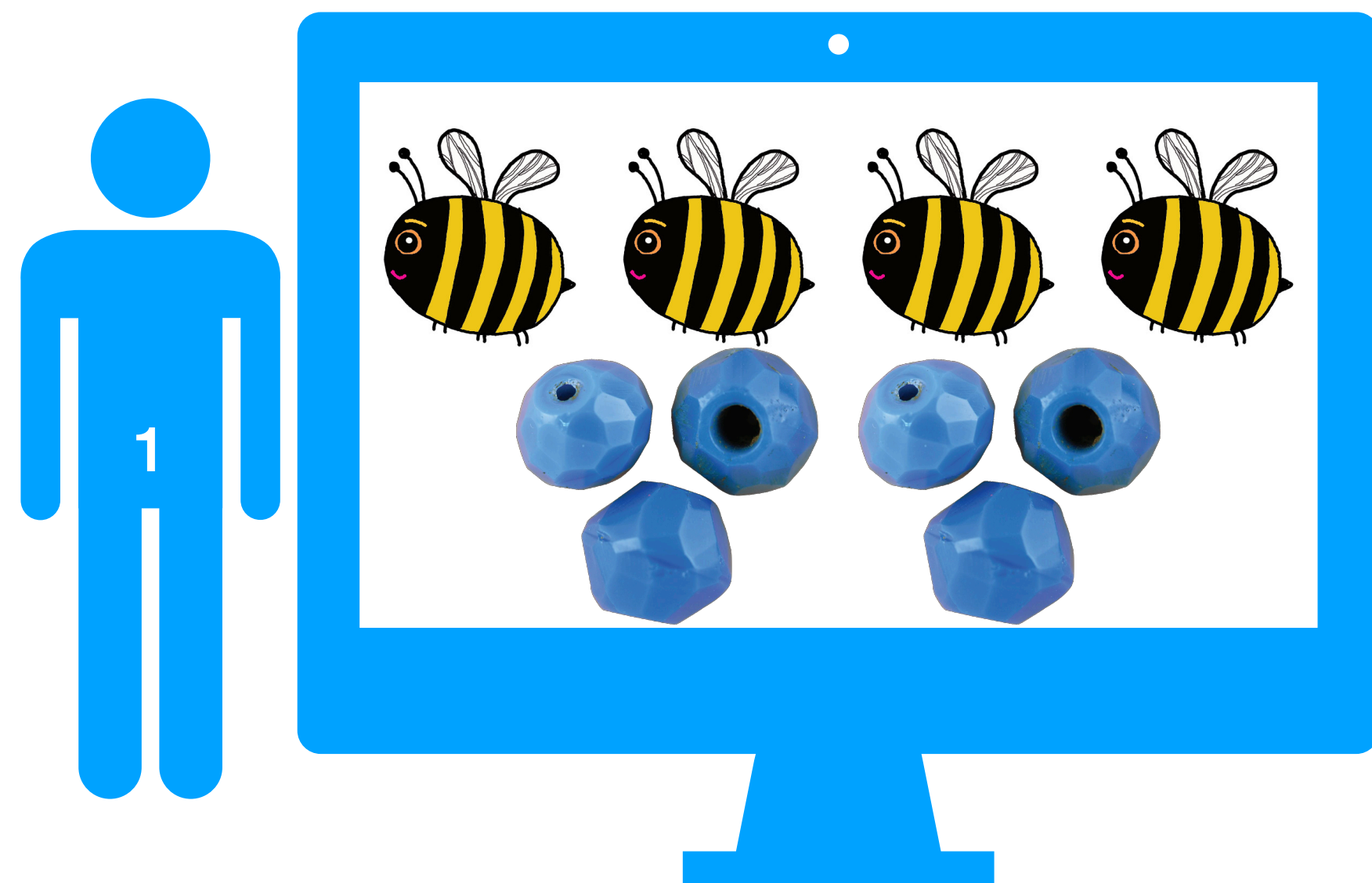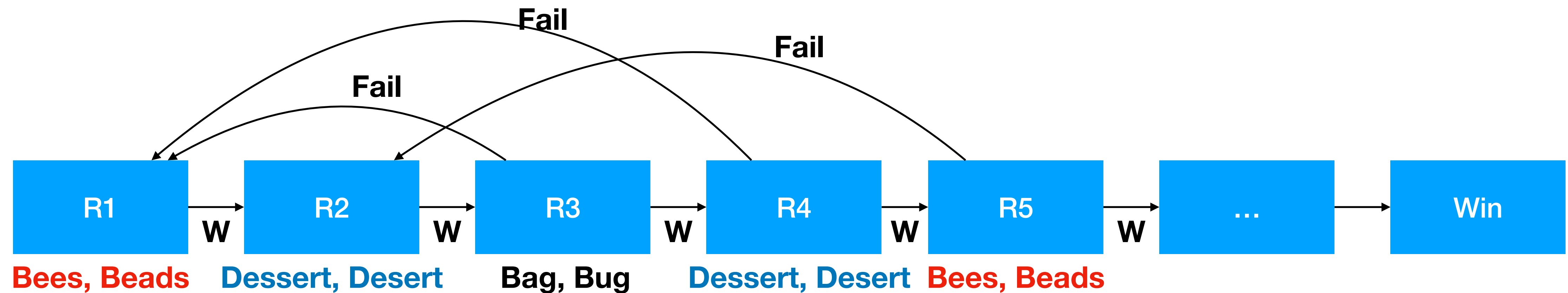- Player 2 relies on clues in Player 1's room to escape

Concept

Escape Room Game

- Player 1 (Round 2)

  - Clue: the key is in the dessert.

- Player 2 (Round 2)

  - Clue: the password is the number of beads

How many beads are there?

PvP

Escape Room Game

Fail

Fail

Fail

R1	W	R2	W	R3	W	R4	W	R5	W	…	Win

Bees, Beads   **Dessert, Desert**   **Bag, Bug**   **Dessert, Desert**   **Bees, Beads**

- Player 1 and Player 2 will take turns in solving each other's problems

  - They are also encouraged to avoid using alternative nouns to describe the scene.

  - They must confirm their selection with the other player.

  - If they fail, or violate the above rules, they go back to a previous game
    The clue also changes randomly, so Round 1 was asking for "Desert", it could now ask for "Dessert"

  - The same set of words are used couple times

PvP

Escape Room Game

- Player 1 (Round 1)

  - Clue: the key is in the dessert.

the key is in the dessert

- Bot: The key is in the desert.

- Player 2: Did you say desert or dessert?

- Bot: Allow me to clarify, desert.

- Player 2: OK, I will select desert.

- Bot: OK, desert is correct.

PvP

Escape Room Game

Fail

Fail

Fail

| R1 | W | R2 | W | R3 | W | R4 | W | R5 | W | … | Win |

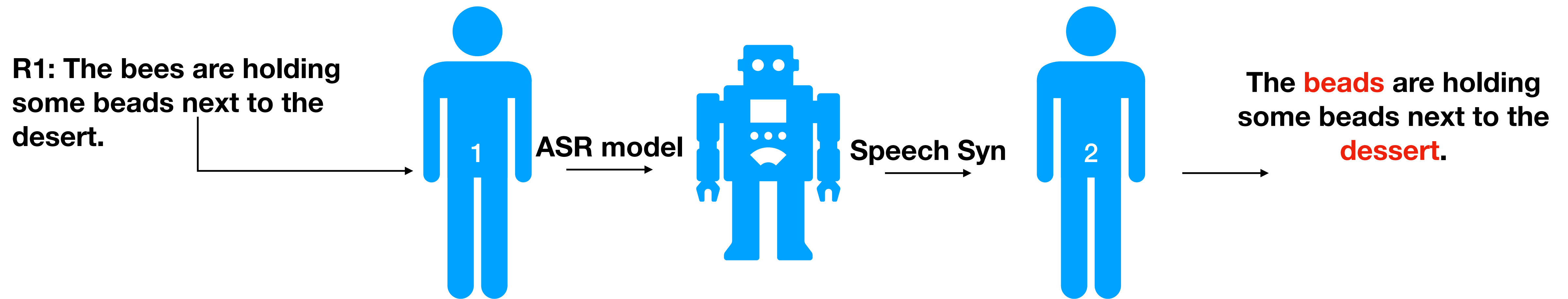**Bees, Beads** **Dessert, Desert** **Bag, Bug** **Dessert, Desert** **Bees, Beads**
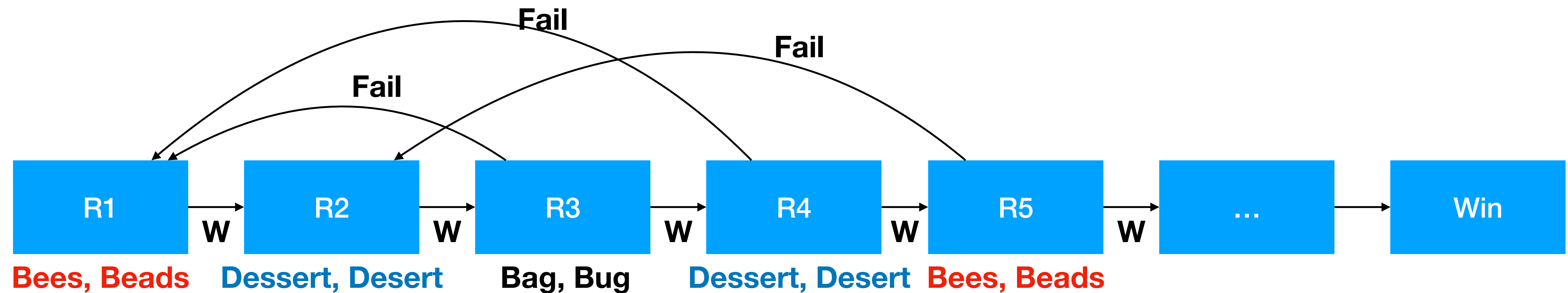
- Same rule as human interaction applies

- If the computer doesn't hear the human using the required words (e.g. neither "Bees" nor "Beads"), the round is failed.

- Player is then almost forced to articulate these words like the Bot.

PvBot

Chinese Whisper Game

- Two human players, and a Bot

  - For every story: A -> B -> C

    - Player 1 -> Player 2 -> Bot

    - Player 1 -> Bot -> Player 2

    - Bot -> Player 1 -> Player 2

    - Player 2 -> Player 1 -> Bot

    - Player 2 -> Bot -> Player 1

    - Bot -> Player 2 -> Player 1

- Objective:

  - A hears the story, whispers to B, B whispers to C, C writes it down

- Story: could be a 12 sentences story about bees beads bugs bags desert dessert.

- For each round, 1 sentence is used.

- If the final story is incorrect, continues the game with a different story, switch roles for A and B and C as well.

Concept
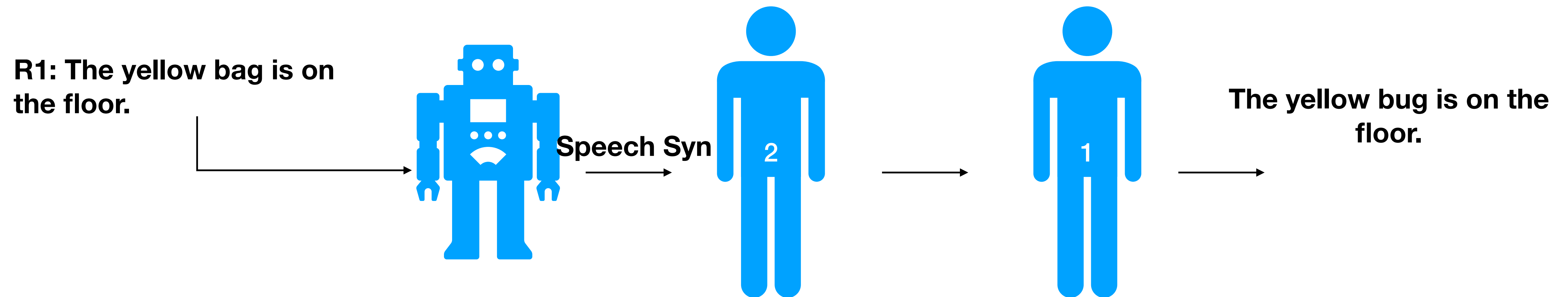
Chinese Whisper Game

- Story 2: A is Bot, B is Player 2, C is Player 1

R1: The yellow bag is on the floor.

Speech Syn

2

1

The yellow bug is on the floor.

R2: The blue bug is on the flour.

R3: …

Round 1