The possible behavior combination of 20 cases in MPIs

In the following scenarios, several people are surrounding the robot. In the general case, their body is aligned toward the robot, their body inclination angle is neutral, and they are all the same distance from the robot. If so indicated, some users may be a different distance from the robot, have a different body inclination, or be facing different direction for the purpose of the experiment.

The robot’s attention is requested by…

Case1: … a participant’s utterances.

Case2: … a participant waving.

Case3: …a participant moving closer to the robot.

Case4: …a participant leaning forward.

Case5: …a participant aligning his or her body toward the robot.

Case6: …a participant located closer than others to the robot.

Case7: …a participant calling and gesturing.

Case8: …a participant calling and leaning forward.

Case9: …a participant calling from behind than others.

Case10: …a participant calling and gesturing from behind than others.

Case11: …a participant gesturing, leaning forward, and calling.

Case12: …a participant aligning the body toward the robot, leaning forward, and calling.

Case13: …a participant calling and aligning his or her body toward the robot from behind than others.

Case14: …a participant gesturing and moving forward.

Case15: …a participant gesturing and leaning forward.

Case16: …a participant gesturing and standing behind than others.

Case17: …a participant gesturing, moving toward the robot from behind than others.

Case18: …a participant gesturing, leaning forward, and located from behind than others.

Case19: …a participant approaching the robot from behind than others.

Case20: …a participant leaning toward the robot from behind than others.