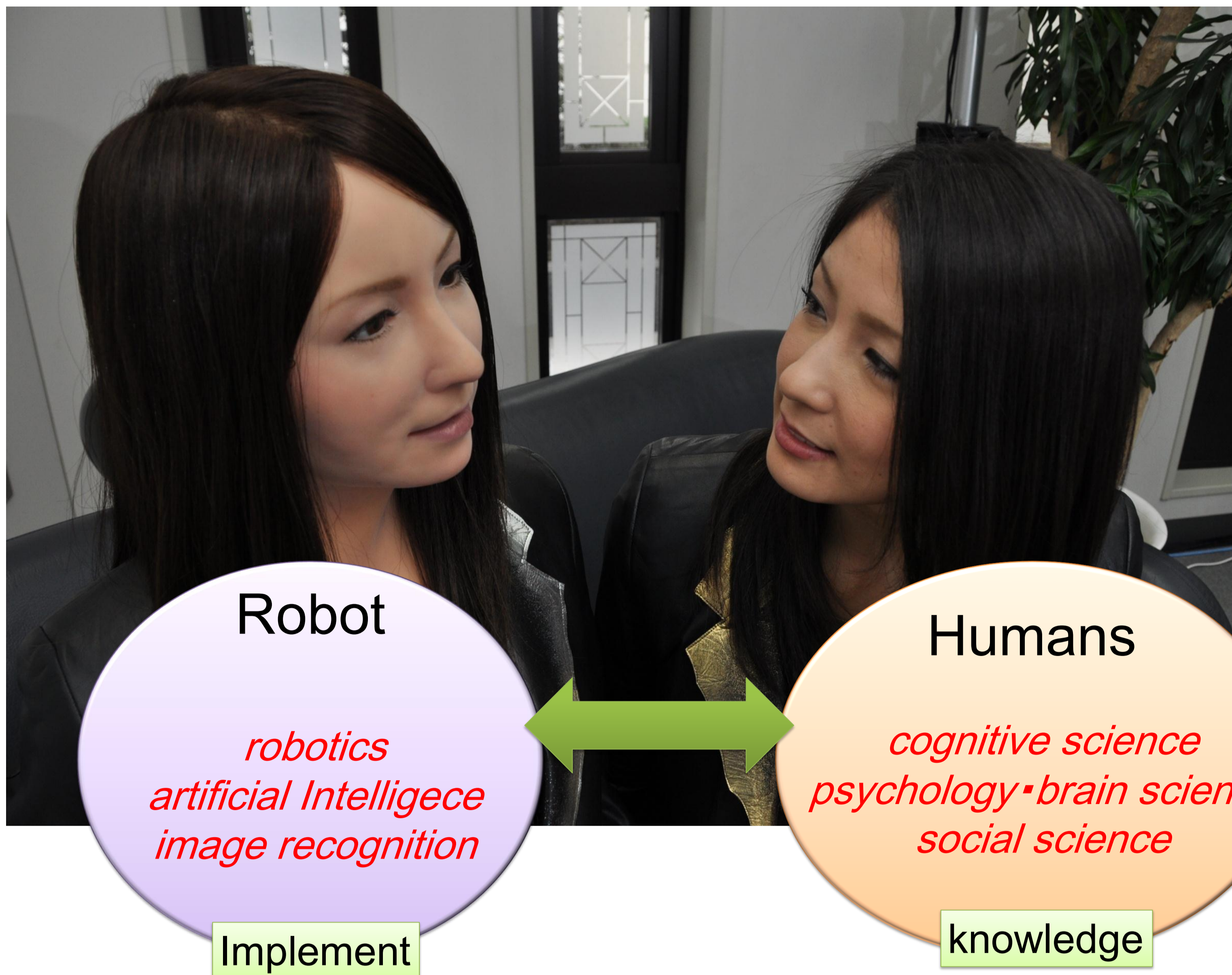


Android Science

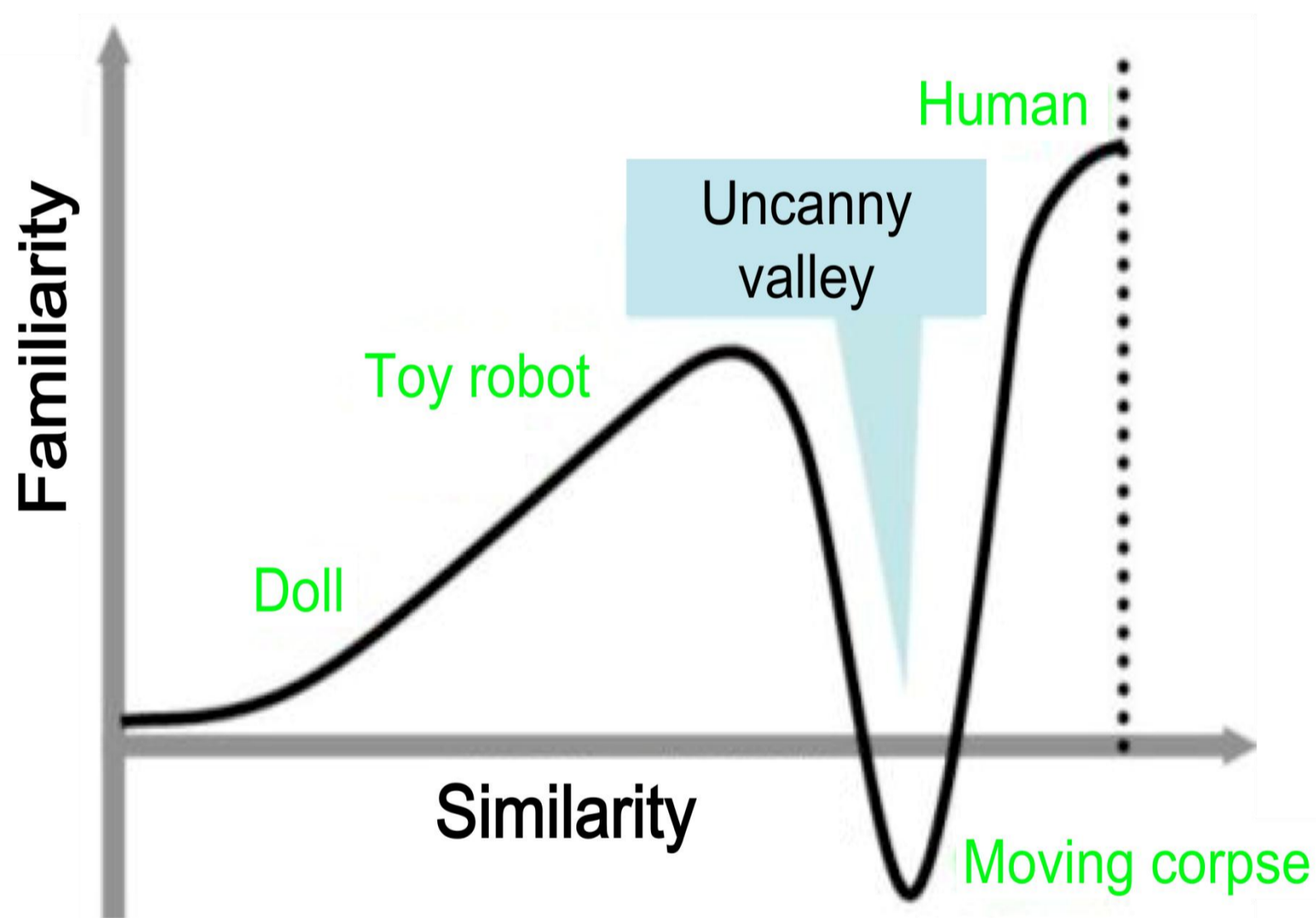
(Osaka University · ATR)

Human like robot , "Geminoid F"

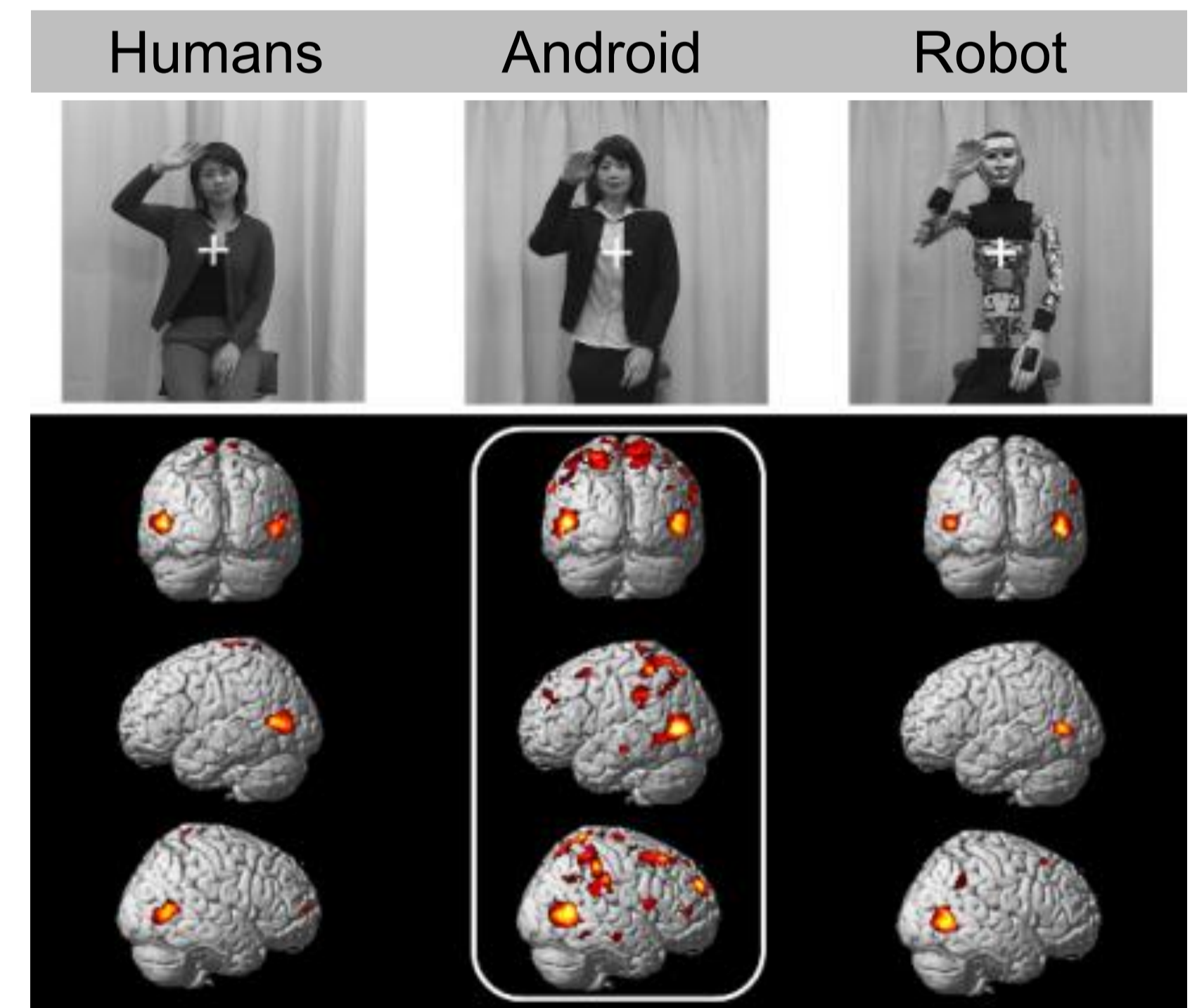


In order to develop the robots which humans can feel as human-like, we need to know how humans recognize others. By using human-like robot, we are able to investigate human nature scientifically. Therefore, we try to combine robot engineering and human science through developing the android, and we study in a new field "Android Science"

Verification of the hypothesis in psychology



Humans have the same psychological reaction to android (human-like robot) and humans. But, android give us "uncanniness" because of the differences in the figure and behavior (Uncanny valley). We use android in order to verify such causes.



Difference is found not only in questionnaire survey but also in brain activity. Right figure shows how brain activity differs when the test volunteers watches movement of a human, an android, and a mechanical robot.

Differences of response to human, robot and android

In short glance (2 sec.), humans tend to recognize an android as a human.(70% of subjects failed to distinguish human and android.) Right figure is an analysis of eye-movements. This suggests that human eye-movements are similar while talking with human or android response.

