

***Abstract***—This paper explores the topic of human–robot interaction (HRI) from the perspective of designing sociable autonomous robots—robots designed to interact with people in a human-like way. There are a growing number of applications for robots that people can engage as capable creatures or as partners rather than tools, yet little is understood about how to best design robots that interact with people in this way. The related field of human-computer interaction (HCI) offers important insights, however autonomous robots are a very different technology from desktop computers. In this paper, we look at the field of HRI from an HCI perspective, pointing out important similarities yet significant differences that may ultimately make HRI a distinct area of inquiry. One outcome of this discussion is that it is important to view the design and evaluation problem from the robot’s perspective as well as that of the human. Taken as a whole, this paper provides a framework with which to design and evaluate sociable robots from a HRI perspective.

***Index Terms***—Human–robot interaction (HRI), socially guided learning, social or sociable robot partner.