Pixelbots 2014

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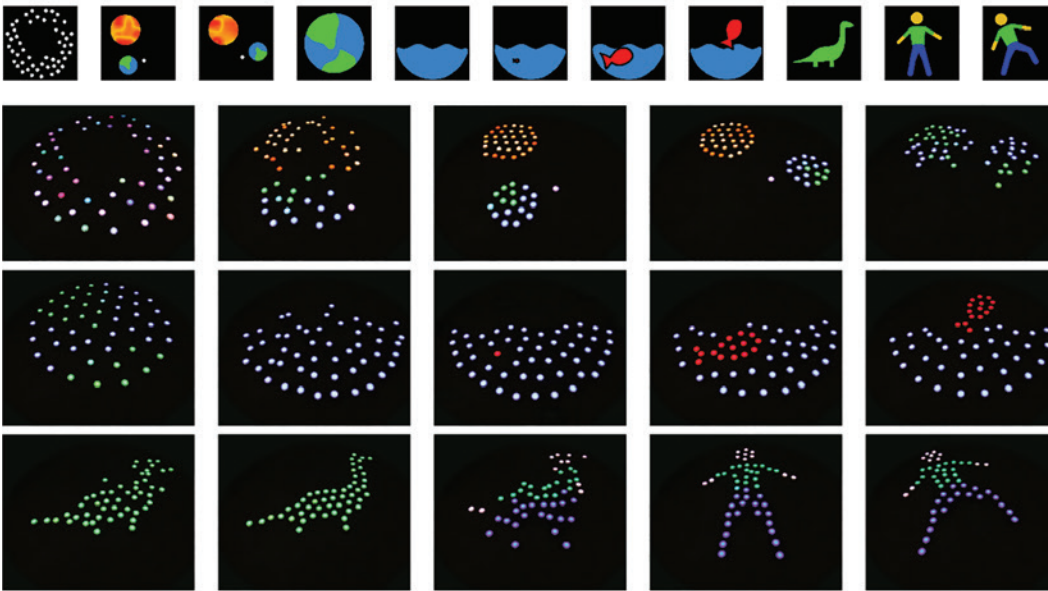rsiegwart@ethz.ch

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In today's digital media landscape, we are constantly surrounded by displays, from the LCDs found on the phones in our pockets to the ubiquitous screens that greet us whenever we enter a store, airport, taxicab, doctor's office, or educational institution. This plethora of displays both allures us and contributes to the media's saturation of our lives. The truth remains that we are never far from the next form of information display. Disney Research's *Pixelbots* takes this truth as an inevitability and brings the display into a kinetic form, breaking the screen out of the confines of a rectangular or oval experience. Billed as "Pixels with Personality," the Pixelbots' enticing presence rests on our ability to project human qualities onto objects that move as we do in physical space.

Pixelbots. (© 2014 Disney Research and ETH Zürich. Photo: Disney Research.)

Whenever we see robots, remote-controlled cars, boats, planes, drones, or anything else moving in controlled formations resembling a flock of birds or an army of ants, we project human characteristics onto them. Sigmund Freud discovered this phenomenon and named it "psychological projection"—the process whereby one projects one's own thoughts, motivations, desires, feelings, and so on onto someone or something else. *Pixelbots* represents this form of empathetic display, as well as the evolution of how information will manifest itself in the near future. Similar to Greyworld's *The Source*—a kinetic installation inside the London Stock Exchange consisting of tethered spheres that change color and position based on which stocks are doing well or poorly on the market [6]—*Pixelbots* shows how information can be arranged dynamically and fluidly on a physical platform and take material shape in the form of clusters or designed dynamic shapes. The screen itself becomes a fluid entity that can be harnessed and remixed into any shape, color, or manifestation one desires.