Abstract

One-year olds can use touch screens—youtube has proof of that. But why—what makes certain interactive devices so “natural” that any child can just pick them up and use them? The key seems to be user interface hardware that only allows for the one thing even 1-year olds can do—point. No windows, no mice, no touch pads, and certainly no distortion. Just space. The resulting systems tend to be wonderful to use, but they also tend to be limited, as we have essentially thrown out most of the advances in user interface research of the past 40 years. In this keynote, I will discuss this evolution and I will show how to reintroduce some of the lost qualities—in the form of custom hardware devices. I will show a series of prototypes I have built over the past decade, at PARC, at Microsoft Research, and at Hasso Plattner Institute, all of which elaborate on the topic of naturalness. A hardware/devices perspective.