# The Input

Hands, for many of us, are the first and primary interface—the tools through which we encounter and shape our surroundings. For millennia, designers have been hard at work to conceive ways to translate our thoughts and intentions into objects, bringing them to life. The advent of the computer has made this task even more complex and vital.

Consider the button. This simple device translates physical input—the press of a fingertip—into signals, acting as a switch between physical and digital worlds. Advancements in computer technology have made this exchange increasingly lively, as well as more intricate—from the mouse to the keyboard to the touchscreen. The input device is itself an interface, which, when skillfully designed, engages mind, body, and machine in a rewarding conversation. Now, as we inch closer to seamless digital interactions throughout the physical world, external devices will become less necessary. And, one day, interfaces that directly connect brain to machine will bring about a vast field of new interactive experiences.

# The Designer

The test of a well-designed interface is how easy it is to use—the degree to which it is accessible, functional, and instinctive. Badly designed features make tasks harder to accomplish, while thoughtful ones can make even the most difficult tasks easier.

When it comes to video games, however, not all designers aim for ease and entertainment. Some delight in breaking these rules, deliberately taking players on a ride in which efficiency and clarity are gleefully ignored in favor of friction and even chaos. The designer might take control of the game's narrative, robbing players of their agency and reminding them how little power they have over how their lives unroll. Or, rather than presenting intelligible rules with logical consequences, the designer might create an atmosphere of tension and unpredictability, in some cases prompting players to resist the nonsensical conditions forced upon them by the game and complete the interaction by finding their own solution.

# The Player

Interfaces need users. No matter how elegant the code, how realistic the animations, or how witty the dialogue, a video game cannot play itself. The overall shape is dictated by its designer, but it is the performance of the player that brings the interactive experience to life and gives it meaning.

The richness and diversity of today's video games have been brought about, in part, by their dedicated and creative player communities. They resolve glitches, adjust the code, and inevitably exploit every weakness they can find in a game's structure. Like musicians tweaking chords and adapting rhythms, those who play, interpret, and redesign video games expand those games' boundaries, finding new ideas and possibilities within the designed interaction. The player and the designer are united in the creation of the experience, reminding us that when we play, we are never alone.