off

on

Once, the form, feel and function of a button were of primary importance to the machine: it was the precursor to and promise of action, it was the intimate juncture between man and machine. While not exactly extinct, the humble button is no longer as much of a concern for industrial designers. Today, a user interface is often made of other stuff. And so the subtleties of the button and the simple pleasure it can evoke are less well understood: they have become the exotic and the unsophisticated of industrial design. We explore this design detail at close quarters with a catalogue of kinetic beauties.

Photography by Angela Moore

Snooze button, 9 × 7 × 80 mm
Braun DB 12 fsl alarm clock, Dietrich Lubs, 1995

Soft rubber buttons, ∅ 2 × 1 mm
Muji TV remote control, Muji Design Studio, 2004

Rocker switch embedded in a 40 mm recess
Ronson Rio hairdryer, Kenneth Grange, 1966

Concave buttons, ⌀ 12 x 8 mm
Braun Regie 308 control unit, Dieter Rams, 1973

Number buttons, ⌀10 × 5 mm, hook button 38 × 8 × 5 mm
Muji Second Phone, Industrial Facility, 2002

What is the appeal of the humble button? It is a simple element of any technological design and yet it is often its most characterful, most loaded, most tantilasing. Push a button and something happens. The likelihood is that you, the user, knows what will happen – the small experience is full of expectation, fulfilment, satisfaction, control. Advances in digital technology, in sensors, touch technologies and voice recognition mean that the button is becoming largely defunct, replaced by the screen. As a consequence, our relationships with machines are changing. The pre-emptive nature of sophisticated digital touch technology, for example, means that our machines can predict our commands. Compare that experience to the one where you push against a proud shiny button that is ergonomically curved to your fingertip, jolting a sleeping machine into action. To press a button is to prod, to agitate, to insist on action. The swipe seems very limp in comparison. The kinetic nature of button-pushing, of simple cause and effect, might be primitive but it remains pleasing.

The shape, size, position, colour and texture of buttons all contribute to our machine experience. Buttons can be ergonomic, proud, singular, en masse, discreet, tactile or alarming. In some designs the button is the main event; in others it is purposefully homogenous. A button is singular in its purpose, providing a specific outcome, so our favourite buttons are often those associated with good things that make our lives better: on cameras, coffee machines, radios, calculators. Think of helpful, orderly buttons such as those on a keyboard (when is a button a key? Is a button singular and key multiple? Is a button circular and key square?) or calculator; thumb-actioned buttons such as shutter releases, rollerball pens, games consoles; buttons to dramatically hit or even kick such as emergency alarms or stop buttons. Then there are switches, their own subcategory, for lights and utensils. Dials, we decided, are something else altogether.

Some designers give better button than others. It is perhaps predictable but nonetheless necessary to heap praise at the door of Dieter Rams and Braun. Fellow contemporaries agree, and when talking buttons Rams's name is mentioned frequently. 'His aptitude to understand buttons as communication by way of material, spacing, colour and positioning continues to be a great reference point,' says Industrial Facility, while Kenneth Grange describes Braun as producing 'peer products of our society'. In his mission to pare back the visual clutter of electronic objects, Rams's designs were often little more than a box and buttons. Rams said, 'Making design intuitive requires that you care about the reality in which people live. That means bringing clarity to the shapes and colours based on life experience. That's why I chose only two colours (too many colours can distract), designed realistic shapes (well proportioned buttons and layout) and created a comfortable lighting (gradients and shadows).' In Rams's designs, buttons are strictly ordered: always the same distance apart and uniform in size and shape and colour (grey, red, yellow and occassionally green). The top of Rams's buttons each have a gentle crater, making them especially visceral: the fingertip is drawn to their surface.

After Rams, Mario Bellini's button work is perhaps the most significant. For Olivetti's large catalogue of electronic gadgets he first created a system of tessellating keys and a postmodern colour scheme. Then, in 1973 he caused a revolution with the most influential button design ever in the Divisumma 18 and 28 calculators. Here, buttons became an inherent part of the machine, incorporated into a rubber membrane that stretched over the whole object. The effect was purposefully fleshy and tactile with Bellini provocatively likening the delicate rubber buttons to nipples. If it feels familiar, it is because the design became the patent-providing precursor to contemporary

In-line

It's likely you might currently own a piece of design by the great Achille Castiglioni without even knowing it. Castiglioni called his humble little on/off switch (page 34) his greatest achievement; it is also his most anonymous. In 1968 Achille and his brother Pier made the switch as a universal accessory for lighting. Simple, functional, and easily applied to any electrical lead, it is still commonly used today.

digital keyboards; 'No such thing as a small personal writing calculator had ever been created before – it is almost a soft prosthetic hand, entirely wrapped up in rubber skin, that continuously shapes the keyboard as well, so as to take advantage of its elasticity.'

Bellini was not Olivetti's only great button designer – the perenial Ettore Sottsass also turned his attention to the humble button for the Italian manufacturer. The Valentine typewriter might be Sottsass's best-known machine, but it was another device that gave us his best buttons: the Praxis 48 of 1964. On this typewriter Sottsass overloaded the keys with character; they rise towards the fingertips, tall with nipped-in waists and lozenge-like tops. Another iconic industrial designer, Kenneth Grange, has produced a catalogue of enviable buttons in his lengthy career. In many of the affordable and democratic products for everyday that he designed for Ronson, Kodak, Anglepoise and more, the button is a central feature. Grange says, 'You couldn't imagine a more humble device, really. It interests me that buttons were once a closing device for clothing and then became something that had a different purpose altogether. Olivetti put a lot of effort into placing buttons and the next generation learnt a lot from them. The button is like the jewel in the crown; it is the one element that has action and so you give it an unreasonable importance. And very often it was the only chance to include colour in a design where you didn't have to make an elaborate presentation to justify its use.' Products such as the iconic Kodak Instamatic camera had a singular function and a low price point, and Grange used the buttons on these objects as an excuse for ornament, albeit reductive. Similarly, another of his great democratic designs, the Ronson Rio hairdryer, uses the button as decoration. 'I was always very pleased with that product. The button had huge importance in that design.' Industrial designers, it seems, have fun with buttons – they can be a means of expression in otherwise restrictive designs.

Examples of button design, not surprisingly, have lessened of late although some industrial designers remain fascinated by this macro design detail. Industrial Facility have tackled the topic several times, most notably with their all-button Ten Key Calculator for IDEA, where a swarm of keys are contained in a tray, and in the Second Phone for Muji where the transmitter is a button, engaging only when the device is picked up. 'A button is the most primordial and intuitive interaction we have as humans,' say Industrial Facility's Sam Hecht and Kim Colin. 'It allows us a direct translation from action to affect. Even now, the majority of buttons that are on screen continue to be simulated variations of a physical button.' And on the ergonomic nature of good buttons they add: 'For us, the starting point for a button is not the button itself but the finger. Fingertips are soft and fleshy, rounded, a little forgiving, unique but consistent, highly intelligent and agile. The button is entirely a servant of the finger to operate a product beautifully.'

Taking emphasis off the button and onto other devices is purely evolution, says Mario Bellini. 'Calculating and billing machines, typewriters and industrial terminals are considered Jurassic devices. Computer keyboards, laptops, cordless phones, remote controls, printers, alarm panels and video games still survive. However, the touchscreen is relentlessly moving forward, offering new challenges to our hands, eyes and brain, while computer mice are close to retirement. Smartphones, tablets and smart TVs occupy our physical and mental spaces. Luckily, we are adaptable and evolutionary animals. I feel like the powerful global world of consumer products is neglecting what can be neglected, whereas it gives the right amount of importance to that which deserves it.' A button is intuitive if designed well, emotive even. As Hecht and Colin rightly note, the button is a common skeuomorphic design; however unlikely the potential to press will be, most touchscreens feature ornamental assimilations of physical buttons. Nothing beats the real thing, however. As Kenneth Grange puts it: 'There is rare importance in these little moments.'

Keys, 18 ×18 mm with concave finger rests, 10 × 10 × 6 mm
Olivetti Praxis 48 electric typewriter, Ettore Sottsass, 1964

Sliding keys, 30 x 10 x 90 mm
Lecson AC1 pre-amplifier, Allen Boothroyd, 1973

Push switch, 5 mm
VLM in-line cord switch, Achille and Pier Giacomo Castiglioni, 1968