

Innovations That Make Everyday Life a Little Easier

By ALICE RAWSTHORN

LONDON — Finding new ways of making our lives more efficient or enjoyable, ideally both, has been one of design's roles throughout history. Often designers do so by translating leaps in technology into things we find useful or appealing. Sometimes they achieve the same result simply by thinking of new — and better — ways of solving problems.

Here are four examples of these everyday innovations. Three of them show how designers have interpreted new technologies to help us to plan journeys more efficiently, to improve our health, and to save energy. The fourth is an ingenious example of old-fashioned design thinking that has produced something special.

1. Planning a journey

Have you ever tried to use the New York subway at the weekend only to discover that all or part of the line you were planning to take is closed for maintenance? Or that the line will be running slowly all day? Sensible though it is for the Metropolitan Transit Authority to schedule subway repairs on Saturdays and Sundays, the slackest days of the week, such delays can be infuriating, especially for passengers who weren't warned about them.

The M.T.A. has devised a smart solution in The Weekender, an interactive map of the subway system, which appears on the home page of its Web site (www.mta.info) from 3 p.m. every Friday until early Monday.

If you click on the station where you are planning to start your journey, you can check if there will be any closures or delays. You can also choose whether to assess the travel situation by station, line or borough, and, if necessary, ask The Weekender to suggest a faster route.

The Weekender is an inspired example of the interactive digital information systems that are now replacing traditional maps, charts and timetables. Stylistically, it is a nod to a much-loved example of late 20th century graphics, the diagrammatic subway map designed by Massimo Vignelli, which was introduced in 1972 only to be abandoned seven years later, to the horror of design geeks and the delight of geographic purists.

2. Monitoring health and wellbeing

How well do you sleep? Are you eating healthily? Do you take enough exercise? How many calories do you consume when you are exercising, whether by running around a park or climbing the stairs at home?

Wouldn't it be helpful to know the answers to all of those questions without having to consult an army of experts? The U.S. tech company Jawbone has devised a simple way of doing so in UP, a \$99.99 wristband and smart phone application developed with the San Francisco-based design group fuseproject. Sweat-proof, water-resistant and rechargeable, the wristband is equipped with tiny motion sensors that monitor your movements while you are awake, and analyze the quality of your sleep by measuring the vibration of your wrist.

The data are dispatched to the app, which then tells you how many calories you have burned and whether your sleep was satisfactory. If you take photos of your food on your phone, the app will analyze the calorie content. You can use UP as an alarm, which will wake you by vibrating at the ideal moment in your sleep cycle before a specific time. It can also tell you when you

have been slumped in a chair for too long, and how your exercise regime compares to a friend's. Not that you will necessarily be happy with the answers.

3. Saving energy

Another dynamic area of contemporary design is lighting, thanks to designers' experiments with the latest versions of energy-efficient light sources. Among them are the Bone table lights developed by the British designer Emily Johnson to combine fine bone china with tiny light emitting diodes, or LEDs.

Each light is a slender column of bone china that acquires a translucent glow when the LEDs are illuminated. The columns are handcrafted in a factory in North Staffordshire, the heartland of the British ceramics industry, near the potteries once owned by Johnson Brothers, which was founded by Ms. Johnson's family in 1882. Ms. Johnson has co-founded a new company, 1882 Ltd, with her father, Christopher, to produce Bone and eventually other products too.

Making lighting in this form would have been impossible using a traditional light source, such as an incandescent bulb or halogen lamp, which heat up when in use, unlike LEDs. As energy-efficient light sources become more advanced, other designers will be able to develop environmentally responsible lighting in new forms, as Ms. Johnson has done.

4. ...and understanding

Imagine being asked to design a book of 700-plus pages on the history of a postwar architectural movement, which is to include historical essays, maps, charts, photographs and dozens of interviews with the protagonists plus their collaborators, protégés and families. How could you possibly make such a tsunami of material seem coherent? With difficulty. And imagine how much more difficult that task would be if new content was still being generated after the design process had started.

This was the challenge facing the Dutch book designer Irma Boom when she embarked on the design of "Project Japan: Metabolism Talks...", a book produced by the architect Rem Koolhaas and curator Hans Ulrich Obrist on the Metabolist architectural movement in post-war Japan. "The material was so diverse, almost chaotic, so the key objective was to find a way of organizing it in a logical way to make the text and images accessible and understandable," Ms. Boom said.

She did so by deploying lateral thinking. Her solution was to intersperse essays and interviews throughout the book, and to identify each section through color-coding. The colors of the page edges and of the introductory pages indicate whether a section is devoted to essays, interviews or photographs of the surviving Metabolist buildings. There is also a nostalgic note in the gently distorted Japanese "red sun" symbol on the book's cover. Together with the reddish brown palette and roughly textured paper, it is Ms. Boom's tribute to a 1960 pamphlet in which the Metabolists defined their goals.