

RAISING VOICES 2
USHERING IN A NEW ERA
FOR SCIENCE CENTRES AND
POLICY MAKING
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OPINION?
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THE ECSITE MAGAZINE

WINTER 2013 | ECSITE.EU

- spoke*: noun, plural *spokes*
1. One of the ribs or braces connecting the hub and rim of a wheel.
2. Nautical One of the handles projecting from the rim of a ship's steering wheel.

Raising VOICES Andrea Bandelli

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Design is the method
of putting form and content
together.
Design, just as art, has
multiple definitions;
there is no single definition.
Design can be art.
Design can be aesthetics.
Design is so simple, that's
why it is so complicated.

— PAUL RAND

The Guggenheim Museum in Bilbao, Spain, designed by Canadian-American architect Frank Gehry, is the building most often cited by architecture experts as the most significant work completed since 1980 in the 2010 World Architecture Survey.

Design, broadly speaking

We hope this series will offer information and inspiration that will help science centres, museums and their visitors to develop innovative ways to understand technology and to use it sensibly and sustainably.

The *Spokes* Design & Technology Series is a selection of upcoming articles about contemporary designers and their designs. The series will concentrate particularly on developments relevant to museums and science centres. Of course, design is a broad term. In recent years, it has become an overworked buzz word and lost much of its true meaning. Products are often labelled 'design' to make them sound more interesting and justify inflated prices: we stay at a 'design' hotel furnished by Phillip Starck; we sit on a 'design' chair by Jasper Morrison, and our 'designer' camera is styled by Paul Smith. Design has too often become superficial, elitist, conventional and – most of all – politically correct.

By contrast, Bauhaus designers like Walter Gropius or Charles and Ray Eames were idealists who aimed to use modern materials and new production techniques to produce aesthetic and affordable domestic items for ordinary people. In the 1980s, Dieter Rams, Braun's chief designer, formulated ten principles of good design that are still valuable today. Good design, he said, is innovative... makes a product useful... is aesthetic... helps a product to be understood... is unobtrusive... is honest... is durable... is thorough down to the last detail... is concerned with the environment... and is as little design as possible.

The *Spokes* Design & Technology Series will look for what's hot and what's not in de-

sign and technology with a special focus on sustainable design. What, for example, are the new trends in museum architecture? We have seen how an innovative, high-profile design like Frank Gehry's Guggenheim Museum in Bilbao (Spain) can trigger the creative transformation of a city and even boost the economy of an entire region. MUSE, designed by Renzo Piano, has recently opened in Trento (Italy), while Techmania, housed in an old Skoda car plant in Pilsen (Czech Republic), has undergone a complete make-over. We are interested in their experiences and curious to hear what challenges they faced in the course of the design and construction process.

The series will also investigate current trends in the field of exhibition design, where ambient technology and the playful approach of the computer games industry are now being used to complement authentic objects and ensure that visitors' interaction with exhibits and with each other is increasingly natural and intuitive. 'Experience design', first defined in Gilmore and Pine's book *The Experience Economy*, has become an important facet of the management of science centres and museums. These days, visitors expect museums to offer them the kind of complete experience they get at Disney World. But how do you plan that experience, where does the visitor's journey begin and how can we control it? Are Living Labs a good way to give added depth to the experience?

The value, and especially the legitimization of design will be, in the future, measured more in terms of how it can enable us to survive... on this planet.

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Design & Technology Series

The current generation of designers has added a number of new criteria to Dieter Rams's list – principles like social commitment, accessibility and co-creation. These young designers have grown up with computers, work online and – unlike Rams – are no longer reliant on big business or mass production for the manufacture and distribution of their products. A good example of this independence is the online campaign for Phonebloks, a simple and idealistic concept for a new kind of more durable mobile phone. The campaign has been prompted by the realization that millions of mobile phones are discarded every year, even though most of them have only one faulty or obsolete component; the rest works fine. The one simple reason for all this waste is that mobile phones are not designed to be repaired or upgraded. The new, durable phone is to be made up of separate components that can be 'clicked' together. Each component will have its own function, such as Bluetooth, Wi-Fi, battery or display. And each will be easy to replace with a new one whenever necessary. Moreover, by choosing individual components, users will be able to customize their phones to meet their personal needs.

The support for the Phonebloks campaign has been stunning. The YouTube video alone has generated over 16.2 million views in less than two months. The campaign has attracted over 9,705,540 supporters with a social reach of 378,987,875 people. Thanks to this massive support, the campaigners have been able to approach some of the biggest companies in the world and Motorola has agreed to become their development partner. As this example shows, young designers have a do-it-yourself (DIY) mentality and are driven by the same sense of social mission as Eames. They are not in the business of superficial product prettification. They produce their pioneering designs online, via crowd funding, or present them at events like this year's Dutch Design Week in Eindhoven, where this year's theme was Now Future. According to the press release, this "refers to the economic crisis, flirts with the rebellious spirit of punk in the 'no future' era of the 1980s and simultaneously demonstrates a constructive approach and commitment. 'Now future' is a call to everyone to roll up their sleeves, make a positive statement in times of doom and gloom, and emphasize the power and importance of contemporary design."

Most people make the mistake of thinking design is what it looks like. People think it's this veneer – that the designers are handed this box and told, "Make it look good!" That's not what we think design is. It's not just what it looks like and feels like. Design is how it works.

— STEVE JOBS

If I'd asked people what they wanted, they would have said a faster horse.

— HENRY FORD

Interesting and unexpected designs are also showcased at GameCity, an annual festival held in Nottingham (UK). GameCity projects aim to contextualise videogames as accessible, important, cultural, visionary and enduring pieces of work made by creative designers with diverse skills, ambitions and imaginations. They want as many people as possible to be able to join in, play, learn, and have fun in the process. This is the place to see exciting games with refreshingly different story lines and a complete absence of soldiers, guns and bloodshed. One such game is Recharge, developed by American pop group Linkin Park. Recharge is located in a not-too-distant future world where humans have depleted all natural resources on the planet. The few energy stores remaining have been seized by machines and an elite minority. Players battle their captors and recharge the world with clean, sustainable energy.

Typography and graphic design are traditional disciplines within the general design field, dating right back to the invention of the printing press. But over recent decades the digitization of printing and developments in the field of web design have revolutionised the graphics industry. Recent developments are interesting particularly for the influence of advertising campaigns in the worlds of fashion and popular music. The result is a new visual culture in which the distinction between "highbrow" and "lowbrow" culture has vanished. We need to consider how we can use this postmodern visual idiom both in the development of visuals and in advertising our science centres and museums.

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What works good is better than what looks good, because what works good lasts.

— RAY EAMES

A designer is a planner with an aesthetic sense.

— BRUNO MUNARI

A designer is an emerging synthesis of artist, inventor, mechanic, objective economist and evolutionary strategist.

— BUKMINSTER FULLER

Until recently, posters, flyers and advertisements in the print media were the key components of our publicity campaigns. Now, the majority of visitors to museums and science centres plan their excursions and visits on the basis of information obtained via their iPads. Specific web design and smart technology can help us develop online communication and build better websites. Google Analytics enables us to trace the exact behaviour of our online visitors but how can we assess the resulting data and improve our online communications and e-marketing through smart interaction design? What are the do's and don't's of effective web design?

Needless to say, the new Design & Technology Series won't be about superficial hypes or the latest short-lived gadgetry. It will seek to identify reliable technology that we can use in our displays and that will work for our visitors. We hope this series will offer information and inspiration that will help science centres, museums and their visitors to develop innovative ways to understand technology and to use it sensibly and sustainably. ¶

A logo doesn't sell, it identifies. A logo derives its meaning from the quality of the thing it symbolizes, not the other way around. A logo is less important than the product it signifies; what it means is more important than what it looks like.

— PAUL RAND

Practice safe design:
Use a concept.

- PETRULA VRONTIKIS



Phonebloks:
Independence, customization,
durability and conservation
- the next generation
in mobile phone design?