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Editorial introduction

New IDI

In recent years, information design has experienced a spectacular development. Traditional information design areas, such as typography or the visual presentation of statistical information, have evolved into their computer alter egos such as screen typography and the use of animations to show developments over time in statistical data. Infographics have invaded our media for the presentation of almost any subject in the news. New information design topics, such as hyperlinked documents which may include sound, animations and real time video that we find on the Internet have emerged. Both the traditional information design topics and these new areas will be mentioned, discussed and criticized in the new *Information Design Journal*.

Information Design Journal has a new base, new editors, a new editorial formula, a new publisher, new associations, a new design and a new website, but hopefully an ongoing relation with you, honourable reader.

From this issue onwards, *Information Design Journal's* base has moved from the University of Reading in the United Kingdom to Delft University of Technology in The Netherlands, more specifically the Visual Information Design Group of the Faculty of Industrial Design Engineering. The general editors are supported by an international team of associate editors, a case studies editor, and two cartoonists. The editorial board consists of members

from the USA, Australia, Canada, the UK, The Netherlands and Austria. As you see, the production and the supporting teams are chosen from a wide variety of countries. Moreover, they have a wide variety of backgrounds, both in research and in practice, both in traditional and in new information design areas — and this reflects the new formula of IDJ.

Information Design Journal will from now on be published by John Benjamins Publishing Company (Amsterdam/Philadelphia), a renowned science publisher with over 30 scientific journals on their list. They will also host the adjunct IDJ website (www.benjamins.nl/idj). On this website, you will find contents, abstracts of all articles plus illustrations in full colour and additional illustrations that authors would like you to see, but which could not be printed in the paper version of IDJ. Animations, short movies and sounds also belong to the possibilities. Subscribers will have full access to the online edition of IDJ that includes full articles, illustrations in color, sound samples and short videos.

Information Design Journal has a new formula. From now on, in each issue of IDJ you will find two main sections of articles. The first section is based around a central theme. A second section consists of articles and summaries based on presentations at one of the Information Design conferences. Apart from these two sections, each issue will contain a case study, several book-reviews and a cartoon. Of course, we also hope to include compelling

articles sent to us spontaneously by researchers and practitioners in the field.

Information Design Journal will work closely together with InfoDesign, the electronic discussion group which was initiated in 1995 by Yuri Engelhardt and is now moderated by Karel van der Waarde and co-edited by Conrad Taylor, Alan Davis, Karen Schriver and Piet Westendorp. The lists and the journal will from now on be synchronized. For example, books and conferences can be quickly announced on the InfoDesign list. Reviews of these books and selected presentations from the conferences will be published in IDJ. We are still thinking of other possible mutual influences of the two mediums, such as having abstracts of discussion threads from InfoDesign or Info-Design-Cafe in IDJ. The information design website www.InformationDesign.org will provide you with overviews of discussion threads, Bookwatch archives, conference announcements, and other information that we think is relevant to information designers and researchers in Information Design.

Another development is that IDJ will closely collaborate with Information Design organizations. All members of the International Institute of Information Design (IIID), chaired by Peter Simlinger from Austria, will receive an offer to take a subscription to IDJ at a special members' rate and special membership conditions. In the future we would also like to make such arrangements with other organizations.

In this issue

The theme of this issue is Jacques Bertin's theory of geographic visualization. Emeritus professor Bertin, who wrote *Semiology of graphics: Diagrams, networks, maps* (originally published in 1967) and *Graphics and graphic information processing* (originally published in 1977), is a central figure in the theories of graphic communication. The most well-known part of his work concerns 'graphic

variables'. Bertin suggests that there are seven of these fundamental visual variables. The variables include the geographic position of a mark on a surface, which can vary in two dimensions (x and y location). A particular mark can further vary graphically in size, value, grain, colour, orientation and shape. The description has had a large influence on cartography, but it seems applicable to large areas of visual communication. These variables are usually seen as the center of his work, but his theories are far more elaborate. They also encompass methods to process large amounts of data. This approach starts from the idea that humans can discover patterns easier in a visual presentation than in numerical tables. Bertin suggests ways to transform data into 'graphics' which help to analyse and make decisions. His theories are interesting to information designers for the description of graphic variables and the information processing system. Myriam Daru has translated an article that describes Bertin's key principles and approaches in the hope that this will make his theories more accessible. She also interviewed Jacques Bertin in Paris to provide a personal and historic context for the development of his theories.

Alan MacEachren, Wolf Günther Koch and Xavier Garnerin wrote articles on the influence of the theories of Jacques Bertin on their work. Alan MacEachren (Penn State University) expands on some of the points from his book How maps work and pays particular attention to the expansion of Bertin's seven graphic variables with time, sound and touch. The expandability of the theories of Bertin is also discussed by Wolf Günther Koch (Dresden University of Technology). He describes the research into the applications of the graphic variables and develops this towards the integration of sound and tactual variables in cartographic representations. Xavier Garnerin presents a practical application of Bertin's theories to the public transport map in Lyon. This paper shows that the visual data-analysis system of Bertin can successfully be applied to a practical situation, and can lead to a novel solution. These three papers show that the theories of Jacques

Bertin still challenge researchers and practitioners and provide a fertile ground for new developments.

'Drawing the process' was the theme of the Vision Plus 6 conference, held in Vienna in July 1999. This conference focused on the support of task-related knowledge transfer through visual information. We selected the presentations of Sheelagh Carpendale and Alard Weisscher and invited them to write articles. Sheelagh Carpendale (University of Calgary) refuses to accept the limitations of current screen presentations and has developed a perspective projection to create a virtual three-dimensional display. Her 'Elastic presentation spaces' show that it is possible to create visual presentations with visual distortions, that can be trusted by the viewers. The main advantage of this kind of presentation is that a lot more information can be displayed meaningfully on a screen. Alard Weisscher (Meru Research) approaches the problem of 'not enough screen space for a lot of complex information' from a unexpected angle. He applied the user-interface of computer games to the control room of a power distribution center. The presentation on a screen of all the activities of the plant can be overseen as if it is a simulation game. Apart from these two full articles of conference presentations, we include eight summaries. These provide a flavour of the topics that were discussed at the conference.

In the Case Study, Per Mollerup notices that a local parish church does not need any signage to tell people where to go, what to do and how to behave. Comparing a small church with an airport seems harsh, but this comparison provides a clear basis for the development of a signage system at the new Copenhagen Airport. By questioning the purpose of signs and pictograms in the context and culture of an airport, Mollerup was able to reduce the number of different signs and make the built environment more accessible for travellers.

The book reviews in this issue give an indication of the breadth of the field in topics as well as geographic diversity. Research, digital media, practice and information visualisation are discussed by American, Australian, and British reviewers.

All of the papers of this issue have a single topic in common. They all discuss the problems and solutions for making complex information accessible and usable for a particular group of people. The theme, the conference presentations, and the case-study form the basis for the new IDJ formula to describe, discuss and criticize developments in the field of Information Design.

We invite interesting proposals on any theme concerning information design and we will always have room in IDJ for good articles not related to the central theme of a specific issue.

Subscribers to Information Design Journal have access to the full electronic edition of IDJ. How to get access? Visit www.benjamins.com/jbp, and go to Journals.