

Report of ICA Commission on Maps and Graphics for Blind and Partially Sighted People 2005-2006: Summary of Activity

The following report covers activities of the commission since July 2005.

Conferences

ICC2005 A Coruña, Spain: Constituted the highest profile given to tactile maps for years. One poster session and three themed paper sessions were notable for the number of 'hands on' examples used to illustrate each presentation. As evidence suggests that interest in tactile cartography remains fairly constant, this trend does not necessarily reflect an upsurge in tactile map research, but was achieved at least in part by asking commission chairs to be involved in the scientific committee. The importance of this process especially for tactile mapping when many potential presenters are not cartographers should not be underestimated.

ICC2005 Cartographic Exhibition: Examples of maps for visually impaired people from 5 different countries; Chile, Japan, Poland, Spain and Turkey, featured in the exhibition. Tactile maps dominated the 'Other Maps' section in the ICC2005 conference awards. A tactile map from Chile depicting plate tectonics came a distinguished 2nd place in the category; and a tactile outline Finger Map from Japan was placed a creditable 3rd. The Geographical Atlas of Poland for schools received 3rd place in the 'Globes and Atlases' section.

Tactile Graphics 2005, Birmingham, UK: The Third International Conference on Tactile Diagrams, Maps and Pictures for blind and partially sighted people took place in December. As a member of the international steering committee the ICA commission played an influential role in helping to organise and advertise TG2005. Spread over three days, approximately 200 people from 28 countries were present for 8 pre-conference workshops, 36 presentations, 30 exhibition stands and 6 poster displays.

Commission Meetings

The 1st commission meeting of 2005 was held in A Coruña. Despite a poor timetable slot 25 people attended, the largest number for any ICA conference in living memory. Agenda items covered included the previous commission update for 2005, which originally appeared in *TacNews* (4) June 2005 and the ICA Newsletter June 2005; country reports, commission business including an item ratifying the change of commission name agreed in Durban, South Africa 2003, agreement over the commission Terms of Reference which lead to a discussion on standardisation; the nature of commission membership; and the appointment of a new commission co-chair. Under future activities commission plans were discussed. Most important among these was the pressing need to hold a symposium in developing country

A 2nd commission meeting was held at Tactile Graphics in Birmingham, December 2005. Approximately 40 delegates participated in this short meeting, of whom only two were also present in A Coruña. Due to time constraints the meeting had to be condensed into 45 minutes. The agenda was thus restricted to two topics: the position of the ICA Commission within the wider field of tactile diagrams; and methods for encouraging people to contribute to the newsletter, providing news of their respective regions. Although there was not sufficient time to record a list of everyone present and curtailing the meeting prevented any formal decisions being made, given the number of ICA debutants the meeting was considered a useful promotional exercise for the commission and a success.

Other Meetings

In the capacity of ICA representative, the commission chair has recently been invited to the following events: to give a paper on 'Scoping the Future Research Agenda for Tactile Graphics' and chair the discussion at an open meeting following TG2005; to attend a one-day seminar on 'Location-Based Services for People with Disability' organised by *PhoneAbility* in London, May 2006; and to contribute to the debate on tactile standards at an ISO meeting in Potsdam, May 2006 (unable to attend due to ill health).

International Tactile Activity

Emerging from the commission meetings a summary of the most exciting tactile map activity worldwide reported to the commission appeared in *TacNews* (5) and (6). Highlights included:

- A continental wide initiative to make small-scale geographical maps of South America for schools
- China's intention to consult the commission about producing tactile maps for visually impaired competitors and spectators at the Paralympics 2008 in Beijing
- The use of force feedback technology to allow visually impaired sailors to navigate at sea in France
- The development of multi-modal interface devices incorporating GIS and GPS technologies in Canada and US
- The unveiling of a School Atlas of Poland
- The launch of new tactile maps of London underground stations
- Turkey and Iran announcing their first tactile map releases.

New Commission Co-Chair

Dan Jacobson from University of Calgary, Canada, was appointed co-chair of the commission in A Coruña. A brief CV and pen picture of the new co-chair appeared in *TacNews* (6).

Commission Website

According to feedback the commission website INTACT is held in high regard. Though figures for the number of hits are not available, personal communication indicates it is a resource that many tactile map producers report accessing regularly. It also generates a steady trickle of new enquiries from around the globe. The most recent addition to the site (early 2006) is an electronic version of *TacNews*.

Commission Newsletter

Popularity of the commission newsletter *TacNews* continues to grow. There are now over 150 names on the subscriber's list, an increase in excess of 100% since the newsletter was launched two years ago. Though not an academic publication it recently featured in the *British Journal of Visual Impairment* and also received its first citations. As the numbers of contributions rise, occasional issues run to 12 pages. Content is evermore international with recent articles from Chile, France, Iran, the Netherlands, Norway, Poland and the US.

An update of commission activity and future plans will appear in the next two issues of ICA News.

Jonathan Rowell

Report of ICA Commission on Maps and Graphics for Blind and Partially Sighted People 2006-2007: Summary of Activity & Future Plans

The following report covers activities of the commission since December 2006 and also looks at future plans.

Conferences

Attempts to arrange a seminar or workshop in a developing country have proved difficult. Contact has been made, but the only country that has tentatively made a serious offer thus far has been Israel, a nation that does not fulfil any of the criteria the commission has set in the past for holding a workshop.

Tactile Activity

Recent reports of tactile activity have centred on innovation. In response to new designs and in order to explore the impact these could have on tactile graphics, a special issue of the commission newsletter on technology has been compiled. To give a flavour of 'what's going on', *TacNews* (8) features articles on the following developments.

- TeDUB (Technical Drawing Understanding for Blind people) is a new method offering visually impaired people an accessible route to diagrams and plans. The system uses speech synthesis and various sounds to provide basic output, but user's can also feel characteristics of a graphic via a force feedback mechanism, in this case a joystick.
- The Talking Tactile Tablet currently being promoted in the UK and US combines tactile maps with a touch pad that offers verbal instructions and layers of spatial information that would otherwise be inaccessible through touch alone.
- A review paper investigating Braille embossers and touch sensitive screens reports on how these devices can be applied to tactile production more generally.
- Finally as funding for TIMP (Tactile Ink-jet Mapping Project) comes to an end the project that has been examining novel tactile production methods for the past 3 years announces its findings.

The issue also includes a think piece on electronic wayfinding devices and Location-Based Services (LBS), introducing readers to positioning technology and mobile navigation tools, and discussing the relevance such developments might have in improving access to spatial information for blind and partially sighted people. Most articles appear to share a common trait. The devices described are not tactile maps according to conventional definitions, but involve providing geographic representations of environments in the broadest sense. The appeal of new technology also typifies a widespread notion that expecting a tactile map alone to fulfil the spatial needs of blind and partially sighted user's is no longer tenable.

Commission website

A new website developed by the co-chair is in preparation. This is intended to replace INTACT and will reflect developments in technology and the changing nature of tactile mapping. Dan Jacobson who is responsible for the project has indicated that the new web page will be more interactive. Additionally it is forecast to include a useful bibliography, a place for archiving full versions of material where authors can download copies of their seminal material, and resource pages with quick and easy access to sites considered important for improving tactile design.

Commission Newsletter

A survey of the newsletter's readership, growth and increasing internationalisation of its content will appear in *TacNews* (10). The review, based on the geographical distribution of subscribers, should be a useful guide to worldwide interest in tactile graphics. As this kind of information has not existed previously, a quick survey could also approximately identify the location of tactile map activity hotspots and serve to pick out zones that should form the focus of future research interest.

Statement on Standardisation

A statement reflecting the commission's position on standardisation is in preparation and will appear on the website forthwith. In summary standardisation is declared undesirable, largely because it is unachievable. The use of standard symbols is therefore discouraged and more consistent design advocated by recommending a series of best practice guidelines. After years in gestation, the Braille Authority of North America (BANA) and Canadian Braille Authority (CBA) are about to jointly publish official guidelines for production of tactile graphics. Designers will be directed to this exhaustive document.

Archive of Tactile Material

Calls to establish an archive of tactile mapping have received a lukewarm response. Though the NCTD in the UK has acted as an unofficial repository for examples of tactile material, building on a collection of tactile works bequeathed to them by Ron Hinton, there is no proper library as such, nor does any record of what tactile maps have been produced exist. Despite initial enthusiasm when the idea was first proposed at the Commission meeting at TG2005, lack of interest subsequently means this has now been put on the backburner.

Scoping the Future Research Agenda

Based on consultations with an expert panel of producers, designers, practitioners, researchers and users of tactile maps, the commission has broadly identified five essential topic areas that should form the focus of future research consideration. These include: technology, particularly new innovations; availability of tactile maps; guidelines to help improve consistency of design, user involvement in all aspects of the tactile graphic production process; and training for both makers of tactile material and potential users.

Jonathan Rowell