

# Quote

"The West became the "occident," which suggests falling and dying, like the sun. "Oriens" in Latin means rising; hence the Orient, the East, Christ's star, and why we use "orient" to describe finding our bearings.""

Toby Lester, <a href="http://www.maptheuniverse.com/?cat=6">http://www.maptheuniverse.com/?cat=6</a>

# Commission on Education and Training 2007 - 2011

I would like to thank all commission members for their support and contributions during the 2007-2011 term of the commission. It has been a wonderful time for the commission and it was through the combined efforts of members that we have advanced cartographic education and training at the international level. The current team has served its term and a new team will be formed after the conclusion of the ICC2011 congress. Please see the end of this newsletter for the CET report as sent to the Executive.



Above: Commission on Education and Training members and corresponding members for 2007 to 2011. Missing from the photographs are Lilia-Particia ARIAS – Colombia; Professor Myron Myridis – Greece; Aleksandra Dimitrovska – TFYR of Macedonia; Ms Tamar Soffer – Israel and Daniel D.K.Tossou - France (See webpage for contact details - <a href="http://lazarus.elte.hu/cet/">http://lazarus.elte.hu/cet/</a>)

A final word of thanks to Professor Laszlo Zentai who assisted me greatly during my time as chair.

# Workshops

The CET ran a number of workshops (Iran, Vietnam, Indonesia) and currently the commission is involved in a joint ICA symposium in Orleans, France.

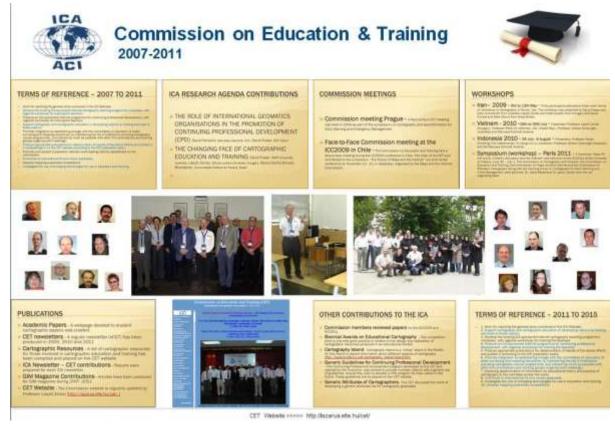
# Joint ICA Symposium on Maps for the Future, June 30-July 1, Orleans

- Commission on Cartography and Children,
- Commission on Education and Training,
- Commission on Maps and the Internet,
- Commission on Planetary Cartography
- Working Group on Cartography for Early Warning and Crisis Management



# **Commission Poster for ICC2011**

For members attending the ICC2011there will be a CET poster on display at the conference.



More detail on the work of the Commission will be presented by Professor Laszlo Zentai (Hungary) at the business meeting of the conference.

If you are attending the conference, please attend the Commission meeting.

# **ICA Conference Proceedings**

Proceedings of International Cartographic Conferences (ICC) are published by the local organizing committees for ICA and are available online since ICC 1999.

- 24th ICC, Santiago 2009 (external link)
- 23th ICC, Moscow 2007 (external link)
- 22th ICC, A Coruña 2005 (external link)
- 21th ICC, <u>Durban 2003 (external link)</u> (works with PDF browser plugin only)
- 20th ICC, Beijing 2001 (external link)
- 19th ICC, Ottawa 1999 (external link) (works with PDF browser plugin only)
- **18th ICC**, Stockholm 1997: Kartografiska Sällskapet, Peter Wasström, Secretary, ULI, Lantmäteriverket, 80 182 Gävle, Sweden; e-mail: <a href="mailto:peter.wasstrom@lm.se">peter.wasstrom@lm.se</a>
- 17th ICC, Barcelona 1995: Institut Cartografic de Catalunya, Parc de Montjuic, 08038 Barcelona, Spain; e-mail: webmaster@icc.es

**Go to link:>**<u>http://icaci.org/publications</u>

# The World is an Amazing Place



Go to link:> http://www.nationalgeographic.com/

# **Cartography in the Media**

# Internet via contact lenses, as computers die out

May 27, 2011 - 3:59PM



If the thought of change worries you, the following paragraphs might make you feel uncomfortable. The accelerating pace of progress means workplaces will be very different in the future. But precisely how different will they be? I asked some of the

world's most respected futurists for their forecasts on the shape workplaces will take in 2030.

# What are your predictions, no matter how wild? Leave a comment

**Michio Kaku** is a professor of theoretical physics at the City University of New York and the author of *Physics of the Future*. He's convinced that computers will cease to exist. "You will blink and you will be online," he says.

His forecasts extend to PowerPoint presentations, which he says will also be in 3D animation.

**Dr Ian Pearson**, of British consulting company Futurizon, agrees with Michio Kaku that handheld devices, such as laptops and phones, will disappear.

"We will instead wear personal head displays," he says. ..... Keyboards will become extinct too, he says, and be replaced with advanced voice recognition or technology that responds to gestures. "And computers themselves will be mostly cloud-based or in tiny bits of jewellery," he adds.

All of this assumes you'll actually have a workplace. Ray Hammond is an author of 16 books about the future, and his latest is *The World in 2030*.

He tells me that information workers – such as designers, investors, writers, and so on – will be able to work from wherever they choose.

**Professor Jim Dator** heads the Research Centre for Futures Studies at the University of Hawaii. ...... today we don't just work - we overwork. And this could get worse unless the technology of the future allows us to return to a way of life where leisure is prized more than labour.

#### Go to link:>

http://www.smh.com.au/small-business/blogs/work-in-progress/internet-via-contact-lenses-as-computers-die-out-20110527-1f6t0.html#ixzz1NXLZHIPk

# Google to amend Rio maps over Brazil favela complaints



Google has agreed to amend its map of Rio de Janeiro, after city officials said it gave too much prominence to favelas, Brazilian media report.

Favelas, sprawling shanty towns which are home to tens of thousands of people, are a defining feature of Rio.

But the Globo newspaper said their labelling on the map and the absence of wealthier districts and tourist sites gave a bad impression of the city.

Google told Globo it would change the way the information was displayed.

When viewed in a large-scale format, the maps of Rio pinpoint several of Rio's more than 600 favelas, including some of the less well-known ones.

23 February 2011 Last updated at 16:24 GMT

#### Go to link:>

http://www.bbc.co.uk/news/world-latin-america-13193503

# **Google map gives German harbour to Netherlands**



The grey border hugs the German coast - but Germans do not see it that way

Emden is a town in north-west Germany but its harbour now belongs to the Netherlands - at least according to the internet map service Google Maps. Emden officials complained about the error, but Google Maps still shows the Dutch border winding into the harbour.

A Google spokesman quoted by Deutsche Welle news said a continuing border dispute may be to blame.

#### Go to link:>

http://www.bbc.co.uk/news/world-europe-12558741\

# Amondawa tribe lacks abstract idea of time, study says

By Jason Palmer Science and technology reporter, BBC News 20 May 2011 Last updated at 01:04 GMT



The Amondawa were first "discovered" by anthropologists in 1986
An Amazonian tribe has no abstract concept of time, say researchers.
The Amondawa lacks the linguistic structures that relate time and space - as in our idea of, for example, "working through the night".

. . . . .

"What we don't find is a notion of time as being independent of the events which are occuring; they don't have a notion of time which is something the events occur in." The Amondawa language has no word for "time", or indeed of time periods such as "month" or "year".

. . . . . . . . .

But perhaps most surprising is the team's suggestion that there is no "mapping" between concepts of time passage and movement through space.

Ideas such as an event having "passed" or being "well ahead" of another are familiar from many languages, forming the basis of what is known as the "mapping

hypothesis".



"None of this implies that such mappings are beyond the cognitive capacities of the people," Professor Sinha explained. "It's just that it doesn't happen in everyday life." Go to link:>

http://www.bbc.co.uk/news/science-environment-13452711

# **Editors input:**

An interesting parallel to this can be found with the early Australian Aborigines. Bill Bryson in his book "Bill Bryson Down Under" records the following. "When James Cook and his men sailed into Botany Bay they were astonished that most of the Aborigines they saw sitting on the shore or fishing in the shallows from frail bark canoes seemed hardly to notice them. They 'scarce lifted their eyes from their employment', as Joseph Banks recorded. The creaking Endeavour was clearly the largest and most extraordinary structure that could have come before them, yet most of the natives merely glanced up and looked at it as if at a passing cloud and returned to their tasks.

They seemed not to perceive the world in the way of other people. No Aboriginal language, for instance, had any words for 'yesterday' or 'tomorrow' — extraordinary omission in any culture. ............ In almost every way it was as if they answered to some different laws." (pages 196-197)

# Alaska Airlines pilots have begun using iPads instead of paper inflight

2:38 PM, May 25, 2011

All of that paper info is dragged around by pilots in bags that can weigh more than 40 pounds. Captain Jim Freeman and Captain Brian Holm are Alaska Airlines pilots who have the job of trying to move that paper and put it on a 1.5 pound iPad.

"What we've set up is a 400 megabyte file which contains all of the essential manuals and information we feel the pilot needs," Freeman said.

Right now at Alaska Airlines, the Federal Aviation Administration has approved using the iPad for viewing manuals in flight.

Pilots are also allowed to download weather map information, not normally available on paper, while they are still on the ground.

But while all of the maps and navigational information is available for the iPad, the FAA is still evaluating whether it trusts the iPad enough to allow pilots to rely on that that information.

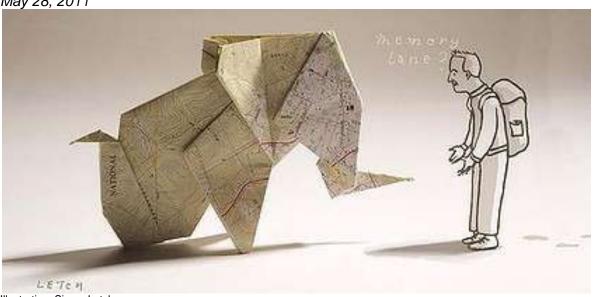


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http://www.wcsh6.com/news/watercooler/article/160440/108/Alaska-Airlines-pilots-havebegun-using-iPads-instead-of-paper-in-flight?odyssey=mod|newswell|text|FRONTPAGE|t

# Looking back, going forward

May 28, 2011



# In a landscape dominated by high-tech GPS, Keith Austin champions the utility and beauty of an old-fashioned map.

I love maps. Not Google Maps. I like Google Maps but I love maps, proper maps: maps made of paper and almost impossible to fold up again without a black belt in origami. I have one here next to me now, for research - an English Ordnance Survey map, 95 centimetres wide and 120 centimetres long, printed on both sides. I love its myriad squiggly lines, the different shades of green, the red main roads, the dotted footpaths and the names you can find if you look hard enough: Fishes and Peggy Hill, Cat Gallows Wood, Little Kittycaul, Great Kittycaul, Hell Syke Bridge and the unfortunately named Buttock.

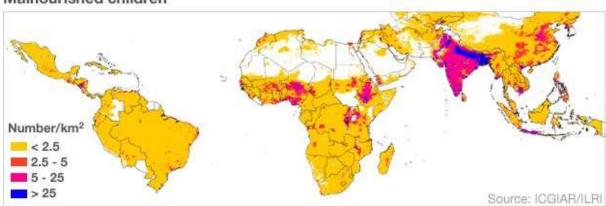
It's primaeval, I think, this obsession with maps. ..... Go to link:>

http://www.theage.com.au/travel/traveller-tips/looking-back-going-forward-20110527-1f7on.html#ixzz1NcG4s2j1

# Climate to wreak havoc on food supply, predicts report

3 June 2011 Last updated at 02:33 GMT By Jennifer Carpenter Science reporter, BBC News

#### Malnourished children



Areas where food supplies could be worst hit by climate change have been identified in a report.

Some areas in the tropics face famine because of failing food production, an international research group says.

The Climate Change, Agriculture and Food Security (CCAFS) predicts large parts of South Asia and sub-Saharan Africa will be worst affected.

Its report points out that hundreds of millions of people in these regions are already experiencing a food crisis.

"We are starting to see much more clearly where the effects of climate change on agriculture could intensify hunger and poverty," said Patti Kristjanson, an agricultural economist with the CCAFS initiative that produced the report.

A leading climatologist told BBC News that agriculturalists had been slow to use global climate models to pinpoint regions most affected by rising temperatures.

Go to link:>

http://www.bbc.co.uk/news/science-environment-13628374

# Antarctic survey reveals rugged buried landscape

2 June 2011 Last updated at 14:07 GMT



The DC-3 departs from Casey Station. The ice-penetrating radar antennas can be seen under each wing

The belly of Antarctica has given up a little more of its mystery.

Survey data taken across a great swathe of the east of the white continent has allowed scientists to map the shape of the bedrock buried deep under the ice. It reveals in new detail a huge trough hundreds of kilometres long that is cut by fjord-like features.

Researchers <u>tell Nature magazine</u> that this hidden landscape was probably moulded by the action of glaciers more than 14 million years ago.

This was a time when Antarctica was only part way through acquiring the extensive ice covering we know today.

The team behind the survey work believes its data will improve not only our understanding of Antarctica's past but also its future, as the continent contends with a potentially much warmer world.

"This type of study is important to understand how ice flows in Antarctica and how it will flow in the future," said Professor Martin Siegert, from the University of Edinburgh, UK.

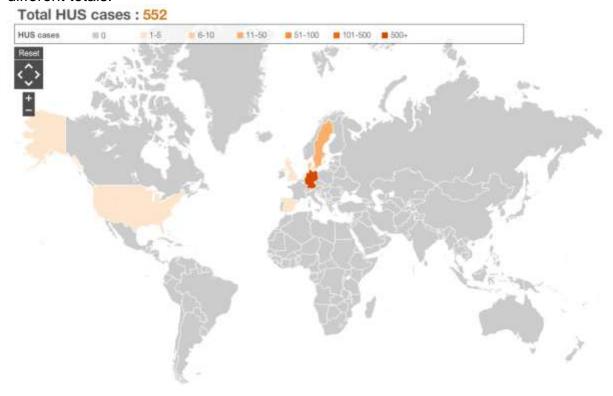
"The only way you can do that is with models, and models need topography on which to grow and flow the ice. If our topography doesn't resemble the reality then the outputs from the models won't either," he told BBC News.

Go to link:>

http://www.bbc.co.uk/news/science-environment-13616725

# E. coli map: How the outbreak has spread

Seven countries are reporting cases of the potentially deadly haemolytic-uraemic syndrome (HUS) in connection with the E. coli outbreak which began in Germany. The World Health Organization says 520 people are affected by HUS in Germany alone. Use the map below to see how the disease has spread. The WHO figures were published on 3 June but relate to 2 June. Local authorities may report slightly different totals.



# Satellite can give the oceans' salt tally each week

May 19, 2011 TheAge.com.au Agence France-Presse



An artist's concept of the Aquarius/SAC-D spacecraft. Instruments on the spacecraft, will take NASA's first space-based measurements of ocean surface salinity. *Photo: NASA* 

WASHINGTON: NASA said it is preparing to launch a satellite to observe salt levels on the surface of the world's oceans and how changes in salinity may be linked to future climate variations.

#### Go to link:>

http://www.theage.com.au/technology/sci-tech/satellite-can-give-the-oceans-salt-tally-each-week-20110518-1et7j.html

# Google's Street View starts mapping India

May 26, 2011

Internet giant Google on Thursday launched its ambitious "Street View" project in India to provide detailed panoramic images of life in a country of 1.2 billion people. The 360-degree photographic mapping service, which is already in operation in more than 25 countries, will begin gathering data in the southern city of Bangalore, a technology hub where many Internet firms are based.

#### Go to link:>

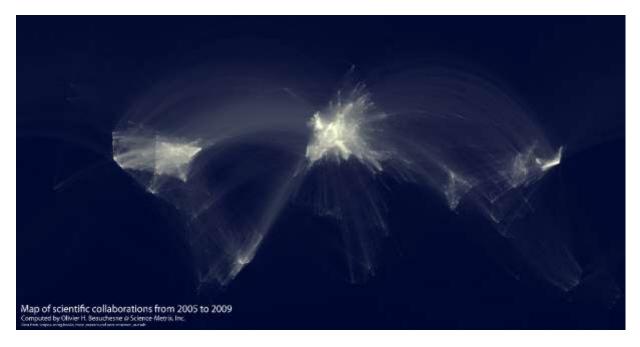
http://news.theage.com.au/breaking-news-technology/googles-street-view-starts-mapping-india-20110526-1f6c4.html

# Map of Scientific Collaboration

# Map of scientific collaboration between researchers

Posted by Olivier H. Beauchesne on January 23, 2011

I was very impressed by the <u>friendship map</u> made by Facebook intern, Paul Butler and I realized that I had access to a similar dataset. Instead of a database of friendship data, I had access to a database of scientific collaboration.



#### Go to link:>

http://olihb.com/2011/01/23/map-of-scientific-collaboration-between-researchers/ (Thanks to Craig Molyneux for this contribution)

# **Education**

# **How Do GPS Companies Collect Their Data?**

June 3, 2011 7:39 AM

#### Question

Remember when we had to ask other people for driving directions? Before the age of Garmins, Tom-Toms, and other GPS devices in our cars and apps on our phones, we had to do it the old fashioned way.

But Judy Lyons of Owatonna wants to know how exactly GPS devices collect their data?

## **Background**

The U.S. Department of Defense first used GPS in the 1960s as a way to navigate during military operations. But after the Korean Airline Flight 007 tragedy, President Ronald Reagan let the public have access to GPS in 1983.

"GPS might have averted that kind of disaster," University of Minnesota Aerospace Engineering and Mechanics professor Demoz Gebre said. "It was made available to the public but it wasn't until the late 90s and early 2000s are when things really took off."

## **The Process**

The GPS we use today collects geographic data from satellite and aerial images, and from data collectors who drive around the globe.

GPS receivers use triangulation, a mathematical method of determining position, to find a user's precise location on earth and create a digital map of the surrounding area.

.....

#### **Problems**

What happens when there's an error on the map? Your directions lead you to a dead end or a road that's recently been renamed.

.....

#### Go to link:>

http://minnesota.cbslocal.com/2011/06/03/deblog-how-do-gps-companies-collect-their-data/

# **Amazing Race: Testing GPS**

May 19, 2011 11:08 PM

**MINNEAPOLIS (WCCO)** – It wasn't that long ago that we had to write down directions if we didn't know where we were headed.

It also wasn't that long ago when you had to spend big bucks to get a GPS system. Now, good navigation devices are on the market for about \$150, and similar things are free for smart phones with apps.

But what is the best option when it comes to GPS? Some of WCCO-TV's personalities put three different kinds of GPS to the test with Minnesota's version of The Amazing Race.



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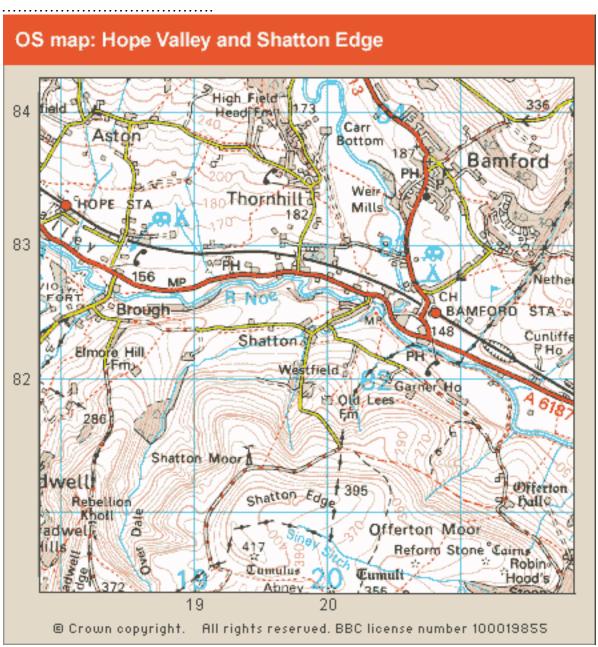
http://minnesota.cbslocal.com/2011/05/19/amazing-race-testing-gps/

# Map skills

To read a map you need to understand compass directions, grid references and the map's key and scale. You need to be able to find features when given a map reference. You also need to be able to describe a feature's location on a map by giving a map reference. From a map you should be able to pick out key information on natural features and types of human activity (eg, is this an rural or urban location?)

# **Basics of mapping: 1**

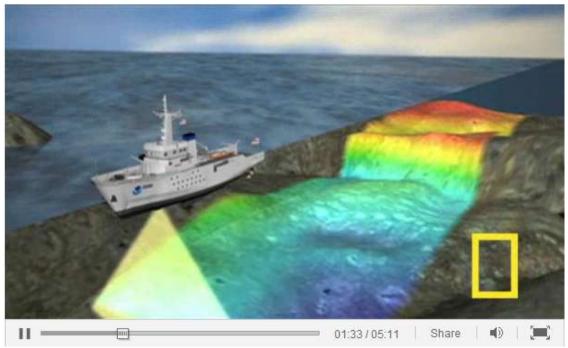
Maps are representations of the world. Maps are written by people called **cartographers** to help other people <u>navigate</u> the world.



Go to link:>

http://www.bbc.co.uk/schools/gcsebitesize/geography/geogskills/geogskillsmapsrev1.shtml

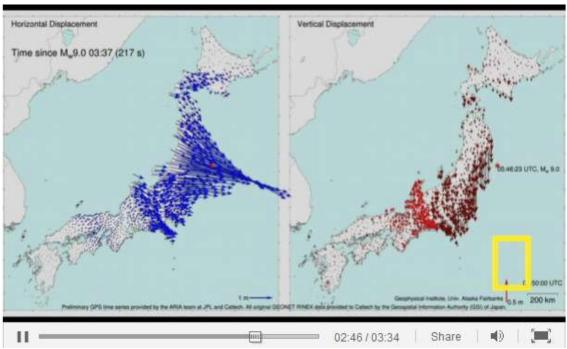
# Scientists "See" Ocean Floor via Sonar



Go to link:>

http://video.nationalgeographic.com/video/player/news/environment-news/us-ocean-floor-mapping-vin.html

# Rare Video: Japan Tsunami

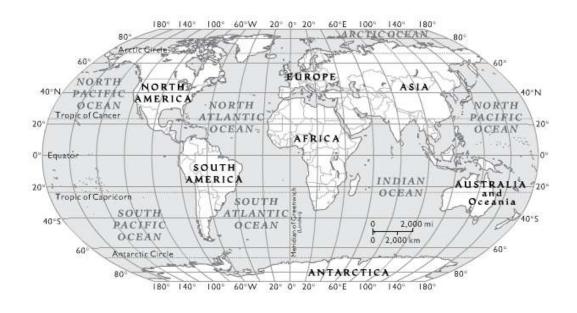


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http://video.nationalgeographic.com/video/player/news/environment-news/us-ocean-floor-mapping-vin.html

# **MapMaker 1-Page Maps**

Customize one-page maps and download, email, print, or share!



# THE WORLD

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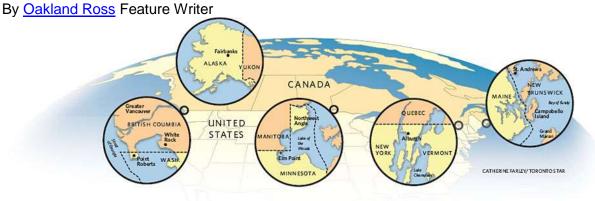
#### Go to link:>

http://education.nationalgeographic.com/education/mapping/outline-map/

# **Orphans of the Atlas**

# **Orphans of the atlas**

Published On Mon Jun 06 2011



To travel overland from Point Roberts to another part of the United States, you have to go through Canada.

In fact, it is difficult at first glance to understand why Point Roberts is not part of Canada.

"It's much more a part of the lower B.C. mainland than it is a part of the United States," says Viktor Konrad, an expert on borders at Carleton University in Ottawa.

Point Roberts is one of several similar territorial anomalies scattered across the longest undefended border in the world. It is also a prime example of a kind of geographical feature that was once quite common but has now almost vanished from the world's maps.

They are known as enclaves or exclaves — the name depends on whether the feature in question is part of someone else's country attached to yours (enclave) or a part of your country attached to someone else's (exclave) — but you could simply call them orphans of the atlas.

.....

Point Roberts is not the only cartographical oddity on the North American continent — and it's far from the biggest. (That would be Alaska, which is also an enclave/exclave of the United States.)

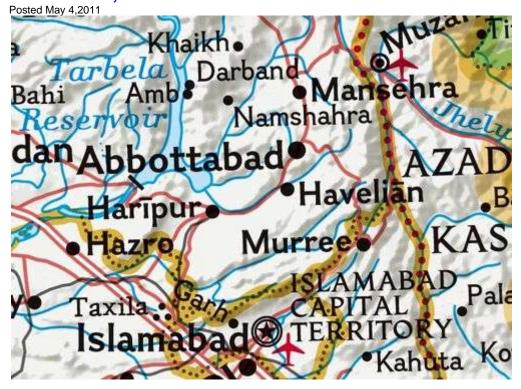
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Go to link:>

http://www.thestar.com/news/insight/article/1002539--orphans-of-the-atlas

# A Sense of Belonging

# Abbottabad, Pakistan



The "War on Terror" is inextricably linked to place. Among these are Afghanistan, Kenya, Tanzania, New York City's "Ground Zero," and most recently, Abbottabad, Pakistan. The suffix found on some of these names, such as *stan* in Afghanistan that means "land of the Afghans," serves to qualify their cultural or historic affiliations. This is the case for the Pakistani city of Abbottabad, which is situated in that country's Kyber-Pakhtunkhwa province. Named after British Army Major James Abbott, the city was founded in 1853. The name's suffix, *abad*, is of Persian origin meaning "place of abode" or simply "place."

A thesis could be written about the role suffixes have played in place-names around the world. However, the purpose of this brief blog is for you to start considering the overriding importance of place-names on a map—any map. Like Abbottabad, Pakistan, they do not merely serve as indicators of location but are often a reflection of the political and cultural forces that have influence the designation of their name.

Juan José Valdés
The Geographer
Director of Editorial and Research
National Geographic Maps
Go to link:>

http://blogs.ngm.com/blog\_central/2011/05/abbottabad-pakistan.html#more

# **The Cartographic Passion**

# **Professor Robert Clancy discusses all things cartographical**

Source: ABC News

Published: Friday, June 24, 2011 7:50 AEST

Expires: Thursday, September 22, 2011 7:50 AEST

Immunologist and map collector Professor Robert Clancy talks with The World's Scott Bevan about his passion for cartography, and why maps are about people as well as places.



#### Go to link:>

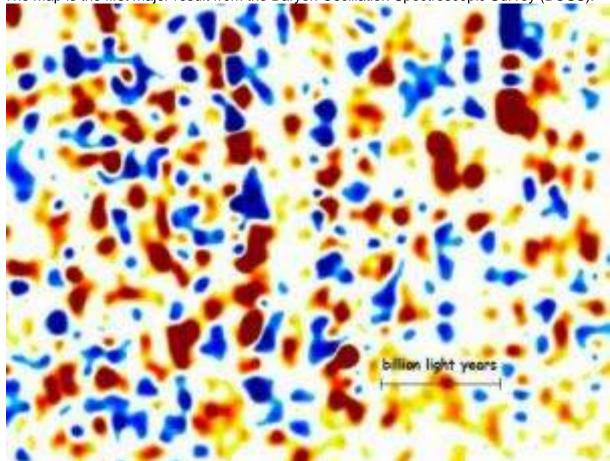
http://www.abc.net.au/news/video/2011/06/24/3253182.htm

# **Out of This World**

# Measuring the Distant Universe in 3-D Using Light from 14,000 Quasars

ScienceDaily (May 2, 2011) — The biggest 3-D map of the distant universe ever made, using light from 14,000 quasars -- supermassive black holes at the centers of galaxies billions of light years away -- has been constructed by scientists with the third Sloan Digital Sky Survey (SDSS-III).

The map is the first major result from the Baryon Oscillation Spectroscopic Survey (BOSS).



Zooming in on a slice of the BOSS map shows areas with more (red) and less (blue) intergalactic gas, as revealed by correlations of the Lyman-alpha forest data from the spectra of thousands of quasars. A distance of one billion light years is indicated by the scale bar. (Credit: Anže Slosar and BOSS Lyman-alpha cosmology working group)

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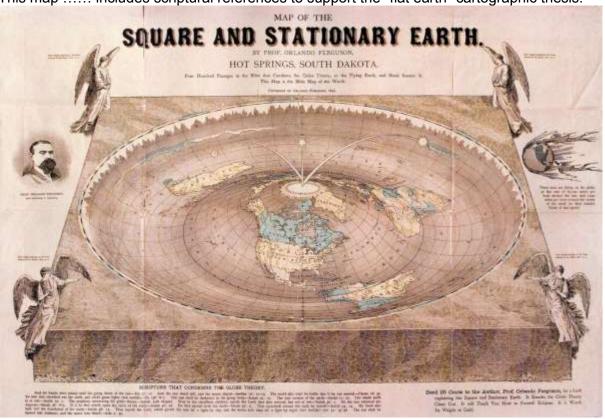
http://www.sciencedaily.com/releases/2011/05/110501183827.htm

# **The Square Earth**

# Flat Earth / Square Earth

Tuesday, June 21, 2011

This map ..... includes scriptural references to support the "flat earth" cartographic thesis.



#### Go to link:>

http://1.bp.blogspot.com/-5YoQHoNbmQk/TgDSfxnH8xl/AAAAAAAAAJE/NADZM0cR\_lk/s1600/Orlando-Ferguson-flat-earth-map.jpg

# **BLOM3D**

# Blom3D™

Blom3D<sup>™</sup> is the product name for Blom's archive 3D models. Blom currently has in excess of 340 detailed urban models, covering more than 12,000 km² and detailing more than 20 million buildings.

The Blom3D™ models have four different LODs (level of detail), ranging from simple wire frames to fully textured models. This flexible range of LOD allows for Blom's clients to choose which level of detail they require for their specific purposes.



Notre Dame Cathedral, Paris - BlomLANDMARKS™

# **Applications**

- Navigation
- Leisure applications, tourist guides, games
- Urban planning
- Telecommunications
- Environmental analysis
- Risk assessment
- Transportation
- Multimedia guides for education or tourism
- Route planning

## Go to link:>

http://www.blomasa.com/products-services/products-services-en/data-models-geographical-databases/blom3d.html

# **Conferences**

# Maps for the future: Children, Education and Internet"

Joint ICA Symposium

with a Special Session dedicated to Cartography for Early Warning and Crisis Management

Date: June 30- July 1, 2011

Venue: University of Orleans, France http://lazarus.elte.hu/jointsymposium2011/

# 25th International Cartographic Conference

3-11 July 2011

Paris, France

Open to researchers, engineers, students, data producers and software suppliers, the ICC 2011 will be held from 4th to 8th July 2011 at the Palais des Congrès in Paris, with simultaneous proceedings in eight meeting rooms. This conference will consider the most wide-ranging issues involving cartography and geomatics. In addition to oral presentations, sessions will be organized for the presentation of work in the form of poster displays. http://www.icc2011.fr/

## The Surveying and Spatial Sciences Conference

November 21-25, 2011

Wellington, New Zealand.

It is a joint conference hosted by the New Zealand Institute of Surveyors and the Surveying and Spatial Sciences Institute. Please register you interests at <a href="http://sssc2011.org">http://sssc2011.org</a>

## 1st European State of the Map Conference - Call for Papers

The Research Group Cartography and the Austrian OpenStreetMap community are pleased to invite you to contribute to the 1st European State of the Map Conference of the OpenStreetMap project, held July 15-17 in Vienna, Austria. After 4 successful and well-organised International State of the Map conferences, we are proud to offer an additional European edition of this well-received event. In addition to former OSM-conferences we will establish a specific focus on research with a relation to OpenStreetMap.

Attached you'll find the Call for Papers, which will be open until Monday, February 28. Please forward this mail to anyone interested.

For further information please visit: <a href="http://www.sotm-eu.org/cfp">http://www.sotm-eu.org/cfp</a>

#### **MODSIM 2011.**

International Congress on Modelling and Simulation, 12-16 December, Perth, Australia, mssanz.org.au/modsim2011

## «InterCarto-InterGIS 17».

SUSTAINABLE DEVELOPMENT OF TERRITORIES:
GIS THEORY AND PRACTICE

December 14-15, 2011
Belokurikha, Altai Krai (Russia)
December 18-19, 2011
Denpasar, Bali (Indonesia)
http://conf.nsc.ru/intercarto17.

## **Mercator Revisited – Cartography in the Age of Discovery**

25-28 April, 2012

International conference

Sini-Niklaas, Belgium

Contact: <a href="mailto:contact@mercatorconference2012.be">contact@mercatorconference2012.be</a>

For more information please consult the conference website:

www.mercatorconference2012.be

NOTE: If you are involved in a workshop, symposium or conference related to cartography please send me brief details for the newsletter.

# Commission on Education and Training Report to the Executive of the ICA - 2011

#### Report to the Executive – ICC2011

Provided below is a summary of the main activities of the Commission on Education and Training for the period 2007-2011.

## ICA RESEARCH AGENDA

# ICA Research Agenda – CET Contribution – Discussion Papers

The following paper was written for the ISPRS Commission VI, Mid Term Symposium, Enschede, June, 2010

THE ROLE OF INTERNATIONAL GEOMATICS ORGANISATIONS IN THE PROMOTION OF CONTINUING PROFESSIONAL DEVELOPMENT (CPD)

David Fairbairn a, \*, David Fraser b

- <sup>a</sup> School of Civil Engineering & Geosciences, Newcastle University, Newcastle upon Tyne NE1 7RU, UK dave.fairbairn@newcastle.ac.uk
- <sup>b</sup> School of Mathematical & Geospatial Sciences, Royal Melbourne Institute of Technology University, Melbourne 3001, Australia david.fraser@rmit.edu.au

The nature of CPD is considered: the process is modelled and each component is examined in the context of geomatics. Firstly, the type of person and institution interested in CPD (the consumer) is addressed. Secondly, there is a range of suppliers of CPD resources including commercial companies, educational establishments or international learned societies. Thirdly, the material delivered also forms part of the model: there a wide range of content, available material, and dissemination method.

#### The following refereed paper is to be presented at ICC2011 in Paris.

#### THE CHANGING FACE OF CARTOGRAPHIC EDUCATION AND TRAINING

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This paper discusses the issue faced by many cartographic departments and programs around the world. That is the weakening of cartography as a discipline in its own right and the dispersal of cartographic theory and practice into many and varied education programs representing allied disciplines.

ICC2009 & ICC2011 Conference papers from CET members

#### ICC2009

More than ten papers on cartographic education were presented at the ICC2009 conference in Chile and are now linked to the CET website:

- Araya Palacios Fabin Rodrigo: <u>Progress Map for Geography in Chile: Cartographic Materials in Primary And Secondary Schools</u>
- Bielecka Elzbieta: Usability of Web Maps in Teaching Geoinformation in Higher Education
- Brandalize Maria Cecilia: <u>The Pedagogical Experience in Teaching Cartography and GIS Using</u>
   Public Data And Software
- Dibiase David-Goranson Christopher-Harvey Francis-Wright Dawn: <u>The GIS Professional</u> Ethics Project
- Fraser David: The Model for The Development of Research Training in Asian Countries by a Foreign University Case Study Vietnam
- Krajukhin Alexander: New Technique of Creation Educational
- Medvedev Andrey: <u>Satellite Information: Innovations for School Education</u>
- Molochko Victoria: The System of Educational Geographical Atlases in Ukraine
- Murad-al-shaikh Makram: <u>Teaching Cartography Using Map Critique Exercises a Proposed Model</u> <u>for a GIS Cartography Course</u>
- Peters Stefan-Krisp Jukka-Liqiu Meng: <u>Development of an International Master Program in Cartography and Geoinformatics</u>
- Reinhardt Wolfgang: <u>Some Thoughts On a Body of Knowledge for Different Purposes in GI</u> Education
- Resl Richard: <u>UNIGIS in Latin America 1999 To 2009</u>: Experiences of a Distance Education Program for GIS in Latin America
- Van Der Merwe Fritz: Concepts of Space in Spatial Thinking
- Windiastuti Rizka: Cartography Education for Children in Indonesia
- Zentai Laszlo: Change of the Meaning of the Term cartographer in the Last Some Ten Years

#### ICC2011

A similar number of papers of education and training have been submitted to ICC2011 and these will be linked to the CET website at the conclusion of the conference.

# Review of Cartographic Education and Training papers for ICC2009 Chile and ICC2011 France

The Commission reviewed the cartographic education and training papers presented for consideration for the ICC2009 conference.

The Commission reviewed the cartographic education and training papers presented for consideration for the ICC2011 conference. Commission members Dr. John Kostelnick and Dr Elisabeth Chesneau took on the role of reviewers.

#### **MEETINGS**

## **Commission meeting Prague**

A face-to-face CET meeting was held in 2009 as part of the symposium on Cartography and Geoinformatics for Early Warning and Emergency Management.

<u>The meeting was chaired by David Fraser and the following Commission members were present and contributed to the discussion:</u>

Professor Laszlo Zentai (Hungary)

Colonel Vaclav Talhofer (Czech Republic) Mr Sukendra Martha (Indonesia)

#### Other key attendees were:

Professor Milan Konecny (ICA immediate past president)

Dr Temenoujka Bandrova (Co-chair Commission on Cartography and Children)

Professor Ferjan Ormeling (ICA executive)

Mr. Aris Poniman Kertopermono (Indonesia)

#### Face-to-Face Commission meeting at the ICC2009 in Chile

The Commission on Education and Training held a face-to-face meeting during the ICC2009 conference in Chile. The Chair of the CET also contributed to the symposium, "The Future of Maps and the Internet" run prior to the conference on November 13 - 15, in Valparaiso, organised by the Maps and the Internet Commission.

# **WORKSHOPS**

## Iran Workshop - 2009

Thirty participants attended a three week hands-on Workshop on Cartography in Tehran, Iran. The workshop, held from 9th to 13th May 2009, was organised by the National Cartographic Center of Iran and the ICA Commission on Education and Training. The workshop was hosted by the National Cartographic Center (NCC), and in particular staff of the Cartography Department, NCC ICA delegate Mr. Babak Shamei, and the deputy manager of the Cartography Department, Mr. Mehrdad Jafari. Participants were primarily NCC staff involved in map production associated with the publishing of country maps, city maps, street directories and atlases. The workshop was presented by David Fraser and Colin Arrowsmith from Australia: László Zentai and Antal Guszlev from Hungary and David Forrest and Mike Shand from Great Britain.

#### **Cartographic Workshops - 2010**

The ICA Commission on Education and Training used the cartography workshop held in Tehran as a model for further workshops. Communication with cartographic colleagues from member countries resulted in workshops in Indonesia and Vietnam in 2010. The workshop model was adapted and adopted to benefit cartographers in both these countries. Guidelines have been produced for the workshops. They can be found at the CET website <a href="http://lazarus.elte.hu/cet/">http://lazarus.elte.hu/cet/</a> under the "Cartographic Workshops" tab.

#### **Workshop Vietnam 2010**

VIET NAM – HO CHI MINH CITY WORKSHOP on 19th to 30th July.

Workshop I: 19-23 July 2010

Presenters: Professor László Zentai (Hungary) and Professor RNDr. Vít Voženílek, CSc. (Czech Rep.)

Workshop II: 26-30 July 2010

Presenters: Professor William Cartwright (Australia) and Manuela Schmidt (Austria)

Many thanks go to the presenters for giving of their time, expertise, resources and finances (air fare) to attend this workshop.

Workshop - Indonesia 2010

#### INDONESIA - JAKARTA WORKSHOP on 26 July - 6 August 2010.

The 5th IGTE symposium will be held on 27-30 July 2010 (workshop presenters for week 1 also presented at this event)

#### WEEK 1 (July - Monday 26th - Friday 30th)

Presenters: Professor Ferjan Ormeling (The Netherlands) and Dr Gang-Jun Liu (Australia)

#### WEEK 2 (August - Monday 2nd - Friday 6th)

Presenters: Professor William Cartwright (Australia) and Ms Manuela Schmidt (Austria)

Many thanks go to the presenters for giving of their time, expertise, resources and finances (air fare) to attend this workshop.

#### Symposium (workshop) – Paris 2011

A workshop "Maps for the future: Children, Education and the Internet" has been organised for prior to the ICC2011 at the University of Orleans, June 30 – July 1. The Commission on Cartography and Children, the Commission on Education and Training, the Commission on Maps and the Internet and the Commission on Planetary Cartography along with the Working Group on Cartography for Early Warning and Crisis Management have been confirmed as partners. Dr. Jesus Reyes and Dr Laszlo Zentai are the key organising team.

## **PUBLICATIONS**

#### **Academic Papers**

The webpage devoted to cartographic papers has been extended on the CET website. The following papers have been added to those already lodged:

A. Keogh-D. Fraser: Contemporary Map Products and Their Origins

Danielle Cull: Applying Beck's tube map theories and conventions to non-geographic subject matter Monique Elsley: The Issue of Accessibility: Considerations when Designing for a Worldwide Audience Harvey, Kate: Google Earth - Has the "Digital Earth" been achieved?

Pegg, Dave: <u>Design Issues with 3D Maps and the Need for 3D Cartographic Design Principles</u>

Syme, Richard: <u>Privacy of a mobile phone user in a rapidly evolving technological framework</u>

They can be found at the CET website <a href="http://lazarus.elte.hu/cet/">http://lazarus.elte.hu/cet/</a> under the "Academic papers" tab.

## **CET newsletters**

A regular newsletter (eCET) has been produced in 2009, 2010 and 2011. A copy has been sent to all CET commission members and other ICA commission and working group chairs. Back issues can be found at the CET website <a href="http://lazarus.elte.hu/cet/newsletter/newsstart.htm">http://lazarus.elte.hu/cet/newsletter/newsstart.htm</a>

#### **Cartographic Resources**

A list of cartographic resources for those involved in cartographic education and training has been compiled and placed on the CET website <a href="http://lazarus.elte.hu/cet/">http://lazarus.elte.hu/cet/</a> under the "Cartographic Resources" tab. The list will grow over time as more resources are identified.

#### **ICA Newsletter – CET contributions**

Reports were prepared for the ICA newsletters and they appear in each edition (See <a href="http://icaci.org/newsletter">http://icaci.org/newsletter</a>). A report was sent to Mr Igor Drecki for the June, 2011 edition.

## **GIM Magazine Contributions**

Articles have been produced for GIM magazine during 2007 -2011.

#### **CET Website**

The Commission website is regularly updated by Professor László Zentai so that it remains up-to-date and relevant to members and the International community of cartographers.

#### **OTHER CONTRIBUTIONS**

## **Biennial Awards on Educational Cartography**

#### 1. Aim

The competition aims to promote good practice in relation to the design and realisation of cartographic resources produced in an educational context.

Le concours a pour objectif de promouvoir les bonnes pratiques pour la conception et la réalisation de ressources cartographiques dans un contexte éducationnel.

#### 2. Eligibility

Submissions are invited for the competition in the form of maps, atlases and other educational cartographic resources designed to be used for either school students within the 3-18 age range or for tertiary undergraduate students. The term 'Educational cartographic resources' should be interpreted broadly to include, for example, conventional, web-based and digital materials, maps, globes and GIS. It shall not be restricted to published materials (enabling, for example, materials produced by cartography students and teachers to be included). *Materials that are primarily instructional in nature (i.e. textbooks on map skills) are not, however, included. Atlases are eligible.* 

A document containing all the required detail has been amended and approved by the Executive. Ms Elisabeth Chesneau has translated the original English version into French. Both versions were forwarded to the ICC2011 organising committee but a response was not forthcoming and the ICC2011 will be used as a test case only.

A copy of the awards document has been placed on the CET website [http://lazarus.elte.hu/cet/.]

#### **Cartography Island**

Cartography Island is a 'virtual' island in the Pacific.

On this island is placed information about different aspects of cartography.

Cartographers are invited to visit the island to obtain cartographic information.

Cartographers are also invited to contribute information which can make the island into a one stop geographical location where everyone could go to indulge their passion for cartography.

Cartography Island "themes" are listed at the information kiosk located at the island's airstrip. Theme labelled map pins, distributed around Cartography Island, allow users to access selected cartographic information.

#### Go to link:

http://lazarus.elte.hu/cet/cartography\_island/island.htm

## **Generic Guidelines for Continuing Professional Development**

The Continuing Professional Development program developed by the CET and rejected by the Executive at its last meeting, is to be revised to provide member nations with a generic set of

guidelines, should they wish to develop a CPD program for their nation in the future. These guidelines will be placed on the CET website.

The CET still hopes that the original intent for the CPD program will one day be realised. That is, it was intended that the CPD program support and recognise the contributions to cartography of only a handful of individuals from developing countries who do not have access to the educational resources that most of us enjoy. It is not, and never was, intended to be used by those who have other means at their disposal to promote themselves as cartographers.

# **Generic Attributes of Cartographers**

The CET discussed the merit of developing a generic attributes list for cartography graduates. The initial set is presented below.

Cartography courses are designed to provide the community with scientist who have:

- > the ability to apply knowledge of basic cartographic fundamentals
- > the ability to communicate effectively, not only with other professionals, but also with the community at large
- > in-depth technical competence in at least one cartography sub-discipline
- > the ability to undertake cartographic problem identification, formulation and solution
- > the ability to function effectively as an individual and in multi-disciplinary and multicultural teams, with the capacity to be a leader or manager as well as an effective team member
- > an understanding of the principles of cartographic design and development
- > an understanding of professional and ethical responsibilities and commitment to them
- > an expectation of the need to undertake lifelong learning, and the ability to do so

## **FORWARD PLANNING**

#### Terms of Reference – 2007 to 2011

- Work for reaching the general aims conceived in the ICA Statutes.
- Develop the existing ICA-sponsored Internet cartography teaching programme (modules), with regional workshops for training the teachers.
- Produce an ICA-sponsored Internet programme for continuing professional development, with regional workshops for training the teachers.
- Support cartography and cartographic education in developing nations by holding seminars in these nations.
- Promote integration by establishing linkage with the committees on education of sister surveying and mapping disciplines, by maintaining the list of institutions providing cartography course programmes, and interact as much as possible with other ICA commissions and working groups (organize joint meetings).
- Produce appropriate publications for dissemination of results of the above efforts and publish it in proceedings or on the CET website according to the IOF publication policy.
- Promote joint project cooperation between participating nations represented on the commission.
- Contribute to international forums where applicable.
- Develop mapping awareness competitions.
- Investigate the role of emerging technologies for use in education and training.

# Professor László Zentai has produced a new set of TOR for the coming period 2011 - 2015.

- 1. Work for reaching the general aims conceived in the ICA Statutes.
- 2. Support cartography and cartographic education in developing nations by holding seminars in these nations.

- 3. Develop the existing ICA-sponsored Internet cartography teaching programme (modules), with regional workshops for training the teachers.
- 4. Produce an ICA-sponsored Internet programme for continuing professional development, with regional workshops for training the teachers.
- 5. Produce appropriate publications for dissemination of results of the above efforts and publish it according to the IOF publication policy.
- 6. Promote integration by establishing linkage with the committees on education of sister surveying and mapping disciplines, by maintaining the list of institutions providing cartography course programmes, and interact as much as possible with other ICA commissions and working groups (organize joint meetings).
- 7. Improving dissemination of information on educational theory and practice of cartography to the members across the world.
- 8. Contribute to international forums where applicable.
- 9. Investigate the role of emerging technologies for use in education and training.
- 10. Develop mapping awareness competitions.

#### **Succession Planning**

(Amended version of original - amended on 30th June 2011)

David Fraser will step down as Chair of the Commission on Education and Training at the ICC2011. The Executive will decide who will take over the chair for the next four year. I continue to assist as one of the vice-chairs.

Compiled by:
David Fraser
Chair, Commission on Education and Training
International Cartographic Association
<a href="http://cartography.tuwien.ac.at/ica/">http://cartography.tuwien.ac.at/ica/</a>
Tuesday, 26 April 2011