

**ARGENTINE-HUNGARIAN BILATERAL S&T AGREEMENT
FOR SCIENTIFIC AND TECHNICAL COLLABORATION
Project ARG-3/2007**

Title of the project:

“The possible use of the Chernoff faces for data visualisation in school cartography”

Argentine main investigator: *Lic. Cristina Juliarena de Moretti*

Argentine participants: *Ana M. Garra, Carmen A. Rey, María Victoria Alves de Castro, Anabella Dibiasi, Teresa A. Saint Peirre, Mariana Alesia Campos*

Hungarian main investigator: *José Jesús Reyes Nunez, PhD*

Hungarian participants: *Prof. István Klinghammer, Anita Rohoncz*

The main results reached during the two years (2008-2009) of the project are:

1st year:

- Study of cartographic antecedents similar to the Chernoff method.
- Study of the Chernoff faces and their actual uses in thematic cartography.
- Study of the possible use of Chernoff faces in school cartography.
- First steps to make a survey on this theme in Argentine and Hungarian Schools.

2nd year:

- Contacts to design and make sample maps for a questionnaire on this topic.
- Survey in Argentine and Hungarian educational institutions.
- Creation of tables to store the results of the test.
- Creation of diagrams using the obtained results and analysis of results.
- The final results and proposals about the use of this method in school publications will be elaborated.

All the information, data and results of this project can be accessed on the Web, assuring the fast accessing by specialists from other countries. Website address:

<http://lazarus.elte.hu/hun/dolgozo/jesus/ma0809/proyect1.htm>

Participation in events, publications, articles:

1- International experiences using Chernoff faces in cartography (poster presentation)

Resume: Proceedings of the Second International Conference on Cartography & GIS, pag. 389, ISBN: 978-954-724-036-0. Borovets, Bulgaria, 2008.

2- Chernoff faces in thematic maps: an original and interesting experience (poster presentation)

Resume: “Building together our territories” printed proceedings of the IGU 31st International Conference, pag. 300, Tunis, Tunisia, 2008.

3- Actividades del Centro Argentino de Cartografía. Proyectos intergubernamentales de colaboración bilateral entre Argentina y Hungría en Ciencias y Tecnología (paper)

CD proceedings of the 16th Congress of Scientific Activities for teachers and students

-PROCIENCIA, Chivilcoy, Buenos Aires, Argentina, 2009.

4- Posibles usos de las fases de Chernoff para la visualización de datos en la cartografía escolar

Boletín N° 1/2009 (ISSN1667-8508) de la Asociación Centro Argentina de Cartografía (CAC, Argentine Association of Cartography). 53rd year – N° 45. (pp 42-51), Buenos Aires, Argentina, June 2009.

5- Ideas for the use of Chernoff faces in school cartography (paper)

“The World’s Geo-Spatial Solutions” CD proceedings of the 24th International Cartographic Conference, ISBN: 978-1-907075-02-5. Santiago de Chile, 2009.

6- Proyecto de colaboración bilateral Argentina-Hungría

Boletín Digital de la Asociación Centro Argentino de Cartografía (CAC, Argentine Association of Cartography), Nro 6 (ISSN 1851-6769) (pp 08-09), Buenos Aires, Argentina, December 2009.

Different presentations related to this theme were made in educational institutions in Spain and Argentina:

- "Breve historia de la visualización de datos y los mapas temáticos"
Academia Argentina de Geografía, Buenos Aires, Argentina. November 13, 2008
- "Breve historia de la visualización de datos y los mapas temáticos"
Universidad Politécnica de Madrid, Spain. March 23, 2009
- "Aplicaciones innovativas en la geovisualización"
Universidad Politécnica de Madrid, Spain. March 23, 2009

This theme was also included to the subject entitled “Thematic Cartography 3” for students of the MSc degree on Cartography at Loránd Eötvös University (Department of Cartography and Geoinformatics).

The research group plans to present officially the final results in the first semester of 2010, during the 3rd International Conference on Cartography and GIS (June 15-20, 2010, Nessebar, Bulgaria) and the Quinto Congreso de la Ciencia Cartográfica (June 28-July 02, 2010, Santa Fe, Argentina).

From 2010 following the international collaboration a new research based on the results of the present project will begin, counting with the participation of the Institute of Cartography and Geoinformation of the Politechnical University of Vienna (Austria) and the Department of Cartography and Geoinformatics of the Loránd Eötvös University. More detailed information can be found at this address:

(http://cartography.tuwien.ac.at/content07en/index.php?Research:Projects:Chernoff_Faces)

Buenos Aires,

Lic. Cristina Juliarena de Moretti
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