

Highlighted-Section [ENGLISH]

GEPEtno: [ode](#) a gaiolas abertas e a pássaros que cantam em outros galhos¹

GEPEtno: ode to open cages and to birds singing on other branches²

GEPEtno: oda a jaulas abiertas y a pájaros que cantan en otras ramas³

**GEPEtno: purahei ñembo'e ñandutípe ha guyra kuéra oapurai ambue
yvyra rakãme⁴**

GEPEtno: kanhgág rê iambro kho e kanhrrè khên xăn hě idj wê khrãm⁵

GEPEtno: wãtamapë haramakö hi yãkita pata wãhin⁶

Roger Miarka

“Free” Professor in Mathematics Education
São Paulo State University (UNESP)
Rio Claro, São Paulo, Brazil
roger.miarka@unesp.br

<https://orcid.org/0000-0002-0633-8446>

Resumo

Operando com a metáfora das “gaiolas epistemológicas”, este texto tem como objetivo realizar uma breve apresentação de como se constituiu o Grupo de Estudo e Pesquisa em Etnomatemática (GEPEtno) e quais rumos tomaram seus integrantes após a finalização do Grupo com o falecimento do

¹ In Portuguese, the only official language of Brazil, imposed on the country during Portuguese colonization in the 16th century.

² In English, a language often assumed to be global, which can be questioned considering its colonizing effects, where non-Anglophone countries and cultures are pressured to adopt it in order to “be relevant” on the global stage.

³ In Spanish, a language also imposed on regions colonized by Spain in the Americas, replacing and marginalizing the local indigenous languages.

⁴ In Guarani, a language spoken by about 6 to 7 million people. Most speakers are in Paraguay, where about 90% of the population speaks Guarani, but there are also significant communities in Brazil, Argentina, and Bolivia.

⁵ In Kaingang, a language spoken by about 20 to 30 thousand people, primarily in southern Brazil, in the states of Paraná, Santa Catarina, Rio Grande do Sul, and São Paulo.

⁶ In Yanomami, a language spoken by about 20 to 30 thousand people, primarily by the Yanomami peoples who inhabit the Amazon region between Brazil and Venezuela.

Prof. Ubiratan D'Ambrosio em 2021, em termos de participação em outros grupos de estudo, pesquisa e luta.

Palavras-Chave: Grupo de pesquisa. Etnomatemática. Ubiratan D'Ambrosio.

Abstract

Operating with the “epistemological cage” metaphor, this text aims to provide a brief overview of how the Study and Research Group in Ethnomathematics (GEPEtno) was formed and the paths its members took after the group's conclusion following the passing of Prof. Ubiratan D'Ambrosio in 2021, particularly in terms of their participation in other study, research, and advocacy groups.

Keywords: Research group. Ethnomathematics. Ubiratan D'Ambrosio.

Resumen

Operando con la metáfora de las “jaulas epistemológicas”, este texto tiene como objetivo hacer una breve presentación de cómo se formó el Grupo de Estudio e Investigación en Etnomatemática (GEPEtno) y qué rumbos tomaron sus integrantes luego de que el Grupo finalizara con la muerte del Prof. Ubiratan D'Ambrosio en el 2021, en cuanto a participación en otros grupos de estudio, investigación y lucha.

Palabras clave: Grupo de investigación. Etnomatemáticas. Ubiratan D'Ambrosio.

Canto XIII

*Renew yourself.
Be reborn within yourself.
Multiply your eyes, so they may see more.
Multiply your arms to sow everything.
Destroy the eyes that have seen.
Create others, for new visions.
Destroy the arms that have sown.
So they forget to reap.
Be always the same.
Always another.
But always high.
Always distant.
And within everything.*

Cecília Meireles (1981, our translation)

The metaphor of "Epistemological Cages" was created and widely used by Prof. Ubiratan D'Ambrosio to shift the way human knowledge is often understood within disciplinary boundaries towards a thought process that unites humanity through a set of

knowledge essential for planetary citizenship. To achieve this, he invited us to fly out of our cages so we could see them from the outside, as well as a whole world to be explored (D'Ambrosio, 2016).

This text aims to take the Study and Research Group in Ethnomathematics (GEPEtno) of Prof. Ubiratan D'Ambrosio as a space with established knowledge, struggles, and elements of belonging, inhabited by birds that sang knowledge in this space, to present how it was constituted and to indicate the paths that the birds who lived with Prof. Ubiratan D'Ambrosio took in their flights, in terms of the constitution and belonging to other study, research, and struggle groups.⁷

The first meetings of GEPEtno began in 1999, initially informally, marked by Prof. Ubiratan's supervision in the Graduate Program in Mathematics Education (PPGEM) at São Paulo State University (UNESP), Rio Claro campus. In 2002, Professor Pedro Paulo Scandiuizzi became a faculty member of PPGEM, which led to an increase in the number of students participating in the Group. In 2004, Prof. Scandiuizzi formally registered GEPEtno in the CNPq Directory of Research Groups, leading it until 2011, when he requested to be de-registered from PPGEM due to retirement. At that time, Prof. Ubiratan assumed the leadership of the Group.

In this process of constitution, the Group ceased to be composed of students from a single advisor and began to diversify around a common theme – ethnomathematics and the relationship between mathematics and culture – with the participation of students from professors of various research lines, approached from different perspectives, including Philosophy, History, Teaching, Education, etc.

Thus, GEPEtno came to be marked by diversity – of themes, theoretical frameworks, struggles – maintaining this constitution until the passing of Prof. Ubiratan D'Ambrosio in May 2021, when it had seventeen researchers and ten students, spread across the states of Goiás, Minas Gerais, Mato Grosso, Mato Grosso do Sul, Paraná, Rio de Janeiro, São Paulo, and Tocantins.

Although it was discontinued in the CNPq Directory of Research Groups as GEPEtno, it remains alive through its bird-members, who flew to other spaces, opening new groups and

⁷ More detailed descriptions of the history of GEPEtno and the topics addressed by the Group can be found in the texts by Scandiuizzi and Lübeck (2011), and by Gondim, Miarka, and Sachs (2018).

producing a system of capillarity distributed throughout the country, demonstrating the original force that began to unfold and update in other movements.

Let's see where some of these birds from the 2021 GEPEtno cohort (CNPQ, 2024) are currently singing.⁸

In Tocantins, Sinval de Oliveira promotes the *Study and Research Group in Mathematics Education of Northern Tocantins* (GEPEM-TO); in São Paulo, Roger Miarka, Jorge Orjuela Bernal, Ronilce Lopes, and Jeimy Cortés Suárez participate in the *Cronopies+ Collective*, and Valdirene Rosad in the *Study and Research Group in Ethnomathematics* (GEPEm); in Paraná, Línlya Natássia Sachs Camerlengo de Barbosa leads the *Study and Research Group in Mathematics Education of the Countryside*, and Marcos Lübeck the *Research Group in Mathematics and Mathematics Education*; in Goiás, Roberto Barcelos Souza participates in *Matema: Research and Training Group in Mathematics Education*; in Minas Gerais, Sonia Regina Coelho accompanies the *Ethnomathematics Research Group at the Federal University of Ouro Preto* (GPEUfop); in Mato Grosso, Adailton Alves da Silva and João Severino Filho lead *Warã - Study and Research Group in Ethnomathematics Education*; in Mato Grosso do Sul, Thiago Donda Rodrigues is ahead of the *Study and Research Group in Mathematics Education, Diversity, and Difference* (GeduMaD), and Cintia Melo dos Santos participates in the *Indigenous Ethnomathematics Research Group* (GPEIND); in Rio de Janeiro, Gabriela Brião is with the *Mathematics Education Group* at CAP/UERJ and the *Environmental Sciences Study Group*, and Diego de Matos Gondim leads the *Study and Research Group Crossroads: Education, Philosophy, and Cosmologies* (GEPEN).

These groups carry with them the struggles once belonging to GEPEtno, encompassing Ethnomathematics in its broad spectrum, including Rural Education, Indigenous Education, Quilombola Education, Education for diversity, etc.

I would say that these birds have metamorphosed into bees, carrying with them the pollen produced at GEPEtno with Prof. Ubiratan amidst a [circle-love-friendship](#), with their struggles for a world of respect with planetary consciousness for [peace](#), to different spaces.

⁸ The following list only includes GEPEtno participants who are currently part of research, study, and struggle groups that adopt ethnomathematics as an operative concept.

After all, they were birds that for some time were together in a space – GEPEtno – that had no bars, but only the potency of life.

By the way, speaking of flights out of cages, the attentive reader may have noticed some escapes from the walls of this text through hyperlinked words. These are invitations to explore other spaces and to perch on other branches, like those promoted by the Ubi Friends Group, affectionately called [GAU](#).

To conclude this text, I would like to share that I first met Prof. Ubiratan in 2001 when I heard him speak in a lecture about the importance of critically embracing the power of technology rather than fighting against it. At that time, he was talking about the use of pocket calculators in mathematics teaching.

Here is my small tribute to this visionary professor⁹:



My thanks to you, Ubi, who has always taught us to fly and sing on other branches.

References

⁹ Image created by Chat GPT, using the following prompt description: *Chat GPT, I would like you to create a fictional image with various figures that combine elements of bees and birds, perched on branches singing, with several open-door cages in the background.*

CNPQ. Diretório de Grupos de Pesquisa.

Disponível em <https://dgp.cnpq.br/dgp/espelhogrupo/13305>. Acesso em 20 jun. 2024.

D'AMBROSIO, Ubiratan. A Metáfora das Gaiolas Epistemológicas e uma Proposta Educacional. **Perspectivas da Educação Matemática**, v. 9, n. 20, 2016.

<https://periodicos.ufms.br/index.php/pedmat/article/view/2872>

GONDIM, Diego de Matos; MIARKA, Roger; SACHS, Línlya. Constituição de um Território Existencial e Singularidades do Grupo de Estudo e Pesquisa em Etnomatemática (GEPEtno). **Ensino Em Re-Vista**, v.25, n.3, p.727-746, 2018. <https://doi.org/10.14393/ER-v25n3a2018-11>

MEIRELES, Cecília. **Cânticos**. São Paulo: Moderna, 1981.

SCANDIUZZI, Pedro Paulo; LÜBECK, Marcos. Itinerários do Grupo de Estudo e Pesquisa em Etnomatemática e sua Relação com a Educação Matemática. **Bolema**, v. 25, n. 41, p. 125-151, 2011.

<https://www.periodicos.rc.biblioteca.unesp.br/index.php/bolema/article/view/5741/4627>