

GIVING THE FLOOR TO... WILFREDO VIDAL ALANGUI IN A TRIBUTE TO UBIRATAN D'AMBROSIO

TEM A PALAVRA... WILFREDO VIDAL ALANGUI NUM TRIBUTO A UBIRATAN D'AMBROSIO

TIENE LA PALABRA... WILFREDO VIDAL ALANGUI EN HOMENAJE A UBIRATAN D'AMBROSIO

**ETHNOMATHEMATICS, DECOLONIZATION AND INDIGENOUS PEOPLES' EDUCATION:
D'AMBROSIO'S LASTING LEGACY**

A turning point in the life of the young Ernesto Guevara was his exposure to injustice when he and Alberto Granada set out to experience Latin America in an 8-month-long journey in 1952 aboard a motorcycle. His "face-to-face contact with poverty, exploitation, illness, and suffering" across the continent had much to do, according to the Argentinian historian Carlos Vilas (National Geographic, 2004), with his transformation from Ernesto to the revolutionary Che.

A just and humane society is an aspiration shared by many transformative figures in history. Like Che, Ubiratan D'Ambrosio set out to change the world, whose own pivotal moment in life, from his accounts, came with his exposure to the inequities engendered by mathematics education to the indigenous and minority students in the USA, Africa and Brazil (Alanguí, 2010). His subsequent conceptualization of ethnomathematics as a research program in the history and philosophy of mathematics was anchored on a vision of a new planetary order without inequity, arrogance and bigotry (D'Ambrosio, 2006).

D'Ambrosio first used the term ethnomathematics in his opening address to the Fifth International Congress on Mathematics Education in Adelaide, Australia in 1984. Since then, the field of ethnomathematics has become a site of contestation for the transformation of relationships – between knowledge systems and/or across cultural groups. He linked ethnomathematics to the imperative of understanding the human condition based on what he called the triad of individual-other(s)-reality, and the human struggle for survival and transcendence (D'Ambrosio, 2007).

In D'Ambrosio's ethnomathematics, the evolution of ideas and their influence on historical developments, namely, the dominance of the Eurocentric conception of mathematics and its role in shaping human and social behaviour, became a central *problematique*. Barton describes his writing in ethnomathematics as concerned with the way social inequities are "continued by academic hegemony" (Barton, 1996).

Many mathematics educators around the world have come to embrace ethnomathematics as a research program. I personally believe that ethnomathematics has launched a movement akin to a social revolution whose objective is to challenge the academic *status quo* and advocate for structural changes to end the colonizing and homogenizing power of Western mathematics. By interrogating our old assumptions about knowledge and becoming more respectful of other views of the world, societal relations might also evolve for the better. Ethnomathematics offers these possibilities for change. This is its charm. This is, to use Michael Apple's words, what "grabs us" (Apple, 1992).

D'Ambrosio's impact is that he has gathered, under the umbrella of ethnomathematics, passionate mathematics educators inspired to do better as educators and to turn mathematics education into an instrument to change world. Subverting long held notions about mathematics is a project of decolonization. To hold an alternative view of the nature, history and purpose of mathematics is to hold alternative knowledges, which, according to the Maori scholar Linda Tuhiwai Smith, has the pedagogical implication of providing the basis for alternative ways of doing things (Smith, 1999).

Thus, one lasting legacy of ethnomathematics is in the field of Indigenous Peoples' education that advances indigenous ways of thinking, including in 'mathematics.' For historically marginalized groups and peoples, this is a matter of survival and justice. Ethnomathematics asks us to broaden our conceptions and views about different cultural systems, to understand their relationships with one another, to acknowledge their integrity and value, to listen to multiple voices and to recognise the existence of diverse ways of knowing the world.

D'Ambrosio's ethnomathematics is contributing to the indigenous Peoples' movement for self determination and empowerment. It is not that another world is still possible. For Indigenous Peoples, it already exists.

Wilfredo V. Alangui is an indigenous person and a professor of mathematics at the University of the Philippines Baguio with academic training in mathematics and mathematics education from the University of the Philippines and the University of Auckland respectively. His research interests are in the interplay of mathematics/mathematics education and culture, Indigenous Peoples' education and Indigenous Knowledge Systems. He is actively engaged in efforts to promote Indigenous Peoples' education in the Philippines.

REFERENCES

- Alangui, W. V. (2010). *Stonewalls and Waterfalls: Interrogating Cultural Practice and Mathematics*. The University of Auckland, Auckland.
- Apple, M. (1992). Do the Standards go far enough? Power, policy and practice in mathematics education. *Journal for Research in Mathematics Education*, 23(5), 412-431.
- Barton, W. (1996). *Ethnomathematics. Exploring Cultural Diversity in Mathematics*. The University of Auckland, Auckland.
- D'Ambrosio, U. (2006). The Program Ethnomathematics: A Theoretical Basis of the Dynamics of Intra-Cultural Encounters. *The Journal of Mathematics and Culture*, 1(1)
- D'Ambrosio, U. (2007). Peace, Social Justice and Ethnomathematics. *The Montana Mathematics Enthusiast*, 1, 25-34.
- Smith, L. T. (1999). *Decolonizing Methodologies: Research and Indigenous Peoples*. London & New York: Zed Books Ltd.
- [https://www.nationalgeographic.com/pages/article/-motorcycle-diaries-shows-che-guevara-at-crossroads;](https://www.nationalgeographic.com/pages/article/-motorcycle-diaries-shows-che-guevara-at-crossroads)
accessed 28 August 2021