Stories from Guatemala and North America: Why Indigenous Beliefs Matter in the Debate on Genetically Engineered Food

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Indigenous peoples do not share a common religion, but almost all share a history of colonialism and Christian missionization. Cultural practices relating to food production and consumption have been central to preserving and transmitting to future generations local ecological knowledge, social institutions, ethnic identity, and spiritual teachings. Food practices, including prohibitions, evince an extraordinary body of knowledge passed down orally over generations, and these practices have been increasingly threatened by a widespread transition from locally produced and prepared food to the consumption of marketed, globally sourced, refined, and processed foods. According to Debra Harry, Director of the Indigenous Peoples Council on Biocolonialism, genetically engineered foods represent to indigenous peoples worldwide both the extension of an on-going colonial destruction of their local knowledge systems and a violation or desecration of the natural world.

While genetically engineered seeds are being marketed and distributed around the world through agribusiness, food aid programs, and government agents, little attention has been paid by scholars to the religious and spiritual reservations of indigenous peoples to this technology. In this paper, "Born from Bears and Corn: Why Indigenous Beliefs Matter in the Debate on Genetically Engineered Food," written with Lorenzo Magzul and Nancy Turner for a forthcoming book anthology of religious perspectives on genetically engineered food, we explore the ways that indigenous food practices are tied inextricably to sustaining ecological health often through food taboos, prohibitions, and spiritual teachings that impart a respect for the integrity of the earth and its life-forms. These complex forms of knowledge and socialities represent world views that integrate and inform community organization and are based on direct dependence on the natural world.

In this paper, we selected two research methods we felt most effectively narrate *particular* indigenous perspectives on transgenes in food. Lorenzo Magzul and Shiri Pasternak travelled to Guatemala to conduct focus groups in Magzul's hometown of Patzun with the local Mayan community and Nancy Turner sent out questionnaires to indigenous people in North America. Thirteen people participated in the North American focus group, including six males and seven females. Of these, over eight different North American indigenous nations were represented, including: Cherokee Nation, Wasco (Warm Springs Confederacy, and other nations), Gwich'in, Métis, Mohawk, Haida, Nuu-Chah-Nulth (three different communities) and Straits Salish (two communities).

In our chapter, we highlight the conflict between indigenous perspectives and the scientific approach to food:

- The pressure on the world's resources is compromising the food security of many people, especially those in developing countries. The typical scientific and positivist approach to address the consequences of the

scarcity of resources, however well meaning, is that key measures such as investments, scientific research, transfer of knowledge and technology — presumably from developed to developing countries — will "ensure wise management of resources and sustained capacity for growth."[1]

- In contrast to the scientific and positivist approach, and despite the incredibly rapid expansion of Western economic and ideological approaches to resource use, some indigenous peoples worldwide continue to utilize natural resources that achieve the same goals of "wise management of resources" and the ability to feed themselves, yet the means to achieve these goals are not drawn from scientific approaches, but include rituals, ceremonies and prohibitions.[2]

- The ongoing challenge for indigenous societies, because of the expansion of Western economic, cultural and ideological perspectives, is whether they can maintain their own traditional belief systems and practices, not just for the sake of preserving them but also as means of ensuring their own physical survival and the continuation of social and time-tested ecological relationships.

We argue that indigenous perspectives must be taken into account in regards to the production, consumption, and distribution of genetically engineered seeds, since the sovereignty of these peoples is dependent on a direct connection to the earth. When nature is tampered with, cultural transformation also ensues and spiritual principles are violated.

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1. Rosamond L. Naylor *et al.,* "Biotechnology in the developing world: a case for increased investments in orphan crop" (2004) 29 *Food Policy* 15 at 16.
2. Nancy J. Turner & Fikret Berkes, "Coming to Understanding: Developing Conservation Through Incremental Learning" *Human Ecology* [forthcoming in 2005]; see also J. Stephen Lansing, *Priests and Programmers: Technologies of Power in the Engineered Landscape of Bali* (Princeton, N.J.: Princeton University Press, 1991).