

**A Review of *Incorporating Cultures' Role in the Food and Agricultural Sciences***

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*Incorporating Cultures' Role in the Food and Agricultural Sciences*. By Dunkel, Florence V. 2018. Elsevier Academic Press. 320 pp. Paperback ISBN: 9780128039557

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This book is a must-read for anyone interested in teaching about food and agriculture in the classroom or working in the field with communities – both locally and around the world – because, regardless of our geographical location, political persuasion, or ancestral heritage, culture matters.

Culture is the medium in which we swim as humans – our complex sets of beliefs, practices, material manifestations, arts, architectures, fashions, food habits, ideas about gender and hierarchy, the way in which we socially construct memories and memorials, our ethical and aesthetic systems, even our views about what constitutes “nature” ... which in turn influence or determine our views of ecology, how we treat non-human animals, our dietary practices and our landscape painting (Clammer 2016, 16).

Florence V. Dunkel has seized this concept and made it the centerpiece of her work in the food and agricultural sciences. Along with a group of dedicated academics, administrators, and practitioners, she has developed a series of chapters that are full of new ideas, stories, case studies, personal reflections, images, and information.

She begins her inquiry with a seemingly simple question: where did you come from? She herself was asked this question when she attended a meeting of Native American elders of the Apsaalooke tribe in 2013, about three hours away from her university. At this meeting, she witnessed the Apsaalooke students using the skills they had learned in her class. When she replied that she was an Associate Professor of Entomology at Montana State University in Bozeman, her two Apsaalooke students intervened, emphasizing that the elders wanted to know *where* she was from – about her people and her ancestral land. Feeling herself on unfamiliar territory, she told the story of her family’s history. This resulted in Dunkel learning an important life lesson: “How can you know where you are going if you don’t know from where you came?” (6).

Dunkel has taken this lesson and made it her first “tool” in her toolkit for incorporating culture into the food and agricultural sciences. She describes this tool as “know and understand from where you come,

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your own culture(s).” In other words, recognize your own culture(s) and people regardless of who you are or what you do.

This first tool takes Dunkel into a discussion of culture itself, which she defines as:

the integrated pattern of human behavior that includes thought, speech, action, and artifacts, and depends upon the human capacity for learning and transmitting knowledge to succeeding generations, particularly as it is intertwined with the culture of, or production of, food (9).

For Dunkel, recognizing one’s culture is the beginning of the development of intercultural competency, a process that starts with realizing that there are people with worldviews other than our own. She proposes, “Inclusivity begins with recognizing where you are coming from and where your colleagues and students and administrators are from” (14). If we either do not recognize or subconsciously deny that there are other cultures, we will not ‘see’ them, which results in dragging others into our own culture. Recognition of other cultures, she warns, is only a first step, and still encompassed in an ethnocentric worldview. What Dunkel is aiming for is ethno-relativity, in which people recognize subtle, subsurface differences between cultures and accept these profound differences as okay, just different. This, she argues, is the next step in intercultural competency. In advanced levels of ethno-relativity, she adds, people learn to move seamlessly between different culture systems.

This brings us to what Dunkel refers to as the urgency of this book – the “attempt to decolonize the language of the food and agricultural sciences by providing examples of the importance of raising awareness and the tools to decolonize language and learning structures” (17). For Dunkel, knowing the nature of our own cultural filter and how we both consciously and unconsciously respond in an intercultural situation will end up creating a broader, wider field in which to teach and learn. She develops this approach by first addressing what she calls the gap that faces all of us. This gap is “a hiatus, a chasm that exists between two groups who wish to communicate with each other” (23). Overcoming this gap means engaging in bilateral communication in which both groups are enabled or at least willing to really hear what the other is saying. Dunkel illustrates the gap through diagrams and case studies, such as crop scientists pushing Kenyan farmers to switch from traditional grains to a corn-based diet in an effort to alleviate hunger, not realizing that corn is deficient in two essential amino acids. At the same time, she declares war on grasshoppers and locusts, which eliminated these nutritionally dense snacks children used to depend on, resulting in physical and cognitive stunting. She then uses the rest of the book to teach people how to build the skills and bridge the gap, beginning with the idea of deep, contemplative listening before moving on to the process of decolonizing one’s words and actions, and using a holistic process to ensure being in tune with the desired outcomes as well as focusing on the qualities of life for the people of the community. For Dunkel, a decolonized worldview is an ethno-relative worldview, one that moves from the ethno-centric position of denial of other cultures, defense of one’s own culture, and minimization of cultural differences to the ethno-relative worldview of accepting cultural differences, adapting to cultural differences, and integrating into a variety of cultures. It involves decolonizing our interactions

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with the community of focus. To put it otherwise, it means refraining from imposing our own values on the community, which involves two steps: identifying colonizing actions and words, and then decolonizing our actions and words. Subsequent levels include identifying communication languages, recognizing cooperation-based groups (and eschewing competition-based groups), achieving participation of everyone, and establishing ownership of original data or products. Such immersion in another culture can help us move toward a transformative experience that can lead us from an ethnocentric worldview to an ethno-relative one.

This brings us to Dunkel's discussion of Reductionist (Western) Science and Traditional Ecological Knowledge (TEK). She explains how, during the nineteenth and twentieth centuries, Western scientific discoveries became compartmentalized, resulting in the loss of interconnections within the whole biosphere or simply an ecosystem. TEK, on the other hand, involves doing Native Science – a process of learning through direct experience that requires “a connection with heart and mind, interrelationships, and a participatory approach” (58). For Dunkel, TEK accumulates within those cultures that live in a particular place as the cultures adapt and adopt while learning how to provide for their means of life, from generation to generation. Colonization suppresses or devalues TEK, but it becomes easier to see after decolonization, when worldviews become ethno-relative. She argues that in spite of the difference between Native Science and Western Science, “both scientific processes are needed to solve complex issues such as food insecurity and to reduce the ecological footprint of food and agricultural production” (59). Both are also equally valued in what she refers to as ‘the holistic process,’ which she describes as an informal, nonlinear process with the following categories of action, which are not sequential but spontaneous:

- Describing the ‘whole to be managed’ and creation of the holistic goal
- Identifying tools and testing questions
- Establishing the feedback loop
- Creating focus groups
- Convening stakeholder meetings (59).

Students engage in the holistic process through directed readings and content modules, reflective writing, small and whole group discussions, whole class group case study, an individual Holistic Management Plan, guest speakers, and field trips.

At the heart of the book are examples of how the holistic process and decolonizing methodologies can take place in practice. Under the topic of listening in and between communities, these examples include subsistence farmers in Mali, two Native American tribes and a bioregion in Mongolia, along with building ‘power line’ connections between students and policy leaders, and listening to students themselves.

The book concludes with a call to action to bridge the gap between food and agricultural sciences and the humanities and social sciences, emphasizing that both Native Science and Western Science contribute

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essential understandings to the whole of place-based and culture-based knowledge. Overall, Dunkel sees this book as a new teaching process at the interface of teaching, scholarship, and engagement and as a response to students who wanted to connect the dots between their technical education in the classroom and people in the real world. For her, the way forward is enabled by eleven basic tools:

- Recognize and understand one's own culture
- Be open to failure and how to learn from it
- Decolonize (use language of those with whom you work and live)
- Strive to have an ethno-relative worldview
- Use the holistic process in one's own life and facilitate its use in learning and sharing in a community
- Value immersion experiences
- Listen to indigenous peoples
- Listen across "power lines"
- Instructors listen to students and students listen to each other
- Listen across campus
- Include Traditional Ecological Knowledge and the doing of Native Science as an important basis and ongoing process (299).

For Dunkel, this new teaching process represents a 'Quiet Revolution,' a way to create systemic change in every aspect of higher education. Such a change is needed because "poverty and the whole area of health and food security is one of our global grand challenges" (305). I couldn't agree more, and Dunkel et al. have created the roadmap for achieving this.

The book is clearly written and coherently organized. It can also be used as a toolkit for engendering this transformation. I would have liked to see a more refined concept of ethno-relativism. Under this worldview, "differences are noted and accepted not as 'good, bad, or disgusting,' but 'just different, and that is okay'" (101). This relativistic outlook does not take into account that some cultures engage in genocide, ethnic cleansing, female genital mutilation, or slavery. These cultural practices would not be considered "just different," but criminal by most standards and need to be denounced, not tolerated. One other small issue occurs in the preface of the book, written by the President of Montana State University. She writes that "the commitment to freeing the world of hunger and malnutrition still weighs on our nation's conscience" (xxiii). This is a startling sentence, considering that for many years the United States was complicit in dumping surplus farm products into developing countries in the name of food aid, thus benefitting their own producers while harming those in targeted countries (Friedmann [2012] 2017). Organizations like Via Campesina aim to be free of such impositions by powerful players in the global food system and to exercise food sovereignty – that is, the right to determine their own agriculture systems, food markets, environments, and modes of production. This would constitute an excellent exercise in ethno-relativism.

**References**

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