

Marginalized Knowledges

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Summary and Keywords

Marginalized knowledges are the intergenerational knowledges and skills from communities worldwide that hegemonic forces have pushed to the margins of society. These include facts, beliefs, perceptions, attitudes, behaviors, and competencies. Marginalized knowledges are part of the human capital that materially poor rural and urban peoples have developed over time—both Indigenous and non-Indigenous communities. These knowledges are situated and contextualized in a given time and locality, and have evolved to fulfill economic, social, environmental, spiritual, or cultural needs. School systems worldwide in the 19th and 20th centuries adopted an official, hegemonic curriculum that ignored and displaced these vital knowledges at a great loss to poor communities. Fortunately, different pedagogies exist today (e.g., pedagogy of place; funds of knowledge; civic service) that seek to bring these knowledges to the center of school life and provide a complementary, parallel role to that of the school's official curriculum.

Keywords: marginalized knowledges, Indigenous knowledges, local knowledge, development, pedagogy of place, funds of knowledge, civic service

Introduction

Marginalized knowledges are the intergenerational knowledges and skills from communities worldwide that hegemonic forces have pushed to the margins of society. Marginalized knowledges include facts, beliefs, perceptions, attitudes, behaviors, and competencies. Communities worldwide produce these knowledges and attempt to preserve and pass them on to future generations. Materially poor rural and urban peoples have developed this human capital over time while being part of a given ecosystem and locality. Marginalized knowledges serve to fulfill economic, social, environmental, spiritual, or cultural needs. Although the poor lack adequate amounts of money or material possessions, they may have a wealth of knowledge and skills that help to fulfill basic subsistence needs, a unique sense of identity, and care for the environment. Some examples include knowledge that helps people grow food, provide shelter, promote health care, make housewares, take care of plants and animals, fulfill cultural and spiritual needs, and generally improve their community's livelihood and environmental well-being. Because these

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knowledges sometimes lack a real or perceived value within the market economy, they have often been prevented from being viewed as vital assets by society at large.

As they relate to the educational system, marginalized knowledges have regularly been considered by school authorities as too insignificant or trivial to become an indispensable part of school life. As a result, they tend to be excluded from the school curriculum or at best occupy the edges of school life in the form of extracurricular activities. The curriculum in contemporary schools tends to privilege certain forms of knowledge above others. It legitimizes knowledge perceived as having high status, codified in books, viewed as universal, and with a proclivity to be abstract and theoretical. Knowledge perceived as having low status, transmitted orally, local in nature, and viewed as parochial, is ignored, vilified, or considered trite and useless. The same occurs with manual forms of skill, which too often are treated by schools as dispensable and subordinate to such subjects as mathematics, science, and language arts. It should be noted that modern systems of education are just one of the culprits behind the disappearance of local knowledges. Larger economic, political, technological, and cultural forces are also responsible. Nonetheless, a focus on schools is important given the inordinate amount of time that children and youth spend inside schools; therefore, it is necessary to focus on how schools prevent children and youth from accessing and mastering marginalized knowledges that historically have co-evolved with the local bioregion.

This article first discusses the historical origins of the systematic exclusion of marginalized knowledges in modern schools and textbooks. Next, it explains the importance of marginalized knowledges in society at large. Then, it focuses on pedagogies that incorporate marginalized knowledges into different educational contexts and strategies that are currently included (or could be included) in schools. Lastly, it offers words of caution that educators and other supporters should take into consideration as they seek to include marginalized knowledges in school and daily life.

Systematic Exclusion of Marginalized Knowledges

A starting point for understanding how knowledge from subordinate communities becomes marginalized is to discuss a key institution where this has taken place: the modern school. The first comprehensive theory of modern schooling is believed to have been articulated by the Czech educator John Amos Comenius in the 17th century (Arenas, 2007; Dobinson, 1970). Comenius (1592–1671) was perhaps the first one to suggest a national system of education that was compulsory, universal, used the vernacular language as the main communicative tool, and sought to transmit a rational body of knowledge. Whereas Comenius did not advocate for a secular form of education, a hallmark of contemporary public schools in secular countries, he did plant the seed that supported curriculum built around reason. A secular form of education would appear until the 19th century, with the

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spread of national systems of education. Comenius expounded his unfailing trust in rationality in his most important work, *The Great Didactic* (1628–1632):

We should accustom boys to do everything by reason, and nothing under the guidance of impulse. For man is a rational animal, and should therefore be led by reason, and, before action, ought to deliberate how each operation should be performed, so that he may really be master of his own actions. (1896, p. 364)

An important aspect of the transmission of a scientific, rational body of knowledge was the creation of textbooks. Comenius was perhaps the first to introduce books appropriate for each grade level that contained secular content in schools (Eby, 1934, p. 185). In schools, the custom at the time was to use books written for adults, and usually, only the teacher and just a few students had copies. Comenius remedied this situation by publishing his textbook in 1658, *Orbis Sensualium Pictus* (The Visible World in Pictures), for elementary-school-aged children. This book, composed of 150 short sections, is considered the first secular children's book with pictures, and it covered all sorts of subjects, including biology, history of wars, stages of development, and religious life. First printed in Latin and German in Nuremberg, the book was published in other vernacular languages soon thereafter (Eby, 1934).

Textbooks radically changed the character of education. The homogenizing process that started with simultaneous instruction was greatly aided by textbooks, for they restricted the type and amount of content taught in an academic year and ensured that year after year the same knowledge would be transmitted. Over time, textbooks gradually displaced oral tradition and other forms of knowing and feeling that were not easily codified in book form. The printed document came to signify the reliable representation of observable events, and it replaced in importance the changing spoken word. Virtually the entire intellectual content transmitted in schools from one generation to the next became enshrined in books and textbooks. A new hierarchy of knowledge was thus gradually established. Before the rise of the printing press and the Reformation, only religious knowledge mattered; afterward, secular and rational content encoded in textbooks competed for hegemony in schools alongside religious texts. Gradually, both secular and religious texts were the only sources of knowledge considered to be legitimate and truthful. Everything else, especially oral traditions at the vernacular level, were deemed insignificant, or worse, false.

Centuries later, during the establishment of national systems of education, book content tended to be standardized and made the same for all children. The printing press was vital to the establishment of national systems of education. Edward Reisner (1930) wrote, “possibly the most important single factor connected with the rise of the common school [was] the invention and spread of printing” (p. 19). Unfortunately the standardization of books and the rise of “the common school” displaced other forms of knowledge that were not codified in books and thus deemed unworthy by those in power.

Importance of Marginalized Knowledges

Today, many marginalized, local knowledges are at risk of becoming extinct. The disappearance of these knowledges is partly due to educational systems that see little use for these forms of knowledge. It is also partly the result of fast-paced economic, political, social, and cultural changes that make it increasingly difficult for local knowledges to be incorporated into people's daily lives. For instance, the indiscriminate adoption of modern technologies that have promised easier and faster solutions to problems—real or perceived—or the adoption of Western lifestyles that are viewed as more alluring and fashionable have pushed many ancestral practices to the margins of social and economic life. The tragedy of the eventual disappearance of marginalized knowledges is most obvious to those who have developed them and make their living from them, but the consequences for society may also be detrimental because valuable skills, technologies, artifacts, problem-solving strategies, and expertise become lost. Local knowledge is a part of people's lives, and the poor especially may depend on specific skills and knowledge to ensure their livelihoods. Some examples of local knowledges that are indispensable for a good living include the following:

- Sustainable agriculture, knowledge related to crop diversity, intercropping, erosion prevention, and safeguarding of the biological richness of the soil.
- Sustainable animal husbandry, knowledge of breeding strategies, livestock characteristics and requirements, humane forms of sacrificing animals, and ethnobotanical knowledge for treating common illnesses.
- Responsible management of natural resources, protection of rivers and forests, sustainable management of wild species, and preservation of native species.
- Promotion of preventable health care and knowledge and use of plant properties for medicinal purposes.
- Ecological construction and design of housing and other dwellings that use low-impact materials.
- Community well-being, common or shared knowledge that provides links between community members and generations (e.g., festivals, music, arts, clothing).
- Poverty alleviation, knowledge of survival strategies based on local resources.
- Conservation and revitalization of Indigenous and other non-hegemonic languages.

Three examples that support the importance of protecting marginalized knowledges are (1) the global public health epidemic of Type 2 diabetes; (2) the decline of agrobiodiversity (i.e., fewer crops are feeding more people); and (3) the eradication of Indigenous languages.

Type 2 Diabetes

The global public health epidemic of Type 2 diabetes disproportionately affects Indigenous peoples (Leal Ferreira & Chesley Lang, 2005). The complex reasons for this include genetics, lifestyle changes, and psychosocial stresses associated with colonization and postcolonization. What is clear, however, is that Type 2 diabetes is a modern disease that did not exist in Indigenous communities before the systematic contact with the Western world. Highly sedentary lifestyles replaced the active lifestyles of Indigenous peoples, and a diet rich in processed flour, processed sugar, white rice, carbonated drinks, powdered milk, cheap fatty meat, and little in the form of fresh fruits and vegetables replaced a healthy diet that included a mostly plant-based diet with occasional animal species from local ecosystems. A case in point is the Tohono O'odham people, an Indigenous group from southern Arizona that has one of the highest rates of diabetes in the United States (Fazzino, 2008). Before 1960, diabetes was unknown among tribal members. In the decades that followed, in addition to becoming highly inactive physically, members from the tribe replaced a traditional menu of tepary beans, cholla buds, prickly pear cactus, saguaro fruit, squash, and corn—all native to the southwestern United States—with a modern diet of mostly processed and junk foods laden with carbohydrates, salt, and fat. Over time, tribal members ceased to consume their traditional foods, and, even worse, the new generations failed to learn the ancestral agricultural techniques that allowed them to cultivate with little water in the Sonoran Desert.

Decline of Agrobiodiversity

Fewer crops are feeding more people worldwide, and the dangers to biological and cultural diversity are staggering (Zimmerer, 2017). More than 50% of all plant-based calories consumed in the world comes from only three crops: rice, wheat, and corn. Agrobiodiversity, a subset of biodiversity, is the rich genetic legacy that results from the interaction between natural selection and cultural practices of inventive farmers, herders, and fishers throughout millennia. Agrobiodiversity is declining rapidly due to the overwhelming presence of industrial forms of agriculture, husbandry, and fishing that pushes to the margins the knowledge and skills of countless peasant and Indigenous populations who have an intimate knowledge of the land. According to Zimmerer (2017), Mexican farmers are cultivating only 20% of the corn types that were grown there in 1930. Chinese farmers are producing only 10% of 10,000 varieties of wheat that were recorded there in 1949. And farmers in the United States are harvesting only 5% of the apple varieties that existed in the country in 1900. The dangers to the reduction of agrobiodiversity are numerous and include the following:

- a diminished array of nutrients, which has led to the development of a poor diet for people worldwide
- the production of fewer crops and fewer varieties of the same crop (all for export) as tastes become homogenized, which makes local communities dangerously dependent on global markets

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- the biological impoverishment of soils
- the loss of cultivation techniques and local know-how on how to maintain the richness of the local agrobiodiversity
- the loss of genetic diversity in staple food crops

The history of the potato exemplifies the latter point. In the 19th century, Ireland was heavily reliant on only a few varieties of potato, and those types contained no resistance to the devastating disease known as late blight. When the late blight pathogen destroyed the potato crop in the 1840s, widespread famine followed. The famine, along with British government policies, led to the death of one million people and another two million was forced to migrate abroad. With an estimated population of eight million at the time, the deaths and migration of millions of Irish people is considered one of the worst social catastrophes of the 19th century (Donnelly, 2001).

Extinction of Indigenous Languages

The shocking number of Indigenous languages that are becoming extinct is one of the greatest tragedies in lost marginalized knowledges (Nettle & Romaine, 2000). Researchers estimate that of the approximately 7,000 languages that exist, about 50% will disappear by 2100. If present trends continue, one language will die about every four months. A language is not just a collection of words strung together through a set of syntactic rules; it is also a way of thinking, perceiving, and relating to the world. It is an immaterial vehicle through which the souls of cultures become alive in the material world. In certain respects, these Indigenous languages contain a knowledge of the natural world that is absent in modern forms of science (Thurman, 2015). For instance, the taxonomies of endangered languages often distinguish hundreds of types of flora and fauna unknown to Western science. As Thurman (2015) wrote, “Haunóo, a tribe of swidden farmers on Mindoro, an island in the Philippines, have 40 expressions for types of soil. In Southeast Asia, forest-dwelling healers have identified the medicinal properties of some 6500 species.” Quinine, aspirin, codeine, ipecac, and pseudoephedrine are common medicines derived from the language of Indigenous ethnobotany. On every continent, people are forsaking their ancestral tongues for the dominant language of their region’s majority, thus contributing to the loss of Indigenous languages. Once the last speakers of the language are gone, the vast knowledge contained in the language may also be lost.

Since the 1970s, when important efforts to rescue and protect Indigenous languages came to the fore, some academic circles have called into question such an enterprise, by stating that language preservation and economic development were in opposition. As Jonathan Pool wrote in 1972, “A planner who insists on preserving cultural-linguistic pluralism had better be ready to sacrifice economic progress” (p. 225). The belief that a society can only have linguistic diversity or quality of life but not both simultaneously is Manichaeistic. This same logic brought about the destruction of old-growth forests worldwide, imposed industrial agriculture to the detriment of ecological forms of agro-production, turned economies of developing countries into monoculture cash crops for export,

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and imposed a Western, modern form of education to the detriment of local languages and knowledges.

Incorporating Marginalized Knowledges into Schools

Pedagogies that employ the concept of marginalized knowledges in the context of schools include multicultural education (Banks, 1981); ecological literacy (Orr, 1992); funds of knowledge (Moll, Amanti, Neff, & González, 1992); ecojustice education (Bowers, 1995); intercultural education (Dietz, 2003); place-based learning (Sobel, 2004); civic service education (Arenas et al., 2006); and culturally appropriate education (Castagno & Brayboy, 2008). While each of these pedagogies emphasizes different aspects of social justice or environmental sustainability, they all share the idea that until marginalized knowledges become dutifully incorporated into school praxis and eventually become part of the “official curriculum,” the knowledge and skills these pedagogies promote are ignored or simply deemed unimportant, dispensable, or flat out wrong.

Incorporating marginalized knowledges into schools takes different pedagogical strategies, depending on the type of knowledge and skills that educators, often with the assistance of community members, want to see included. This section describes pedagogical strategies that are currently included or that could potentially be included in efforts to address the three examples explained in the section “Importance of Marginalized Knowledges.”

Type 2 Diabetes and the Tohono O’odham People

In the case study related to the Tohono O’odham Indigenous people from Southern Arizona who have diabetes, part of the solution is to recuperate the knowledge and skills related to the Tohono O’odham traditional, low-glycemic diet. For such purpose, it is imperative to recuperate culturally appropriate ancestral knowledge and skills that are relevant to the local ecosystem. Some of the marginalized knowledges that need to be reclaimed and used regularly include knowledge about local plants and animals, traditional knowledge of wildlife and ecosystems, traditional subsistence skills, traditional cultural activities that create a sense of place, and traditional food and diet (Nabhan, 2016).

Local Plants and Animals

The strategy here is to survey students to determine how much knowledge they already have and how much they are missing. This can be done by showing photos of traditional animals and plants, or even better, taking them in person to where they can find flora and fauna for identification. Once they can identify them, the next step is to help students acquire ethnobotanical and traditional knowledge of animal behavior.

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Traditional Knowledge of Wildlife and Ecosystems

A science teacher may teach students that Baboquivari Peak is a granite monolith of 2,356 meters in elevation, with oak and walnut trees in the higher areas and saguaro, paloverde, and chaparral at the lower elevations. While this is true, an elder from the tribe would emphasize the spiritual aspects of the same peak, stating that Baboquivari is the most sacred mountain of the Tohono O'odham people. It is the center of their universe and the home of I'ittoi, their creator. Both of these interpretations of the same mountain can coexist peacefully and even nurture each other.

Traditional Subsistence Skills

Hands-on, experiential learning is used to transmit skills related to marginalized knowledges. Some questions that can be asked to ensure the skill is learned include the following:

- When is the best time of year to harvest roots and leaves for baskets?
 - How do you prepare gourds for making rattles, ladles, and masks?
 - What is the best wood to burn for baking clay pottery?
 - When can tortoises be found sleeping in caves or crevices?
 - How big should wild greens (*quelites*) be before you pick them?
 - How can you remove spines or stickers from food plants before you can eat them?
- (Nabhan, 2016, p. 151)

One organization that puts these knowledges and skills into practice is the San Xavier Co-op Farm in the Tohono O'odham Reservation, in the outskirts of Tucson, Arizona. The San Xavier Co-op has two primary focuses: producing agricultural products in an environmentally and culturally sustainable manner that supports the economic development of the Tohono O'odham people, and educating the greater public on ecologically and culturally sustainable agriculture in the Sonoran Desert. They sell a variety of products, including dried goods, seasonal produce, nursery plants, and hay/feed. Their education programs include opportunities for volunteering on the farm, the Wild Harvest program, which includes workshops on how to harvest plants like cholla buds or prickly pear, and farm tours. The mission statement of the San Xavier Co-op is as follows: "The San Xavier Cooperative Association is committed to healthy farming practices and growing traditional crops to support the cultural and environmental values, as well as support economic development within the community" (San Xavier Coop, N.D.). The San Xavier Co-op always considers Tohono O'odham Himdag, or Way of Life, in their management of the farm and its program to ensure that the farm is consistent with the culture. Tohono O'odham Himdag includes respect for the land, the sacredness of water, respect for elders, respect for animals, and respect for plants.

Before the establishment of the San Xavier Co-op Farm, irrigated agriculture along the Santa Cruz River was widespread and practiced by generations of Tohono O'odham. The Santa Cruz area was the only place where irrigation agriculture was possible. Groundwa-

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ter pumping and down cutting caused surface water flow to stop in the Santa Cruz River. Many Tohono O'odham people lost their livelihood. In 1971 a group of Tohono O'odham landowners gathered to form a cooperative that pieced together land allotments that were previously assigned by the U.S. president to specific families and farmers through the General Allotment Act of 1887. In 1975 the Tohono O'odham pressured the U.S. federal government to file a lawsuit against the City of Tucson, agribusiness, and mines that were diverting groundwater from the aquifer beneath the San Xavier District on the Tohono O'odham Nation. This lawsuit led to the passing of the Southern Arizona Water Rights Settlement Act in 1982, which granted 56,000 acre-feet of water a year to San Xavier. The water allotted to the community from the passing of the Southern Arizona Water Rights Settlement Act allowed for the San Xavier Co-op farm to be a productive asset of the community (San Xavier Coop, N.D.).

Traditional Activities That Create a Sense of Place

Traditional songs, stories, festivities, biographies, and activities instill knowledge of place and bring group members together. This knowledge includes the realization that not all activities and skills are open to all members of the group. Some people may have more access than others, depending on their age, gender, or status. In all cases, however, the elders are the repositories of knowledge and they should be the main leaders for sharing information and experiences. Schools should invite elders as often as possible to help bring these marginalized knowledges into the curriculum.

Traditional Food and Diet

Schools need to become sites for teaching children how to harvest, prepare, and consume traditional foods; offer these foods regularly in the school cafeteria; and invite community members to school festivities serving these foods. The Tohono O'odham diet is a perfect example of how centuries of the careful selection of foods led to a diet that is highly appropriate for people living in a desert environment.

Agrobiodiversity

Peruvian peasants stand out as formidable protectors of the rich bioagricultural diversity of the potato (Apffel-Marglin & PRATEC, 1998). Whereas the rest of the world has succumbed to eating just a few varieties, Peru, the cradle of the potato, has more than 3,500 varieties, and some farmers harvest more than 50 varieties from their fields. It is important to note that Peruvians preserved this vast potato genetic pool despite several challenges, including the incessant efforts by national governments to impose modern, industrial forms of agriculture that has led to the growth of a few cash crops and just a few varieties of those crops in developing countries, and the imposition of modern forms of institutionalization, such as the Western, modern school.

When analyzing the rise of modern education, it is important to highlight key characteristics of the modern school and how each of these characteristics differs from the qualities found in the traditional Andean world (Rengifo Vásquez, 1998). First, modern education

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stresses the separation of the individual from nature. In contrast, in the traditional Andean world, there is a close and symbiotic relationship between the two:

In the Andes it is common to hear the farmers who raise alpacas say “In the same way that we raise alpacas, they also raise us.” “Just as we raise potatoes, the potatoes also raise us.” The quality of upbringing or nurturing is not an exclusive attribute of the human community, but also of nature and of all the [nonhuman] communities that inhabit the world. This is so because the Andean human community has not disaffiliated itself from nature, but is a part of her.

(Rengifo Vásquez, 1998, p.174)

Second, modern education stresses that nature is an inanimate object that can be exploited at will to serve the human community. In contrast, in the Andean cosmovision, everything in nature is considered full of life. The mountains, rivers, rains, and wind are all alive and are a part of the human community’s extended family: “The mountain is our grandfather; the Earth is our mother. When farmers incorporate potatoes into the *chacra* [agricultural field in Quechua] for the first time, they treat the potatoes like daughters-in-law. In the Andean world, not only is everything alive, but everything has the attributes of a person and a relative” (Rengifo Vásquez, 1998, p. 175).

Third, modern education—and especially the modern university—separates the subject from the object in its incessant pursuit of the professionalization of knowledge. This professionalization turns knowledge into a commodity and its search into an individual endeavor. The credential holder is the all-knowing individualist, a passionless, factual expert who ignores or even despises knowledge that has not emerged from the halls of academia. In contrast, in the Andean cosmovision, the knowledge that has allowed Indigenous and non-Indigenous peasants to nurture the *chacra* to give rise to thousands of potato varieties and to safeguard them throughout the centuries is a collective effort with no subject-object separation. Moreover, the knowledge exists to support communal well-being, not to ensure the socioeconomic advancement of a few privileged individuals.

Linguistic Diversity and Formal Education

Despite the incompatibilities between the modern school and the Andean traditional universe, in the example related to linguistic diversity, formal education could play a vital role in ensuring the conservation and revitalization of marginalized languages, even when many public-school systems are failing to do so. One country where this has occurred is Paraguay, the only country in the Americas where the majority of the population speaks one Indigenous language, Guaraní. Unlike many languages native to Latin America that have disappeared as a result of European conquest and colonization, Guaraní has survived the passage of time and is spoken by the vast majority of the population. Whereas other regional Indigenous languages have also achieved widespread use and legitimate status—such as Quechua and Aymara in Peru and Bolivia, respectively—Guaraní is the only Indigenous language that is spoken by Indigenous *and* non-Indigenous people alike,

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surpassing 80% of the population as speakers, with different fluency levels (Ito, 2012; McCormick, 2018).

The role of schools in improving the acquisition of Guaraní, however, has been mixed at best (Ito, 2012). In 1973 Paraguay adopted a transitional bilingual education program that, while it taught Guaraní in the first few years of primary education in rural areas, its main purpose was to hispanize Guaraní monolingual children. In other words, Guaraní was taught only as long as it served as a springboard to learning Spanish. In the 1990s a new consciousness and sense of pride for speaking Guaraní was developed, which resulted in two important changes. The newly minted 1992 Paraguayan Constitution granted official status to Guaraní alongside Spanish, and in 1994 a new bilingual education policy was adopted that replaced the old and obsolete transitional programs with one that sought to turn the Paraguayan population between 15 and 35 years old completely bilingual by 2020.

At least this was the theory. The reality, however, has been different given that Guaraní still lags behind Spanish in socioeconomic status. At least three factors have contributed to the marginalization of Guaraní (Ito, 2012; McCormick, 2018): (1) Spanish remains the predominant language of instruction in many schools, as many teachers and parents (including those who were raised speaking Guaraní) still believe that learning Guaraní takes time away from learning to master Spanish, and they view Spanish as the window to economic development. (2) Bilingual education is underfunded, bilingual teachers receive little training, and bilingual education has little presence in rural schools in the country, where Spanish is taught to many Guaraní speakers. (3) The Guaraní taught in schools is a formal, and somewhat anachronistic, version compared to the colloquial version spoken on the street, known as Jopará, a mix of Guaraní and Spanish.

Despite these obstacles, there are still many signs of hope that the Guaraní language will remain vital inside and outside of schools. Inside schools, there are efforts to implement a new linguistic ideology that supports bilingualism without compromising economic advancement, better funding for bilingual education in the country, and adopting a more flexible and less purist Guaraní ideology that opens space for Jopará in schools. Outside of schools, as McCormick (2018) wrote, “Today, a growing number of babies and businesses are being given Guaraní names. Guaraní text can be seen on billboards and signs in Asunción, the capital. Its music is no longer just confined to the folk genre; artists are increasingly recording metal, rock and rap songs in Guaraní. Online content in Guaraní is also steadily expanding. Vikipetâ, the Guaraní version of Wikipedia, gets 220,000 monthly visitors.” Moreover, to ensure the vitality of an indigenous language and to reach what Joshua Fishman (2001) called “Reversing the Language Shift,” the vernacular language must be spoken

- informally between and within three generations of a family,
- informally by children and adults in the neighborhood,

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- and by a host of institutions, such as the mass media at the local, regional, and national levels; governmental services; nonformal education for adults; youth groups; and cultural groups in general.

It is the constellation of all of these forces brought together, in and out formal schooling, that may guarantee the continuity of the Guaraní language.

Final Considerations

This article has advocated the importance of bringing noncommodified knowledges that large economic, political, and cultural forces have sought to render irrelevant back to the center of cultural and school life. The problems facing contemporary life are so large and intractable (e.g., climate change, poverty, diseases, malnutrition and famine) that the usual answers emanating from modern institutions (i.e., Western science and technology; growth economics; nation-state) have shown to be insufficient in addressing these problems, and even worse, are sometimes found to be at the root of the problems themselves. Nonetheless, it is important to be mindful of certain potential problems of incorporating wholesale marginalized knowledges.

There is a tendency to over-romanticize marginalized knowledges, particularly those of an Indigenous nature. This is problematic because the assumption that all marginalized knowledges will necessarily provide a sustainable answer to the problems affecting poor communities is naïve at best. The question then becomes, which traditions to uphold and which to reject? Part of the answer lies in the limits of cultural relativism. Cultural relativism, the idea that the knowledges, practices, and values of a group must be understood within its cultural context, is circumscribed by the Golden Rule in its positive, “Treat others as one would like others to treat oneself,” and negative, “Do not tolerate for others any treatment that one would not accept for oneself,” forms. These maxims should of course be extended to the planet: “Treat the Planet the way one wants to be treated” (Gould, 1994).

Marginalized knowledges are not static. Despite having emerged from a certain place and time, these knowledges are syncretic and constantly evolving. They are reinterpreted and experienced differently by each new generation, and this is even truer with globalized forms of technologies that allow for instant communication and influence in even the remotest corners of the planet. Notice that in this article, the concept of marginalized knowledges has been used in the plural; this was done purposefully, to signify that these knowledges are not self-contained, independent, separate, and immutable. Users of marginalized knowledges tend to be highly practical, and if the knowledges are identified as having socioeconomic, cultural, environmental, or spiritual relevance, then they will be adopted by its users, regardless of the origin of such knowledge.

Finally, to the discussion on education, the role of schools provides an interesting paradox: while the modern school has historically subordinated vital place-based knowledges, it is precisely the school itself that must become one of the sites for recuperating these

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same knowledges. This is no easy feat. Few schools have embraced true intercultural and experiential education or made concerted efforts to place marginalized knowledges on an equal footing as the more conventional and modern forms of knowledge. There are various reasons for this: A renewed emphasis on standardized testing; the inertia and recalcitrance of bureaucratic systems to embrace change; the lack of experience by well-meaning educators to implement the necessary transformations; and the alarming contentment by other educators to embrace the status quo all contribute to educational malaise. Nonetheless, schools and other educational institutions can and should play an important role in promoting a new understanding of community and ecological stewardship among educational actors—students, teachers, administrators, and parents.

Marginalized knowledges are an integral part of the cultural wealth of poor communities worldwide and may enable community members to live dignified lives with a sense of identity and belongingness while helping them to satisfy basic material needs.

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