Participatory Research Ethics - Aruskipt'asipxaňanakasakipunirakispawa

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Photographs by John Amato

Editorial

"We are human beings; hence we must communicate. We are obliged to dialogue, in spite of all the conflicts in which human act, we also face and resolve with communication."
Aymara Professor Juan de Dios Yapita

Abstract

Collaborative ethnographic research with First Nations Peoples contributes to our understanding of humanity, its dynamic processes, and possibilities toward sustainable ways of living in harmony with Mother Earth. Cultural diversity is one of the greatest gifts bestowed on humanity (Spradley 1979, p. v). When conducting participative research with indigenous peoples, it is essential for the fieldworker to adopt a holistic perspective with the awareness that ethnographic interviewing is a cross-cultural opportunity of intimate communication, exchange and fellowship. The researcher must be conscious of her/his personal biases and assumptions that directly reflect their ethics and values, as well as the research process and outcomes.

Key words: participatory, ethnographic, research, indigenous, First Nations, sustainable, harmony, earth

Genuine respectfulness, cultural sensitivity and courtesy are paramount when conducting participatory research. The project must be explained clearly and honestly to the people of the community, and permission on consent should be sought from local leaders. Strongly consider what can be given back to the community for the peoples' patience, participation, generous knowledge sharing and time.

It is necessary to recognize the vantage point of one's own dominant culture to guard against portraying or defining others in terms of one's own cultural belief system. Ethnocentrism is a form of scientific colonialism, which is the imposition of a dominant culture's values (Sunstein & Chiseri-Strater 2012, p. 4). The collaborative field researcher has an ethical responsibility to the people she or he is engaged in working with, to honor and protect their dignity, wellbeing and privacy. The project itself must involve and safeguard the concerns, interests, rights and needs of the participants while being instrumental in affirming these foci.

I had the honor and privilege of conducting participatory research in the Andes with the Aymar Marka (Aymara Nation) of northern Chile through USAID and the International Cooperative Biodiversity Group Project. Our work is about giving voice to the Aymara people. Of primary importance is to engage and cooperate with the Aymara community in order to strengthen their ongoing capacity-building efforts (Eisenberg 2002, p. 14; 2006, pp. 84-88; 2013, p. 2) (Fig. 1).

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Fig. 1. Interview with Chungara Aymara artisans and pastoralists on the high plateau.

Genuinely respectful and reciprocal dialogue is a valuable exchange for exploring how the research can benefit the community. The undertaking can be mutually cooperative; a partnership in which there is consultation with those involved and their suggestions and concerns drive the direction of the project. Reports of the research study should be accessible to the participants for review. We provided the preliminary report generated by the fieldwork to Aymara experts, participants, and collaborators for technical review to ensure that it did not contain confidential information or inaccuracies. Participative research is an ongoing interactive process therefore consultation continues (Eisenberg 2013, p. 6).

Marcus (1992, pp. 99-114) exposes how ethnographies may be "produced and reproduced through the politics of domination" while the gaze of the state is so pervasive, as it exercises its power, surveillance and violence in Aboriginal Australia. The factors controlling the production of ethnographic works must be examined as the absence of any discussion of power is key to its perpetuation where racialized others are scrutinized. De-politicized ethnography fails to undermine the structures and practices of racism and the "anthropological silence on these matters is disturbing." Marcus expressly purports that ethnographic researchers must expose the ways in which Aboriginal lives and culture are being violated, and that we must not sanitize through language, "the horror of the practices of racism." Politicized criticism that overtly discusses power and meaning is scarce in the field of ethnography (Alonso 1992, pp. 165-180).

There is however a position that many researchers share whose professional lives are devoted to providing a richer understanding of humankind as a basis for social action and change to improve quality of life. Reciprocity is an essential and indispensable component in this methodological process and the heart of this understanding rests upon a shared humanity (Edgerton & Langness 1974, p. 29). Any planning, development and social change must represent the talents, strengths, knowledge and expertise of the local community including its wisdom of ecosystems, ecological principles and adaptive potentialities (Appell 1988, p. 272). Thus, the people are in a reciprocal relationship with the resources necessary to implement the changes they desire.

Fieldwork requires honesty, sympathy, insight and humility. To establish rapport and trust, one must be natural and open-minded. To have a friend, one must be a friend. Words spoken from the heart enter the heart. This bond is built on a foundation of trust (Fetterman 2010, p. 2). Participatory research is an interactive process, yet the dialogue is initiated by the researcher, revealing differences of power.

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Ethnography must be a collaborative undertaking whereby one "true" ideal of human life does not exist (Schultz & Lavenda 2013, p. 7).

It is essential for the participative researcher to have an understanding of native metacommunicative skills in order to conduct ethnographic interviews. There may be an incompatibility between these systems of communication, and one must learn to overcome the need to define and control the encounter (Briggs 1986, p. 39). While working on the ethnobotany of the Comcaac, the Seri Indians, at one point early in the study, the authors Felger and Moses attempted a standardized approach to data gathering, but it was a disaster. As one Comcaac woman asked, "Do you want to do this your way or ours?" After this, they tried to listen as a student who is learning from their teacher (Felger & Moser 1991, p. x). Each interview is a unique social interaction involving a negotiation of social roles and frames of reference between people. In order to prevent stagnation, we must question and examine our own methodology. Communication and discourse involve opening channels, both physical and psychological, between participants.

The context in which a question is asked may significantly affect the participating respondent's interpretation. Insensitivity to their definition of the encounter may lead the researcher to violate speech norms that contrast sharply with the native cultural premises. Many studies of indigenous plant uses have focused on medicinal and hallucinogenic practices. The definition of medicine in these societies is quite distinctive from the way in which Western cultures define medicine. Dr. Judith Schmidt, visual ethnobotanist discussed how Native Americans do not understand how we attempt to separate food from medicine because they affirm that …"good food is medicine" (Schmidt 1995, pp. 187-194).

I believe there is a universal regard and emphasis on maintaining and exhibiting patterns of respect for one's elders. Briggs (1986, pp. 61-92) reflected on his attempts to impose his own metacommunicative strategies on his elder consultants in the small Mexicanos community of Cordova in the mountains of northern New Mexico. The elders did not allow him to lure them into traditional interviews whereby "they would have accepted a subordinate role in a conversation with a rhetorical incompetent." The elders preserved their control over the selection of topics and the interactional strategy. Briggs was a younger person who was not well versed in the history and traditions of the community. It would have been disrespectful and inappropriate for him to dominate the conversation. By their resistance, the elders presented the young Briggs with valuable contextual information within an extended semiotic framework.

I have read many of the older ethnographic studies that describe the Aymara people. These writings are saturated with skewed negative stereotypes and "cultural" personality generalizations about these deeply rooted Andean people who I had the honor and privilege of working with through USAID and the International Cooperative Biodiversity Group Project (Eisenberg 2002, p. 4; 2006, p. 84; 2013, p. xiv; 2016a, p. 34; 2016b, p. 73; 2018, p. 10) (Fig. 2).

It is quite disturbing to read these so-called scholarly works, through which one must seriously comb and sift. How could the authors possibly assign one personality to an entire group of people?

Dr. Martha J. Hardman, renowned linguist and humanist worked respectfully with the Aymara of Bolivia. Before she first began her research in Peru with the Aymara, she was informed that the Aymara were so taciturn and that they never talked, and that she would not be able to engage in conversation with the Aymara people. Dr. Hardman as I never encountered this. She greeted everyone she met and practiced Aymar aru (Aymara language) as much as possible. This was interpreted by the Aymara as respectful human behavior and Hardman was accorded human respect. She looked back on earlier researchers' characterizations of the Aymara and the studies told her much about the way in which the researchers had treated the Aymara. "The gift of language had been withdrawn from the researchers quite clearly because they treated the Aymara like animals - as nonhumans" (Hardman 1997, p. 33).

Dr. Martha Hardman is a Professor of Anthropology and Linguistics at the University of Florida and Founder and Director of the Aymara Language Materials Program. She received the 1996 Humanist Distinguished Service Award from the American Humanist Association. Hardman explained that among the Aymara, "language is the definition of what it means to be human" and "the linguistic recognition of mutual humanity is the basis" of their grammatical system and system of courtesy. "In order for science to be of value, it must have value to the people from whom our scientific information comes." (Hardman 1997, p. 32). Human beings must not be used as objects of study. Such a practice is scientifically unethical. In 1965, Dr. Hardman's Aymara student, Professor Juan de Dios Yapita wrote a phonology and an excellent alphabet of the Aymara language.

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Fig. 2. Interview with Aymar awatiri (pastoralist) on the high plateau (suni) with her beloved qarwa (llama), Loli

In 1972, Professor Juan de Dios Yapita founded the Instituto de Lengua y Cultura Aymara. His creation of the Aymara alphabet generated a great deal of hostility. His alphabet accurately reflects the structure of the Aymara language however there were three other Aymara alphabets that were already in existence that were invented by non-Aymara foreigners for their own purposes. None of those alphabets represented the Aymara language accurately. These other alphabets were the Catholic, Protestant and Governmental. Thus the "Alphabet Wars" ensued with claims that Yapita could not have developed the Aymara alphabet himself; that it had to have been Hardman. Hence, Hardman was asked to order Yapita to change his alphabet to one that more closely resembled the other alphabets. Over time, the foreign alphabets changed…in the direction of the Aymara alphabet, which truly reflects the unique culture of the Aymara people (Hardman 1997, pp. 32-33).

In 1986-1987, I was Research Fellow and International Conservation Liaison for Yu Shan National Park in the Central Mountains of Formosa, where I worked closely with Bunun tribal colleagues who patiently taught me their language. The Taiwanese Chief of Yu Shan National Park requested that I, a non-Bunun foreigner with rather limited skills in Mandarin at the time, teach Bunun language to the national park staff. I declined with the recommendation that he approach the Bunun people with this request and with compensation to support their families. Bunun people understand their language within its linguistic and cultural context. I think it somehow diminished the politically appointed Taiwanese chief's hierarchical position to acknowledge the Bunun as teachers.

In the field, our consultants are our teachers and it is both respectful and important to understand the ways in which they convey and share information. Consultants in Briggs' research (1986, p. 76) used an agricultural metaphor to explain how one acquires a skill or body of knowledge, "You must have seeds in order to plant." This *talento* does not develop in isolation. It requires observing and engaging with those who possess the expertise in the endeavor. One must want to learn and concentrate. Water and weeding the developing plants refers to using the knowledge gained through observation and then expanding it by means of repetition – reiterating the words of one's elders. *Paciencia* and *respeto* at this

stage are central, and with careful cultivation, the plants will mature to be harvested (Briggs 1986, p. 63).

This native theory of learning from comprehension to imitation to production corresponds with a prominent theory of linguistic ontogeny. Observation promotes learning, and contexts change from moment to moment within interactions (Briggs 1986, p. 64). Researchers, who enter another society, lacking social and cultural sociolinguistic competence, have not developed by practice through the phases of language learning. They lack the understanding of how to use and interpret context-sensitive expressions appropriately. It would be inattentive then to barrage people with a set of interview questions! Researchers may also be ignorant of the oral traditions, ethnology and values of the community in which she or he has entered. An interview of questions may be disruptive to the cohesion and flow of discourse. Some fieldworkers impose their own metacommunicative patterns on their consultants, who are taught a subset of these devices. Briggs (1986, p. 88-91) termed this practice “communicative hegemony” and it exemplifies incompatibility with the participant’s own method of expression.

The first weeks or months of a researcher’s fieldwork can be devoted to becoming acquainted with the native community, its dynamic sociocultural processes, and language learning. While conducting ethnographic research with Diné families, Briggs (1986, p. 96-97) learned that it was highly inappropriate to speculate on the beliefs and behaviors of others. Such suppositions and talk might be viewed as usurping a person’s agency and as an attack on their integrity. The demonstrated lack of insight by asking probing questions introduced bias and made the respondents uncomfortable.

Researchers would benefit by looking into the communicative norms of the community before designing the interview instrument! The structure of the interview affects the significance of each response. While conducting collaborative research in the Andes of Chile with the Aymar Marka – the Aymara Nation (Eisenberg 2013, p. 3; 2002, pp. 307-309), Aymara Professor Manuel Mamani Mamani, Aymara linguist, folklorist, and ethnomusicologist of the Universidad de Tarapaca, taught us the basics of the Aymara language and introduced us to Aymara community elders. Professor Mamani, Roberto Jara Miranda, Presidente Junta de Vecinos de Puxtiri and Juana Crespo Cancino, Director of the Escuela de la Mujer in Puxtiri, the Aymara Precordilleran community, provided introductions in the Andean communities and assisted in developing and revising the interview instrument by removing potentially biased and leading questions toward an appropriate and acceptable language for the Aymara people and their communities. There were five different generations of the interview instrument, which underwent a number of adjustments after field testing before arriving at the final version. Collaborators Professor Mamani, Roberto Jara Miranda, and Juana Crespo Cancino facilitated translation of the interview instrument into the Aymara language and Castilian (Figure 3).

The interpretation of the discourse may differ between researcher and participant consultant. This raises viable questions about the notion of “scientific objectivity”. We cannot delude ourselves into believing that the meaning of the interaction is independent of the context in which it was articulated. It is too common that …”the interview data lull us into being content with business-as-usual interpretive techniques” (Briggs 1986, p. 118). Some researchers are focused on obtaining great quantities of data that precisely fit their vision. The interview agenda may be linked to relationships of power and control consistent with predominant Western institutions and ideologies. Such misguided research then reinforces such preconceptions.

When we draw on our participants’ understanding, this opens and expands us and enhances our perceptions. One cannot remain neutral, uninvolved and objective when conducting participatory research. The fieldworker becomes a part of the community and this must be recognized (Smith & Kornblum 1996, p. 3-6). Culture is not monolithic and static. It is about individual and collective experience, dynamic relationships and constant processual changes.

The collection of ethnographies of indigenous peoples in native languages concerns ethics, where sacred and esoteric information must be safeguarded according to the United Nations Declaration on the Rights of Indigenous Peoples (United Nations 2008, p. 1-15). In the case of the Diné Ethno-Medical Encyclopedia Research Project, the researchers were not permitted to record ceremonies, prayers, ceremonial songs or chants. The 10 volume work contains the teachings, ideology and knowledge that are the foundation of the Diné system of medicine. Ethnographers honored the conditions that extremely sacred and sensitive materials not be recorded. Some information can never be translated into English. The Diné language protects these texts from misuse. Sacred knowledge and objects have been desecrated, such as the

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burning of the Diné medicine bundles by Christian missionaries.

There is a growing concern among native peoples about how the materials they give to ethnographers will be used (Werner & Schoepfle 1987, p. 135).

In earlier years, ethnobotanical research was framed by imperialist motives (Alcorn 1995, p. 23). Today, this science is concerned with contributing to sustainable development and respect for indigenous knowledge systems and intellectual property rights.

Fig. 3. Interview with Aymar yapuchiri (agriculturist) and Aymar Yatichiri (Professor) Manuel Mamani Mamani.

The integration of ethnobotanical and anthropological research can enhance understanding of human ecology – human-land and resource reciprocal relations. Native peoples' agroecosystems reveal an applied ecological wisdom in which conservation and sustainability are integral to their practices. The diversity of vegetation created by traditional resource management functions to protect the system and maintain its health and resilience. Indigenous practices of selection and wild resources maintenance enhance conservation and the enrichment of species diversity.

There is an increasing participation in ethnobotanical research by First Nations Peoples and some policy makers are beginning to recognize and give overdue acknowledgement to traditional resource managers. Participatory researchers and indigenous communities are creating partnerships, and there is a response to local needs as this discipline assumes more policy-relevant dimensions (Alcorn 1995, p. 32-34). Native collaborators have generously contributed to ethnobotanical studies and as counterparts, the relationship is hopefully more balanced. The intellectual achievements and the sophistication of indigenous peoples' interpretation of biological relationships are extraordinary. First Peoples are exceptionally skilled naturalists and the adaptive choices they have made have resulted in the development of highly specialized expertise. A comprehensive and holistic perception of nature and the universe includes humans. Through this cosmological perspective, an intricate balance is implicitly understood. Other worldviews that exclude humanity from the whole threaten and cause devastation. By promoting dialogue, traditional wisdom may temper and guide the "…inevitable development processes that ride roughshod…" over the earth today (Davis 1995, p. 48-49).

How can indigenous peoples be compensated for generously sharing their ethnobotanical knowledge with industrialized nations? Shaman Pharmaceuticals, Inc. was a company based in California that concentrated on the development of plant derived medicinal plants employed in native societies. This ethical company provided a percentage of its research monies and profits to local communities. It gave up-front compensation for the immediate needs of the country and the indigenous collaborators and was committed to the development

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of a long-term compensation program through the Healing Forest Conservancy. The Healing Forest Conservancy non-profit foundation committed to cultural and biological diversity conservation, assisted indigenous peoples in participating in the process with a shared responsibility, while compensating forest-dwelling communities for drug discovery and actively promoting the welfare of the people. Human needs and problems are a primary concern for any biocultural diversity conservation efforts. Any and all activities that seek to develop natural products from indigenous peoples' cultural landscapes need to incorporate specific reciprocal benefits programs and processes for the people and places from which the products come (King 1996, p. 66-73).

Dr. Paul Cox conducted ethnobotanical research with Samoan healers who taught him how to use the bark of the *mamala* tree to treat patients with hepatitis. Prostratin, an antiviral compound is from the bark of the *mamala* tree, *Homolanthus nutans* (G. Forst.) Guill. in the Euphorbiaceae. Collaborating with a National Cancer Institute team led by Dr. Gordon Cragg, Dr. John Beutler, and others, with permission of the village chiefs and the Government of Samoa, Dr. Cox provided samples of the healer potion for analysis. The healer potion and the *mamala* tree from which it was extracted showed extraordinary efficacy against the AIDS virus HIV-1. The Institute for Ethnomedicine has been assisting the Samoan Government, the University of California, Berkeley, and the AIDS Research Alliance in the development of Prostratin, the antiviral drug. The Institute for Ethnomedicine negotiated valuable benefit-sharing agreements for Prostratin with the Samoan people. Prostratin profits shall be shared with the Samoan Government, the village where *mamala* was collected, and the families of the two healers who assisted in the discovery of Prostratin. Upon the request of the Government of Samoa, a team led by Dr. Holly Johnson of the Institute for Ethnomedicine identified high-yield genotypes for cultivation by Samoan villagers. Proceeds from cloning Prostratin genes shall be given to the Samoan Government, Falealupo Village and the healers (Brain Chemistry Labs The Institute for EthnoMedicine 2018). 1997 Goldman Environmental Prize recipient, Paul Cox and Samoan High Chief Fuiono Senio carefully worked to preserve a 30,000-acre rainforest by developing sustainable economic alternatives to logging. Cox raised funds to build a school and the Falealupo Covenant was signed. The Falealupo Rain Forest School was built and the Falealupo Rainforest Preserve was established (The Goldman Environmental Prize 2018).

Toledo (1995, p. 76-86) professed that ethnobotanical research has become a discipline concerned with social change, self-determination and the struggle and rights of indigenous peoples. Strong politicization has involved professionals with critical minds and a legitimate concern about the social role of science. The impoverishment, marginality and exploitation of native farmers and their struggle have greatly influenced ethnobotanists. Dominated cultures, political oppression and the destruction of indigenous natural resources raises serious questions about the political neutrality of scientific work. Consider the role of economic botanists in the expansion of imperialist England in the nineteenth century. Native people must not be used as mere objects of research, which exemplifies an asymmetrical relationship between a dominant and dominated culture. The social situation and the community's future cannot remain outside our interests. Native peoples are not merely suppliers of new material, and their knowledge is as valid and intricately sophisticated as any academic science. Their ecological interchange and reciprocity with nature serves to achieve and maintain the renewing capacity of ecosystems. Traditional ecological theories present innumerable promising alternative technologies of discovery, invention, multiple use strategies such as polyculture and integrated systems of sustainable agriculture. These brilliant innovations of their living heritage are inspirational!

Scientific investigations should be designed to be of service to rural communities and to acknowledge First Nations Peoples as researchers of their own ecological wisdom. Indigenous peoples should be the first beneficiaries of the research enterprise. Ethnobotany and ethnoecology are no longer disciplines enclosed within themselves. They are concerned with the problem of production and politics. Toledo (1995, p. 85) spoke of the new ethnobotany and the nature of the researcher as one who is "less specialized, less politically naïve and more conscious of her or his social role." Some current ethnobotanists and ecologists believe that classical ethnobotany has suffered a breakdown and is being reconstructed. As ethnoecologists and botanists, we must understand the culture in its own unique terms and consider the intracultural variation within a community. We need to be intuitive and flexible so that we adapt our methods to local norms and preferences rather than attempting incongruous techniques that alienate collaboration and cooperation. Culturally appropriate approaches can invigorate issues of conservation, cultural survival and affirm traditional values in the face of

encroaching external threats. Participants may share confidential information with the express request that it is not to be disclosed. Researchers must honor this as specified in the "Guidelines of Professional Ethics of the Society for Economic Botany (Cunningham 1996:23-24) and the International Society of Ethnobiology. Always ask the participant before recording material that might be secret, sensitive or compromising. Some individuals request anonymity because they are fearful of the consequences of political repression (Martin 1995, pp. 91, 106, 245).

Fieldworkers must obtain permission from the community leadership before commencing research activities. This entails making contact with leaders and then taking part in a meeting. The approval by the community affiliated indigenous federation of the region should be sought. An agreement formalizes the conditions under which the work will be conducted (Alexiades 1996, p. 7). Plant collectors must always seek the permission of individuals when gathering near homes, fields and gardens. Native peoples hold particular respect for plants that are endowed with powerful medicinal, religious or magical properties. Certain rituals associated with these plants may be required before collecting. As participatory researchers, we do not wish to offend or compromise the peoples' faith and trust in us, as worthy recipients of their knowledge. Researchers should be sincere, clear and honest about the project goals. All negotiations require an open mind and flexibility. Participatory research is an ongoing interactive process that remains an essential aspect of the relationship between fieldworker and the people. Try to incorporate local needs into the research design in direct response to the peoples' expressed concerns. Compensation is a form of reciprocity. Supporting efforts to secure land rights, promoting health care, contributing to community development programs, helping to build a school, providing books and training personnel are helpful. I worked with the Washoe Tribe of California and Nevada creating a Washoe Ethnobotanical Garden at the Washoe Elders Center under the direction of the Washoe tribal elders. The garden helps to teach the Washoe children about their plants and provides plant material for the elders. Washoe plant names and uses are spoken and shared as a revalidation and reinvigoration of their heritage. One can compensate participants through gifts and services, as is the local custom of exchange. There are many ways to express gratitude and reciprocity and this is essential. It is our responsibility as researchers that compensation is equitably shared and beneficial for the community.

As International Expert in China at the Research Institute of Anthropology and Ethnology, Jishou University, we conducted participatory United Nations Educational, Scientific and Cultural Organizations -Local and Indigenous Knowledge Systems (UNESCO-LINKS) and United Nations Permanent Forum on Indigenous Issues (UNPFII), United Nations Department of Economic and Social Affaris (UNDESA) grant projects with the Kam ethnic minority and ministries responsible for ethnic development. The Kam of Gaoxiu Village in Guangxi Province wished to develop a Gaoxiu Women's House, an Elders Activity Center, and playground for their children. Our project provided some financial assistance for these worthy community improvements. Gaoxiu Kam healer, Wu Shun Jun hoped to create a Teaching and Healing Center for Kam Medicine in his village. His grandfather taught him Kam medicine and he is teaching this very specialized intergenerational knowledge to his son. We hope that our study contributed to this aspiration (Eisenberg, Amato & Dengtao 2009, p. 106).

The Convention on Biological Diversity in Rio de Janeiro, June 1992 increased awareness of the need for policies regarding intellectual property rights. Biodiversity programs must respect the collective rights of the peoples concerning their cultural, biological and intellectual property. Groups are not culturally homogeneous. Certain specialized knowledge within societies is kept private through ritual and taboos. Ethnobotanists should not expect all people to be willing to share their knowledge and we must respect this when conducting fieldwork. Indigenous healers are not mere intellectual material. As participatory fieldworkers, we must never lose sight of this. In the field, group discussions with the community can serve as social events, which facilitate the transmission of cultural knowledge across generations (Alexiades 1996, p. 67). Build local capacity to carry out research and apply the findings toward conservation and community development (Eisenberg 2002, pp. 442-450; 2013, pp. 223-228; Eisenberg, Amato & Dengtao 2009, pp. 104-108;). It is essential that the research results are accessible to the people. A collaborative effort could be the creation of an ethnobotanical pamphlet, which represents the traditional community (Korn 2010:1-5). Royalties, revalidation and recognition would be a part of the acknowledgement and giving back to the community. Legitimize and promote traditional ways of healing, while integrating systems of health care for accessibility. Courtesy and politeness are universal, thus common sense can guide one's actions even with a limited understanding of local customs. Professional facades may create barriers between the fieldworker and the community. Being open to

new ways can endear people to you. Be willing to learn appropriate behavior. The field experience is re-educating ourselves to become attentive listeners and to allow others to express themselves freely. We should refrain from posing dichotomous questions because nothing is entirely black and white, and it is essential that our participants not be pressured into giving preconceived responses (Fig. 4).

Fig. 4. Interview with kullaka (sister) Matilde, Aymar awatiri (pastoralist) on the high plateau.

The protection of biodiversity must always be balanced with the needs of local people who are directly dependent on these resources for their subsistence and survival. Opportunities for the youth to master the ecological knowledge of their elders are of inestimable value. Conservation preserves culture and homeland. “Preservation of biological and ecological diversity depends upon the recognition that healthy, living ecosystems are more valuable than barren degraded ones.” (Posey 2004, p. 63).

“The Declaration of Belem”, 1988, the product of the First International Congress of Ethnobiology called for the legal defense of indigenous peoples’ knowledge and just compensation. It urges that mechanisms be established by which indigenous specialists are recognized as authorities and are consulted in all programs and projects affecting them and their environment (Martin 1995, p. 241). Indigenous experts, scientists and environmentalists met to discuss a strategy to stop the rapid devastation of the Earth’s biological and cultural diversity. Programs to ensure, preserve and strengthen indigenous communities, their stewardship and traditional knowledge are crucial.

Our responsibilities as participatory research scientists are to support and address the needs of local communities and to acknowledge the central role of First Nations Peoples in every aspect of sustainable development. We must guarantee just compensation for the utilization of indigenous knowledge and their biological resources. The rights of First Nations Peoples must be respected. Indigenous peoples and their designated leadership must be consulted to authorize any scientific research or development within their territories. They have the right to be informed about the results of such activities (Posey & Dutfield 1996, p. 2, 179-180). We must recognize that indigenous peoples are the guardians of their customary knowledge and they have the right to protect and control dissemination of that knowledge.

Indigenous Peoples walk to the future, in the footprints of their ancestors…

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