

SHAMPOO ARCHAEOLOGY: TOWARDS A PARTICIPATORY ACTION RESEARCH APPROACH IN CIVIL SOCIETY

Michael P. Robinson

Arctic Institute of North America
The University of Calgary
2500 University Drive N.W.
Calgary, Alberta
Canada, T2N 1N4

Abstract / Résumé

The author presents a new paradigm for participatory action archaeology, funded by a constellation of non-governmental agencies and activities, and inclusive of community needs for education, heritage preservation and democratization of research. From the actions and writings of Hawken, Roddick and Dahrendorf emerges an approach to social science that is rooted in civil society responsibility, and the reciprocal obligations of business to scholarship and vice versa. In the current era of provincial and federal government cut-backs to scholarly grants councils, this article offers new hope for an academic future in turn with community needs.

L'auteur offre un nouveau modèle de l'archéologie directe participative soutenue financièrement par une myriade d'activités et d'agences non gouvernementales, qui tient compte des besoins éducationnels de la communauté ainsi que de la préservation du patrimoine et de la démocratisation de la recherche. Les activités et les écrits de Hawken, Roddick et Dahrendorf ont donné naissance à une façon d'aborder les sciences sociales qui est ancrée dans la responsabilité de la société civile et dans les obligations mutuelles du monde des affaires et des bénéficiaires de bourses d'études. En cette période actuelle de diminution de subvention de la part des gouvernements fédéral et provinciaux, cet article représente un nouvel espoir pour l'avenir d'une formation universitaire qui s'accorde avec les besoins de la collectivité.

Introduction

Over the last decade the practice of participatory action research (or PAR) has begun to blossom on the tundra and in the boreal forest of the Canadian north and mid-north. PAR projects are becoming the chosen form of community-supported research in Inuit, Inuvialuit, Dene, Cree, Métis and Sauteaux communities and southern academics are having to adapt or remove their traditional research programs back south to cities and laboratories. Academic and community partnerships now involve the disciplines of social anthropology, law, medicine, nursing, political science, environmental science and planning, but they have been slow to find open acceptance in the archaeological camp. This is strange given the strong articulation of community-based interest in regional heritage, traditional land use and occupancy studies, and cultural tourism planning and development, all of which would benefit from archaeological partnerships.

It will be important at the outset to stress that there are archaeological adherents, but it is difficult to find PAR-based articles in the peer reviewed literature. The author, in preparing for this paper, reviewed a sample of a small universe of literature, and was able to discern a northern archaeology PAR strand in the peer reviewed work of Hanks (1983), Hanks and Pokotylo (1989), Hanks and Winter (1991), Janes (1989) and Stenton and Rigby (1995). Bielawski's pioneering work with the Northern Heritage Society (personal communication, 1995), Gotthardt's innovative work in the Yukon with the Elders of the Selkirk First Nation (1991), and Charlie *et al.* (1993) with the Tsawnjik Dun/Little Salmon and Carmacks First Nation provide three further examples of community-based archaeology partnerships. Stenton and Rigby in particular note the "immediate need for northerners trained in cultural resource management and the strong desire of many northern communities to direct historical research" (1995), yet there continue to be few opportunities for these needs to be met. These comments beg a connection to the PAR literature developing in other disciplines; it is interesting to note a total lack of other or interdisciplinary PAR literature citations in all of the above articles. Clearly it is time to forge the connection.

When one scrutinizes the roots of the growing northern Canadian PAR practice, they reveal first of all the community distaste for "being studied." In Gwich'in, Inuvialuit, Dene, Cree and Sauteaux communities, and most recently in the Sami villages of the Kola peninsula in Russia, the author has heard at first hand about how a generation of academics has benefitted from their relationships with communities, but has left nothing tangible in return. A local person's summer season field work as a "gofer," a peer reviewed article in a learned journal, a Ph.D. successfully defended in

Vancouver, Calgary, Montreal or Moscow, or the publication of a text book for undergraduates translates to very little of practical use for communities like Fort McPherson, Northwest Territories; Janvier, Alberta or Loparskaya, Russia (all communities where the Arctic Institute has developed PAR projects over the past decade). As they look back over the experience of their lives, Elders from these communities wonder just where the scientists went after all those summers of fieldwork. "They remind us of ducks," says James Ross of Fort McPherson, Northwest Territories, "we see them first in the late spring after break-up and they go South before freeze-up in the fall" (personal communication, 1994).

In the worst case examples, copies of those peer reviewed articles and monographs somehow find their way into community hands where they are read with amazement. Well known local experts, rich in traditional ecological knowledge (or TEK), are referred to as "informants," and occasionally very personal relationships, sacred details of spiritual life or even sexual life are revealed for all the world to read in print. Lloyd Binder, an Inuvik resident, an economics graduate of the University of Calgary, and an Inuvialuit beneficiary, recounts finding such an article about relatives and friends in Sachs Harbour and Holman Island in the main stacks at the library of his Alma Mater. "The names of the communities and the people were changed, but it sure was not difficult to recognize who was being described and where they lived. That scientist should never work in the North again!" (personal communication, 1995).

By objectivizing people, their lives, and their cultures, many social scientists have left a rather tatty and shameful record in the communities of their research. More of the same will guarantee the end of their particular research paradigm and its opportunities for application. PAR is an obvious way to build a successful research relationship with small communities, albeit on very new terms. It is time that archaeology as a discipline with strong cultural roots got the message.

PAR's Roots and the Evolution of Shampoo Archaeology

PAR owes its birth to leaders in many central American and Indian sub-continent communities who decided in the 1950s and 60s to rebel against the western science model based on rational, analytic reasoning and the concurrent tendency to discount as irrelevant such things as intuitive wisdom, mythology and TEK (Johnson and Ruttan, 1991). That this challenge should be mounted is entirely predictable to scholars of the history of science. Kuhn (1970) notes the importance of fundamental

challenges and shifts in prevailing paradigms in disciplinary evolution; indeed these paradigm shifts call into question the assertion of "absolute" scientific knowledge. Whilst most Elders steeped in TEK have no knowledge of paradigm shifts, they do intuitively and practically understand that the rational, positivistic and mechanistic approach of western science has not served their communities' needs. They argue that the quality of bush economy life has not incrementally improved with the advance of scientism; in fact everywhere it is under attack from transboundary pollutants, bioaccumulation of toxins, and population pressures. The economic evidence suggests that a small and distant industrial capitalist elite increasingly controls bush resources at the expense of those who have lived on the land as stewards. How natural that the remaining stewards of both TEK and the land should revolt against the scientific approach that trivializes their knowledge, their presence and their economy.

In further developing an understanding of the roots of PAR, one must also factor in the decreasing role of the state in maintaining environmental standards and acting as trustee for Aboriginal peoples. With the cumulative Canadian governmental deficit now approaching one trillion dollars, the federal, provincial and territorial governments are pulling back from traditional levels of expenditures and service. Consequently government funding of research initiatives is waning. Increasingly what was once known to be a government responsibility is being recast as a corporate activity or a "civil society" mandate. Anita Roddick (1991) has led the way in the field of corporate social responsibility to Aboriginal communities with the Body Shop's "Trade not Aid" policy. While her pioneering efforts are sometimes inviting of journalistic attacks, they do illustrate a practical model for corporate partnership with bush communities in the cause of maintaining species diversity and TEK at the same time as earning profits from the first world sale of third world products. In straight forward terms, the Body Shop develops shampoos with rain forest nuts harvested by local Aboriginal people. These shampoos are sold through the 1,000 Body Shop franchises and a portion of the profits is tithed back to Amazonia. By tithing to third world producers, a cash incentive is provided to preserve rain forests and their harvestable fruits, in the face of corporate quick cash offers for clear-cut logging, mining and other non-renewable uses of traditional land bases. Roddick's efforts have now been joined by other social venture ethical entrepreneurs such as Ben Cohen, Paul Hawken, Yves Chouinard, and Eric Utne. Their corporations (Ben and Jerry's Ice Cream, Smith and Hawken, Patagonia, and the Utne Reader) all espouse similar approaches to entrepreneurship. I think the next step in this process is for researchers committed to PAR to link up with both the green entrepreneurs and their

Aboriginal partners. Why cannot local research needs be funded in whole or in part by the sale of locally derived products? In supporting this concept all parties are in a very important sense taking Fritz Schumacher's middle way between materialist heedlessness and traditionalist immobility (1974). This middle way in essence is corporate/community/academic PAR leading to corporate/community/academic reinvestment in local human resources and sustainable harvesting. Over the next decade as this model develops it is not inconceivable that archaeology will be funded through the sale of shampoo!

Current PAR Practice in Canada

As Hoare, Levy and Robinson (1993:43-68) have recently described, PAR utilizes a rigorous and scientific process in identifying research needs and getting on with the work. The literature (Hall, 1989; Ryan and Robinson, 1990; and Tandon, 1989) indicates the importance of six main methodological steps:

- research problem(s) are identified by the community and the community investigates the problem(s) and isolates its (their) components;
- adult trainees acquire the tools of research and analysis, in order to identify the social, economic and political structures contributing to the problem(s);
- alternative actions are identified which offer the potential to resolve the problem(s);
- evaluation of these alternatives is undertaken;
- a program is designed for implementation of the preferred alternative(s); and
- community awareness is raised of the potential to effect change and to foster a subsequent deeper commitment to work towards resolving community problems.

One would be remiss in not pointing out that these six steps parallel the steps of western science and the rational planning model; the only difference is that they emanate from the grassroots and not the academy.

In the classic PAR project the community controls the project from beginning to end, and retains copyright on all print, video and cyber-media produced. In this new research regime, academic authors have to be comfortable with long lists of "collaborative authors," they must sometimes eschew traditional peer review for community peer review, and they must refrain in speech from referring to "my last book..." A PAR publication is

not the individual academic's last book; it is rather the last collaborative PAR book written with the community. The reader is no doubt already imagining the intrigues this new form of literature creates for tenure review committees, annual evaluations, and resumes. The author has often had to deal with all of the above over the last ten years, and is only now beginning to evolve successful responses to the inevitable academic questions, barbs and assaults. The following two reproduced pages of *There Is Still Survival Out There* (1994) illustrate both the new nature of peer review: "Mike, thanks for the superb book. Keep it up!," the attribution of text to study team members, community retention of copyright, and community control of distribution by registration of all 150 copies.

While community publications are an important output of PAR work, the training of community researchers is central to its ongoing success. Over the last ten years the Arctic Institute, either alone or in PAR joint ventures with the Dene Cultural Institute, has been responsible for training almost 30 individuals. These PAR graduates possessed prior formal school education from grades 2 to 12, and together had never before worked on research projects as research associates. Depending on the projects (which ranged over language and cultural centre creation, traditional medicine and customary law, traditional systems of self-government, and cultural land use and occupancy mapping), the PAR graduates become computer literate, competent report writers, able to manage project finances using spreadsheet software, able to plan, schedule, conduct, and evaluate interviews, and capable video and radio technicians who can also act as media spokespeople. All became more self-assured and self-reliant. Common post graduation outcomes now include new jobs, further education via upgrading at college or university, and taking assertive control of one's life.

Based on the Arctic Institute's experience, the best way to evaluate a PAR project is to interview its graduates and their extended families. In this process one learns a great deal about empowerment and its practical personal and community applications. Once exposed to the PAR empowerment outcomes, it is difficult to conceive of a community's return to old research paradigms. The concept of PAR has a virus-like effect; once infected it is hard to forget and its unique challenges drive practitioners to new and innovative solutions.

PAR Problems and Challenges

As the director of a growing PAR practice, based at a university research institute for ten years, I see the great challenges to its growing acceptance as being three-fold:

1. the greater time commitment and cost of PAR when compared to individual positivistic research methods,
2. the need to train a young generation of PAR practitioner/trainers to replace the first Canadian generation of PAR disciples, and
3. the need to overcome the traditional, academic recognition and reward system.

The first constraint will require funding agencies of government companies and foundations to re-learn some of their basic approaches to research support. PAR projects typically run from six months to three years. They require from one to five trainees to be paid (generally at about \$100 per day) whilst they learn on the job. Increasingly Elders are also paid (about \$10.00 per hour) for the time that they contribute to a project. A resident trainer will need in addition to salary (about \$50,000 per year), a home/office, a vehicle, firewood, water and sewer service, access to a generator or electrical supply and ideally country food. PAR trainees do not live in hotels or motels as a rule; they live with the community in community housing and by community norms of service, friendship and hours of work.

PAR trainers and trainees must work hard to overcome obstacles to their success that take many different forms: community bingo nights, deaths of Elders, early break-up of ice roads, changes of First Nation government in mid-project and the lengthy summer commitments to religious pilgrimages (e.g., the Lac Ste. Anne Pilgrimage in Alberta, held the third week of July annually), pow-wows, rodeo and various political general assemblies. One might ask--is PAR really worth the efforts? For those of us who practice PAR, the answer is an unflinching yes.

On the issue of training new trainees, we have to convince academia that PAR is a legitimate activity in terms of tenure assessment, courses of study and places of work. To date, the best northern Canadian PAR practitioners tend to be women with M.A. or Ph.D. credentials who are not in mainline teaching departments. They either have not pursued traditional academic careers, or they have returned to PAR after early retirement from tenured work in universities. Their choice to work in PAR has required very significant accommodation by partners, creativity in day care arrangements, considerable exposure to dangerous modes of travel (e.g., small aircraft flights, skidoo trips across thin lake ice), and a strong suit of bush skills. PAR practitioners cut their own winter wood supply, often get their own caribou, deer and moose, maintain their snow machines, understand well why GMC suburbans are the PAR vehicle of choice, and do not mind endless visitors at most hours of the day at the home/office. None of these skills are well taught in conventional graduate programs, although many

archaeologists master them in the field. For most PAR practitioners they are learned in life, and we must work to ensure that they are passed on to the next generation of trainers. Given that some PAR trainee graduates are now going to college, within a decade we may see PAR truly practised by home grown community talent. I suspect that we must also continue to train southerners from cities in PAR so that the demand for the methodology and its practice can be met over the next decade.

At the University of Calgary the author teaches the only PAR preparation course currently offered, EVDS 721, in the Faculty of Environmental Design. In September of 1995 the new Arctic Institute Northern Planning and Development Studies Minor began to be offered in the Faculty of General Studies to undergraduates with a thirst for PAR. It is interesting to note that last year in Winter Term, EVDS 721 saw its first anthropology M.A. student and its first archaeology Ph.D. student. Both signed up because of their growing awareness that PAR methodology had to be a component of their graduate training. The archaeologist in addition realized that his Ph.D. project would not proceed in Chiapas, Mexico, without a PAR commitment. Once again the villagers were no longer prepared to tolerate old paradigm science.

Civil Society and Social Archaeology

By now it should be apparent that a case exists for a more rigorous application of PAR to archaeology, and perhaps more importantly (as a recent Ph.D. candidate, Armando Anaya, has revealed to me), to the discipline of social archaeology and the evolving ethics associated with it (personal communication, 1995). The Canadian Archaeological Association, in creating its Statement of Principles for Ethical Conduct Pertaining to Aboriginal Peoples (Aboriginal Heritage Committee, 1996) has certainly laid the groundwork for this to occur in Canada. In the wake of the Inuvialuit, Gwich'in, Sahtu, Yukon and Nunavut comprehensive land claim settlements, and with more settlements on the national horizon, it is difficult to imagine continued use of outmoded paradigms by archaeologists seeking to work on Aboriginal lands. As news of northern PAR projects spreads (and they have now begun to mushroom in northern B.C. and Alberta), it is also difficult to imagine much more time for the model of western positivistic archaeology in the south, especially involving sites on or near First Nation lands.

A new social archaeology that embraces PAR methodology may also find funding support in civil society, that group of actors including non-governmental organizations, voluntary associations and ethical social venture

capitalists (Dahrendorf, 1990; Roddick, 1991). Civil society comprises those organizations who step in with innovation, volunteer sweat and equity and risk capital when government vacates a traditional responsibility that in the judgement of civil society must still be maintained. Another way of conceptualizing civil society is as the informal public sphere; that network of forms of community and association that lie outside the formal structure of state power. They are mediating institutions between the individual and the state (Elshtain, 1995).

To some degree one could argue that the expanded efforts of Canadian corporations (Hayes and Wolf Leg, 1995) to incorporate blessings, sweetgrass, tobacco and naming ceremonies to thank the Creator prior to excavations, and the employment of local First Nations' excavators represents a step beyond the norm for regulatory excavation requirements. Whilst not entirely a PAR project the recent partnership between the Siksika Nation and NOVA Gas Transmission Ltd. on the Saahkómapina (Big Chief) site excavation in southern Alberta (Hayes and Wolf Leg, 1995) does carry many of the essential attributes. The fact that a summary paper on the work was presented by a First Nation's co-author at a national conference is worthy of note, as is the innovation of a civil society team approach: NOVA Gas Transmission Ltd., Bison Historical Services Ltd., Siksika Nation, the owner of the land, volunteers, paid First Nation archaeological assistants and visitors all had a role to play in completing the work.

To qualify as a full PAR project the above example should first of all have been initiated by the Siksika Nation. The project trainees would have had a longer, more detailed and rigorous training period, and upon its completion they would have been able to initiate a new project with much less technical assistance. A community advisory committee (or CAC) would have been formed to control and manage all aspects of the project. As needed, the CAC would have called in further technical advice through a technical advisory committee (or TAC). All project reports would be copyrighted by the First Nation, and a summary report, well illustrated and in plain English, would have been prepared for the community school. A true feeling of community empowerment would also have manifested itself at a community feast to honour the PAR graduates and celebrate the completion of the project. Funding of the work would have much the same appearance -- a patchwork quilt of sponsors, with government playing a relatively minor role.

The full bloom of PAR will necessitate a stronger and more direct combination by archaeologists with a host of civil society actors, including allied non-governmental organizations and like-minded corporations. I say this because decreasing government budgets will not be sufficient to fund

its growth, and archaeologists have to learn to play their new PAR role. To do this they will have to learn some social entrepreneurship skills. If Anita Roddick and Ben Cohen can develop Rainforest Crunch peanut brittle and ice cream, and Amazonian Rainforest shampoo, Canadian archaeologists can make equal efforts to popularize their craft in civil society, and to create new funding relationships. In essence this is an extension of the teaching role of archaeologists, one that many enjoy and pursue with rigor and panache. In the globalizing, cyberizing and homogenizing next millennia, archaeology will simply have to demonstrate relevance to new funders and accessibility to new partners. As government funding shrinks, if archaeology cannot demonstrate its relevance to civil society, it will probably disappear.

Some Thoughts on Next Steps

It is the thesis of this paper that social archaeology must next embrace PAR and civil society partnerships to increase its public relevance and ensure its research future. Starting down this path will require some changes in curriculum, both at the undergraduate and graduate levels. These changes should expose archaeology students to PAR at an early stage in their methodological development and involve PAR documents, PAR community graduates and PAR university practitioners wherever possible. As previously noted, it is now possible at the University of Calgary for undergraduates to enroll in the Northern Planning and Development Minor to achieve an early exposure to PAR; graduate students from any discipline may enrol in the Faculty of Environmental Design Community Development in Planning Practice course (EVDS 721) to receive advanced instruction in PAR methods. Anthropology and archaeology undergraduates and graduates are now taking both of these routes to improve their awareness of allied methodologies as well. Chief amongst these are mediation, community-based strategic planning, and creating civil society partnerships in research and non-governmental organizations. It will also be useful to expose archaeology students to case studies and field visits to local civil society partnerships. In Calgary these take the form (in EVDS 721) of visits to the Mennonite Central Committee, the Glenbow Museum, the Canadian Parks Partnership Strategic Alliance, and the local Body Shop franchises.

While the regulatory consulting practice and salvage archaeology have been with us for over twenty years now, we are just becoming aware of the linkages between and amongst archaeology, tourism, land use planning and co-management of natural resources. Given the recent explosive

growth of adventure travel and tourism, this sub-sector of global travel may hold the most future promise for archaeological research joint ventures. Participants in this form of vacation travel desire authenticity, local environmental knowledge and well written guidebooks. Elderhostel groups, comprised of affluent retirees possessed of good health, now seek experiences that only twenty years ago would have daunted the middle aged. They are poised to experience archaeology field camps, interpretive workshops and site survey work.

Earthwatch, an international non-profit organization, has pioneered civil society support of field science in a way that greatly appeals to this market. In this respect they make an excellent case study for aspiring civil society archaeologists (Earthwatch [EW], 1994). Since their inception in 1972 they have sponsored more than 1,800 projects in over a hundred countries. Earthwatch volunteers pay up to \$1,400 (U.S.) for the privilege of serving on a particular research project, and they cover all costs of travel to and from the site. Increasingly, Earthwatch volunteers are drawn from all walks of life, including retired senior business executives, professors and consultants. Their contributions therefore range farther than sample taking and photography: recent Canadian projects have seen retired IBM vice-presidents and Harvard professors participate in research design and even peer review of research publications (personal communication, Jenny Feick, 1995).

In the growing realm of cultural land use and occupancy mapping and co-management, PAR has been applied to create non-adversarial dispute resolution mechanisms for communities and industry. In Alberta the Arctic Institute has participated in four such projects involving eleven communities. In each project historical and prehistoric resources were located and mapped, sometimes using global positioning system (GPS) technology along with a geographic information system (GIS). In the next phase of these projects, forest companies, tar sands mines, and the oil and gas industry will begin to see the need for documentation and mitigation of archaeological impacts, using the services of PAR trainees. This application of PAR will be closely tied to the need to preserve and document local traditional environmental knowledge (TEK). Once again new opportunities loom for civil society archaeologists.

In a recent trip to Moab, Utah, the authorsaw another expansion of civil society partnerships, this time involving First Nation communities, artists and galleries. Anasazi rock art, especially the mythic "kokopelli" fertility figure, is being licensed for reproduction and modification using sheet metal cutting and welding techniques. One such venture markets kokopelli figures riding mountain bikes and driving jeeps, perhaps grafting the sacred to the

profane. The outcome, however, is an interesting meld of authenticity, creativity, risk and return. The product sells, tithes back to communities, and arguably may even represent the current expression of the kokopelli spirit. The point I wish to make is that archaeologists should play a role in developing commercial applications of artifacts and art along with First Nations and allied entrepreneurs. While some will view this as aiding the entry of money counters into the temple, let us not forget who paid for the temple in the first place. The notion that all government research grants are value free is naive; just review the tied-aid relationship of Canadian International Development Agency (CIDA) grant recipients with Canada's industrial heartland if you want an illustrative case study of the quid pro quo. However, the real issue is not where the money comes from; it is how it is applied for the common good. If you subscribe to the belief that the goals of archaeology are a societal common good, then the onus is on you to strive to achieve them. If this means catered weddings in museum galleries, Earthwatch joint-ventures in field camps, joint venture marketing of authentic cultural products, Body Shop shampoos based on traditional ingredients, or ice cream flavours based on Amazonian nuts, so be it. The alternative is handwringing and debate in the ivory tower about the consequences of government funding cut-backs. Surely the future of social archaeology should not be tied to government largesse, especially when more and more First Nation communities are asking for assistance in documenting their past in order to plan for their future. The challenge to the academy is to accept the participatory, civil society and entrepreneurial nature of the brave new world and get on with it.

Notes

1. In the author's experience PAR is the acronym most frequently used to describe current community initiated and controlled research. Its roots however, go back nearly 50 years in the evolving intellectual critique of social science methodology. Prior to the emergence of PAR, its adherents have explored action anthropology (Tax, 1988) as well as action and community-based research (Kemmis, 1988).

References

- Aboriginal Heritage Committee
 1996 Statement of Principles for Ethical Conduct Pertaining to Aboriginal Peoples. B. Nicholson, R. Pokotylo and R. Williamson (Editors) Calgary: Canadian Archaeological Association.
- Charlie, Dawn, Little Salmon and Carmacks First Nation, and D.W. Clarke
 1993 *Frenchman and Tatchun Lakes: Long Ago People*. Whitehorse, Yukon: Yukon Heritage Branch.

Dahrendorf, Sir Ralf

- 1990 Threats to Civil Society, East and West. *Harper's Magazine*, July: 24-26.

Earthwatch (EW)

- 1994 While Others Just Look at the World, You Can Change It: Focus in on the World. *Earthwatch Membership Brochure*. Watertown, Massachusetts: Earthwatch Centre for Field Research.

Elshtain, Jean Bethke

- 1993 *Democracy on Trial*. Toronto: Anansi.

Gotthardt, Ruth

- 1991 *Tat'á Män*. Whitehorse, Yukon: Selkirk First Nation and the Government of Yukon Heritage Branch.

Hall, Budd

- 1981 Participatory Research, Popular Knowledge and Power: A Personal Reflection. *International Council for Adult Education XIV(3)*.

Hanks, Christopher C.

- 1983 An Ethnoarchaeological Approach to the Seasonality of Historic Cree Sites in Central Quebec. *Arctic* 36(4):350-355.

Hanks, Christopher C. and David L. Pokotylo

- 1989 The Mackenzie Basin: An Alternative Approach to Dene and Melts Archaeology. *Arctic* 42(2):139-147.

Hanks, Christopher C. and Barbara J. Winter

- 1991 The Traditional Fishery on Deh Cho: An Ethnohistoric and Archaeological Perspective. *Arctic* 44(1):47-56.

Hayes, Myrene and Wolf Leg, Allan

- 1995 Saahkómapína, in *Focusing Our Resources: Forum Papers*. Calgary, Alberta: First Nations Conferences Inc.

Hoare, Tony, Chris Levy and Michael P. Robinson

- 1993 Participatory Action Research in Native Communities: Cultural Opportunities and Legal Implications. *The Canadian Journal of Native Studies* 13(1):43-68.

Janes, Robert R.

- 1989 An Ethnoarchaeological Model for the Identification of Prehistoric Tepee Remains in the Boreal Forest. *Arctic* 42(2): 128-138.

Johnson, Martha

- 1992 Dene Traditional Knowledge. *Northern Perspectives* 20(1):3-5.

- Johnson, Martha and Robed Ruttan
 1991 Draft Manuscript--Documentation of Dene Traditional Environmental Knowledge--Pilot Project. Hay River, Northwest Territories: Dene Cultural Institute.
- Kemmis, Stephen
 1988 Action Research in Retrospect and Prospect, in W. Carr and S. Kemmis (Editors): *The Action Research Reader*. Australia: Deakin University Press.
- Kuhn, T.S.
 1970 *The Structure of Scientific Revolutions*. London, 2nd Edition.
- Robinson, Mike, Terry Garvin and Gordon Hodgson
 1994 *Mapping How We Use Our Land*. Calgary, Alberta: Arctic Institute of North America.
- Roddick, Anita
 1991 *Body and Soul*. London: Ebury Press.
- Ryan, Joan and Michael P. Robinson
 1992 Participatory Action Research: An Examination of Two Northern Case Studies. Report to Royal Commission on Aboriginal People.
 1990 Implementing Participatory Action Research in the Canadian North: A Case Study of the Gwich'in Language and Cultural Project. *Culture* X(2):57-71.
- Schumacher, E.F.
 1974 *Small is Beautiful*. London: Sphere Books Ltd.
- Stenton, Douglas R. and Bruce G. Rigby
 1995 Community-Based Heritage Education, Training, and Research: Preliminary Report on the Tungatsivik Archaeological Project. *Arctic* 48(1):47-56.
- Tandon, Rajesh
 1989 Social Transformation and Participatory Research. *Convergence* XX1(2/3):5-16.
- Tax, Sol
 1980 Action Anthropology, in W. Carr and S. Kemmis (Editors): *The Action Research Reader*. Australia: Deakin University Press.