TEMPORAL CONSTRUCTS AND "ADMINISTRATIVE DETERMINISM": A CASE STUDY FROM THE CANADIAN ARCTIC

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Abstract: This paper considers time regulation as an aspect of Canadian governmental and institutional management of the lives of the Inuit. Utilizing data from the eastern Keewatin region it contrasts "land time" (literally time on the land, but also the traditional Inuit temporal orientation) with the chronometrically regulated time of the town. Its conclusions are twofold: time management is a part of a larger administrative design for the Inuit (and, parenthetically, indigenous peoples everywhere). This structuring of Inuit life around schools, jobs and government agencies cuts the Inuit off from the land and contributes to the severing of ties with their own past. Secondly, the paper offers the theoretical conclusion that for Sociology and Anthropology the study of time and temporal constructs provides an important and potentially rich field for research. In particular, the significance of the imposition of external temporal orders upon indigenous peoples has yet to be fully examined.

Résumé: Ce discours considère le réglage du temps comme un aspect de la gérance gouvernementale et institutionnelle canadienne de la vie des Inuits. En utilisant de l'information provenant de la région est du Keewatin, on contraste «le temps de la terre» (littéralement, le temps sur terre, mais aussi l'orientation temporelle traditionelle des Inuits) avec le temps des villes, réglé par chronomêtre. Les conclusions sont de doubles envergures: la gérance du temps constitue une partie du schéma élargi administratif pour les Inuits (et, pour tous les peuples autochtones). Cette structuralisation de la vie des Inuits autour des écoles, des emplois et des agences gouvernementales sépare les Inuits de la terre et contribue à la rupture des liens avec leur propre

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passé. L'article propose la conclusion théorique que, pour la sociologie et l'anthropologie, l'étude du temps et des structures temporelles offre un domaine important et, potentiellement riche de recherches. La signification de l'imposition d'ordres temporels externes à des peuples indigènes doit—en particulier—encore être examinée au complet.

The temporal order varies cross-culturally. Whatever concepts of time (if any), or system of time-reckoning a people utilize, however simple or complex their calendrical system, they regulate their lives in distinctive systematic patterns. Moreover, the temporal co-ordinates by which they existentially order themselves constitute key elements in their sense of self-identification and societal integrity. This is nowhere more apparent than in situations in which the temporal order of one society is imposed on another. In his study of Western anthropological perspectives on "primitive" people, Johannes Fabian uses the term "chronopolitics" to characterize an important aspect of Western domination of tribal peoples:

the expansive, aggressive and oppressive societies which we collectively and inaccurately call the West needed Space to occupy. More profoundly and problematically, they required Time to accommodate the schemes of a one-way history: progress, development, modernity (and their negative mirror images: stagnation, under-development, tradition). In short, *geopolitics* has its ideological foundations in *chronopolitics*. (Fabian 1983:144; italics in original)

In this paper we consider the significance of the imposition of linear chronometric temporal concepts and behavioural patterns on the Inuit of the Canadian Arctic.¹

The locus of Inuit life in the contemporary Canadian north is the town: a community comprising anywhere from a few hundred to a few thousand native persons and a very much smaller group of non-Natives (Eurocanadians). But, despite their numerical preponderance in such communities, the Inuit are subject to the management of the larger Eurocanadian society in virtually every institutional setting they occupy. Indeed, the town itself (and we use the term here to refer to what are officially designated "settlements," "villages," and "towns" according to size) is an artifact of 20th-century Canadian political, economic, religious and educational management of the Inuit people. Here, life is regulated daily in schools, workplaces, administrative agencies and churches by abstract Western chronometric time.

In the next section we consider temporal constructs as they have been discussed in the anthropological literature, in particular, "linearity" and

"cyclicity" as aspects of temporal processes. We then review some aspects of the ethnography and ethnohistory of one specific Arctic community in order to illustrate the structuring of Inuit life as a result of the progressive extension of Eurocanadian control over the past 30 years. The paper concludes with a discussion of the consequences of "chronological assimilation" for the Inuit throughout the Canadian Arctic.

Temporal Constructs in Non-Chronometric Societies

In one of the earliest and most seminal ethnographic treatments of time reckoning and temporal constructs Evans-Pritchard anticipated not only the fundamental issues but many of the conceptual problems that were to arise in subsequent studies (1940:94-108). Most significant are the distinctions he makes among (1) time-reckoning systems, (2) abstract conceptions of temporal processes, and (3) "history"—those linear links between the present and the past.

Nuer time reckoning, Evans-Pritchard observed, identifies a two-part year (ruon) which divides into a rainy and a dry season. Words for "year," "rainy" and "dry season" and the 12 lunar months are used, but this "ecological time" pattern is not anchored in the lunar or solar cycles but in the social and exploitative patterns associated with the horticultural village life of the wet season and the fishing/pastoral life of dry season camps:

Oecological ["ecological"] time reckoning is ultimately, of course, entirely determined by the movement of the heavenly bodies, but only some of its units and notations are directly based on these movements, e.g., month, day, night and some parts of the day and night. (Evans-Pritchard 1940:102)

Thus Nuer ecological time is cyclical. Its unit is the year, not in the sense of a mathematically divided time span between two fixed benchmarks (i.e., January and December) but the full cycle of time between any two qualitatively similar patterns of human life and activity (Pocock 1967:305).

For the Nuer the annual seasonal round is the unit of ecological time. But cyclicities inhere in human social patterns as well. In his discussion of the cycle of domestic groups, Fortes pointed out that the succession of existential phases of birth, maturation and death have their analogues in the structural patterns of households as the group comes into existence with marriage, procreation and child rearing, passes into the phase of dispersion or fission with the maturation and marriage of the children, then cyclically repeats with the replacement of the household head by the oldest (or youngest) child (Fortes 1969:4-5). This structural replication in the subsequent generation ensures the perpetuation of the group. Halpern has utilized this notion of social cyclicity in his study of the South Slav zadruga. In this

case, long-term demographic data point to significant changes in community and familial composition through time. But the ideology of the persistent, cyclically recurring nuclear family contradicts the perceived linear flow of unpredictable events and irreversible change (Halpern and Wagner 1984).

The Inuit belief in "name souls" reflects a similar sense of temporal cyclicity on the social level as well. When a child is given the name of a deceased relative he/she reincarnates the spiritual essence of that person. Society replicates itself not merely in the replacement of the dead by the living but in the continuing rebirth of personal qualities. Williamson reports an incident from Rankin Inlet in the Canadian Northwest Territories, which attests to the continuing importance of the beliefs surrounding name souls:

In the mid 1960's ... a child had to be adopted into a family not related to her by kinship (which is unusual), because while away in hospital in the south and beyond access to the normal traditional sources of advice, the natural mother had named the child after someone who had very deeply offended... the natural father. His negative reaction to the reintroduction of this baleful essence into his nuclear family was what made the move necessary. (Williamson 1974:25)

Linear time (succession and duration) is Evans-Pritchard's "structural time":

There is a point at which we can say that time concepts cease to be determined by oecological factors and become more determined by structural interrelations, being no longer a reflection of man's dependence on nature, but a reflection of the interaction of social groups. (Evans-Pritchard 1940:104)

Nuer linear or historical time is not based on some abstract external benchmark but links significant persons and events of the past with those of the present.

One of the commonest ways of stating the year of an event is to mention where the people made their dry season camps or to refer to some evil that befell their cattle. . . . Weddings and other ceremonies, fights and raids, may likewise give points of time. (Evans-Pritchard 1940:104)

In similar fashion the Berens River Ojibwa tied their oral history to the life events of individuals, and like that of the Nuer, it was a shifting rather than a fixed record: "So long as the names, personal characteristics and activities of deceased individuals are carried in the memories of living persons, a useful, although non-quantitative and unformulized, frame of reference for past events is maintained" (Hallowell 1937:666). Oral history of this sort is short. Evans-Pritchard suggests that 50 years might be the extent

of Nuer historical recollections. Hallowell makes Salteaux time depth about 150 years.

Beyond this point history merges into the mythic past. A tree growing in Nuerland a few years before Evans-Pritchard's arrival was the tree under which humankind was created (Evans-Pritchard 1940:107). The Aiviling-miut term *eetchuk*, Carpenter tells us, signalled that the temporal setting of a story was in "time before known time." The tale might concern the Sadlermiut, recent but extinct residents of the area, or *tunik*, fearsome giants of the mythic past (Carpenter 1968:41).

Linearity is then the non-recurrent, or "vertical" dimension of temporal construction. It is seen on the individual level in the personal autobiography. It is tied to the immediate past by the individual's pedigree, the "charter" by which people present themselves as the descendants of specific ancestors (see, for instance, Fortes 1969).

Technical Time

Technical time, mathematically based, mechanically, electronically or geophysically regulated, is the clock and calendar time of Western society. Unlike the time reckoning systems of non-chronometric, non-calendrical peoples, technical time is abstract, quantitative, integrated and homogeneous. Technical time is external to human activity, unlike the "process marking" (Hallpike 1979:345) that characterizes Nuer, Inuit or Saulteaux seasonal reckoning. This ordering in modern society provides a uniform framework within which human activities take place and are co-ordinated. This is a powerful and pervasive means of cognitive control in modern society. Pocock (1967:306) has pointed out that "the more diverse are the activities of a number of people or groups, the more abstract and systematic must be the time reckoning if any form of coordination is desired or effected." Thus, the clock, as Mumford noted, "is not merely a means of keeping track of the hours, but of synchronizing the actions of men" (Mumford 1936:14).

Technical time has both cyclical and linear dimensions. The clock face is a circle. The digital clock returns to one after its 12 or 24 hour linear progression. The named days return week by week, the named months year by year. But the quantitative precision of cyclical time ensures that its units are by some objective measure the same. Hence, our reification of minutes or seconds of time into tagmemic slots into which we "drop" activities or into commodities which we can "save," "spend" or "waste."

This measured chronometric time is the calendar time of the years and centuries. It is numerical, exact, and anchored in historical benchmarks. Even the "typological time" (Bailey 1983) of historical, archaeological,

and geological studies in which "eras" or "epochs" or "cultural horizons" are identified, is ultimately linked for us in some approximation to years as we reckon them. Like Hutton's geological "uniformitarianism," the past is distant from but temporally equitable to the present.

Linear time is the framework of history and prehistory for Western society. By means of linear temporal reckoning we co-ordinate the pasts of other peoples with our own, we chronologically absorb them as we spatially absorb them through territorial conquest.

Edlund has observed that "Humans do not merely live in different environments, they create them, feeling and molding the earth simultaneously. They use time itself as an ecological niche" (Edlund 1987:118).

This existential "ecological niche" exists at the intersection of cyclically returning "nows" and the line of successive "thens" of the past and future. The psychological literature on mental illness indicates that temporal awareness and orientation can be either causally or symptomatically implicated in psychopathologies. Without suggesting simplistic analogies or linkages between personality and society, we would propose that communal temporal constructs function in an important culturally integrative fashion and that their re-ordering and allocation have critical consequences for any people.

A significant feature of Inuit encapsulation within the Canadian socio-political system has been their subjection to a temporal paradigm that is not their own. Its "cycles" and "arrows" are those of the clock and the calendar. We consider the consequence of "chronopolitical" change in the following section.

Sociocultural Change in the Eastern Keewatin

Comprising the coastal and inland areas on the west side of Hudson Bay, the Keewatin district of the Northwest Territories extends from approximately 55° to 65° N latitude. With the exception of the northernmost part of the area (from Daly Bay to Repulse Bay) and Southampton Island, the area has been occupied for at least the last millennium by Caribou Eskimo groups. "Caribou Eskimo," a kabloona (i.e., non-Inuit, Eurocanadian) term, alludes to the generally inland, hunting orientation of most of these peoples. Similar to such terms as "Labrador" or "Central" Inuit, it carries no indigenously recognized cultural connotations. Emic terms such as Avviamiut ("people of the whale"), Aivaligmiut ("people of the walrus hunting place"), Padlimiut ("people of the source") do not designate corporate tribal entities, but loose regional groupings sharing common local cultural patterns, recognizable dialect features and a tendency to endogamous marriage. Regional groups were in turn composed of ilagiit, kindreds, which characteristically formed cooperating, co-resident sharing units.

Keewatin Inuit today occupy seven settlements: Eskimo Point, Whale Cove, Rankin Inlet, Chesterfield Inlet, Baker Lake, Repulse Bay and Coral Harbour. Of these, Eskimo Point, Rankin Inlet and Baker Lake are "townsize," i.e., in excess of 1000 people, the others range upwards from about 300 people.²

The history of European contact and settlement in the Keewatin has been dealt with in considerable detail (Vallee 1967; Vanstone and Oswalt 1959; Williamson 1974). It is necessary to note here only that some form of European contact was established in the 18th century with the building of Fort Prince of Wales at the present site of Churchill, Manitoba. Intermittent trade contacts continued until the 20th century, when trading posts, mission stations and Royal Canadian Mounted Police posts were established throughout the region.³

As Brody, Hughes, Jenness and others have pointed out (Brody 1975; Hughes 1965; Jenness 1964), Inuit economic dependency throughout the Canadian Arctic is datable to the beginning of their involvement in Eurocanadian exploitive enterprise. In the eastern Arctic and especially in the Keewatin this meant Arctic fox trapping, although sealing, whaling and the taking of walrus were also significant. Trade meant increased economic dependencies including guns, ammunition, traps, attractive and convenient foods, such as flour and tea, and luxuries such as tobacco. More significantly, commercial involvement irreversibly altered cyclical patterns of movement and exploitation on the land. *Ukiuk* and *auja*, the dominant seasons in Inuit life, reflect the two-part exploitive cycle characteristic of many Inuit groups: winters spent sea ice hunting for seals, summer spent on the land hunting geese, ducks and caribou, and fishing.

Fox trapping is a winter activity involving the setting and tending of traplines when the fur is thick and the pelt at its highest value. Commercial trapping of foxes tied the Inuit to a seasonal activity, utilizing techniques and equipment that were foreign to them and focussed upon an animal that was traditionally virtually ignored. In trapping for trade rather than for local use the Inuit became dependent upon fluctuating external market demands, as mediated through the Hudson's Bay Co. and other traders. Moreover, fur production ultimately depended on the persistence of animal stocks subject to uncontrolled exploitation beyond sustainable levels. An elderly Inuk informant recalled: "I remember when a man would have a hundred traps. There would be maybe a few thousand out on the land around here in those times" (L.C. fieldnotes 1983).

In the Keewatin the collapse of fur trapping between 1945 and 1955 coincided with a radical decline in caribou herds and led to widespread starvation. The Padlimiut and Ahiamiut, two of the interior groups, were most severely hit. Middle-aged Padlei people recall life in the camps in their child-

hood: "We were eating our clothes, skin clothes. We had no dogs, we ate them. There were no caribou. My brother and sister died there at the [Maguse] River" (L.C. fieldnotes 1983).

The "Padlei Starvation," as dramatic and widely publicized as it became, was only one part of the process of movement off the land in the Keewatin region. Trapping and trade had increasingly led to settlement in more or less sedentary camps within reach of trading posts and mission stations. In fact, the tendency to cluster in settled camps at such sites led the RCMP in some areas to forbid Inuit families to camp nearby unless a family member was employed in the settlement (Van Stone and Oswalt 1959).

Wage work at Distant Early Warning (DEW) line sites, mission stations and later at clinics and schools, as well as scattered opportunities for work in mines and other (sometimes short-lived) industrial or commercial developments, were important economic factors in the settlement period as well. More generally, as government installations such as clinics and schools appeared, community life became increasingly attractive. To the Inuit on the land the many useful commodities, as well as the relief funds which were available there, were reason enough to consider abandoning their traditional life and moving to the settlements (Brody 1975).

The last years of the 1950s saw the onset of an intense period of government regulation of the lives of Inuit peoples. Although ultimately a federal concern, the development of the Northwest Territories (and Yukon) was in part administered through territorial government structures. The establishment of schools and the enactment of a mandatory school attendance ordinance tied families to the settlements for 10 months of the year. Welfare and other transfer payments made life on the margin of a cash economy possible. The gradual installation of government-built houses heated by free oil, lit by free electricity and serviced with free water, sewage and garbage disposal completed the process of urbanization in the Keewatin.

In his 1960s study of Baker Lake, Vallee noted a significant dichotomy in the Inuit population of the community. Land and tradition-oriented people (the nunamiut—"people of the land") contrasted sharply with the kabloonamiut—"people of the whites." The latter, usually bilingual, typically employed in schools, clinics, stores, government offices and in public service occupations played a mediating role vis-à-vis the nunamiut assisting them to adapt to the settlement and to the kabloonas in charge of its various institutions (Vallee 1967). But a generation later one can no longer make the distinction (Brody 1975:168). All Keewatin Inuit are permanent town dwellers now. Wage work, transfer payments, small business enterprises, trapping and crafts sustain them in the settlement economy.

Town Time and Land Time

It is not accidental that all of the settlements of the Keewatin region (and most other Arctic areas as well) bear English names: Whale Cove, Eskimo Point, Rankin Inlet. The names celebrate the whites who first visited these places or recollect their observations or adventures on their travels through the region. (Inuktitut names for these places exist and Inuit have been securing official recognition for these indigenous names in recent years.) The names also reflect the fact that Arctic settlements are in essence Eurocanadian installations and that, directly or indirectly, Inuit are there solely because of the white presence in the Arctic:

Eskimos view their move to the settlement as a move to the whites even though most of them would be deeply reluctant to call themselves Quallunaarmiut (i.e., Kabloonamiut). And there is no doubt that Eskimos throughout the Canadian Eastern Arctic have become superficially more like whites. (Brody 1975:168)

The move "to the whites" meant the relinquishment of responsibilities as well, including responsibilities imposed by the cyclical demands of the land, the necessity for seasonal preparation for the next phase of the year's exploitive activity. An older Inuit recalled:

When we were living inland we thought ahead, next year, next winter. During summer we used to get ready for winter, to survive that year.... Here [in the settlement] we don't travel anymore, we don't think ahead anymore. I think the change came when the government came in. That's when people started living in one place. We were given welfare and didn't want to leave the place. (L.C. fieldnotes 1983)

The process was especially abrupt in the eastern Keewatin because of threatened and actual starvation resulting from the coincident decline of both caribou (essential for food) and Arctic fox (essential for cash for the purchase of guns, ammunition and food staples). Many of the Hudson Bay coastal communities became, in effect, refugee camps to which people migrated or were transported because they could no longer live inland. Movements to settlements were often not matters of personal choice, but emergency measures either by government agents (the RCMP for instance) or the people themselves.

The establishment of schools was also an important factor in anchoring populations to settlements, particularly as receipt of family allowances could be dependent upon children's attendance at school (Oswalt and Van Stone 1959).

Researchers have frequently stressed the apparent ease with which Inuit, as contrasted with Canadian Indians, have adapted to town life. Honigmann

and Honigmann (1965), comparing Inuit and Cree at Great Whale River, found that the Inuit adjusted much more readily to life in the community. Barger (1977), using measures of "psychosocial adjustment" for the same populations, found the Cree "adjusted," but not as well "adapted." Brody (1975) and Vallee (1967) have pointed out, however, that the apparent "adaptation" is often based upon a certain uneasiness in dealing with Eurocanadians, fear of angering them and a more deeply rooted concern for the maintenance of smooth interpersonal relations, all of which can be perceived as friendliness and cooperation. Williamson comments:

The Eskimo word which almost all white people learn very early in their contact with the Eskimo in Keewatin—because they hear it so frequently—is amai... which means "one does not know." This word is used protectively with great frequency by the Keewatin Eskimo in contact with the whites... and is a form of antenna as well as a general barrier. Fear, lack of ease, or lack of certainty as to what the white people have in mind (they are notorious in the minds of the Eskimo for inconsistency)—combined with the influence of the value system—cause the Eskimo to adopt in many instances a position which, at least until they are sure of themselves, does not commit them. (Williamson 1974:168)

A tendency to passive acceptance—'adaptation' to the Honigmanns and Barger—might be viewed as the response of Inuit to a world engineered for them by the Eurocanadians.

Despite their overwhelmingly preponderant numbers, Inuit constitute a client population in communities established and dominated by whites. The caste-like disjunctures between whites and Inuit in Arctic communities have been the subject of frequent commentary (Dunning 1959; Brody 1975). Early in the history (i.e., 1959) of the Eskimo Point community, Oswalt and Van Stone observed, "There is every indication that village-wide social integration does not exist" (Oswalt and Van Stone 1959:21). This lack of social integration is also reflected in Inuit leadership patterns in the settlements.

It is not surprising that in this social milieu Eskimo leadership is poorly developed beyond the family level and no one individual represents a significant segment of the population. The only discernible leaders are the whites who control political, economic and religious activities. (Dunning 1959:2)

In a similar vein, Brody points out that in general, eastern Arctic Inuit tend to surrender responsibility to whites who are in many senses the proprietors of the communities (1975:169).

There have been changes since Oswalt and Van Stone wrote in the 1950s, Vallee in the 1960s and Brody and Williamson in the 1970s. Keewatin communities have grown radically—Eskimo Point and Rankin Inlet at the

present time are approaching 10 times the size of the original settlements. The tarpaulin and plywood shacks, tents and winter snow houses have been largely replaced by two and three-bedroom bungalows, the primitive water supply and sewage disposal services have been much improved, and the disparities in living arrangements between whites and Inuit are not as obvious. School committees and settlement council members, mayors, housing authorities and wildlife conservation officers are typically Inuit. The co-op store is staffed and managed by Inuit, and smaller enterprises such as convenience stores and Bombardier travel services are owned by Inuit. Inuit sit on the Territorial Council of the Northwest Territories and in the Canadian federal parliament.

Menial jobs are still held by Inuit in the settlements—garbage, sewage disposal, water and oil supply, snow ploughing, janitorial services. However they are typically found in "middle level" positions as well: as clerks in stores, translators for government service officers and as nurses' aides and managers of electric power installations and other public services.

But the observations on local level social integration and leadership made in the 1960s and 1970s would still be valid today. The institutional structures of Arctic communities are of southern white design and they are ultimately externally managed. Their economic bases rest upon external subsidization and their socio-political structures upon a framework of *kabloona* institutions: schools, stores, churches, community services and airports.

The initial impression of the Southern visitor to a Keewatin Arctic settlement is the sense of its being grafted onto the landscape. It stands alone without connecting roads, without visual evidence of its raison d'être. The glaring disjuncture between landscape and community persists as one becomes familiar with it as a social milieu. Schools, businesses, clinics and government offices operate as in the south. Apart from the presence of northern hunting and trapping gear and Arctic clothing, the facilities for fur purchasing, the paternalistic signs telling people to eat vegetables, keep their dogs chained and avoid social diseases, and the high prices, there is nothing to suggest an Inuit clientele in either the Hudson's Bay Store or the Inuit owned Co-op. At Eskimo Point, Kreterklik school is a large, modern metal structure designed on the "open concept" plan with class areas separated by baffle screens, carpeted floors and acoustic tile to muffle the noise. A circular and sunken amphitheatre opens off the fover and is used for school assemblies and for occasional Inuit cultural activities, including visits by drum dancers, throat singers or elders who come to talk about the old ways. Inuktitut syllabic cards line the walls in the lower grades, and Inuit classroom assistants translate for the English-speaking teachers or they conduct sessions in Inuktitut on their own.

The school operates on a typical five-hour day, five-day week, 150-day year. It closes at the beginning of June for two months. The choice of June and July as vacation months is to accommodate the move out onto the land which will largely empty the community for the summer months and which has already begun with weekend trips in April and May. The school almost never closes for bad weather. The children all live in the village and will make their way through blinding blizzards to be in class. (Attendance is consistently at about 66%). The Northwest Territories School Attendance ordinance is not rigidly enforced, especially if children are out on the land with their parents, but parents may be spoken to if children are simply hanging around the coffee shop arcade or if they are missing school because they have been out playing all night.

Like the school, the community as a whole replicates any small urban settlement in southern Canada. The southern white visitor experiences a minimum of discomfort in most Inuit homes in the settlement. The living arrangements, furnishings and appliances are similar to those in the south: bedrooms, living, dining, kitchen areas, bathrooms, usually refrigerators and stoves. Reminders of the nearness and importance of the land are there: caribou carcasses in a box outside, frozen fish stored in the porch, perhaps a haunch of caribou or portions of seal thawing in the furnace room or on newspapers on the kitchen floor.

Technical time dominates the environment of the settlement. Children go to school and many adults go to an office or store or other work place at 9 a.m. They return home at noon for lunch. Children populate the streets after 3:30 p.m. and adults return home at 4:30 or 5:00 p.m.

There may be conflicts over the temporal ordering of life. A young Inuit translator for a (kabloona) social service worker commented, "She gets mad at me for being late or leaving early. Sometimes I stay off in the afternoon and go goose hunting. That makes her mad too—even if she is up in Rankin (Inlet) and I have nothing to do, she wants me there" (L.C. fieldnotes).

At Rankin Inlet Williamson found evidence that time schedules caused some distress to the Inuit, "one significant source of anxiety among the acculturating Eskimos at Rankin Inlet has been the modern preoccupation with time... every Eskimo home and person is plentifully supplied with time pieces" (Williamson 1974:123).

An illustration of how important the Eskimo often felt that time is to White people—is the tendency... of men to stay away from a shift (i.e., at the local mine) if they seem likely to be late, indicating that they believe that the White bosses value punctuality even more than the presence of an individual to undertake a necessary job. (Williamson 1974:123-124)

At Eskimo Point during the twilight nights of the Arctic spring, children and young adults can be seen out and about the settlement until dawn, driving snowmobiles, sliding on the town "snowhill" (the roof of the curling rink) or lounging in groups on the road. Teachers comment that this is a bad time for punctuality (or indeed, attendance) at school as the youngsters may remain out until daylight then sleep through most or all of the school day.

Indigenous time, the sequencing of activities according to Inuit patterns can be seen in "Tradition Days" or "Heritage Days" at the school. In one corner of the schoolyard a man demonstrates how a komatik (sled) is loaded and hitched to a dog team, elsewhere boys are shown how to throw a harpoon, set a fox trap or build a snow house. But there is a leisurely disorder about the activities: the trapper may have decided to go out on the land that day, the snow might not be right for building igloos or the throat singers may have decided to stay home or come later; the children, out of the confining order of the classroom, might find more interest in kicking a ball through the snow than attending to the land skills lessons being offered to them.

Trips out to hunt and fish and shoot geese have a similar inner logic. The party of men or family groups may pause to play at sliding on the snowy slope of an esker or to have tea and a leisurely chat. The children may busy themselves piling up stones into miniature *inukshuks* (stone markers). The hunt is dictated by the predicted movement of the caribou or the wind direction that indicates that geese are or are not likely to appear that day. Food (raw caribou or fish or seal meat, bannock) lies about to be cut up and eaten according to personal want. The day drifts to a close at dark or twilight and gradually resumes with the brightening of morning.

But hunting and fishing trips and "Tradition Days" in the settlement, reflecting as they do the ecological cyclicity and traditional sequencing of land time, are encapsulated and structured into the technical temporal ordering of the settlement. Hunting and other exploitive activities are confined for most Inuit to relatively brief journeys regulated by the requirements of the town schedule. Families with children may extend their weekends on the land in the spring and fall and they will spend the summer vacation months on the land within ATC ("All Terrain Cycle") commuting distance if one or both parents work. But if they were missing on a trip from Eskimo Point to Rankin Inlet (150 miles north), or Baker Lake (300 miles north) such as their forebears would regularly have made, it is likely that land and air search parties would be sent out after them on the supposition that their snowmobiles or ATCs had broken down or run out of gas.

The establishment of settlements on the model of Eurocanadian communities, institutionally complete and temporally ordered by the time constructs of southern urban society has thus, in scarcely more than a genera-

tion, restructured the patterns of Inuit life. The seasonal migrations between sea ice and land, the orientation to the northward movement of caribou and game birds and the runs of char in the rivers have been replaced by a sedentary life in which exploitive activities have been largely encapsulated within the technical temporal framework of the settlement. Hunting and fishing occupy weekends, "long weekends" or holidays. Camping on the land (hunting, fishing, gathering bird's eggs) is a vacation activity which may have to be co-ordinated with settlement employment. Land life and the cyclicity of land time is thus disjoined from and dominated by town life and town time.

At the same time, the technical temporal cyclicities of the town create frameworks to which Inuit may have difficulty adapting. "Wasting time," "idle time," or even "killing time" are phenomena of the structured life of the town. For the young who are out of school or for the unemployed, town time may be filled with empty spaces. Brody observes, "Time weighs heavily on the young. Those who feel unable or disinclined to hunt and trap must spend many hours trying to amuse themselves, by meandering here and there in the villages, visiting, gossiping, sitting, dreaming" (1975:208-209). The temporal structure of the community dictates that amusements, meetings, youth activities, weekly movies, church services be scheduled (from an Inuit perspective) for arbitrary and indeterminate times and the gaps between them may be difficult to fill.

Consequently, from the perspective of linear time, the settlement is a Eurocanadian historical artifact with little connection to the Inuit past. Populations are mixed groups including persons from diverse regional groups, migrants from other settlements, refugees from distant places and their descendants, and whites. Its history is made and recorded by Eurocanadians in written documents. Its inception represents the beginning of time for those born and educated there. The settlement-born will continue to use the land, but the oral-historical links to its past could well disappear with the present generation of those who were born on the land.

Conclusion

In his concept of "state formation" Michel Foucault argues that a key element in the "technology of power" is the "functional site"—the locale in which discipline can be exercised and observation maintained: "functional sites... code a space that architecture generally left at the disposal of several different uses. Particular places correspond not only to the need to supervise... but also to create a *useful* space" (Foucault 1977:143-144; italics added).

The argument of this paper has been that the Inuit community is a "functional site" in Foucault's sense. It is an artifact of administration, a centre

for the dispensing of Canadian government services and the exercise of regulatory control. As the ethnohistoric data for the eastern Keewatin indicates, the history of Inuit settlement over the past 30 years has been the history of the establishment of mission stations, clinics, RCMP posts and schools around which Inuit groups have been encouraged or economically compelled to cluster. But a "functional site" is temporally ordered as well as spatially organized. The temporal order is based upon Western technical time: abstract, chronometric and synchronized. Church services, school, clinic and store hours, starting and quitting times at work sites are all co-ordinated and regulated. Land life and land time, while still integrally part of Inuit existence, are relegated to "off hours," weekends, spare time.

Inuit cope with temporal regimentation in several ways. Hunting and fishing trips onto the land often begin before the weekends and spill over into the following week. These are increasingly frequent in spring and end with many families permanently camped outside the community in the summer.

Alcohol and substance abuse can be viewed as temporal coping strategies as well. MacAndrew and Edgerton (1969:83-99) have used the phrase "time out" to refer to socially sanctioned times of drunkenness and licence. For the Inuit, in communities where alcohol and drugs are accessible (in one form or another they can probably be obtained in almost every settlement) "time out" can mean an escape into inebriation or euphoria from the temporal regimen which structures community life and work.

The linear axis of Western technical time constitutes an imposition on Inuit life as well. The Inuit historical and mythical past becomes folklore and legend. The history of the settlement, and more broadly of the Arctic as a whole, is absorbed into Western technical linear time. Taught in schools and preserved in books, this model of the past in which the Inuit are an objectified "other" (Fabian 1987) renders the Inuit a people disconnected from their own past. As a people they have largely lost their own "structural time."

In a review of the Canadian Indian reserve system, Peter Carstens has pointed out that the notion of native "acculturation" to Eurocanadian cultural patterns is both "unsatisfactory and misleading" as an account of patterns of change which ensued from European domination of indigenous North Americans. Rather, he argues, Indians (and Inuit) have been subject to what he terms "administrative determination" which "not only defined the boundaries of the land or territory... on which the Indians should settle, but the legal concept whereby Indians were to be recognized and, indirectly, the roles they should play" (Carstens 1971:128). For Indians, Carstens notes, the focus of deterministic control is the reserve, the lands set aside by treaty or government fiat, title to which is vested in the Canadian state.

Inuit have not been party to treaties nor subject to any single piece of legislation comparable to the *Indian Act*. They do not occupy reserves. In fact, by and large, they do not have any clearly defined titular relation to the lands over which they hunt or the settlements in which they live. However, as with Indians, they are residents of governmentally regulated and supported settlements. Following Carstens' characterization of reserve communities, Inuit settlements could be described as "ossified" social structures, indigenous neither in origin, nor in relation to the regions where they are located, nor linked to the cultural past of the people themselves. But these settlements are *temporal* constructs as well as human communities. They are linked into the ordered, technically chronometric fabric of Canadian society. In this process their ties with the cyclical temporal orientation of traditional Inuit life on the land and with the linear links to the Inuit past are, generation by generation, progressively severed.

"A whole world ends when its metaphors die," Anastasia Shkylnyk (1985:233) observes in her account of the destructive resettlement of a Northern Ontario Ojibwa community:

the health of any society or collectivity depends upon a series of vital processes that allow individuals to grow, discover their identity and learn . . . the skills and ways of knowing of their people. (Shkylnyk 1985:231)

All incentive to maintain cultural precepts, values and beliefs is lost if these things no longer work to structure reality. (Shkylnyk 1985:233)

As social scientists we metaphorize spatially. The fundamental concepts of sociology and anthropology are based upon relations in space: the group, the community, interaction. But a society or group orders its life temporally as well as spatially. Moreover, its sense of itself is predicated upon the cyclical temporal rhythms of days, months, years and generations and upon its linear progression out of the past where its roots lie.

As anthropologists we must restructure our conceptualization of society so as to take account of these temporal dimensions. This is nowhere more apparent than in the study of the large-scale social disruption and restructuring of the lives of indigenous peoples.

Notes

1. The ethnographic work on which this paper is based was carried out intermittently by the authors either jointly or independently over a period of years between 1978 and 1982. Work on time and temporal constructs was begun earlier by Halpern in connection with his work on the South Slav zadruga (Halpern and Wagner 1984) and was extended to incorporate Arctic data in his initial paper on the Inuit (1987). A joint paper on the subject of temporal constructs and Inuit mental health was read by Christie at the XIIth International Congress of Anthropological and Ethnological Sciences in Zagreb, Yugo-

slavia in July 1988 and a revised version of that paper appeared in *Social Science and Medicine* (Christie and Halpern 1990). A more general and theoretical treatment of our joint research has been prepared for publication in the near future (Halpern and Christie 1989).

- 2. For ethnographic treatment of the traditional Caribou Eskimo life way see Rasmussen (1930) and Birket-Smith (1929).
- Other Inuit groups such as Aiviligmiut and Netsiligmiut are also represented in some of these communities.

References Cited

Bailey, G.N.

1983 Concepts of Time in Quaternary Prehistory. *In* Annual Review of Anthropology, Vol. 12, edited by Bernard Siegel, pp. 165-214. Palo Alto: Annual Reviews Inc.

Barger, Walter Kenneth

1977 Culture Change and Psychosocial Adjustment. American Ethnologist 4:471-495.

Barnes, J.A.

1971 Time Flies Like An Arrow. Man (n.s.) 6:537-552.

Birket-Smith, Kaj

1929 The Caribou Eskimos: Material and Social Life and Their Cultural Position. Report of the Fifth Thule Expedition 1921-24. Vol. 5. Copenhagen: Gyldenalske Boghandel Nordisk Forlag.

Bohannan, Paul

1967 Concepts of Time Among the Tiv of Nigeria. *In* Myth and Cosmos, edited by John Middleton, pp. 315-330. Austin: University of Texas Press.

Boas, Franz

The Folklore of the Eskimo. Journal of American Folklore 17:1-13.

Brody, Hugh

1975 The People's Land: Whites and the Eastern Arctic. Harmondsworth: Penguin.

Carpenter, Edmund S.

The Timeless Present in the Mythology of the Aivilik Eskimos. In Eskimo of the Canadian Arctic, edited by Victor F. Valentine and Frank G. Vallee, pp. 39-42. Toronto: McClelland and Stewart.

Carstens, Peter.

1971 Coercion and Change. In Canadian Society: Pluralism, Change and Conflict, edited by Richard J. Ossenberg, pp. 126-145. Scarborough: Prentice Hall of Canada.

Christie, Laird, and Joel M. Halpern

1989 Temporal Constructs and Inuit Mental Health. Social Science and Medicine 30(6):727-749.

Damas, David

The Eskimo Science, History and Hudson Bay, Vol. 1, edited by C.S. Beals and D.A. Shenstone, pp. 141-172. Ottawa: Queen's Printer.

Dunning, R.W.

1959 Ethnic Relations and the Marginal Man in Canada. Human Organization 18:117-122.

Edlund, Matthew

1987 Psychological Time and Mental Illness. New York: Gardner Press.

Evans-Pritchard, Edward E.

1940 The Nuer: A Description of the Modes of Livelihood and Political Institutions of a Nilotic People. New York: Oxford University Press.

Fabian, Johannes

1983 Time and the Other: How Anthropology Makes Its Object. New York: Columbia University Press.

Fortes, Meyer

1969 Introduction. *In* The Developmental Cycle in Domestic Groups [1958], edited by Jack Goody, pp. 1-14. Cambridge Papers in Social Anthropology No. 1. London: Cambridge University Press.

Foucault, Michel

1977 Discipline and Punish: The Birth of the Prison, translated by Alan Sheridan. Harmondsworth: Penguin.

Hallowell, A. Irving

1937 Temporal Orientation in Western Civilization and in a Preliterate Society, American Anthropologist 39:648-670.

Hallpike, C.R.

1979 The Foundations of Primitive Thought. New York: Oxford University Press.

Halpern, Joel M.

1987 Inuit Aspects of Mental Health: An Approach Utilizing Linear and Cyclical Time Concepts. Collegium Anthropologicum 1:213-226.

1989 Sociocultural Processes and Kinds of Time: A Perspective on Rural Change in Bulgaria, Occasional Paper 21, pp. 1-9. Amherst, Massachusetts: University of Massachusetts Program in East European Studies.

Halpern, Joel M., and Laird Christie

1990 On the Heuristic Potential of Temporal Constructs: Linearity, Cyclicity and Mythtime in Their Spatial Settings (MS.).

Halpern, Joel M., and Barbara Karewsky-Halpern

1972 A Serbian Village in Historical Perspective. Prospect Heights, Illinois: Waveland Press.

Halpern, Joel M., and R. Wagner

1984 Time and Social Structure: A Yugoslav Case History. Journal of Family History 9(3):229-244

Honigmann, J.J., and I. Honigmann

1965 Eskimo Townsmen. Ottawa: The Canadian Research Centre for Anthropology, St. Paul University.

Hughes, Charles C.

1965 Under Four Flags: Recent Culture Change Among the Eskimos. Current Anthropology 6:3-69.

Jenness, Diamond

1964 Eskimo Administration: Canada. Arctic Institute of North America, Technical Paper 14. Montréal: Arctic Institute of North America.

MacAndrew, Craig, and Robert B. Edgerton

1969 Drunken Comportment: A Social Explanation. Chicago: Aldine.

Mumford, Lewis

1936 Technics and Civilization. New York: Harcourt Brace Jovanovich.

Oswalt, Wendell, and James W. Van Stone

The Future of the Caribou Eskimos. *In* The Caribou Eskimos of Eskimo Point, Canada, edited by James Van Stone and Wendell Oswalt, pp. 14-33. Ottawa: Department of Northern Affairs and Natural Resources, Northern Coordination and Research Centre.

Pocock, David F.

The Anthropology of Time-Reckoning. *In* Myth and Cosmos, edited by John Middleton, pp. 304-314. Austin: University of Texas Press.

Rasmussen, Knud

1930 Observations on the Intellectual Culture of the Caribou Eskimos. Report of the Fifth Thule Expedition 1921-24. Vol 7, No. 2. Copenhagen: Gyldenalske Boghandel Nordisk Forlag.

Schweitzer, Doug

1971 Keewatin Regional Dynamics: A Research Report. Regina: University of Saskatchewan Faculty of Engineering.

Shkylnyk, Anastasia

1985 A Poison Stronger than Love. New Haven: Yale University Press.

Vallee, Frank G.

1967 Kabloona and Eskimo in the Central Keewatin. Ottawa: The Canadian Research Centre for Anthropology, Saint Paul University.

Van Stone, James W., and W. Oswalt

1959 The Caribou Eskimos of Eskimo Point, Canada. Ottawa: Department of Northern Affairs and Natural Resources, Northern Coordination and Research Centre.

Williamson, Robert G.

1974 Eskimo Underground: Socio-Cultural Change in The Canadian Central Arctic. Uppsala: Uppsala University.