

ENERGY RESOURCE DEVELOPMENT, ENERGY USE, AND INGENOUS PEOPLES: A CASE STUDY OF NATIVE NORTH AMERICANS

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Energy development and energy use play a significant role in the lives of native peoples worldwide. Such native peoples are most frequently non-autonomous groups whose lands lie completely inside the bounds of politically independent nations. Recently, some have begun to refer to themselves, collectively as the "Fourth World."

Among these Fourth Worlders are the Native Peoples of the U.S.A. and Canada, usually called Indians or Native Americans, Native Canadians, Inuit and Aleuts. This paper examines the relationship between the energy-associated problems and actions of the native peoples of these two nations: energy production and extraction, energy utilization in housing and transportation, and the relationship of energy exploitation to differing concepts of land. The observations made are interpreted in terms of the economic relationships of native peoples to dominant societies, and to such theoretical concepts as neocolonialism, underdevelopment, and dependency.

The Frog does not
drink up
the pond in which
he lives.

— American Indian proverb

They shall take
who have the power
and they shall keep
who can.
— Theodore Roosevelt

The subject of this paper is energy. It is about energy production and energy consumption, and the relation of these two factors to land tenure, land use, and indigenous culture. Its particular focus is a group of people constituting under 1% of the population of the United States and less than 5% of the population of Canada, called Indians, Inuit ("Eskimos"), and Aleuts, (or Native Americans and Native Canadians). In what follows, these two groups, collectively, will be referred to as "Native North Americans." They are part of a global assortment of indigenous peoples, many (or perhaps most) of whom are encapsulated within larger political entities of the First, Second and Third worlds. Originally, these "worlds" were supposed to in-

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dicating political positions, with the first world representing the industrialized West, the second, socialist countries allied with the one-time "Sino-Soviet Bloc", and the third the so-called non-aligned nations. Most recently, "Third World" has come to denote industrially underdeveloped and developing nations.

But the nations of the Third World, whatever their degree of economic exploitation, are (officially, at least) politically independent. The nations of encapsulated indigenous minorities, on the other hand, have no such independence, so the term Fourth World was coined by Manuel and Posluns (1974) to denote native minorities in conditions of relative political powerlessness and dominated by culturally quite different people, usually Europeans. This is distinct from Whitaker's (1973) usage of the term and quite different from the way in which "Fourth World" is employed by Ridker (1976) to refer simply to less developed Third World countries.

The Manuel and Posluns definition is now widely accepted by indigenous peoples themselves. The "Dene Declaration," for example, a statement of self-determination in the mid-1970's by the 11,000 or more Dene people of Canada's Northwest Territories, says:

We the Dene are part of the Fourth World. And as the peoples and Nations of the world have come to recognize the existence and rights of those peoples who make up the Third World the day must come and will come when the nations of the Fourth World will come to be recognized and respected. The challenge to the Dene and the world is to find the way for the recognition of the Dene Nation.

ENERGY RESOURCES AND THE FOURTH WORLD

The only agreements that are really worse than those entered into by Indian tribes are in French-speaking African countries. The government of Niger has to pay the French government back dollar-for-dollar for investment in their uranium mines. That's about the worst deal there is. (A.I.O. 1975).

Encapsulated indigenous minorities of the First, Second, and Third worlds include the Sami (Lapps) of Northern Scandinavia, the Saharan Tuareg and Bedouin, the Iranian Basseri, the Orang Asli of Malaysia, New Zealand Maori, Australian Aborigines, the many Indian groups of Mesoamerica, and Native North Americans, to mention but a few. Quite remarkably, during the 1970's, these impoverished and previously invisible native minorities began independently to undergo a renaissance, focussing upon cultural revival, land rights, and natural resources. The world conferences of indigenous peoples were held in Barbados in 1970 and 1977, two more in Geneva, Switzerland, in the late 1970's, and a fifth in Cuzco, Peru, in 1979. Others have taken place since then. Significantly, information about these gatherings was ignored or even suppressed in much of the world, especially the Western Hemisphere. Nor has much news been released about economic and cultural exchanges among native peoples: about exchanges between New Zealand Maori and Native Americans, about Australian Aborigines and Guatemalan Indians working with Native American tribes, or about current efforts to forge a bond among Canadian, Alaskan, and Siberian Inuit. Indeed, the existence and recognition of the commonality of interest appears to violate certain "sacred cows" of the social science:

... social scientists in general, tend to perceive the world as though it were a mosaic of distinct and isolated societies. Thus they see boundaries where none exist. (Blaut, 1976, p. 5)

Social scientists, and political scientists in particular, also fail to see some boundaries where they *do* exist; thus, the "national interest" in North America is seen as including native peoples with no opportunity to participate in that interest (see Figure 1).

As indicated above, one thread tying many native peoples together is the worldwide search for mineral and energy resources, termed the "geological imperative" (Davis and Mathews, 1976), and the presence of such resources under native lands. During times of colonial expan-

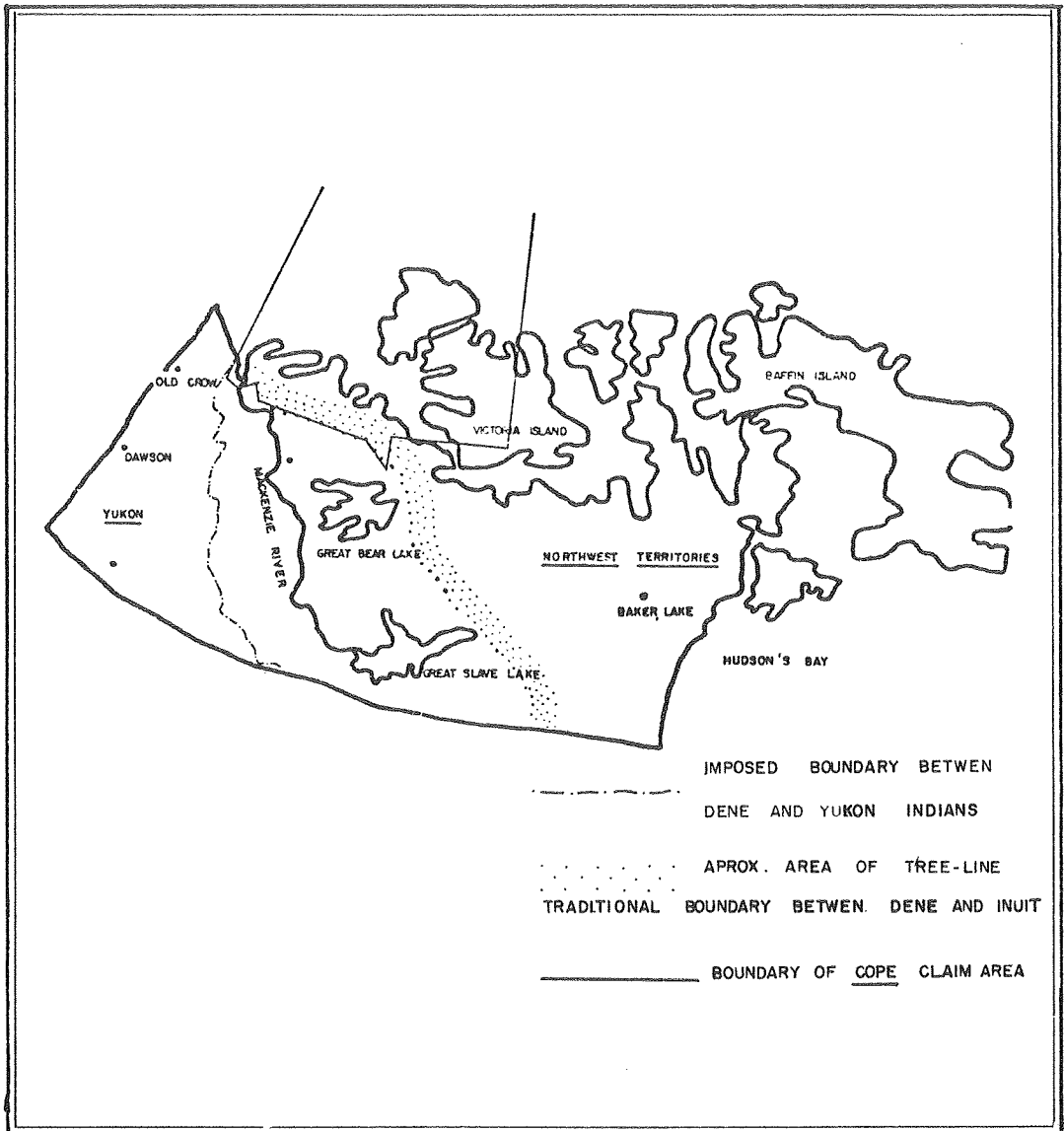


Figure 1: Traditional and Imposed Boundaries among Certain Major Native Nations in Canada

sion, natives were allowed to retain such lands because they appeared ill-suited to any purpose conceivable to Europeans. Rich mineral resources, however, tend to be found most frequently in ecological environments apparently ill-suited to other types of economic activity. That U.S. and Canadian Indian lands, as well as native lands elsewhere in the world have turned out to be rich in minerals is, then, no coincidence.

NATIVE NORTH AMERICA

The U.S.A. and Canada share one of the longest undefended borders in the world. Indeed, casual visitors to Provinces other than Quebec often remark that there seems to be little difference between the two countries. There is much in common, as well, among native inhabi-

tants of the two sides of the frontier: similar cultures, with similar customs, and similar linguistic groups populate areas straddling the East-West border between Canada and the "Lower 48" and the North-South border between Alaska, on one side, and the Yukon and British Columbia on the other.

The histories of Native-European relations, however, are rather distinct in the two countries. The U.S. push into the Western interior began earlier, and involved the making of treaties, the early establishment (and later diminution) of reservations, enforcement by the military (the Bureau of Indian Affairs) was under the Department of Army until the late 19th century, when it was shifted to the Department of Interior), and forced acculturation through compulsory education in Bureau of Indian Affairs (B.I.A.) schools. In Canada, the pattern appears to have been less uniform. There were (and still are) treaty and non-treaty Indians, Reserve and non-Reserve Indians; there are Reserve Indians without treaties, treaty Indians without Reserves, Indian with both, and Indians with neither. The established arm of enforcement in the 19th century was the RCMP (Royal Canadian Mounted Police, or "Mounties") and education was conducted through church schools. Expansion into the western interior, with the exception of the fur-trade, was for the most part delayed until the second half of the present century, with native peoples still in the majority in the Northwest Territories in the 1970's.

Recent estimates placed approximately 300,000 Native Canadians on 2,196 Reserves totalling 6,369,612 acres, or about 0.04% of their original territory: this provides a mean of slightly more than 20 acres for each Native person. In the U.S.A., the Navajo Reservation alone has 12 million acres, about double the total for all of Canada, or approximately 80 acres for each Navajo. Given the relative aridity of many reservation areas, however, even the latter figure exceeds the carrying capacity of land in "traditional" use, i.e. pastoral grazing.

THE "SHORT END" OF ENERGY PRODUCTION

If the environmentalists had been in control, the way they are today, in the 1800's, the land would still belong to the Indians! (Earl Butz, former U.S. Secretary of the Agriculture, in a lecture delivered at University of California, Los Angeles in April, 1980.)

All of the foregoing appeared to be questions primarily of academic — especially historical — interest until the last decade. Until the mid - 1970's, in fact, forgotten Americans and forgotten Canadians shared poverty and invisibility with each other. The "energy crisis", however, and the consequent push to find oil and substitute fuels, suddenly brought more than twenty of the U.S. Reservations into sharp focus. Located in an area extending from the eastern slopes of the Rockies into the Western plains, these tribes controlled less than 4% of this "Mineral Belt" land but an estimated 30% of the low-sulphur strippable coal west of the Mississippi River and over 50% of the nations' known uranium reserves, plus substantial amounts of other valuable minerals, a treasure whose value is currently assessed at more than ten trillion dollars (\$10,000,000,000,000).

In earlier times, mineral resources had been leased to multinational corporations, "on behalf of the Indians", by the Bureau of Indian Affairs, at fixed lease rates (a certain number of cents per ton, rather than a percentage of the actual selling price). Such lease rates often represented a miniscule portion of the leasing company's profits. In the case of fossil fuels, Indians usually had to buy back their resources at prevailing rates, or higher. The inherent inequities of this situation are well illustrated by the behavior of Shell Oil, which attempted to obtain a coal-mining lease on the Crow Reservation by offering a sum of money (approximately \$750,000) to be distributed in one-time per capita payments of \$250 (the cost of heating a Crow home for less than two months during the winter of 1980). When a Crow referendum rejected this offer, the sum was raised to \$1,000, and upon failure of that offer to receive ap-

proval, to \$1,500 per capita. The value of Crow coal is now conservatively estimated at \$29 billion.

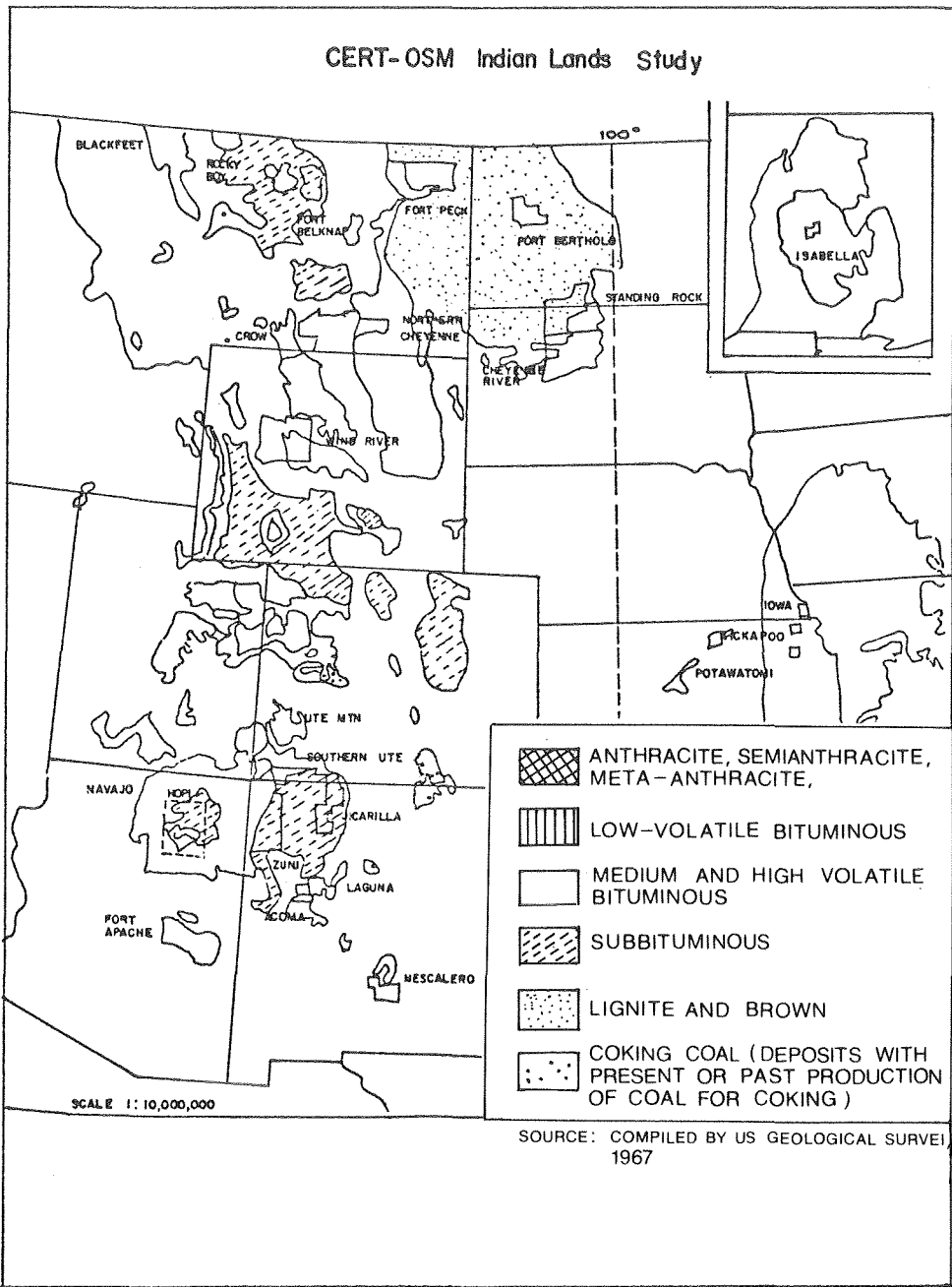


Figure 2: Locations of Coal Resources and a Number of Energy Resource Tribes (C.E.R.T members) U.S.A.

To avoid future situations of this sort, the twenty-one Mineral Belt reservations, together with four others in the Middle West, formed the Council of Energy Resource Tribes under the directorship of former Navajo Tribal Chairman Peter McDonald. When his request to Washington for funds to support a study of how Indians might manage these resources was turned down, McDonald went directly to OPEC, obtaining Ahmed Kooros as advisor, Iran's former Deputy Minister for Finance and Oil (Crittenden, 1979). Federal officials, many for the first time, began to take the energy resource tribes seriously — but not seriously enough. CERT's subsequent request for \$600 million, made in late 1979, was met with an offer of only \$24 million for fiscal year 1980. But this was a substantial improvement over past performance. In answer to an earlier application, the then-U.S. President had requested one million dollars (\$1,000,000) for CERT from congress in 1979 (one ten-millionth of the 1980 estimated value of Native American energy resources) for Indian energy projects. Congress then proposed to shave this appropriation to \$750,000.

In the words of ex-Chairman McDonald:

President Carter's national energy program calls for the spending of the largest single sum in peacetime history — \$142 billion — toward what the President has termed "national energy security". Of that amount, the original proposal would have directed some \$88 billion into the development of synthetic fuels ("synfuels") operations, with an eye toward producing an additional 2.5 million barrels of oil domestically per day by 1990. I recently explained to the President that an investment of *under one half of one per cent* of his national energy security budget in certain key programs could enable the CERT member tribes to build the capacity to produce the energy equivalent of an additional 2 million barrels of oil daily, also by 1990. (McDonald, 1979, p. 1589).

When the "energy crisis" of the late 1970's became the "energy glut" of 1982, the power of both Peter McDonald and CERT began to fade. McDonald is now neither Chair of CERT, nor of the Navajo Nation, and the search for alternative fuels to oil has become less desperate. Many Anglo-Americans are looking northernward once again, to the potentially vast reserves of oil and gas in the Arctic Sea. In between, however, with the opportunity either to impede or to facilitate the flow, lies Canada — and its Native peoples.

It is precisely here that a parochial national perspective becomes misleading. For, as is shown in Figure 3, some of the major proposed pipelines connecting Alaska with the "Lower 48" *pass through Canada*, as do those intended to bring Northern Canada's ample gas reserves through Alberta to the United States. And the paths of these lines lie directly across the land of the *Dene* Nation, the home of Navajo's northern cousins (the Navajo refer to themselves as *Dineh*: "the people").

It should be noted that the United States has been rather unique among former British colonies in not retaining subsurface mineral rights under native lands. In Australia, New Zealand, and Canada, aboriginal lands are Crown Lands, with subsurface rights retained by the government. But the proposed Canadian pipelines will pass *above* ground in the territory of the *Dene*, who seem determined that the pipeline shall *not* pass until their claim to sovereignty over 450,000 square miles of the Northwest Territories (Figure 1) is settled satisfactorily.

Their concerns are supported by the results of an extensive and unusually sensitive study commissioned by Ottawa and conducted under the direction of Mr. Justice Thomas R. Berger:

... the people in the North have strong feelings about the pipeline and large-scale frontier development. I listened to a brief by northern businessmen in Yellowknife who favour a pipeline through the North. Later, in a native village far away, I heard virtually the whole community express vehement opposition to such a pipeline; both were talking about the same region — but for one group it is a frontier, for the other a homeland. (Berger, 1977, p. viii).

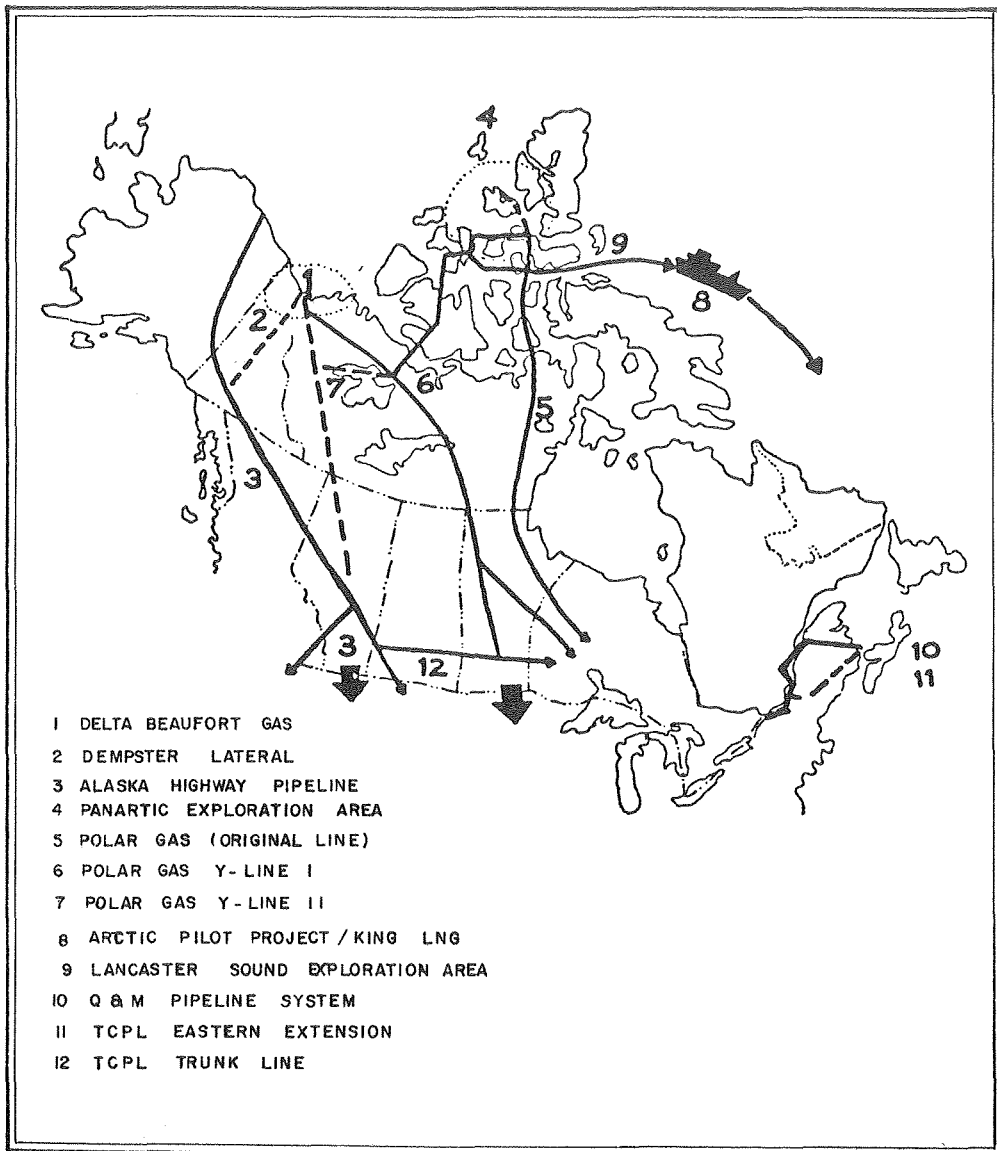


Figure 3: Major Canadian Pipelines.

Six months after a delegation of chiefs presented a claim to sovereignty in 1973, a ruling was handed down regarding Treaties 8 and 11, signed in 1896 and 1920, respectively, and disputed ever since. The ruling stated that because the *Dene* had occupied the land since time immemorial, they were "owners" of the land under the rarely-invoked concept of aboriginal rights and that the above Treaties had never extinguished their sovereignty. In effect, this ruling, and the Berger report's conclusion that pipeline construction will cause irreparable ecological and cultural harm to the land and the people, provide the *Dene* with both the power and the reason to delay pipeline construction indefinitely. The position of Canada's Clark government was to push pipeline construction and land negotiations simultaneously, a procedure entirely unacceptable to the *Dene*. But the Clark government has been voted out, and Trudeau forces have shown themselves to be more conciliatory to the wishes of indigenous people.

The picture we have is one of increasing indigenous control of energy resources on both sides of the border: control of the *flow* of oil and gas in Western Canada and control of the *extraction* of coal and uranium in the Western U.S.A. While the precise meaning of this for the future of Anglo-Native relations is in doubt, it does appear to indicate that the natives' use of legal and economic power *may* allow them to bear fewer of the costs and reap more of the benefits of energy *production* than they have in the past. But what of consumption?

HOUSING, SETTLEMENT AND TRANSPORTATION: THE "SHORT END" OF ENERGY CONSUMPTION

The problems of physical and social pathology among Native North Americans — diabetes, tuberculosis, alcoholism, suicide, infant mortality, etc. — are quite well known. Almost as well known are some of their problems with housing. In earlier times each tribe evolved a form of housing well-suited to its particular physical, climatic, ecological, economic, social and cultural milieu. There are few examples of pure environmental determinism: the Navajo "out-fit" with its scattered eight-sided hogans is as different as can be imagined from the Hopi pueblo, yet both groups live in ecologically similar circumstances. Thus, many adaptations are possible. The existence of this adaptive variety led the present writer to form a theory of "critical elements" (Stea, 1983) a few years ago, loosely related to Julian Steward's (1961) concept of "cultural core". This view proposed that in housing, as in other aspects of a robust culture, people are willing to accept forms that differ somewhat from the traditional *if* a core of critical elements is pursued. The Navajo hogan, for example, may be round, six-sided or eight-sided; it may be covered with earth, logs, or concrete; it may have a mud or tarpaper roof. But it is not a hogan, and therefore useless for ceremonial purposes, if it is quadrilateral, if a window opens to the North, or if the entrance faces other than East, or if the interior is subdivided. In rural areas, house siting is of great cultural significance, as well.

Housing in towns of Native American Reservations, by contrast, is largely H.U.D.-financed and must therefore meet federal minimum-property standards (which apply identically to areas as diverse as New York; Fairbanks, Alaska, Miami; and Window Rock, Arizona) concerning the sizes of, and relations among, interior spaces. Since the minimum standards are the maximum the federal government will finance, all such housing is essentially identical, varying only in the number of bedrooms; all of it resembles an austere version of typical Anglo tract housing. This is fine with Navajo who do not have such housing, and as some recent research has revealed (e.g. Snyder *et al.*, 1976; Sadalla *et al.*, 1976), they even prefer tract-type housing, much to the chagrin of lovers of vernacular architecture. One argument is that free-standing single-family Anglo-style housing is a status symbol associated with economic upward mobility; another is suggested by a finding, in the above studies, that Navajos queried about what things they most like about their homes or would most like to have in their houses, invariably *like* such utility-related conveniences as running hot water, showers, electric lights, and central heat; and such energy-consuming appliances as stoves and refrigerators. To them, it appears, the form of the house is inextricably associated with the "goodies" it provides: they seem to perceive that to obtain these comforts, one must accept the house form that goes with them.

There are several problems with the U.S. Federal system for the provision of Native housing, however, well-summarized by Stanton (1977). While rentals and house payments are subsidized and adjusted to income, utilities payments are not, and when an Indian Housing Authority is forced by the U.S. Federal Government to evict its own people, it is more frequently for failure to meet utilities bills than for difficulties with rent. In more northerly areas of Montana and Wyoming, families have become accustomed to paying \$100, \$200, or more a month

in order to heat homes whose insulation is woefully inadequate. Further, cost-consciousness has had a negative effect upon housing quality. As maintenance costs must be met through separate grants, obtainable only with extensive paperwork and endless patience, houses rapidly fall into disrepair. Finally, until 1979, all proposals to use alternative technologies or locally available building materials — such as logs in the northwest and adobe in the southwest — were systematically rejected by the U.S. Department of Housing and Urban Development (Stea, 1982). Wood stoves were classed as “luxuries”, not to be allowed.

Thus, energy resource tribes, previously cheated in the production of energy resources, were caught in a second energy bind. Families on public assistance were forced to pay large portions of their monthly checks to repurchase energy at many times the rate per BTU that their tribe had received in leasehold royalties.

The Indian housing problem in the U.S. is paralleled by very similar situations in Canada. Balloon-framed uninsulated houses march in military fashion down double-loaded streets in Edzo and Ft. Rae, along the Northwest Territories’ Great Slave Lake, much as they do in Ft. Defiance, Arizona, and Ft. Washakie, Wyoming. In Ft. Rae, too, one housing official’s innovative proposal for the production of superior log houses at lower cost was predictably rejected by offices in Ottawa. In these respects, the bureaucracies in charge of native affairs seem to function the same on both sides of the border.

So, too, with transportation. On Indian Reservations of the U.S.A. and on Native Reserves of Canada, public transportation is virtually nonexistent. A study of Navajo expenditure patterns performed by Brigham Young University in the early 1970’s revealed that Navajos planned to spend 10% of their income on housing and 30% on transportation — precisely the opposite of their Anglo neighbors. This study was performed prior to the *first* “energy crisis” in 1974. No data is currently available on household expenditures of Native Americans for transportation in 1983, but with gasoline costing 3-4 times what it did in 1973, with vehicles more than twice as expensive (and, on rough roads, requiring replacement every couple of years), and with no alternative transport usually available, transportation places impossible economic pressures upon some families.

At the settlement scale, Native Americans must confront yet another problem. Energy exploitation frequently results in the construction of “boom-towns” of unprecedented sizes. In the Navajo case there is some worry about how people who have difficulty dwelling in towns of a thousand will respond to living in towns of 20,000 to 60,000 people, such as that proposed at Burnham, New Mexico, associated with the construction of a \$7 billion coal gasification facility. Figures 4 and 5 are from a plan for the new town presented to (and subsequently rejected by) the Navajo. The planners attempted to understand the relation of Navajo culture and patterns of life to urban design as best they could in a short period of time, but failed. The organization of neighborhoods (in groups of three) into communities, and communities (in groups of three) into villages would do credit to British town planning but bears little relation to Navajo culture or the Navajo situation. The formation of these villages into “The New Town”, as depicted in Figure 5, provides the crowning irony: “central facilities and open recreation” for Navajos to use on weekends — when no-one is there.

For those few Native Americans who manage to obtain employment in the dual economy created by energy exploitation, wages are good, and such expenses as the above become comparatively easy to meet — as long as the energy extraction operation continues. But coal and uranium mining are of short duration in any particular locale, and their cessation, 5 to 20 years after commencing operation, often leaves impacted tribes no more affluent than before, and with much of their land in ruins. The last aspect will be treated in greater detail in the following section.

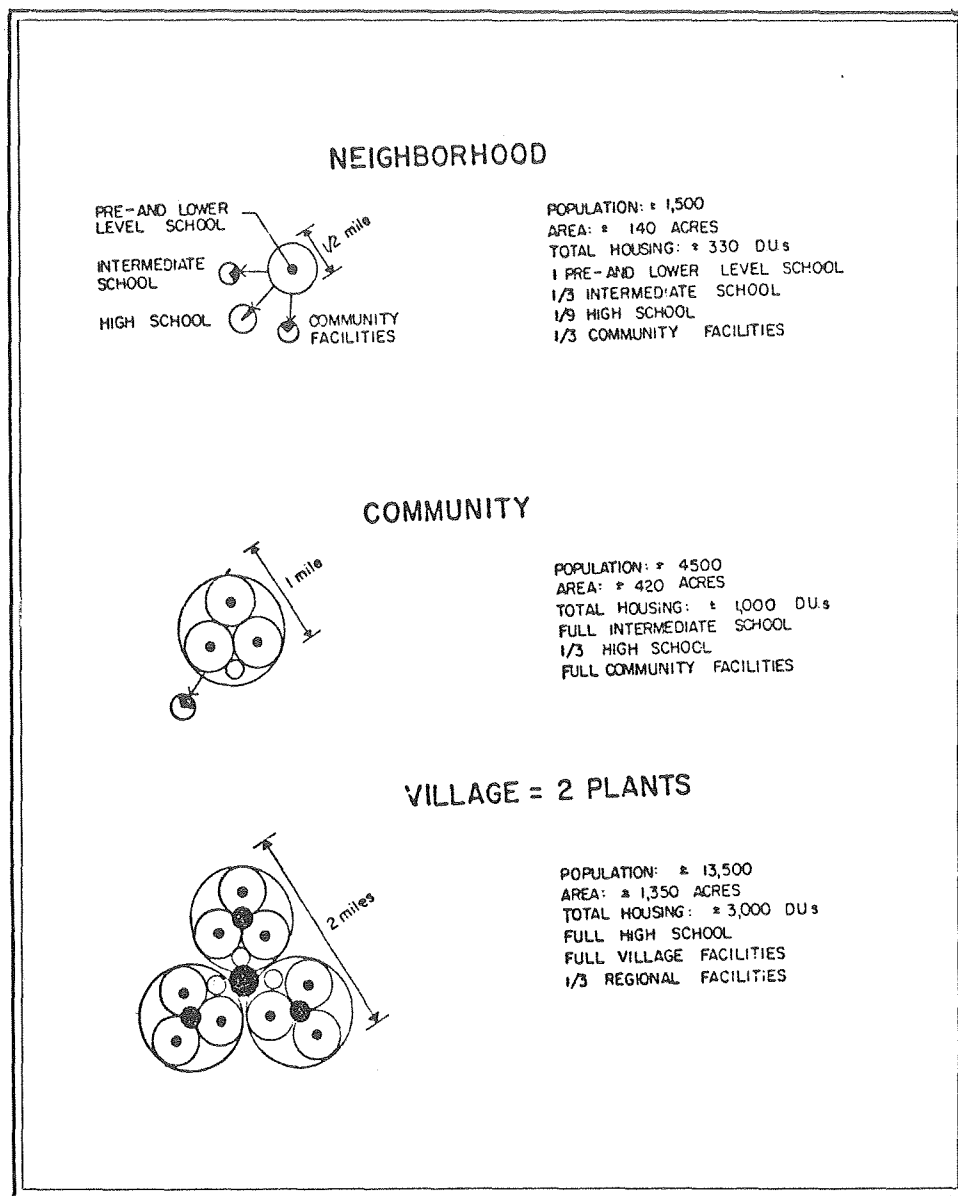


Figure 4: Proposed Formation of Neighborhoods, Communities, and Villages, Burnham, New Town Study, 1974.

CONCEPTS OF LAND

When Europeans first landed on the East Coast of North America, one of the discoveries convincing them of the primitive state of Indian tribes was that Indians apparently had no concept of the private ownership of land. One prime device for "civilizing" Native Americans, therefore, for acculturating them to Anglo ways, was the individuation and commodification (—"allotment") of at least some Native lands, accomplished through the General Allotment Act of 1887. This "solution" rapidly created a difficult and perplexing problem among tribes

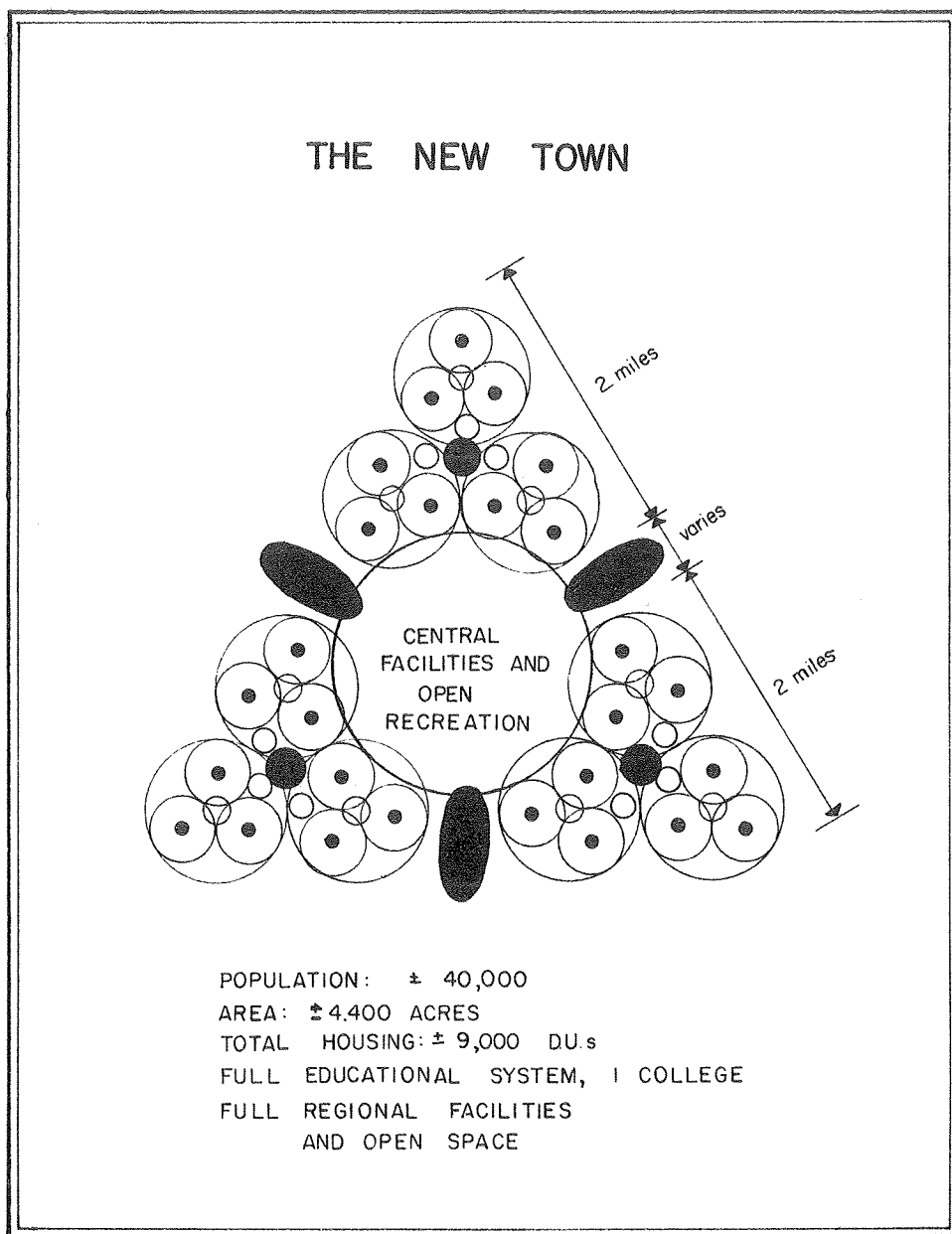


Figure 5: Schematic Organization of Proposed Burnham New Town, 1974.

who accepted allotments, exaggerated by the passage of nearly a century-heirship:

One of the many serious problems confronting Indian people is the fractionalization of land ownership. At least part of this problem stems from the fact that many parcels of trust allotted land have been passed to heirs of the original allottee under state laws of descent and distribution rather than through an approved will ... Recently, certain States have revised their laws of descent and distribution in such a way as to further limit an Indian's testamentary capacity. (Senate Select Committee on Indian Affairs, 1980, p. 18).

For those tribes which refused to accept the allotment system, and who still hold their lands in common, the dilemma of *whether* to lease is supplanted by the dilemma of *how* to lease lands for energy exploitation, and how to control the process and the impacts of the resulting energy extraction activities. The problem is not just the violation of sacred areas, although this is a prime consideration; for inasmuch as most Indian lands, with low carrying capacity, are quite sparsely settled, many of them have been declared "national sacrifice areas", open to mineral exploitation with fewer safeguards than usually accorded to more populated areas. Such "national sacrifice areas" are also open to military development: in the mid-1970's, for example, several Native American reservations were proposed as sites for the much-debated MX missile system. The proliferation of radiation effects among Navajos, moreover, resulting from inadequate health precautions in uranium mines and the careless disposal of radioactive wastes, is becoming well-known. Somewhat less well-known is the irreversible damage to land resulting from the strip-mining of coal, damage which can be cosmetically concealed, but which prevents forever the restoration of the original ecology. As Ted Risingsun (1980) of the Northern Cheyenne Tribe has indicated, the land which can never be restored and the traditional economic activities which, therefore, can never be resumed, are often critical to the continuance of a culture.

THEORETICAL POSITIONS: NEOCOLONIALISM, DEPENDENCY, AND UNDERDEVELOPMENT

In the analysis of Third World development (or the lack thereof) over the past quarter-century, a number of terms have gained considerable currency. Among these are "neocolonialism", "underdevelopment" (as distinguished from the "undeveloped", or pre-development stage of a traditional economy), "dependency", "modernization", etc. In subsequent writings, most of all of these have been applied to Native North American Communities, as well.

Jorgensen, for example, uses the term "neocolonial", in a Native American context:

... to typologize the peculiar form of internal domestic colonialism in the United States that distinguishes Indians and Eskimos, their resources, and their political niche, from all other United States citizens and dominated peoples in U.S. trust territories. (Jorgensen, 1972, p. 10).

Development, as the term is applied to either Third or Fourth Worlders, implies one or more of three kinds of transformation: economic, social, and/or cultural. In the nineteenth century, the concept of development was borrowed from biology and applied to the continuous transformation process of human societies. Some mid-twentieth century theorists saw the definition of development inhering not in the character of society but in that of individuals: they became concerned with individual values and value orientations. To the nineteenth century theorists, "failure" to develop was the "fault" of societal (or racial) traits; to the mid-twentieth century theorists, the fault lay with individual traits, such as the absence of will, of motivation, of achievement orientation, etc. The third and latest view of development revolves about the concept of *dependency*:

This perspective views development and underdevelopment not as two difficult stages in the history of mankind but as integral parts of the same "world economy" ... Thus *underdevelopment* is not a "backward" state prior to capitalism but a variant of the latter and a necessary consequence of its evolution. (Portes, 1976, p. 70, italics added).

"Underdevelopment" is defined by Rothney and Watson (1975) as representing the thwarting of potentially sustained socio-economic development of a type geared to local human needs. Such local development is *suppressed* (Watkins, 1977) through outward drain of economic surplus from the region in question. This outward drain or "export" of, for example, mineral resources, is half of the import-substitution equation imposed by off-reservation-

controlled multinational enterprises; the other half is the "importation" (onto reservations) of basic processed or manufactured goods such as food, motor vehicles, and building materials. The Navajo Nation, for example, was not created as a "resource colony", but in the last quarter of the twentieth century has become a supplier of raw materials to urban industrial centers in other parts of the U.S.A.:

Most of the value of these resources is expropriated by large vertically integrated corporations, not only because of their monopoly power, but also because Department of Interior policies have favored corporate intrusion over Navajo use and development ... Since nearly all production in Navajo territory is for export, the Navajo nation is dependent on outside foodstuffs and manufactures. Capital outflows in the form of transfers of value and competition from imports block the development of Navajo-controlled economic activities which could fulfill local employment and consumption needs. The extreme outward orientation of the Navajo economy also inhibits internal exchange among the sectors of the Navajo economy. Pastoral production, commercial agriculture, mining, forestry, manufacturing and retail trade are not integrated among themselves, but rather each, separately, with the national economy.

Exclusive development of capital-intensive exports and the lack of internal integration have resulted in high unemployment or underemployment in federal make-work jobs. Furthermore, federal interference and the uncontrolled intrusion of mining companies have distorted the Navajo income distribution and Navajo consumption patterns. (Ruffing, 1979, p. 95).

The resulting impact upon reservations, in short, has been the maintenance and expansion of external economic dependence and the internal emergence of new privileged groups, and expanded social inequality *within* the Native American communities themselves. This generates, and is ultimately at the core of, *dependency*.

"Dependency theory", as elaborated by the economist Andre Gunder Frank (1966), centered on the "metropolis-satellite" structure of the Capitalist system: the polarization, imposed by this system, into metropolitan center and peripheral satellites. According to this thesis, the industrial center appropriates to itself much of the increment in income generated by the primary producing periphery (Chilcote, 1974). Jorgensen (1972) has articulated essentially the same position in a specifically Native American context.

As neocolonial underdevelopment and accompanying dependency have systematically eroded the traditional economic base of Native U.S. and Canadian tribes, "welfare" (actually compensatory payments for the surrender of land) and limited wage labor have been introduced, ostensibly for the betterment of impoverished tribes. In the Canadian situation, at least, and undoubtedly as much in the U.S., such blessings have been very mixed, indeed:

... the introduction of welfare payments, in their present form, created the individualization of poverty and helped to relieve the community of traditional responsibility to help one another ... (moreover) in today's circumstances wage labour is often less of a solution than it is a problem ... On the other hand, it is acting as a subtle influence to change values away from mutual sharing and towards individualistic ones. On the other, it is concentrating wealth in the hands of those who are least capable or willing to use it in socially useful ways, while at the same time helping to undermine the respect for others who perform socially more valuable labour. (Asch, 1977, pp. 56-67).

A LOOK AHEAD

Fourth Worlders were always regarded as most lovable when nearly at the point of extinction. On "One Tree Hill", near Auckland, New Zealand, stands a pillar erected to the Maori in the 1890's "a monument to a dying race". There were 10,000 Maori then, and nearly 300,000 in 1979; surely, no more monuments will be erected to them. The 7,000 or so Navajo who survived the "long march" into exile in the 1860's had increased to some 200,000 by 1980;

in the 1960's they were reportedly one of the fastest growing groups of people on Earth. Anglo-Americans are less likely to *talk* about the Noble Red Man now, but they are more likely to *listen* to him. For to the nobility of "a dying race" has been added the power of a living one.

Native North Americans feel that they have identified at least some of the questions critical to their survival and expansion, and are developing the human resources necessary to control their mineral resources and to ensure the continuance of the ways of life they choose to follow. In the 1970's they discovered the power of The Law and are currently using it to regain lands formerly theirs, and to regulate the kind and pace of development on and under tribal lands. As Canada's *Dene* have opted to stand in the way of pipelines across their land, so have the Umatilla tribes of Oregon considered closing those portions of the Interstate Highway and the railway which cross the reservation to the transportation of radioactive waste from West Coast nuclear power plants. Some U.S. tribes are even invoking the Religious Freedom Act of 1978 (which legitimatizes traditional Native American and Pacific Island religions for the first time in Anglo history) as a basis of environmental protection.

Positions within each tribe span the full spectrum from the most "traditional", or "conservative", to the most "modern", or "progressive". There are many Native North Americans, however, who envision possibilities of obtaining the best of both Anglo and Indian worlds, perhaps a hopeful sign. Once seeing their only choice as signing or not signing exploitative leases, they now perceive options for negotiating what is developed, the rate at which development is to take place, capitalization (in addition to wages and royalties), and mitigation of environmental and cultural impacts. Tribes refusing mineral extraction by multi-nationals have rarely opted for no development at all; rather, they have expressed a desire for *control* over the rate and direction of development. Many have expressed a preference for economic development using appropriate technologies (appropriate in social and cultural senses) at levels which enable tribal people to participate in management as well as wage labor. Increasing numbers of Native North Americans are opting for the use of local materials in modified indigenous housing and settlement designs, and for keeping economic "multipliers" operating as much as possible within the reservations.

Finally, after a number of false starts, cooperatives (e.g. Dineh Cooperatives: Reents, 1983) are gaining credibility once again among Indian Nations. This, it would seem, is all to the good. For there is probably no principle more in tune with mutually aided self-reliance than the cooperative individualism which once so strongly characterized the world of so many Native North Americans.

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