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PLACE AND HEALTH IN CANADA

Historical Roots of Two Healing Traditions

Nancy Hudson-Rodd

Thesis submitted to
the School of Graduate Studies and Research
in partial fulfilment of the requirements for the
Ph.D. degree in Geography

University of Ottawa



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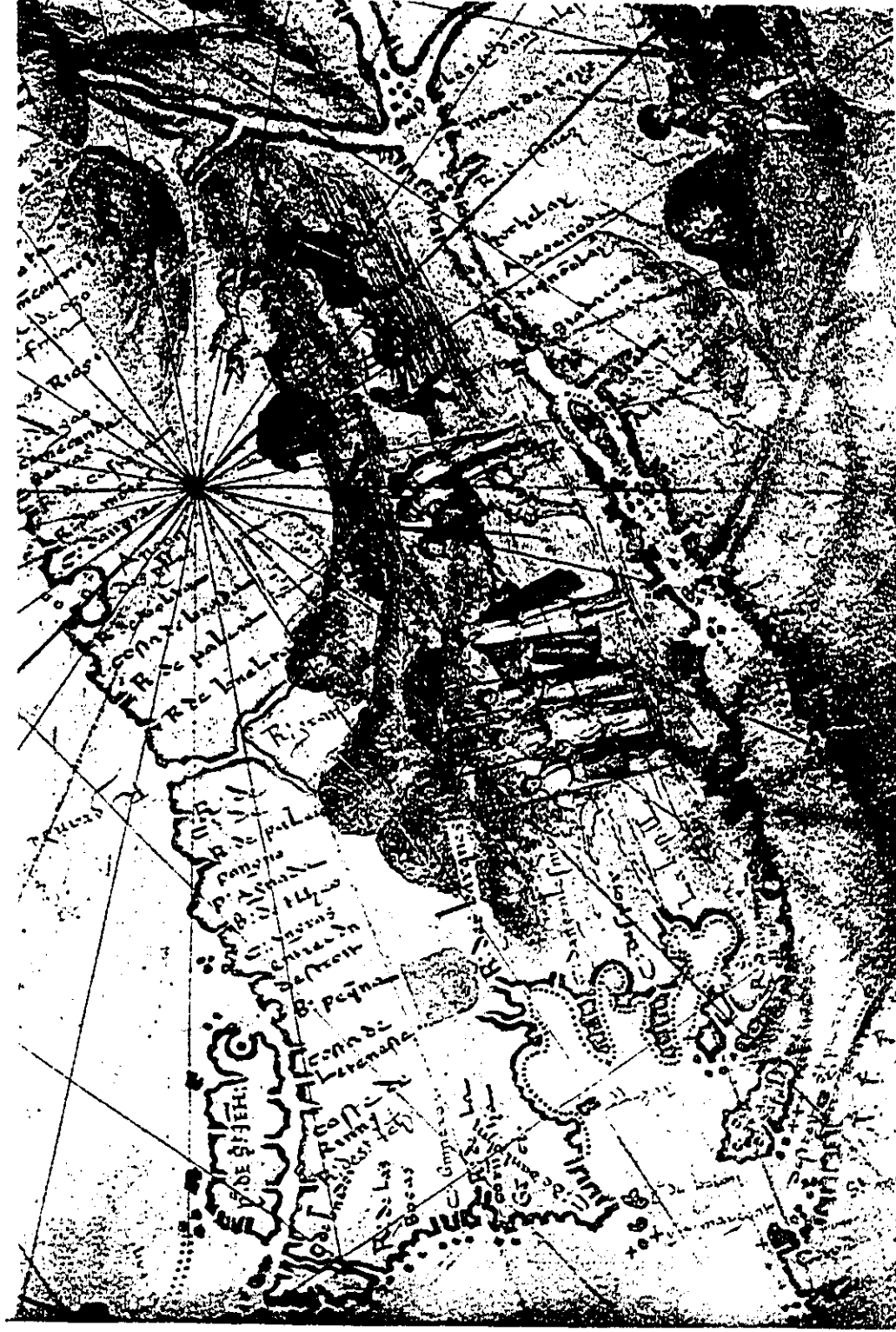
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Detail from a map by the French portolan chartmaker Pierre Descellier, 1544, illustrating Jacques Cartier's discoveries along the St. Lawrence River. "Canada", a name that Cartier heard for the first time from the Indians appears on this map.



Source: Portinaro, P. and F. Knirsch. 1987. The Cartography of North America 1500 - 1800. p.61
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LIEU DE VIE ET SANTE AU CANADA

Origines Historique de Deux Traditions de Guérison

Cette these explore les racines historiques de l'opposition entre la maniere de percevoir la sante, la maladie et les soins dans l'optique des Premieres Nations d'une part et des Eurocanadiens d'autre part. Tout tourne autour de l'idee de lieu de vie envisagee ici a la fois dans son sens litteral et comme metaphore. Litteralement le lieu de vie peut signifier l'espace, clairement delimite dans lesquels individus ou groupes culturels resident, ou bien, des domaines definis par l'administration et dans lesquels on enregistre la presence d'une population particuliere. Metaphoriquement par contre, le lieu de vie evoque une myriade de significations tres differentes. Dans cette these il connote (a) les symboles de l'identite culturelle, les racines rationnelles aussi bien que mythiques et poetique de la memoire collective, les modes d'expression rituels et dans la vision du monde (b) tout ce qui est considere comme allant de soi dans la maniere de comprendre les roles, le statut et le comportement approprie des membres au sein d'un groupe donne et enfin (c) les liens entre les etres humains et leur environnement bio-physique naturel et artificiel dans le cadre de leur habitat terrestre.

Le lieu de vie devient donc le pivot d'une exploration geographique des differences culturelles vis-a-vis la sante, de la maladie, et de l'environnement. De l'epoque de la Grece classique a nos jours, un courant d'investigation s'est penche sur les curiosites de cette association. Toutefois, a partir du XVIIe siecle, dans la tradition occidentale, le progres scientifique a modifie diagnostic et soins en cherchant a ecarter le determinisme associe au milieu naturel et cela a abouti a l'elimination du facteur crucial qu'etait le "lieu de vie" dans la comprehension que l'on avait de la sante. Au XXe siecle, la geographie medicale a surtout dresse (a) des inventaires des maladies et des listes des populations a risque pour les maladies deja repertoriees, (b) des analyses des services medicaux et du rapport qualite-prix de ces services en fonction des modeles de repartition spatiale des equipements medicaux. Plus recemment on s'est rendu compte que les pratiques medicales occidentales ne permettaient pas de soigner les maladies dont souffrent les populations indigenes dans le monde. Les taux de morbidite et de mortalite chez les Amerindiens des Premieres Nations du Canada s'accroissent de facon vertigineuse. Ces populations associent leur lieu de vie a un mal-aise, non pas par manque de soins medicaux modernes, mais parce que leur sentiment traditionnel d'etre a "leur place", avec tout ce que cela sous-entend de "bien etre" dans les domaines spirituels, affectifs, et physiques a ete ebranle.

Pour les populations des Premieres Nations la sante est avant tout une donnee essentielle de l'habitat terrestre. La sante et le lieu de vie ne peuvent nullement etre expliques sans faire reference a des horizons plus elargis que les contextes specifiques. Cette these etudie le contexte historique des deux groupes culturels extremement differents. En Amerique du Nord, avant l'arrivee des Europeens, il existait des distinctions indeniabiles et des differences flagrantes entre les divers groupes de chasseurs-cueilleurs, de pecheurs, d'agriculteurs et autres, disperses dans un milieu physique et geographique tres diversifie. Il existait aussi de tres grandes differences parmi les groupes d'arrivants: des explorateurs, des chasseurs-trappeurs, des missionnaires, des marchands, des colons. Toutefois les oppositions entre ces deux grands groupes etaient plus

importantes que les differences entre les sous-groupes. La these explore les aspects importants de la rencontre des deux mondes que formaient les indigenes d'une part et des immigrants francais et britanniques d'autre part entre 1600 et 1950, sur le territoire desormais appele Canada. Elle cherche a degager les traits de ces deux groupes culturels, et les fondements rationnels, mythiques et poetiques qui s'appuyaient sur des croyances et des pratiques diametralement opposees dans le traitement medical.

Tirant parti de ce travail, le dernier chapitre pose la question de savoir si les traitements medicaux, au Canada de nos jours, sont appropries, et, explore les mesures pratiques qui s'imposent pour faciliter le dialogue entre les deux traditions differentes en presence. Dans l'un comme dans l'autre monde, on voit apparaitre une nouvelle perception de la dimension spirituelle et symbolique des elements constitutifs de l'etat de sante. Une medecine globale plus sensible commence a tenir compte d'une harmonie entre le malade et son lieu de vie. Des lignes directrices sont proposees pour une recherche ulterieure dans un cadre culturel elargi.

PLACE AND HEALTH IN CANADA

Historical Roots of Two Healing Traditions

This thesis explores some historical roots of the contrasts between First Nations and EuroCanadian perspectives on health, illness, and health care. Central focus rests on the idea of place, understood here in both literal and metaphorical senses. Literally, place may connote those territorially-circumscribable spaces within which individuals and cultural groups reside, or the administratively-defined domains within which populations are recorded. Metaphorically, however, place evokes quite another constellation of meaning. In this thesis it connotes (a) symbols of cultural identity, its rational as well as mytho-poetic roots in collective memory, ritual expressions and world view, (b) taken-for-granted understandings of role, status, and appropriate behaviour among members of a particular group, and (c) relationships between humans and their bio-physical environment, natural and artifactual, in the orchestra of terrestrial dwelling.

Place thus serves as an effective focus for a geographical exploration of cultural differences in perspectives on health, illness, and environment. Such curiosities have traditionally held a central role in geographic enquiry from Classical Greek times through the early twentieth century. Scientific progress in Western approaches to diagnosis and treatment of illness from the seventeenth century on, however, coupled with the desire to deny "environmental determinism", has led to suppression of place as critical consideration in the understanding of health. Twentieth century medical geographers have focussed primarily on (a) inventories of disease, populations at risk for ailments already diagnosed, (b) analyses of service-delivery systems and the cost-effectiveness of different locational models of facilities. More recently there is a growing awareness that Western medical practices are inadequate in dealing with the illnesses apparent among Aboriginal populations throughout the world. People of the First Nations of Canada experience alarmingly high rates of morbidity and mortality. Their place is often experienced with disease, not for lack of modern medical treatment, but rather because their traditional sense of being-in-place, with all that this means in terms of spiritual, emotional, and physical well-being has been undermined.

Health for people of First Nations, has been regarded as an essential characteristic of terrestrial dwelling. Neither place nor health is explainable without reference to the wider horizons of particular contexts. This thesis explores the historical context within which the two highly contrasting cultural groups encountered each other. In the North American arena before the arrival of Europeans, there were, of course, sharp distinctions and dramatic differences among the hunting-gathering, fishing, agrarian, and other groups scattered as they were throughout a highly-diversified physiographic milieu. Among those who arrived---explorers, hunters-trappers, missionaries, traders, settlers---there were also differences. Contrasts, however, between First Nations and Europeans were far greater than any internal differences between the sub-groupings. This thesis explores the encounter between native worlds and those of the French and English immigrants during the period 1600-1950 in the land now known as Canada. It seeks to unmask these two contrasting cultural groups, and the range of rational and mytho-poetic foundations on

which diametrically opposed beliefs and practices in the treatment of illness were grounded.

In the light of these reflections, the concluding chapter raises the issue of health care in Canada today and explores practical measures which could facilitate dialogue between these two contrasting traditions. There is evidence within both worlds, of a growing awareness of the spiritual and symbolic components of health and wholeness as anchored in more sensitive attunement to place. Directions for future research along these lines within a wider range of cultural settings are suggested.

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INTRODUCTION

In the midst of a land
without silence, you have
to make a place for yourself.
Those who have worn out their
shoes many times know where
to step. It is not their shoes
you can wear, only their
footsteps you may follow,
if you let it happen.

Chief Dan George (1974:13)

This thesis explores some historical roots of the contrasts between First Nations and Eurocanadian perspectives of health, illness, and health care. It takes as point of departure, the idea that the sense of place, the awareness, symbolism, and feelings of place, are basic to the health of individuals and of societies.

It is especially in approaches to health which have been characteristic of traditional societies that one finds ample illustrations of the intimate connections between the meaning of place and health. Yet, with a few notable exceptions, the study of traditional approaches to health have been absent in geography and non-existent in Canadian geography.

My central point rests on the idea that, in order to understand health, an awareness of the dynamic connection between a people and their environment is needed. This thesis will focus on the meaning given to this connection and how it relates to health. It is surely a quintessential human quality to imbue the world with meaning and to create a sense of place. Yet this is an element which has been largely ignored by medical geographers in the studies of either disease ecology or health care facility.

"We need to ask whether we can afford to continue to overlook the alternative systems of reality, belief and behaviour that figure so prominently in health and illness" (Good 1980:94). Although Good was suggesting this geographic research was important with respect to the Third

World, I propose it is just as valid for research in Canada.

For centuries this North American land has been inhabited by First Peoples belonging to several linguistic and cultural nations, each with their own uniquely created relationship with the land. Not only did the earth provide resources necessary for survival, it also provided the context for an intimate, ongoing relationship between the First Nations and their place. The land was never viewed as alien other, as empty space, but was inextricably a part of the lives of these people, who inscribed themselves on the landscape and were able to identify who they were by reading the landscape. Conversely, to the newcomers this country was seen as a vast frontier of land to be tamed and settled. That the land already had well defined communities and was home to original inhabitants was not recognized. The land was metaphorically imagined by the early Europeans as alien, as something hostile requiring measures to control and dominate it. The First Nations were viewed as part of the landscape which needed to be conquered.

The massive social and cultural changes that occurred over the past centuries have had a considerable impact on the health of the First Peoples (Young 1988). These peoples had developed a successful "health care system" of traditional healing which was built upon their relationships with each other, the physical environment and the spiritual world.

In recent history, a Eurocanadian mode of health care has been introduced to and imposed upon at great expense, into even the remotest corners of Canada. This system of health care, developed in the cities of the Western world was transposed to a people who shared neither the culture, the disease profile, nor the beliefs of these Eurocanadians. Historically, the European cultural approach to health, illness and medical practice had little meaning to the indigenous people. On the other hand, the perceptions of health, illness and healing practices of First Nations were not recognized by health professionals and therefore had little impact on the Eurocanadian programmes.

Most Canadian health care planning has been based on a medical model of service provision. This model is hierarchical, technologically dependent, professional and curative. Programmes are designed for people and not by them. In spite of the availability of "modern Western" health care the health of the First Nations compares so poorly with the rest of the Canadian population that it has been called "a national disgrace" and has been compared to the conditions of the Third World (Young 1983). In Canada, health services do not deliver health to indigenous people.

The poor health of the populations of First Nations ranges from infectious diseases to many so-called lifestyle diseases associated with diet, stress, and apathy (alcoholism, suicide, and diabetes). Some manifestations of these illnesses are discussed in this thesis. However, it is my contention that each of these conditions are part of a complex whole reflecting a fundamental disharmony, a dis-ease between members of many First Nation communities and their physical, social, cultural, and spiritual environments. To what extent is this dis-ease of the First Peoples due to the failure of the Eurocanadian society to recognize the cultural importance of place to a people, and to the actual removal of people from their land? How important is a sense of place to health? Are native healers simply vestiges of another time, another place, another culture? Or, is the current dominance of Western health care only a small disturbance in the long history of traditional healing?

These are some of the questions addressed in this thesis which explores the encounter between native worlds and those of the French and English immigrants during the period 1600 to 1950 in Canada. The dynamic changes in First Nations health care can be examined and understood only within the perspective of the historical antecedents and social and cultural environments. The current health care system did not come about spontaneously but has evolved with time.

One must recognize the great diversity in cultural history, social organization, ecological adaptation, as well as genetic characteristics among First Peoples and among European immigrants, all of which influence and affect health. However, native peoples across Canada do share many similar experiences in their encounters with the externally imposed Eurocanadian systems of education and religion (Johnston 1988: Willis 1973: Lemert 1955: Bryce 1907), of law (Prairie Justice Research 1985: Morse 1980: Schmeiser 1968) and of health care.

An exploration of some historical roots of present perceptions of health, illness, and health care from First Nation and Eurocanadian perspectives recognizes the need to examine and understand each approach within the context of its own socio-cultural milieu. This thesis will have value if it appears to "make sense" in the current situational and historical period and can somehow improve mutual understanding between both First Nations and Eurocanadian cultural expressions.

Pivotal to this thesis are the concepts of sense of place, health, illness and health care. Before

any further discussion, these concepts need to be clearly defined.

SENSE OF PLACE

The meaning of place in human experience depends upon a people's past culture and mythology. As human beings we always exist "in place" and "in culture" (Richardson 1984). Because they are expressions of culture, health, illness, and health care need to be understood in relation to each other. To examine one in isolation from the other distorts the knowledge of the nature of each and how they relate to each other.

An historical approach to the study of health, illness, and health care recognizes that over the centuries, each culture has produced its own adaptive ways of coping with illness. The concepts of health, illness, and health care are a reflection of the meaning given the relationship between the individual and her or his world. As individuals also need to be part of a community to be healthy, personal meaning needs to be integrated with the community's culture and mythology (Campbell and Moyers 1988: Campbell 1986; 1973; 1972).

In Canada the Eurocanadians and the people of the First Nations have shared a common land. However, this land has different meanings for each. As Hugh Cardinal (1977:16) has written:

The basic task that remains after three or four centuries of contact between Indians and Whites is still the construction of a bridge of understanding between two worlds that exist as separate realities.

A bridge cannot be constructed without strong foundations being built on each side. In this research, as part of this bridging, I explore the meaning of place and the relationship to health as expressed by both cultural groups through time.

HEALTH

Health as an holistic term means more than the absence of disease. Health and disease are not symmetrical concepts. And, while there are many diseases, there is in a sense only one health (Engelhardt 1975). In spite of increasing volume of articles which seek to define, analyze, and to explain health, (Van Der Geest 1985; Anderson 1984; Payne 1983; Smith 1983; Keller 1981; Kelman 1980; Winstead-Fry 1980; Ahmed et al. 1979; WHO 1947) it remains an elusive concept.

There exist neither sufficiently homogeneous laic definitions of health nor any consistent scientific definitions. Emphasis in major textbooks of clinical medicine (Weatherall 1983) and public health (Last 1980) rests heavily on negative terms. Most indicators of health status are

based on morbidity and mortality measures.

Classical conceptions of health, such as those of Hippocrates and Galen, involved a successful and continuing interplay between organism functioning as a unit (physis) in its environment (Cumston 1987; Brock 1924). Organism and environment were two poles of a greater unity, life itself. Life was a property neither of organism alone nor environment alone but of both at once (Bernard 1949). With this definition health was conceived as a property of organism-in-environment.

Health is a multidimensional phenomenon. It cannot be understood as something separate from other aspects of life, but as an expression of life within specific environments (Rodd 1989). The link between people and their environments constitutes the basis of an ecological approach to health as proposed by geographers (Thouez et al. 1989; Learmouth 1978; Meade 1977; Pyle 1976; Hunter 1974; May 1950).

This link however, is mediated by culture defined here as "symbolic meanings that shape both social reality and personal experience" (Kleinman 1978:86). Both the internal and external milieu, the being in the world, is mediated by "symbolic meanings". This dynamic aspect involves changing concepts of health for different groups of people in different times.

ILLNESS

In all places people become ill and in all places people intervene. Each culture over the centuries has created ways to cope with illness that are based on their world view and religious belief (Din Daeng 1990; Pillsbury 1979; 1978). Research on traditional healing has suggested that "episodes of illness communicate and confirm ideas about the real world" (Young 1976:5).

Biological events are observable, measurable, and orderly. But there is an important distinction between describing a biological process and defining the symptoms. While disease denotes the morbid process illness signifies the experience, the suffering of the person and the societal reaction to disease (Fabrega 1973).

Illness refers to the way the sick person, her or his family, and the greater social group perceive and explain disease (Kleinman 1980; Kleinman, Eisenberg and Good 1978; Eisenberg 1977). Although illness is experiential and depends upon an individual's set of beliefs, much information is shared within a cultural environment.

Neither illness nor disease is an objectively definable thing, rather, they are different ways

of explanation. Explanations of illness and disease will change with time and will vary between cultures. While a certain medical treatment may be efficient to deal with "disease", the "illness" may not be healed. Mowhawk elder, Ernie Benedict, (1977:18) describes succinctly the difference between the Western approach and the traditional First Nations healing.

The difference that exists is that the White doctor's medicines tend to be very mechanical. The person is repaired but he is not better than he was before. It is possible in the Indian way to be a better person after going through a sickness followed by proper medicine.

HEALTH CARE

Any system of health care, including Western medicine, is a product of its history and exists within a certain cultural environmental context. As the context keeps changing, so does the health care system, adapting constantly to new situations and being modified by economic, technological, scientific, as well as philosophic and religious influences (Pedersen and Barruffati 1989).

Progress in medical science and technology has produced an immense body of knowledge based on the Cartesian view of the world (Foss and Rothenberg 1988; Capra 1983; Engel 1977; Susser 1973). Neglect of the human environment and the division between mind and body has allowed medical scientists and physicians to focus almost exclusively on the human organism and its parts (Carter 1983; Attlai 1979; McKeown 1979). This is reflected in a Western medical system based on molecular biology, intricate bio-technology, and increasing physician specialization (Testart 1986; McGibbon et al. 1984).

Western medicine thus constitutes one culturally specific perspective about what medical treatments should be pursued; and like other medical systems, biomedicine is an interpretation which "makes sense in the light of certain cultural traditions and assumptions about reality" (Fabrega 1975:969). The official health care system in Canada is based on this biomedical model with medicine seen as an independent section of society and health as something separate from other aspects of life.

Within First Nations society health is not separated from life as a whole. Medicine is understood as fundamental to basic values and beliefs regarding the "Indian way". Traditional medicine is not a health care system nor is it a social institution interested only in the societal control of sickness.

Rather, it is a broad group of values that permeates the relationships that the people insist characterizes their connection with each other, the physical environment, and the spiritual world. Healers are consulted when individuals or families find themselves out of harmony with this essential core of beliefs (Benton-Benai 1979).

The usefulness of any "health care system" as a model for another society is quite limited. "Obviously it would be a gross and wasteful mistake to continue to impose biomedicine as generally practised in North America, on the population of the North (Canada)" (Wilbush 1988:53). It may be helpful to explore traditional approaches, both of First Nations and of Eurocanadians, not because they can serve as models but because the comparison may allow for an understanding of the different world views which have formed approaches to health and in a broader sense, the approaches to life in Canada.

The purpose of these brief descriptions is to suggest that concepts of health, illness, and health care are universal, integrally related, dynamic, and reflective of differing beliefs about the inter-relationships between people and their world. Fundamental to an understanding of these concepts is a recognition of the importance of the meaning of place.

By comparing some First Nation and Eurocanadian traditions of health, illness, and health care, fresh perspectives may surface as to how: the meaning of place, the being in the world, is connected to health and why there exists the apparent inability of Western medicine to "cure" the continuing dis-ease of the First Nations in Canada.

MEDICAL GEOGRAPHY OR GEOGRAPHY OF HEALTH

There exist two distinct streams of research in geography: the study of disease ecology and the study of health care facility location. This has meant an artificial separation for research purposes of disease and of health care. This division of focus has allowed for intensive analysis to be made of specific diseases and environmental factors and of the optimum location of health care facilities. It may also have been a factor in the neglect of research into the the broad human dimensions of health and the essential interconnectedness of health, illness, and health.

With focus on the dominant Western health care facility, alternative views of reality are often ignored. A high percentage of medical geographical studies analyze facilities and diseases rather than people. When people are studied, it is their behaviour as overtly expressed by pragmatic spatial actions (e.g. attendance at a health clinic). These studies presume an idea of literal place,

as representing those territorially-circumscribeable spaces within which individuals and cultural groups reside and people as experiencing space in linear fashion.

Metaphorically, however, place evokes another constellation of meanings. In this thesis it connotes the relationships between human beings and their bio-physical environment, natural and artifactual in the theatre of terrestrial dwelling. Our sense of place has been determined to some extent by the way in which we envision ourselves in this relation to nature derived from immediate and ancient memory. The meaning of place to First Nations was infused with an organic relationship between space and the sacredness of place. These metaphorical meanings of place and their importance to the perspectives of health, illness, and health care have often been absent. However, I suggest that it is these aspects which may help us to understand different approaches to health and the continuing dis-ease of the First Nation population in Canada.

It is the objective of this thesis to contribute to the development of a geographic theory of human health that: 1) embeds the study of health within the whole human social fabric; 2) confirms the diverse complexity of human experience and vision; 3) confronts the Western bias inherent in much of the medical geographic approach; and 4) allows for dialogue between cultures through exploration of the meaning of place to health from differing perspectives.

Methodology

An understanding of the changing concepts of health, illness, and health care in relation to the meaning of place from a comparative perspective requires a broad approach. It is important to ensure that this qualitative perspective be grounded in a view of the research approach which attempts to understand approaches to health within each cultural context and is not restricted to one perspective or personal approach.

The First Nations were a non-literate people, depending primarily on an elaborate oral transmission with mythology a major part of this expression providing a coherent view of the world which was reinforced by rituals. North American native experiences of place are infused with mythic themes (Brown 1976). Implicit in these themes and woven into the stories were the concepts of well-being. These stories express events of sacred time, which are as real now as in any time. They are experienced through each landmark of each person's immediate natural environment.

The ancient roots of Western healing traditions developed from the pre-Hellenic mythologies,

as expressions of the oneness of existence, an acceptance of the multiple realities of place encompassing the heavens, the mundane earth and the underworld. Thus, this research will incorporate not simply academic and statistical materials, but mythologies, fables, legends, poetry, and fiction to explore the spirit of place of First Nations and of Eurocanadians.

Place is the focus for this geographical exploration of the cultural differences in perspectives on health, illness, and environment. Literally, place may denote a spatial grid, an objective, measureable space within which people reside. Metaphorically, place connotes a very different meaning of the human experience of being in the world. It evokes those mytho-poetic roots in collective memory and the ongoing human dialogue with one's social, cultural, physical environment involved in creating a dwelling place.

The methodological approach combines a critical review of primary sources: historical documents, official statistics, the biological and social sciences, and literature and the arts in order to discover the meanings of place as expressed in the contrasts of approaches to health, illness, and health care by First Nations and Eurocanadians.

Geographic approaches to this fundamental question of the importance of place to health are discussed in Chapter One. The connection between a people and their environment is basic to the study of geography. How has this fundamental question been addressed by researchers in the sub-discipline of medical geography and what can be contributed to these studies?

The contemporary burden of poor health among First Nation populations is explored in Chapter Two. While the health authorities have expressed concern over this continued appalling state of ill health, there is resistance to the First Nations explicit requests to have control over their own health needs. Physical and emotional well-being depend on adequate water provision, housing, education, and ownership of land, cultural integrity, and the ability to be economically self-supporting. First Nations emphasize the dis-ease they experience in their attempt to have their idea of place and health recognized by the dominant group. This highlights the two very different approaches to health, illness, and place as developed by First Nations and by Eurocanadians.

Ancient roots of tradition will be explored in Chapter 3 and Chapter 4. Although from very different perspectives, the world of the Shaman, a rich oral culture within a northern climate and the world of the pre-Hellenic culture within a Mediterranean climate, there are similarities. Place was experienced in both the physical and spiritual sense, with communication between realms

essential for health, as life flowed to and from death. With the Hippocratic writings place was integral to human health. It was through an intimate knowledge of physical place that health was to be maintained.

For fifteen hundred years the main source of the European physicians' knowledge about health and disease had become codified and put in the custody of a powerful and respected male profession. In the sixteenth century two trends rapidly altered the human view of the earth: nature came to be known scientifically and the earth was being explored geographically. Between 1492 and 1522, a series of global explorations led to the Europeans' "discovery" of the Americas, the West Indies, Africa, and the Pacific Islands (Wells 1940). The European countries began a frantic reclamation for ownership of these "new realms".

Chapter 5 explores early documentation about First Peoples, health, illness, and health care at the time of contact with European explorers and travellers. No community can ever be in complete harmony with the environment, and First Nations did suffer from diseases before contact with the Europeans. However, the many Nations had developed a sophisticated health care based on intimate knowledge of body and place which was effective for treating the diseases and injuries encountered.

The voyages to and residence in foreign lands greatly stimulated European scientists direct interest in the study of the natural world. Information on the place, the nature of the inhabitants, both settler and indigenous, the flora and fauna, the treatment of diseases travelled to Europe to be catalogued and discussed. The military, the missionaries, the physician-surgeons, and other travellers to early Canada brought with them visions of place vastly different from those of the original inhabitants. Chapter 6 discusses this encounter and some consequences of this meeting.

In Chapter 7, the process of "civilizing" the First Peoples by imposing Eurocanadian ways of life based on Western tradition and values and the forced settlement of First Nations onto reserves is considered. While the Canadian government has never passed laws specifically limiting the activities of traditional healers, shaman, or medicine men laws have been placed on non-medical subjects (religious, political, economic). The effect was to severely restrict First Nations celebrations (Potlatch, Tamanawas, Sun Dance) of their unique sense of place which overall had healing aspects and were crucial to their way of life.

In Conclusion, the Western, Eurocanadian, or dominant views of health and the existing

traditional First Nations health beliefs and practices have not been combined into one culturally congenial whole for the people of Canada (Kennedy 1984). A renewal of interest in traditional healing ceremonials is occurring in Canada at the same time when questions are being raised as to the general cohesiveness and effectiveness of modern Western medical practice.

If survival is the dominant theme of Canadian life (Atwood 1972), then the First Peoples may be seen as already mainstream. They have survived against all odds. Their extinction or assimilation has not come about. The exploration of varying perspectives of health, illness, and health care from the First Nation and the Eurocanadian contexts, illustrates the different approaches to being in place. Dis-ease of First Peoples has not been due only to a lack of medical services, but has been due, at least in part, to a non-recognition of First Nations place by the dominant Canadian culture.

By critically exploring the past, the First Nations healing traditions may serve as a reminder of neglected aspects of the Eurocanadian cultural heritage. By revealing the past contrasts of First Nation and Eurocanadian approach to being in place and the derived perspectives of health, illness, and health care, it is hoped that dialogue may be begun so that both can reaffirm and regain some aspects of the sacred, mythic dimensions of their own unique healing traditions.

CHAPTER 1

GEOGRAPHY, PLACE, AND HEALTH

The world is differently defined in different places. It is not only that people have different customs; it is not only that people believe in different gods and expect different postmortem fates. It is, rather that the worlds of different people have different shapes. The very metaphysical presuppositions differ. Man is not undifferentiated from no-man or life from death, as in our world (Goldschmidt: 1969:2).

For Indians the oneness of consciousness is not an ultimate and fixed reality but a sacred capacity for centeredness, for an integration of the self and the world that is learned. It is a lesson learned through a vision of the unspeakable plurality that transforms the person of wisdom into the shape of all shapes--so that the powers within and around him may live together like one being. This integrity is fragile in the Indian world, and its disharmony or disintegration is the cause of disease or death (Highwater, 1981:67).

1. Introduction

The world is differently experienced by people from different cultural backgrounds. The sense of place is, to a great extent, determined by the ways in which people envision themselves in relation to nature. The healing traditions of people of Eurocanadian and of First Nation ancestry are expressions of their respective conceptions of this relationship and of the nature of the universe.

In native North American thought, humans were viewed as fused harmoniously with their nature. If the organic relationship of human mind, body, to nature was broken, the shaman sought to restore it. The individual could not be restored to health, by separate treatment: healing involved the restoration of links between family, clan, and natural and spiritual world.

There exists a strong sense of place, among First Nations, which does not stem from the

idea of ownership of space, for the land, belongs to both the present, future and the past.¹ The land is viewed as a shared domain of animals, plants, spiritual beings, sky, water, earth, wind. The present is anchored in the past and kept alive by ceremonies which involve the re-enactment of past, bringing it into the present. The relationship of the people to their world is thus structured by a sacred geography. By recognizing this spiritual vision of the cosmos, one is more able to understand the meaning of place to people of First Nations, and the healing traditions created from these beliefs.

The First Nations have a very different view of the relationship between humans and nature than those of the Western world which are derived from the Greek heritage. As discussed in Chapter 3, the temples of the Greeks express the heroic part of humanity in confronting nature. Temples of healing were built in response to a human created deity, Asclepius. There has since existed in the Western world, the desire to escape from nature, to have freedom from the uncertainty, wildness of the place, to be able to control nature. In contrast to this, for people of First Nations, the landscape itself is sacred. Healing involved tapping into the power of the natural world, not in separating humanity from nature.

The study of the interaction between cultural groups and the physical environment has been a long standing focus of geographers. The historical contrasts of two healing traditions (First Nation and Eurocanadian) as different cultural expressions of being-in-place is the basis of this thesis. This chapter explores some historical bases of approaches to medical geography, analyzes the two dominant contemporary approaches, (the study of the ecology of disease and the geography of health care), and adds the understanding of symbolic meanings of place as crucial to the geographic study of health. Rosenberg (1988:344) stated:

It has been common in medical geography to make a general distinction between studies of the geography of disease and studies of the geography of health care delivery. This distinction has carried over into the writing of books by medical

¹Before the arrival of Europeans in North America, there were sharp differences and distinctions between the hunting-gathering, fishing, agrarian, and other groups scattered as they were throughout a highly diversified geographic milieu. Among the newcomers--explorers, hunters-trappers, traders, missionaries, settlers--representing widely different cultural backgrounds, there were differences. Contrasts between First Nations and Europeans were far greater than any internal differences between the sub-groupings.

geographers.

The implication of these two approaches means that medical geographers have tended to concentrate on "disease" or on the optimal location pattern of clinics as "objects" of separate study. Place has been studied in terms of space, as either a geometric grid on which rational placement of health facilities can be arranged in order to create health, or as a container for people who become diseased.

The different approaches to health as cultural expressions of the distinct relationship between people and their vision of place has tended to be ignored as traditional medicine is a neglected theme among geographers. Even in the few studies on traditional medicine, by geographers, the research has tended to focus on the literal sense of place and not on the rich metaphorical senses as experienced by the people studied. Yet it is through understanding these very meanings of place, which I propose is experienced differently depending on a group's cultural, historical background, and belief in the conception of being-in-place, that an appreciation can be developed for First Nations concepts of health.

The two dominant approaches of medical geography, as explored in this chapter appear to be inadequate to accomplish this goal. The importance of place to health, the interaction between the physical environment and cultural group is offered as focus for the study of the contrasts of the roots of two healing traditions.

2. Approaches to Medical Geography

2. a. Historical Precedents

It is common in the Western world to trace back this lineage of thought to Hippocrates, whose medical writings stressed the connections between (literal) place and medical care. According to Hippocrates, health was viewed as an harmonious interplay between person and place. While there was an environmentally deterministic bias to these writings, Hippocrates did also recognize the importance of a variety of cultural attributes to the maintenance of health (Glacken 1990). At this early period (400 B.C.), two distinct approaches to health, preventative medicine and curative medicine, were discussed with the ideals of these two approaches being personified by the Greek goddesses, Hygeia and Panacea (see Chapter 3).

Geographic enquiry, since Classical Greek times through the early twentieth century, has at

least implicitly explored the connections between health, illness, and environment. Scientific discoveries in Western approaches to both diagnosis and treatment of illness since the seventeenth century on, however, coupled with the formulation of germ theory, toward the end of the nineteenth century, placed great emphasis on the disease and the eradication of disease with the use of drugs, vaccines, and surgical methods. This focus on medical miracles, the effectiveness of powerful drugs, in concert with the desire to deny "environmental determinism", led to a suppression of place as critical to the understanding of health and illness.

Maximilien Sorre (1880-1962), in France, may be credited with laying the foundations for the study of medical geography in the twentieth century. He brought into focus the importance of understanding the human--- cultural interaction when studying health and disease. Sorre stressed the complexity and dynamism of the study of the nature and expression of human life on earth. Geographers, Sorre suggested, could gain valuable insight from working with other disciplines, particularly medicine and comparative biology, sociology, and psychology (Buttimer 1971:124), while maintaining an ecological focus to their research.

"The biological foundations are the basic foundations of human geography" (Sorre 1943-1952, Vol.1). Sorre delineates three levels within these biological foundations: 1. The natural ecosystems, the network of plant and animal life; 2. The changing associations resulting from human cultivation of plants and the domestication of animals; 3. The endemic diseases or "complexe pathogenes", the pathogenic associations. He then relates the ecology of each realm of association, while indicating the significance of them to human nutrition, disease, and economic development (Ibid 78-245;247-363), thus a geography of nutrition and of disease.²

Medical geography while not totally overlooked, was not prominent in North America. By 1944, only two papers had been read before the American Geographical Society (Wright 1952:265), one of which was published from research conducted on recruits during the Civil War (Thomson 1860:113-117). Dr. Thomson suggested that humans were adaptable to new environments and refuted the belief that people could only survive in places of their birth.

²The term "human ecology" had been coined in 1916, by Ellsworth Huntington (while founding member of the Ecological Society of America) to distinguish the work of geographers from that of biologists (Martin 1973:143).

Dr. Richard Light, a neuro-surgeon, and then President of the American Geographical Society, wrote, "that the time seems ripe" for both geography and medicine to collaborate in the study of the influence of the environment on disease (Light 1944:641-652). The goal of this dialogue, Light explained was to allow "physician scholars" to pursue the geographical ramifications of their subjects aided by the knowledge and skill of "professional geographers". The geographic expertise emphasized was "that remarkable but highly technical medium of expression cartography" (Ibid).

To realize this geographical contribution, the Council of the American Geographical Society authorized, in 1945 a joint conference of both physicians and geographers to "explore and define the possibilities of an Atlas of Diseases" (Wright 1952:266). Dr. Jacques May was hired to pursue this joint research and it is his work which established medical geography in North America.

2.b. The Ecology of Disease

I believe that medical geography understood as the science of adaptation of man to his habitat, has a great future in which geographers can play a major role. After all, who better than the geographer is supposed to know the environment in which we live? What an enormous field is now open to this new discipline if we orient our research of the world in the direction of measuring the survivability of man in the many niches at his disposal
(May 1974:192).

Through the concepts and techniques of medical geography, Jacques May was suggesting that important insights could emerge into the interaction between humans and their environments. In this sense he was stating that medical geography could provide a theory of medicine. He adopted an interdisciplinary approach by representing both medical practioners and geographers in the study of disease ecology. May is credited with removing "the brake imposed by the emphasis on the germ theory" in his research (Akhtar 1982:4). Meade (1977:379) attributed the "practical sources" of the "major tributaries to the field" of medical geography to the works of Jacques May.

For more than a decade he directed the Department of Medical Geography of the American Geographical Society. His studies begun in 1948 produced between 1950 and 1974 a statement of methods and objectives (May 1950), an Atlas of Diseases (17 separate plates published in the Geographical Review 1950-1955), two volumes on studies of disease (May 1958,1961a) and

twelve regional studies on the ecology of malnutrition (May 1961b;1963;1965;1966; 1967;1968; May and McClellan 1970;1971;1972;1973;1974).

May introduced the concept of medical ecology as the study of the "home" of disease. The use of "ecology" as used by May reflected the idea of a study of the relationship between the human organisms and their environments.

"Disease is very simply that alteration of living tissues that jeopardizes their survival in their environment" (May 1958:1). Converging in time and space to produce disease were environmental stimuli and circumstances that conditioned the tissues' response. There were according to May, three groups of environmental stimuli: 1. The inorganic included trace elements in soil, water, food and air pollutants; 2. The organic or biological comprised the many living "agents" of disease and the animals which acted as "vectors", "hosts", and "reservoirs" arranged in social patterns; (These patterns reflected the environmental needs and therefore determined the location of disease); 3. Socio-cultural factors might alter the environment so as to protect one from disease or to provoke disease by increasing vulnerability (May 1959:6-9).

It was the conjoint action of "geogens" and "pathogens" in many different combinations which created the global and regional patterns of disease (May 1950). These patterns would change over time as a consequence of socio-cultural influences (May 1958). Culture influenced the disease occurrence by: "linking or separating challenges of the environment and host; by changing the environment; or by changing the host population" (May 1958:30).

The disease would develop within the biological terrain of an individual. This terrain was conditioned by both the genotype and the phenotype of the individual along with the experiences of life. These life experiences would vary with the individual. However, some of the more significant were influences of nutrients, disease agents, and emotional stresses. It was this biological terrain which would become susceptible or resistant to the ever-present disease agents (May 1958:17-20).

Whether an organism is diseased cannot be stated in absolute terms: rather it is relative to place. Disease ecology studies a complex of organisms at a particular site, together with the entire habitat of the organisms (Learmouth 1978). There is recognition of interdependence among all living things within their environments. Disease is recognized as a departure from this normal equilibrium of the biological, physical, social and cultural environments.

It was this "new" ecological paradigm, offered as an "attack on the entrenched position of the germ theory of disease" (Meade 1977:381) which May is credited with promoting and developing. Particular reference is made to May as his interdisciplinary work changed the prevailing causative approach to disease. By rejecting the existing definitions of absolute disease he stressed the relative character of health or disease by linking it to place. The biological and social as well as the physical environment were taken into account in this ecological definition.

The focus in twentieth century medical geography on the correlation of diseases and disease distribution, with possible environmental causative factors is a strong one (Pyle 1968; May 1972b; Learmouth 1978; Minowa et al. 1981; Howe 1977; 1986; George 1959; 1978). Howe (1960) has studied the environmental associations and cancer in Wales showing how wide variations exist in the incidence of mortality rates for different cancers and suggested areas of future study for incidence of stomach cancer with relation to the fine copper and lead wastes from mines. Picheral (1976) has analyzed patterns of disease, mortality and health care in France.

Social milieux and housing conditions have been studied in relation to the increased incidence of leukemia (Dever 1972). Thouez (1978; 1979) has discussed the relationship between drinking water and heart disease and most recently has published "a geographical interpretation", a description of the connections between the incidence of certain cancers and the use of pesticides in rural Quebec (Thouez et al. 1989).

At the individual scale Girt (1972) found a strong positive correlation between simple chronic bronchitis and damp overcrowded housing. Armstrong (1976) has focussed on the "self-specific environment" of individuals to obtain clues about the risk of developing cancer. Certainly people share environments but just how individuals use them in time and space varies. As Armstrong (1976:162) wrote: "A person lives in an environment that is unique in terms of where he spends his time and the kinds of interactions that go on between himself and his surroundings".

These studies have been described as human ecology, offering the challenge to medical geographers to apply spatial theory, methodology, and understanding to phenomena that are products of biological, cultural, and physical environmental processes (Meade 1977). They have also been identified as the traditional and well-established focus of medical geography (Phillips 1981; Howe and Phillips 1983).

Medical geographers analyzing historical trends in France (Noin 1973; Vallin 1973), in

England (Gilbert 1958), in the United States (Hunter 1973; Stamp 1965; McGlashan 1973) and in Great Britain (Howe 1980) have shown that the environment is the primary determinant of health or disease in the population. The professional practice of physicians cannot be credited with eliminating disease or with increasing life expectancy. Air, water, food, and housing in combination with social and political equality have played the important roles in causing or eliminating disease (Eckholm 1977; McLachlan and McKeown 1971). Howe even stated, that "health problems are environmental problems".

This environmental approach to the study of disease, called "Hippocrates in modern dress" (Dubos 1965) has become one of the foundations for criticism of the dominant biomedical model with its focus on the technological medical intervention upon the individual rather than on the prevention of disease by the creation of supportive environments (Powles 1973; McKeown 1979; 1986; Dubos 1959; 1968; 1965; Illich 1976; Rachlis and Kushner 1989; WHO 1984). Furthering this concept in their research, Thouez, Rannou and Foggin (1989, Vol.29:965-974) have attempted to determine the factors that are predispositions to disease inception as a result of the "rapid and major transformations in the living conditions" of the Cree and Inuit of Quebec (Ibid 974) by evaluating both individual state of nutritional health (blood samples) and an ecological survey.

2.c. The Geography of Health Care

The "contemporary approach" in medical geography involves research into "the location, planning, and utilization of health care facilities together with the identification of those features of health care delivery systems that influence efficiency and effectiveness" (Joseph and Phillips 1984:4).

L'analyse spatiale des soins de sante a un objectif normatif; celui de l'ecologie des maladies, plus eclectique, est a la fois normatif et positif. La geographie medicale utilise largement les methodes de l'analyse spatiale. Cette orientation quantitative fournit une description claire et objective du reel, permet de verifier les schemas theoriques et d'analyser les processus d'interaction

(Thouez 1987:9).

Spatial analysis of health care delivery has been called a logical and essential complement to disease studies by geographers (Pyle 1976; Good 1977). The ecological approach used in disease studies was also to be used in the geography of health care delivery. "After all, health care is

delivered through medical systems" (Gesler 1984:5).

Navarro (1970) described two types of systems: the first type is static, deterministic, predictable and controllable; the second type is dynamic, uncontrollable, probabilistic, and affected by random influences. He described a health care system as an example of the second type. Within these systems "feedback devices" take "outputs" from society defined as "deviations (illness)" and "treat" them as "inputs". Health care systems then attempt to correct "deviance" on many levels from the cellular to the community. Feedback loops operate within each level and link together all aspects of the system.

Discussion has centered around what elements are necessary to be included within a health care delivery system. Dunn (1976) claimed that the system would include health education, sanitation, risk assessment, case-finding, prevention, diagnosis, prognosis, therapy, and rehabilitation. Gesler (1984) has built on this system and added to it the type of government and cultural aspects of society. Once the system has been identified geographers have tended to focus in great depth on only a few discrete elements of this system, ignoring the whole.

The distance travelled to a certain health facility by people (Stock 1983; Morrill 1968; 1970; Shannon et al. 1969) or the location of a set of health clinics, or personnel, dentists, physicians (Girt 1973; Lankford 1974) throughout an area has occupied the major attention of geographers. While the larger system has been identified, the focus has remained on a close examination of one or two elements ignoring the whole set of interactions between the component parts.

Intricate modelling and linear programming have been used to determine the best location or the extent to which the actual location of facility or of personnel deviates from the optimum one, defined in terms of certain criteria: size of population, ratio of hospital beds to population, ratio of practitioners to population, distance of "potential patient" from facility (Godlund 1961; Shultz 1975; Pyle and Lauer 1975; Devise 1973; Abernathy and Hershey 1971). These studies all have in common, an interest in the mechanical aspects of the system of supply with an assumption that by the use of ever increasing sophisticated techniques, a system of health facilities may be "optimized".

Geographers are preoccupied with decisions relating to the optimization of location for medical facilities. Systems design and optimization have been of interest to geographers since Central Place Theory suggested hierarchical arrangements of service facilities. A central aspect

of health systems planning in industrialized nations is that hospital systems are to be planned according to a hierarchical degree in a clear analogy to Central Place Theory (Mayer 1982) with improved access to medical care as a goal (Achabel et al. 1978). But research to date has not unequivocally demonstrated that the optimum placement of facilities is actually related to the "health" of the population. Health status has been shown to deteriorate in several instances where access to medical care has been increased (Benham and Benham 1975; Diehr et al. 1979).

In the search for optimum location of health care facilities geographers have exposed the inequality of distribution of resources at many levels, local, regional, national, and global. "Geographers should by definition be concerned with inequalities, since inequality represents differences and the focus of geography is purely spatial differentiation" (Knox et al. 1977:6). Much of this welfare approach has been concerned with medical care (Knox 1982) and has been based on the idea of "social justice".

The essential characteristic is that we are seeking a principle which will allow us to evaluate distributions arrived at as they apply to individuals, groups, organizations and territories, as well as to evaluate the mechanisms which are used to accomplish this distribution

(Harvey 1973:97-98).

Social justice is viewed as a principle for resolving conflict over the allocation of scarce resources. Questions asked (in research) are who gets what, where and how the quality of life can be improved by reform of the present system of distribution of resources (Bryant 1969)? Health and health care have been recognized as products of social conditions (Eyles and Woods 1983). Smith (1982) demonstrated that patterns of spatial organization and of service provisions are reflections of the social structure. The distribution of health-producing resources in a society is a reflection of this social structure created and maintained by its political and institutional structures. The social class arrangements that result from this distribution play an important role in the etiology of physical and mental health (Elling 1981).

In Britain, discussions have been held on how the location and type of medical provisions are being re-structured by the government according to "the needs of capital" (Mohan and Woods 1985). Jones and Moon (1989:3) in their recent text, A Critical Medical Geography, state their

surprise that geographers have not been active in the Marxian analysis of "how to overcome societal constraints by revolutionary change to develop a new form of society". This structuralist approach may also be found among physicians (Waitzkin 1983;1976; Waitzkin and Waterman 1974) and economists, Navarro (1976;1983) and Fuchs (1974).

Implicit in the geographic research into "health care delivery systems" is a certain approach to health based on the view that health is essentially the result of the appropriate delivery of health services. It recognizes that good delivery must be based on planning which ensures that people who have great need but few financial resources still get proper care and that people who use the service decide how to develop the service. It advocates the right of every individual to have access to health care.

This approach to health planning focusses on the allocation of scarce resources, money, materials, and manpower. It asks the questions, who gets what, where and at what cost? The answers to these questions in many countries are that the most wealthy get the top quality care at a cost that denies adequate care to other citizens. Two considerations then have come into focus in the context of this appraisal. One is social justice, in which planners accept the goals of making available the opportunity for equal access for health for all people. The other is the integration of health into the other planning sectors of government, the sectoral approach. It is this planning approach to health which has become the basis of the World Health Organization's formulation of the concept of Primary Health Care.

Health cannot be attained by the health sector alone. Primary Health Care, as an integral part of the health care system and of overall social and economic development, will of necessity rest on the proper coordination of all levels between the health and all other sectors concerned (WHO\UNICEF 1976:40).

Primary Health Care (PHC) is defined as "a practical approach to making essential health care universally accessible to individuals and families in the community in an acceptable and affordable way with their full participation". Using the arguments for redistribution of health resources and the importance of quantity over quality, primary health care proposes a restructuring of the existing health care system (WHO\UNICEF 1978:19).

PHC best articulates the need to consider health care in terms of both social justice and integration of health planning into the political, social and economic development of a nation.

It is based on the conviction that health is the right of each individual. Health priorities, divorced from socio-economic realities and isolated from their influence deny an acceptable degree of access to health care for the majority of the world's population (WHO 1978:3).

Health is no longer described by disease patterns as put forward by disease ecology studies. Instead, health is seen as a result of the proper delivery of services which reflect the existing socio-economic-political conditions. It accepts that health demands social justice through equitable distribution of resources.

In the language of researchers, (geographers, economists, physicians) the words "health care" and "medical care" are often equated and used indiscriminately. However, medical facilities are designed to treat disease. Health service appears to be an object which can be delivered by providers to consumers. This language conveys the idea that health is a commodity given or sold by an expert to one who wants or needs the product.

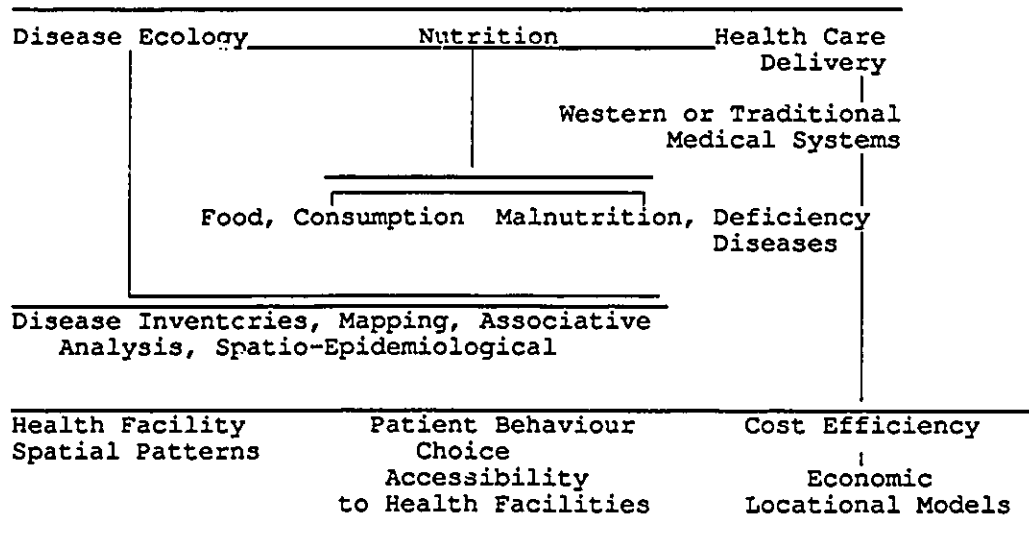
The terminology also gives the impression that Western health care is a package which can be delivered to any group or individual regardless of local beliefs, priorities, traditions, habits, customs, and existent healing practices. Reinforced by technical abilities and scientific claims of Western medical care, health services take on a universal quality which claim to give answers to the problems of diseases.

2.d. Geography of Health or Medical Geography?

At the 1972 International Geographical Union Congress of geographers, there was a "strong influence from mainly young North American workers very concerned with health services, emphasizing provision rather than prevention as a main aim" (Learmouth 1981:9). In 1976, the General Assembly of the 23rd International Geographical Union meeting in Moscow voted to terminate the Commission of Medical Geography and approve the establishment of a Working Group on the "Geography of Health" (Chalkin 1981).

The desire to change the title of the group was not new. Jacques May, while the first chairman of the Commission of Medical Geography had been asked to change the name of the group to the Commission of Geography of Health on the grounds that a more "positive" approach to research would result. May steadfastly refused on the grounds that he knew, "of no acceptable way of defining health for scientific purposes" (Learmouth 1984:1).

Table 1. Twentieth Century Approaches to Medical Geography



In spite of the explicit desire for a more "positive" approach to the research, the review of the literature reveals that geographers do not study health. Table 1 (following Akhtar 1982) graphically demonstrates the dominant approaches to medical geography which focus on disease, or the lack of health. Health care delivery systems of Western medicine are designed to cope with disease. When traditional medicine is studied, it tends to be approached within the same framework as Western medicine.

The research concerns mortality and morbidity, the distribution of disease, facilities, patients and the different medical approaches in the world. For example, "Regionalizing Mortality Data: Ischaemic Heart Disease in Norway" (Aase 1989) is described as the development of a traditional geographic method, the identification of regions for the study of "human health" (McGlashan and Chick 1989:905). By calling the study one of health does not change the focus from disease.

Debates have centered on asking the questions: Is the geography of health care separate from medical geography? (Learmouth 1978; Mayer 1982; Phillips 1981) and: Is the term geosante, the geography of health, a more accurate title for the discipline of medical geography? (Picheral 1982; Phillips 1981); but the definition of health remains problematic. Disease or the Western medical systems designed to cope with disease have been the focus of both streams of study in medical geography. As Girt (1980) stated, "Medical geographers are engineers at heart". Within

this context, health is assumed to be a state which planners can do something about to achieve "the well-being of the individual", yet ignoring the essential interconnections existing within specific socio-cultural milieux (Hunter 1973).

But, what of the traditional healing approaches which are relied upon, by at least 56 per cent of the world's population to cure various physical and mental illnesses in the world (Good 1977:711)? How have they been studied by geographers, and are methods used to study Western medical systems appropriate? Perhaps the wrong questions are being asked in either to gain an understanding of the importance of the symbolic meanings of place to the health of people?

3. Traditional Medicine: Neglected Themes

Medical geographers have largely ignored alternative, traditional and folk medical systems, despite their global existence (Good 1980a:Hellen 1986). In 1977, Charles Good proclaimed, "an agenda for medical geography" in the study of traditional medicine, thereby focussing attention upon a major realm of human existence which is closely interwoven with the culture and quality of life in Third World societies at every scale and social tier, in both rural and urban milieux. Good challenged geographers to make contributions to "humanistic and scientific understanding of traditional institutions, behaviour, and medical landscapes" (Good 1977:707).

There is a dearth of geographical research of traditional medicine, or of therapeutic alternatives to Western medicine in North America (Anyinam 1990:69). A study by Gesler (1988), on the place of chiropractors in North Carolina is one exception. However, about a dozen geographic papers have been published based on research in other countries. These include works by Bhardwaj (1975), Meade (1976), Gesler (1979), Good et al.(1979), and accounts of urban and rural traditional medicine in Kenya (Good 1980b), in Hausaland (Stock 1981), and Zimbabwe (Mutambirwa (1989:927-931). While these studies have focussed on traditional medicine, the approach of the research, the questions posed have often remained functional. The research has tended to be based on a concept of place only in its literal sense, with the exception of Mutambirwa who stressed the need to understand "people's concepts and philosophy of life" (Ibid 927).

Much of the published work by geographers done in these countries has concerned itself with providing analyses of the distribution of medical facilities on a variety of scales, studies of

Malawi (McGlashen 1972), Tanzania (Thomas and Mascorenhas 1973), Guatemala City (Mulvihill 1979), Nepal (Hellen 1983), and of Bangladesh (Sarder and Chen 1981). The assumption apparently made is that, "The methods developed and refined in Western countries, such as measures of accessibility, optimisation, or effectiveness, are potentially capable of universal application"(Hellen 1986:312-313).

The question that arises, however, is why the desire to apply universal methods? The problem inherent in the application of universal methods remains the failure to recognize different approaches of being in place to health. The study of traditional healing has been approached from the assumption that all landscapes of healing are similar to those of Western medicine.

For example, Techatraisak and Gesler (1989:172) wrote that, while some more than half of the population of the world rely on traditional medicine for health care; "the geographical aspects" are relatively unknown. Their research consisted of an analysis of: 1. "The locational characteristics and accessibility of 230 Thai and Chinese traditional medical clinics in Bangkok, Thailand, and; 2. The patient distribution in terms of areal extent and possible distance decays". The "geographical aspects" described here assume a spatial analytical perspective of place and therefore focus on the locational attributes of that space. Space is studied as an ahistoric container for objects, clinics, hospitals, physicians, and patients, whether of the Western world or of other cultural backgrounds. What of the other "geographical aspects" of traditional medicine and place, the symbolic meanings of being in place, and the concepts of health, illness, and health care which are created as socio-cultural expressions of these ideas? Why have these aspects been neglected in most studies of medical geography?

The meaning of health in place implies much more than a geometric grid upon which things occur. Place has deeper, metaphorical meanings for people depending on their unique history and cultural past. New questions need to be asked if we are to approach different cultures from within their own contextual milieu and begin to understand healing based on diverse views of being-in-the-world.

4. Place, Health, And Dwelling

Studies in medical geography have tended to focus on the interaction between people and the physical aspects of their environment in the maintenance of health or development of disease,

the literal meaning of place. The metaphorical meanings of place have been neglected. Berdoulay (1988) has explored how the dynamics of geographic discourse reflect and create different meanings of place. Cultural and humanistic approaches by geographers have suggested the existence of different worlds, in the exploration of the human experience of place, the "symbolic landscape" (Cosgrove 1984), the "lifeworld" (Buttimer 1976; Seamon 1979), and the changing personal world of the aged through time (Rowles 1978).

Many of these studies have derived inspiration from Heidegger's concepts of Being and dwelling. It was this philosopher, in the early twentieth century, who proposed a new interpretation of reason which began to change the way the world was viewed. Instead of one fixed worldview, Heidegger proposed an interpretation of Being which allowed for multiple truths. He nurtured awareness of the possibilities and vulnerabilities of being-in-the-world (Heidegger 1962). By pondering the fact that when diverse ways of being are denied, or not recognized; when no longer do we embrace variety, Heidegger emphasized that: "We become immeasurably poorer---and such poverty makes a difference" (Krell 1977:35). This thesis attempts to create a tapestry of Canada's landscape by discovering the differences in approach to being-in-place, of First Nations and of Eurocanadians in their creation of concepts of health, and disease.

"The sense of well-being, health, and creativity are ways of being in the world which are not entirely explainable in rational terms" (Buttimer 1976:289). To understand the significance of these experiences, one needs to explore the quality of meanings given to being-in-place. Health, for people of First Nations has been regarded as an essential characteristic of dwelling.

To dwell implies more than simply to occupy a space. Heidegger (1971:145-161) suggested the notion of dwelling which offers important perspective on the dynamic relationship of people with their environment. To dwell means living in a way which is attuned with the natural rhythms of one's milieu, to recognize one's life as rooted in history, while building a home which symbolizes the ongoing dialogue with one's social, cultural, and ecological milieu (Buttimer 1976:277). The concept of dwelling, Heidegger developed in Building Dwelling Thinking(1971:145-161), encompasses the fourfold (das Geviert) of earth, sky, mortals, and divinities. To understand and describe the way humans are in this world requires a language of mythology and poetry.

The First Nations' people in Canada offer poignant illustration of the need to consider connections between health and place. They experience a greater level of dis-ease in their world, than do other Canadians. Repeatedly, they persist in the belief that they cannot experience health, or a sense of well-being unless they are permitted to dwell in peace, to live in a place which has meaning and gives expression to their ecological, cultural, and historical values.

The high levels of disease experienced by people of First Nations are common knowledge in Canada. The means of achieving health, as promoted by the government health authorities however, do not demonstrate an understanding of the importance of the meanings of place to the First Nations. Their place is often experienced with dis-ease, not for lack of modern medical treatment but rather because their traditional sense of being-in-place, with all that this means in terms of spiritual, emotional, and physical well-being has been undermined.

The following chapter explores the high levels of morbidity and mortality as experienced by contemporary First Nations and compares the two very different approaches to health, illness, and health care, by First Nations and by the dominant Canadian medical system. The meaning of place is the focus for this geographical exploration of the cultural differences in perspectives on health, illness and environment.

CHAPTER 2

FIRST NATIONS HEALTH TODAY

We have got to ensure that the Canadian public, the health professional and all groups interested in fairness and equity know the facts. They have to be told that government cannot cut back education and training and allow 70% of our people to be unemployed and then wonder why problems of alcohol or suicide become so serious.

(George Erasmus 1989)

The largest public health problem our country faces is the health of Canadian Indian and Inuit people.

(Postl, Moffatt and Sarsfield 1987:220)

Before the healing can take place, the poison must first be exposed.

(Lyle Longclaws 1989)

Canada's constitution specifies three categories of aboriginal peoples, the Indian, Inuit and Metis. The term Indian, of course, is inaccurate and arose due to the faulty geographical sense of Christopher Columbus. In thinking he had discovered India, Columbus named the first inhabitants he encountered Los Indios (Jane 1930). Williams explained in 1643 (A 3):

They often asked mee, why wee call them Indians. And underftanding the reafon, they will call themfelves Indians, in oppofition to Englifh, Dutch etc..

But he continued, they did have several names "peculiar to feveral Nations amongft themfelves, as Nanbigganeuck, Maffacbuseuck, Peguttoog, Quintskoock.....". In spite of the initial error in geography and in spite of the knowledge of the different names of First Nations, the name Indian has endured for five centuries.

In 1876 The Indian Act, An Act Respecting Indians (Canada Statutes 1886, Vol.1, Chap.43:647-686) the government defined who was legally Indian. In this Act the expression person meant any individual other than Indian. The term Indian referred to: 1. Any male person of Indian blood 2. Any child of such a person. 3. Any woman who is or was lawfully married to such a person (Ibid 648). Modern legal distinctions divided Indian between those who were recognized as Indian by the federal government, 375,000 in 1986 (Lithwick, Schiff and Vernon 1986), 1.5% of the total population and those who were denied this recognition, Non-Status Indians. In 1989 some 100,000 to 150,000 people who had lost their Indian status through the policy of enfranchisement have been reinstated and are now able to return to their reserves (Erasmus 1989 b).

However awkward, the term Indian persists today in common usage and in the official language of the federal and provincial governments. This single word covers diverse groups representing different cultures, ways of life, histories and at least 50 spoken languages (Foster 1985; 1982). Berkhofer (1979) has written that the continued use of the term Indian serves to deny recognition of the many existing cultures, traditions, and societies that existed centuries ago and still do today.

The term favoured by many people is First Nations as it signifies many separate, distinct but sovereign entities. The acceptance of this name is reflected in the title of the Canadian organization Assembly of First Nations. This group is the political voice of the 450,000 status Indians in Canada today (York 1989:258). In this thesis the term "Indian" is used in direct quotes and when referring to government documentation reflecting official terminology. However, First Nations or First Peoples will be used collectively and the specific name, Cree, Mohawk, Iroquois etc., when appropriate, will be used elsewhere.

1. Diseases of First Nation Populations

With cultural backgrounds widely divergent from those of the dominant Eurocanadian society people of the First Nations have continued to suffer the effects of considerable political, social, cultural, and economic pressures. In terms of health status indicators, numerous studies and official statistics consistently demonstrate a wide gap between people of First Nations and other Canadians (Dept. of Indian Affairs and Northern Development 1980: Health and Welfare Canada

1988; 1986: Siggner 1979; Spady 1982; Young 1979; Jarvis and Bolt 1982).

Mortality rates on reserves are actually 50% to 100% higher than anywhere else in Canada. Mao et al.(1986) have studied mortality on Canadian reserves in seven provinces for the period 1977 to 1982. They found that age-specific mortality rates for all causes were two to three times higher for those living on the reserves compared to rates for Canada as a whole up to the age of 50. Standardized Mortality Ratios (SMR's) for ages 1 to 69 were greater than 2.0 and statistically significantly elevated for people of both sexes for the following:

Table 2. Standardized Mortality Ratios (SMR'S) for Reserve Indian Population and Total Canadian Population 1977-1982

Cause of Mortality	Females	Males
Infectious and parasitic diseases	SMR 4.44	SMR 2.88
Diabetes mellitus	SMR 4.12	SMR 2.16
Alcoholic psychosis, alcoholism	SMR 10.44	SMR 3.97
Pneumonia	SMR 3.45	SMR 2.92
Kidney disease	SMR 4.34	SMR 2.04
Accidents and violence	SMR 3.74	SMR 3.17

Source: Mao,Y., Morrison,H., Semenciw,R. et al. 1986. Mortality on Canadian Indian Reserves, 1977-1982. Canadian Journal of Public Health. 77:263-268.

The leading cause of death for the Indian population as a whole is injury and poisoning. In a five year period between 1980 to 1984, injury and poisoning accounted for 33.6% of deaths of registered Indians served by Medical Services Branch (Health and Welfare Canada 1988:13). In a study conducted in Alberta 1976-1977, Jarvis and Boldt (1982) found that the majority of Indian deaths from accidental and violent causes were associated with the heavy use of alcohol.

As the authors of this report pointed out, the alcoholically impaired driver, murderer, or

person whose cigarette starts a fire may also bring death to individuals who do not use alcohol. The lack of poorly maintained roads, the poor housing conditions, and lack of fire protection services in rural communities have attributed to the high death rates by accidents (Schmitt, Hole and Barclay 1966; Dept. of Indian Affairs and Northern Dev. 1980; Young 1983).

Infant mortality is one of the single most important indices of socio-economic conditions and quality of health care (Waalder and Sterky 1984). Infant mortality (deaths under one year of age) rates for the registered Indian population and the total population of Canada from 1976 to 1985 are shown in Table 3. While the rates have dropped for both groups the Indian rate remains more than twice the Canadian rate.

For Indians and Inuit the post-neonatal death rate is higher than the neonatal death rate, whereas for the total Canadian population the reverse is true. Since most deliveries occur in the hospital or nursing station, early medical intervention is possible for conditions arising in the perinatal period (Canada Health and Welfare 1988:10). While the medical intervention has been able to control this period, it is the post neo-natal period mortality which is so high and is influenced by the poor socio-economic conditions of the reserve life.

Morrison, Semeniew et al. (1986) have studied infant mortality on Canadian reserves in Quebec, Ontario, Manitoba, Saskatchewan, and Alberta for the period 1976 to 1983. The authors of this study concluded that, "most causes in excess appear to have social rather than biological origins and are probably related to the isolation and poverty which characterize reserve Indians in Canada". In spite of this recognition that the environmental factors are predominant in the poor health and a major contributor to the early death of babies, more money and expertise is placed on technology.

In four Indian reserves in northeastern Manitoba since the 1980's an outreach programme has been implemented (MacDonald and Manning 1982). Funded by the federal government and operated by the Northern Medical Unit of the University of Manitoba and its affiliated hospitals, an obstetrician and nurse-technician travel with a portable ultrasound machine. In 1985, 90% of the pregnant women in the four Indian reserves received an ultrasound examination (Young et al. 1989:276-281).

Table 3. Infant Mortality Rates For Registered Indian Population and Total Canadian Population 1976-1985

YEAR	INDIAN POPULATION *Infant Death Rate	CANADIAN POPULATION *Infant Mortality Rate
1976	32.1	13.5
1977	33.6	12.4
1978	26.5	12.0
1979	28.3	10.9
1980	24.4	10.0
1981	21.8	9.6
1982	17.0	9.1
1983	18.2	8.5
1984	19.0	8.1
1985	17.9	7.9
Average 1976-1980	29.0	11.8
Average 1981-1985	18.8	8.6

* Per 1000 Live Births

Sources: Statistics Canada 1976-1985, Vital Statistics, Vol.111 Deaths, Catalogue 1976. 84-206. Statistics Canada Vital Statistics, Vol.1 Births Deaths, Catalogue 1977-1985. 84-204.

The use of this technology has been advocated and rapidly accepted by the medical profession for assessing structural abnormalities during pregnancy and in assessing fetal maturity. However, there has been little evidence that its use has improved health outcomes (Neilson, Munjanja, Whitfield 1984; Eik-Nes et al. 1984; Bakketeig, Eik-Nes et al.1984). None of the studies could show significant improvement in perinatal or neonatal mortality and morbidity.

Given the questionable effectiveness of this procedure and the high rates of infant death attributed to poor social,economic, and environmental conditions on the reserves, it appears to be an inappropriate focus. "The decision to extend and disseminate such services to underserved rural communities reputedly at "high" risk would have important socio-implications beyond the purely "scientific" issue of effectiveness" (Young et. al. 1989:281).

They have to be told that our rate of Tuberculosis is 10 to 28 times the national average

(Erasmus 1989).

Table 4 shows the incidence of new and reactivated cases of tuberculosis for the registered Indian population served from 1976 to 1985 and for the total Canadian population. While there has been a decrease in the incidence of tuberculosis for the Indian population over the past decade the level remains alarmingly high. Enarson and Grzybowski (1986) have analyzed the incidence rates of active tuberculosis between 1970 and 1981 for Inuit, registered Indian, and all others born in Canada. The mean annual incidence rates for Inuit were 24 times and for Indians 16 times the rates of other Canadians.

These authors note that the Inuit had the highest recorded rates of tuberculosis in the world 20 to 30 years ago. The rate has decreased significantly as a result of an intensive tuberculosis control programme. However, it has been noted with concern that the rate of decline appears to have levelled off and the persistent rate of tuberculosis at 10 to 28 times the national rate remains (Young et al. 1989:302-310; Enarson and Grzybowski 1986).

The incidence of tuberculosis varies considerably in the different regions of Canada, being highest in the North and lowest in the East. These varying rates may be related to the time since the first mass exposure of Indians to the tubercule bacilli and to the development of natural resistance. Indians in eastern Canada came into contact with the infected immigrants first whereas the Indians in the north did not have such early contact (Indian and Northern Health Services 1988).

While time of first exposure may be a factor in the varying rates of tuberculosis the major factors involved are the socio-economic environmental conditions (Wells, Garcia and Jackson 1983). In 1987, the Cree people of Lubicon Lake in northern Alberta had spent a fruitless decade negotiating claims for their traditional land. While oil companies were taking \$ 1 million a day out of these lands, the people were becoming destitute.

Family breakdown and alcoholism and other addictions began to affect many people and in the last half of the year there was an outbreak of tuberculosis, a disease directly linked to poor housing, lack of sanitation, unclean water, overcrowding..... in short poverty. By the end of the year 37 people were under treatment and almost 100 more had been exposed to a disease that had supposedly

disappeared from Canada in the 1950's

(Richardson 1989:254).

Table 4. New and Reactivated Cases of Tuberculosis Registered Indian Population and Total Canadian Population 1974-1985

YEAR	INDIAN	CANADIAN
1974		16.8
1975		15.6
1976	150.7	13.7
1977	147.8	13.7
1978	148.1	12.5
1979	130.2	11.7
1980	101.9	11.5
1981	92.3	10.4
1982	89.5	10.0
1983	105.6	9.5
1984	82.9*	9.4
1985	85.0**	8.5

* Based on data available from five regions only

** Excluding Pacific region

Sources: Statistics Canada, Tuberculosis Statistics Morbidity and Mortality. Catalogue 82-212, 1983 and 1985.

2. Two Approaches to Health, Illness, and Health Care

"The health status of our native people is a disgrace to the nation" (Sutherland, Fulton 1988:18). There appears to be no disagreement as to the extent of poor health of the native people of Canada. How to change this situation however remains a dilemma. The first consideration in attempting to explain the fact of poor health might be to assume that the largely rural population does not have access to adequate medical services and expertise. From time to time the delivery of health services to First Nation communities becomes a public issue (Grescoe 1977; Globe and Mail 1982; Globe and Mail 1980). Concern is expressed over the inadequate services provided by the government agencies and the lack of accessibility of many communities to the same quality of care enjoyed by the majority of Canadians.

Statistics indicate that in 1975 the per capita cost of medical and in-hospital patient care to Indians was \$630.00 compared to a national Canadian average of only \$250.00 (Berger 1980). Beyond these basic services, National Health and Welfare, through its Medical Services Branch, also provides public health and specialized programmes amounted to \$ 50 million in the 1982-1983 fiscal year (Government of Canada 1984).

It is clear that large amounts of health care expenditures and the provision of specialized programmes have not mitigated the poor state of health of the First Nations as compared to Canadian averages. The Department of Indian and Northern Development (1980:22) concluded, on the basis of these discouraging statistics that:

The major causes of Indian deaths and illnesses appear to be associated with poor housing and living conditions and a rural life style. Further improvements in health care systems for curative health programmes may not yield significant improvements.

This observation is not unique to Canada. About thirty years ago the Navajo of Arizona (1955) asked the United States Public Health Department and the medical school of Cornell University to organize medical services for them. This was done (Adair 1960; Adair and Deuschle 1970;1958). After five years the services were found to have had only marginal effects on health status. Maternal deaths and infant mortality did fall somewhat but the health risks associated with deplorable living conditions remained unchanged (McDermott, Deuschle, Barnett 1972; McDermott 1966).

But are the Department of Indian Affairs and the United States Public Health Department conclusions on the poor health and living conditions the complete story?

The community of Indians where there is no material basis for life, no real economy, and a desperate need for access to the employment, health and social benefits available to everyone else: This is the most persistent influence on social agencies and economic planners who concern themselves with the Indians' well-being

(Brody 1983:60).

What these images tend to do is to firmly place the Indians' interest into the past. The future is then given over to the "White" dreamers. What is implied is that without these outside "White" dreamers, plans and projects and development schemes, the "Indian" will remain in a modern

deprived state.

The way out of this situation is assumed to be through the direction and guidance of the "White" planners who know what is best for the "Indian". The state of depravity is seen as a result of either "an original but enduring simplicity or an accumulation of intrusions onto what might have been a once functioning way of life" (Brody 1983:61). Either cause of this state demands the expertise of the "White" authority who knows what is best in the modern world.

From the First Nations' perspective it is clear why their health is so poor. A paper published by the Assembly of First Nations illustrates:

We believe that the future well-being of Indian people is directly related to the degree of responsibility we take for charting our own future. We know that to chart our course in future with confidence, we need both active and potential leadership. We believe we have both! We know that sound decisions and policies must be shaped through wisdom and knowledge. We believe our knowledge and our wisdom regarding the needs of our people have been and will continue to be greater than of the remote institution of Indian Affairs. Most important to our position is a sensitivity to our deeply felt need to realize our future through self-determination which reflects the need in all men for dignity and self-respect.

While sharing certain commonalities with other Indian communities, each Indian community is an unique and independent unit having its own government, its own perception of its needs, as well as a perception of how to best meet them. In choosing to exercise health care control, each Indian government recognizes its responsibility to determine and set its own priorities in the development of Indian control of Indian health

(Dakota-Ojibwy Tribal Council 1981:7-8).

Although self-determination in health care appears to make sense in terms of a factor which would benefit individual and community health, the implications of self-determination are very broad indeed. Self-determination in health care is linked to the broader struggle for self-government, land claims, and development of nationhood. These claims are not compatible with the Federal government and the sentiments of the Canadian public, although changing. Even if this important reality were ignored, self-determination implies the wresting of power from large organizations representing medical and government interests. It is unlikely that real power can be returned to First Nation organizations and communities without much struggle and compromise.

An example of this difficulty was evident in the launching of the permanent National Native Alcohol and Drug Abuse Programme (N.N.A.D.A.P.) in March 1982. The preparatory process for this programme involved an elaborate process of consultation with First Nations representatives as a direct consequence of recommendations given by Justice Thomas Berger (1980) in his "Report of Advisory Commission on Indian and Inuit Health Consultation". Structures were established to allow the people to formulate health policy recommendations (e.g. the Health Commission of the First Nations) and to give representatives access to government health policy activities. Various reports and recommendations were presented to National Health and Welfare through the H.C.F.N. mechanism (Union of B.C. Chiefs 1980; National Indian Brotherhood 1981; Berger 1980).

Despite expectations to the contrary, the final form of the funded N.N.A.D.A.P. was a far cry from the First Nations' perspective as presented to National Health and Welfare. Sub-committee members representing the Assembly of First Nations, warned that such programmes will never solve the problems. In a brief submitted to the Department of Health and Welfare, a Salish consultant on native alcoholism stated poignantly:

I am talking about the deaths of my people. I am talking about not only deaths by accident, suicide and violence, but also the death of the soul which lies behind the environment of self-destruction and despair in which Indian people exist as much today as a decade ago.

It is my contention that the programmes being funded through National Native Alcohol Abuse Programme are not now and will not be effective until we can restore the sense of pride and power to the people and can begin to rebuild the shattered sense of self-worth, the effect of which is passed on from generation to generation.

(Wilbur Campbell 1980)

Geographic research has demonstrated that the low self-esteem of alcoholics is in part due to the loss of identity with particular places and a feeling of not being wanted which is especially applicable to the person on and off the reserve. A therapeutic approach to alcoholism may be the creation of places where people can form meaningful roots of attachment (Godkin 1980).

This rootedness, this meaningful connection with place is difficult to attain as described by the Mowhawk journalist Brian Maracle (Globe and Mail 1988, July 4:8): "When your land has

been taken, when your language has been degraded, when your spirit has been crushed, when you have been forced to live in squalor. when you face existence without hope and when you are offered escape through drink.....what choice do you really have?"

Substantial criticism of government programmes has also centered around the lack of decision-making power allocated to the individual communities, the lack of control over health care training and the insufficient funding in the development of N.N.A.D.P.(O'Neil 1986; Driben and Trudeau 1983; Castellano 1982; Winnipeg, Yellowquill 1986).

3. Indian Health Transfer Policy

These examples illustrate the difficulty that First Nations face in attempting to develop programmes that incorporate their own forms and goals in health. Does the recent Indian Health Transfer Policy promoted by the federal government as being based on "a development approach to transfer centered upon the concept of self-determination in health" (Canada 1987) represent a significant change in approach? Jake Epp (1987a), then Minister of Health, concluded in his speech to the Assembly of First Nations National Health Conference:

We in Health and Welfare and many others in the health field, are convinced that the future health of the Indian people rests in your hands, not ours. God bless you all.

It appears at initial glance that self-determination in health is appropriate and desired by the First Nations. Why then do First Nation representatives working in the field of health argue that this Transfer Policy is not a positive response to their demands for control over the health care agenda (AFN 1988; Erasmus 1989a) and that it may actually represent a hidden agenda of the federal government to assimilate the first Nations (AFN 1988)?

The definition of these terms is central to the understanding of the continuing struggle between First Nations and the Canadian government in the health care field. The first problem to arise in an examination of the conflicts concerns the definition of the subject itself. What is health? How is it to be promoted? What is illness? How is it to be treated?

Health has traditionally been viewed by First Nations as an integral part of all aspects of life. It is a reflection of individual and collective relationships to the natural, social and spiritual domains. One of the fundamental concerns is the human-environment relationship, wherein

everything is envisioned as belonging in a circle or hoop with no one thing, animal, human, plant, realm being excluded (Alexander 1986).

The environment is the family, the community, the land, the sea, the sky. An imbalance in any one of these realms or relationships with these realms may result in illness and, in treating any illness, all of these aspects must be considered. To promote health is to maintain harmony and balance.

Representatives of First Nations have consistently stated that both health status and health care services are inextricably connected to broader problems of relations with the Canadian society. With no recognition of aboriginal title and treaty rights, little control over economic resources, no political autonomy, and no change in the attitudes of non-native Canadians towards the First Nations, more health services will not result in an improvement in health status (Culhane Speck 1989). Health cannot be separated from other aspects of life.

In contrast, Western biomedicine has become disengaged from the language of cosmology and morality, from a system of knowledge addressing the relationship of person to person, spirit, and nature (Comaroff 1978). The language of healing has become part of the discourse of science, designed to exclude from its frame of reference areas of human life viewed as irrelevant to its specific concern (Figlio 1976). With emphasis on the individual as a biological being, biomedicine has emphasized the natural over the social and spiritual dimensions of health and has tended to decontextualize the individual.

The Canadian government recognizes and promotes the connections between health, social, economic and political relations in principle (Epp 1987). However, it continues in practice to segregate various departments which all have important policies and programmes impacting on the First Nations. Indian Health Services is administered by Health and Welfare Canada, while Indian and Northern Affairs, Fisheries and Oceans Canada and Secretary of State all function separately. The control of these separate departments does not reside with the individual communities.

Given these differences in definitions and approaches to health and illness, it may be illuminating to study what is omitted in the Transfer Policy document. By examining two areas of exclusion, I intend to highlight some further differences between First Nations and the Canadian government in the continuing dilemma in First Nations' struggle for self-determination

in health.

Under transfer agreements, funding is calculated on the basis of the number of registered band members living on the reserve at the time of transfer (Canada 1987:87). Excluded are: all band members living off the reserve, people still in the process of regaining band membership under ³Bill C-31 and non-natives living on the reserve. This indicates an ignorance of the particular relationship that the people have with their home communities. People tend to move in and out of communities on a regular basis for various reasons: to attend school, to find work, for a variety of living experiences (Pachano 1989).

The place recognized as home remains the community of origin. Maybe if more opportunities in education, housing, and employment were available in these home communities, there would be less mobility. The fact remains that community in this example is being defined from without. The definition is not consistent with the First Nations perspective on home community which expresses a feeling, a sense of place, and has more fluid boundaries than those rigidly imposed by the federal government. "Community in policy is a singularly static concept, despite the constant evolution that is taking place in real world communities" (Moon 1990:169).

The First Nations community would not have enough resources to develop a comprehensive health care plan based on their specific needs. They recognize the definition of place as basic to their demands and want to have control over that place to create health care which will meet the communities needs which may include non-natives, transient residents, and newly reinstated Indians. The Transfer Policy by qualifying only certain members of the community denies the actual reality of the place as experienced by First Nations.

Beliefs about health and illness and practices of health care reflect personal, family, and community experience and values for both the client and the provider. It would seem important that First Nations have a fundamental role in training people who are sensitive to these dynamics in order to design culturally and locally appropriate services. Yet the Transfer Policy omits mention of training from the

³ June 28, 1985, Bill C-31 became law eliminating sexual discrimination from the Indian Act and offering full reinstatement to all those born with Indian status(Silman 1988:253).

document. There is at least one example where the Native community took on all levels of government and the media to gain control of their health care when they realized the tragic results of having the outside authorities define the care or non-care of the First Nation members (Culhane Speck 1987).

Within the Canadian health care system doctors as fee-for-service professionals have been called the single most powerful group and therefore exert influence and control over all areas of health care (Taylor 1987; Swartz 1987; Rachlis and Kushner 1989). The Transfer Policy does not address this relationship between First Nations and the health care professionals.

The persistence of indigenous healing ceremonies can certainly not be attributed to a lack of modern treatment services; it has more to do with a lack of culturally-congenial approaches in medicine (Jilek 1988:161).

There is a general consensus that the health needs of First Nations are not being met by western medicine as practised by most physicians in Canada (Kennedy 1984). However, no funds are made available for research or for training, or compensation of traditional healers. Experience from the Third World shows that without any concrete support traditional healers and healing practices are in danger of being moved to the margins of health care (Pillsbury 1982; Van Der Geest 1982) and in Canada, native healers may become "junior practioners under the guidance of the medical orthodoxy" (McCormick 1988:13).

The terms and conditions included in the Transfer Policy reveal that acceptance of this transfer by First Nations allows for only limited flexibility to the communities in determining their health needs and approaches to health care. First Nations leaders are given the opportunity to be "held responsible" for health and health care by their communities. At the same time they remain "accountable to" and "dependent upon" the Minister of Health (Canada 1987:15-16). It is this very aspect that has led to criticisms from the First Nations, for regardless of local priorities, it would be the Minister of Health who would determine "health needs" (Erasmus 1989b). There appears to be little recognition or support for First Nations to develop a health care system which reflects their beliefs, values, traditions, and present realities.

This brings the discussion back to the fundamental issue of conflicting definitions of health, illness, and health care. First Nations emphasize that until a new relationship is negotiated with the rest of Canada allowing them to gain control over their place and resources and to develop

a response to their needs based on their cultural history and vision the imposition of a new health care service delivery system based on Western medicine will not create health (AFN 1988). Despite a commitment in principle to a broad concept of health, the federal government attempts to deliver health as a commodity as if it could be separated from other realities.

In recent years, the Canadian response to the high levels of generalized dis-ease and social pathology prevalent in First Nation communities has been one of shame and a stated determination to improve the conditions which have led to the damage of many lives. However, this determination has failed to lead an understanding of First Nation community realities, or to any real change in the relationship between First Nations and the Canadian government.

There continues to be much hesitation and confusion concerning self-determination. While in principle the right to self-determination for the First Nations is recognized, fears and self-interest appear to take precedence over this fundamental right. An example of this thinking is evidenced in a speech of Brian Peckford, the then Premier of Newfoundland and Labrador 1981:

In principle, we have no real argument. There are legitimate rights and legitimate claims being made upon the people of Canada and the people of Newfoundland and Labrador. It is a question of what it will cost us, both financially and economically

(Scarsfield 1988:124).

By using the terminology of self-determination in health (Canada 1987), it appears that the federal government is using the language of First Nations, but not the concepts they are meant to convey in program and policy formation (Erasmus 1986).

The well-being of communities is still being approached as if it is possible to separate political, social, cultural, and economic issues. Communities are being defined from the outside and ways to improve health conditions are being defined from the outside. Important as they are, the provision of more Western medical services, no matter how culturally sensitive will not mean a positive change in the health status of First Nation communities.

Fundamental to this discussion of the dis-ease of First Nations is a recognition of the conflicting definitions of health, illness and health care. This conflict involves more than semantic differences between traditional and Western approaches to health. It involves different world views. "A worldview is the synthesis of a particular people's beliefs about the place of self

within society and the cosmos" (Merchant 1989:70).

Healing plays upon this relationship between physical and social being by tapping that primary source of symbolic media, the interface between self, world, and cosmos (Turner 1980). In the following two chapters, the ancient roots of healing and this primordial relationship between self, world, and cosmos will be explored, first through the study of Greek mythology and then the sacred narratives of First Nations of Canada. The contrasting world views between these two ancient worlds highlights the different approaches to health, being and place.

CHAPTER 3

FROM MYTHIC REALM
TO
"AIRS, WATERS, AND PLACES"

We have lost our immediate feeling for the great realities of the spirit and to this world all true mythology belongs....lost it precisely because of our all-too-willing, helpful and efficient science. It explained the drink in the cup to us so well that we knew all about it beforehand, far better than the good old drinkers.... We have to ask ourselves: is an immediate experience and enjoyment of mythology still in any sense possible?

(Kerenyi 1963:1)

In the following two chapters, I explore the realities of the spirit and the ancient roots of healing through a variety of materials, legends, folktales and the oral tradition of myth making. The goal of this work is to explore beyond the usual boundaries of classical heritage to the pre-Hellenic realm of Mother Earth and to enter the universe of the Shaman and the world of the first inhabitants of North America.

The shaman's view of the world leaps over conventional ideas of being, place, time, health, and illness. It is a world of non-rational, non-objective, non-Cartesian thought. This world view considers the individual as being connected to a universal field of power. In this field, even the most fleeting thought causes the whole universe to tremble. The spoken word can kill your neighbour (Kalweit 1988; Rogers 1982).

As W.B.Yeats (1961:174) wrote, this was a world in which people: "dreamed of so great a mystery in little things that they believed that the waving of a hand or of a sacred bough, enough to trouble far-off hearts, or hood the moon with darkness." This upside down universe, was one in which time could be stretched, space was solid, matter transparent, and reality included what modern Western culture would term the supernatural. The shaman

could enter into different worlds through means of mystical threads or by ascending the world tree. This person, "the technician of the sacred" (Eliade 1964), thus would maintain the links between all worlds for the people.

1. Earth as Mother

The shaman (male or female) speaks of the vitality of all that exists and of a global relatedness of all beings and phenomena at every level of existence. This is also the creative essence of pre-Hellenic mythology. The earth is mother; just as an apple tree apples, the earth peoples. In this world nothing exists in isolation, but a spirit contains and pervades everything and is capable of powerful deeds, the act of creation, plants, light, people. Old Spider Woman, Grandmother Turtle or Thought Woman (Gunn 1988), or Ge or Gaia, the ancient Earth-Mother who brought forth the world and the human race "from the gaping void of chaos" (Rose 1959:19) are all names for this quintessential spirit. The cosmos is a personal one. The forces of nature and the principles they represent are capable of being visualised in human form.

This work is not an attempt to reinstate prehistoric cultural structures but rather it is an exploration of various possibilities. Throughout the world in all times under all circumstances myths have flourished. "Myth is the secret opening through which the inexhaustible energies of the cosmos pour into human cultural manifestations. Religions, philosophies, arts, the social forms of primitive and historic man, prime discoveries in science and technology, the very dreams that blister sleep, boil up from the basic, magic ring of myth" (Campbell 1949:3).

If medicine like mythology and ritual keep mankind in accord with the natural order (Campbell 1984:39), then it is important to discover how this natural accord was expressed in earlier times. In nonliterate cultures throughout the world the origin of illness and the process of healing have been associated with forces belonging to the spirit world. A variety of healing rituals and practices have been developed to deal with illness, birth, and death.

The tradition of Hippocratic medicine is said to lie at the roots of Western medical science. However, Hippocratic medicine emerged from an ancient Greek tradition of healing whose roots go far back into pre-Hellenic times. A rich oral tradition of myth-making had existed before the classical myths took form and were written down by Hesiod and Homer in the seventh century B.C. (Spretnak 1984).

Beneath the splendid surface of Homer's Olympian myths lies a layer at once more primitive

and yet more permanent (Harrison 1905; 1924; 1927). This pre-Hellenic body of mythology, of the Great Goddess deities, told of harmonious bonds among humans, animals, and all nature. They expressed respect for and celebration of the mysteries of the body and spirit (Graves 1958; 1955 Campbell 1959; 1964; Kerenyi 1975; Gimbutus 1974; Farnell 1907).

Hesiod himself wrote that Earth ruled Olympus before the Hellenic deities became divine. Even the patriarchal Olympian gods swore their binding oaths by Mother Earth: Gaea or Rhea, Universal Mother, Deep-breasted One, firmly founded, oldest of all divinities (Larousse 1968:287). Herodotus (1899:226) wrote that: "Three different names have been given to the earth, which is but one, and those derived from the names of women". The tribes of Europe regarded Mother Earth, as the "all-ruling deity, to whom all else is subject" (Tacitus 1942:728). She ruled Russia too. The country bore her ancient name Rha, Rhea, the Red One, Mother of the Volga and all its tribes (Thomson 1965:252).

Ancient Roman philosophers extolled the Earth Mother as "The mysterious power that awakes everything to life.....All comes from the earth and all ends in the earth.....The earth produces all things and then enfolds them again. The Goddess is the beginning and the end of all life" (Vermaseren 1977:10).

These early world myths told of a Mother Goddess who was not restricted to early Greece but she was queen right across to the Indus valley in India. "From the Aegean to the Indus, she is the dominant one" (Campbell 1988:180).

Mother Earth received universal worship because she was the universal parent. Within the Americas, myths of the Salvios, tribe of the Orinoco, tell of a remote age when the Earth Mother produced human beings in the same way as she now produces bushes and reeds (Eliade 1967). American Indians still relate how all peoples and animals in the beginning emerged from Earth's yonic hole. "It was just like a child being born from its mother. The place of emergence is the womb of the Earth" (Campbell 1959:240).

Siberian reindeer hunters tell how the human race emerged from a Goddess, whose carved figurines protected the hunter's hut when given offerings and prayers: "Help us to keep healthy! Help us to kill much game!" (Campbell 1959:314).

The Great Goddess was known by many names in many cultures. At various sites of worship, certain attributes were stressed, depending on the local environment. However, Mother Earth and

her many manifestations of deities were several facets of the One, omnipotent Goddess. She was revered as the source of life, death and rebirth. She was all forces active and passive, creative and destructive. fierce and gentle.

That human beings were born from the Earth was a belief of universal distribution. This belief, of having come from the soil, of being born of the Earth in the same way that the Earth gives birth to rocks, trees, rivers and birds produced a profound feeling of being oneness with the world. In a sense this belief created a feeling of cosmic relatedness much deeper than an allegiance to familial or ancestral relations (Eliade 1959).

The people were of the place. This kind of cosmo-biological experience of being born from the Earth rooted people in a mystical way with the place of their birth. They were grounded. Just as they were born of the earth they would also seek to be welcomed back into the earth when they died.

I walk alone and wait
 About the earth, which is
 my mother's gate, knock-
 knocking with my staff from
 night to noon and crying, "Mother,
 open to me soon! Look at me,
 Mother, won't you let me in?
 See how I wither, flesh and bones
 and skin! Alas! When will these bones
 be laid to rest?

(Chaucer 1951: 269-270).

The cosmos, the Earth, was personal. The forces of nature and the principles they represented were capable of being visualized in human form. Nature was not to be controlled yet it was possible to live one's life in accordance with nature so that communication with forces, wind, animals, plants was possible. Being tuned into Mother Earth was the ultimate source of power and self-fulfillment. The forces of nature were to be approached with awe and respect.

The universal goddess makes her appearances under a multitude of guises for the effects of creation are many, complex, and often contradictory when experienced by humans (Campbell 1949). The mother of life is at the same time the mother of death. The two Mother Goddesses who ruled supreme before Hellenic times were Artemis and Rhea.

This pre-Hellenic mythology identified the phases of the moon with the universal qualities of the female, creation, nurturance, destruction, and renewal. With each phase of the moon, the Goddess would reveal herself in different form and name; sometimes as an animal, usually as a bear, as a beautiful young woman, as a wild-appearing female with hounds at her side and serpents writhing in her hair or at times becoming the cosmic moon tree connecting all realms of life, spiritual, mystical, earthly, plant, animal and human.

These manifestations were also linked to the three cosmic realms of heaven, middle earth and the underworld (Graves 1955 1:124). In each of these realms ruled a Goddess representing the different manifestations of the Universal Mother. Selene, wise-woman (Budge 1971:196), thought to be important in magic (Rose 1959:34), ruled the heavenly sky. Artemis ruled the earth, as mother of all creatures (Neumann 1963:276), and sometimes appeared as the Great She Bear (Joyce 1980, Vol. 1:249). Hecate, the "most lovely one" (Angus 1973:173), the "mother of witches" (Graves 1966:200) and destroyer goddess (Wedekind 1975:203) ruled the underworld.

Artemis as goddess of untamed nature was said to be the most popular goddess in Greece (Nilsson 1971:503), assisting females of all species in giving birth by offering them artemesia, the medicinal herb now called mugwort, to encourage delivery (Harrison 1927:37). Those who worshipped Artemis danced around the sacred tree (Nilsson 1949:28), the ancient moon tree, the source of life (Harding 1971:46), the birth-giving tree, fruit-giving tree. When the moon was full, Artemis became the axis mundi, the World Tree or Mother Tree.

Artemis appeared large before them standing straight against the tree. Her spine its trunk, her arms its boughs. Her body pulsed with life, its rhythm echoed by the silvered tree, the animals at her feet, the dancers, the grass, the plants, the grove. Every particle of the forest quivered with Her energy. Artemis, the nurturer, protector, Goddess of the swelling moon.

Spretnak 1984:79

This arbor vitae, tree of life binds all creatures to the three realms of existence. The roots penetrate the underworld. Her spine, the trunk of the tree, transects the middle world, earth. The crown, the head of Artemis, embraces the Heavens. This cosmic tree is related to the "idea of creation, fecundity, initiation, and finally, to the idea of absolute reality and immortality" (Eliade

1951:271-2). The World Tree is a tree that lives and gives life.

But when the moon slipped away there were no festivities. The nights grew black and the people protected themselves against the visiting spirits of the underworld. It was here that the goddess Hecate, ruled (Graves 1955:1).

When Hecate's rites were observed, the black nights passed silently one into another. But if the Goddess was deified, she unleashed the power of her wrath and swept over the earth, bringing storms and destruction. She appeared suddenly, with her torch and Her hounds. A nest of snakes writhed in her hair, sometimes shedding sometimes renewing. Until the new moon lit the sky, Hecate shared clues to Her secrets. Those who believed understood. They saw that form was not fixed, watched human become animal become tree become human. They witnessed the power of Her favoured herbs: black poppy, smilax, mandragora, aconite.

Spretnak 1984:83

The same message is always repeated in these mythologies, without death, there can be no life. Every being, animal, plant, rock, human is connected in the dance of life. Life encompasses death and therefore the form and the image of beings is constantly re-newing and re-creating.

The Cretan name for the Great Goddess, who had no consort, but lived supreme before the coming of the Hellenic invaders was Rhea, giver of life (Larousse 1968: 85-86). As Rhea Coronis, she was both a carrion death goddess and mother of life (Mahanirvanatantra 1972:295-296). In her endless time cycles and various manifestations, Rhea, like Artemis gave all kinds of fate, death as well as birth, suffering as well as joy (Graves 1955 Vol.1:148).

Throughout Greek antiquity, healing, essentially a spiritual phenomena, was associated with the manifestations of the Goddesses. While all the Goddesses were recognized for their powers of creativity and renewal, there were two deities who gained special prominence for their healing abilities; Panacea All-Healer and Hygeia Health (Larousse 1968:170; Graves 1955, Vol.1:176). These divine daughters appeared as personifications of the Great Mother's breasts; Panacea as the source of the balm of healing and Hygeia as the source of the Milk of Kindness (Walker 1983:766). Hygeia was associated with snake symbolism and used mistletoe as her heal-all (Graves 1955, Vol.1:976). Her curative rites were secrets guarded by priestesses.

2. Asclepius: Healing from the Gods to Earth

By the end of the second millenium B.C., patriarchal religion and social order were imposed upon Greece. The early goddess mythologies were changed. Gods now ruled and the goddesses reappear as wives or as daughters of these powerful gods (Spretnak 1984; Harrison 1905; 1962;1924;1927). As the Indo-Europeans come down from the north into Persia, India, Greece, and Italy, "a male-oriented mythology comes with them. In India it's the Vedas, in Greece it's the Homeric tradition" (Campbell 1988:180).

Where once Rhea as universal mother ruled with no consort, in the Helienic mythology she is now married to the great Heavenly Father Zeus to create the Olympian Parents (Graves 1955:51). Artemis becomes daughter of Zeus and sister of Apollo, the Sun (Graves 1955:57). Hygieia and Panacea will reappear as the divine daughters of the Healing God Asclepius (Dubos 1968). The tone of the mythologies changes and many of the qualities attributed to the Goddesses now appear with the Gods but in different emphasis.

Artemis, the Goddess of untamed nature, nurture, fertility, and birth had been worshipped throughout Greece, now Apollo made birth illegal on the Isle of Delos. Pregnant women were removed from the island lest they offend the Gods by giving birth there (Halliday 1963:29). Yet, it is Apollo that is worshipped for his healing miracles.

Music exalts each joy, allays
each grief, expels diseases,
softens every pain; And hence
the wise of ancient days
adored one power of physic,
melody and song.

Bulfinch 1966:26

Apollo becomes the God of poetry, music, and medicine. Tatian, in the second century would write: "Artemis is a poisoner. Apollo performs cures" (Graves 1958:433). The midwives, patronized by Artemis and Hecate would become recognized as the most dangerous group to the faith (Kramer and Sprenger 1971:66). However, Hygieia and Panacea would still be worshipped all over Greece, now appearing as the daughters of Asclepius. It is out of the mythology of Asclepius that the Hippocratic tradition developped. For Asclepius was known as both God and

as local healing deity. While health and the cure of disease is expressed by the release of healing potential of the individual in this mythology, the collective sense of celebration of life, death and the continual round of existence as told in the pre-Hellenic mythology is lost.

The Gods of Homer and Hesiod dwelt among the clouds or on the summit of Mount Olymus in Thessaly (Bulfinch 1966:7). At the same time, there was believed to be a variety of local, regional deities who dwelled among the caverns, rivers and rocks of certain regions. Asclepius was thought to be one of these local gods living in Thessaly (D'Irsay 1935).

While Thessaly was a popular birthplace for many Gods in mythical terms, this was a particularly appropriate country for Asclepius to live in. Throughout antiquity it was famous for its healing plants. Mount Pelion, near which Asclepius was reputed to have been born was especially rich in remedial plants, the "hands of the gods" as they were to be called by the physicians (Edelstein 1937:229).

The men of Thessaly were virile and warlike....During the 8th and 9th centuries, they emerged from isolation and headed south, in times of remote antiquity with the Indo Germanic Greeks at a time when the Sanskrit God of Healing Dhanvantari went to India with his brethren, Asclepius migrated from Thessaly.

D'Irsay 1935:435

Swarms of displaced people crossed to Asia Minor, settling the West Coast, while "invaders overflowed to the south part of the coast and southern islands". It is during this eighth century B.C. that historic Greece was said to emerge from its "age of comparative barbarianism" (Thomson 1965:20).

Apollo was always considered Asclepius' father while various mothers were suggested until Rhea Coronis was "found worthy to bear this god" (Edelstein 1945 Vol.1:68). Asclepius, learning the medical art from Apollo (Edelstein 1945, Vol.1:13) became entrusted with the role of Healing God. In ceremonies and in festivals, the paen, a song which had once been sacred to Apollo, became connected especially with Asclepius, indicating the belief of the people that the son of Apollo now was the medical hero (Fairbanks 1900:66).

Hygieia, the goddess of health, continued to be associated with the Asclepian myth and was portrayed with her father and with her sister Panacea. In this version of the mythology the two goddesses represent the two aspects of medicine that are as valid today as they were in ancient

Greece: prevention and therapy (Dubos 1968:56).

Hygieia, Health, is concerned with the maintenance of health by showing to all the wisdom that people can maintain health if they live wisely. Panacea, All-Healing, personifies the knowledge of place needed to find and create remedies from the plants of the earth. Plinius (XXV, 4(11) 30) writes of "daughter Panacia by her very name promises remedies for all diseases". Those who sought preservation of health and the liberation from disease tried to gain the attention of Asclepius. This plea took place in the temples. The Greek deities in the time of Asclepius ceased to dwell outdoors and were now placed in magnificent temples built for their worship. People sought cures and went to worship at these temples, first at Thessaly, Arcadia, Messene, Athens and the Isle of Cos (D'Irsay 1934:455) then into Africa, Asia Minor, Spain, and Italy (Edelstein 1945, Vol.2:707-861). By the 4th century 186 temples were built in the honour of Asclepius (Edelstein 1945, Vol.1:13).

The character of these temples, located in a restful environment, was extensively that of a health sanctuary as described in the accounts of Aristides (Croiset 1928). The sites of these temples were chosen for their healthful qualities as in this description by Vitruvius:

For when sick persons are moved from a pestilent to a healthy place and the water supply is from wholesome fountains, they will recover more quickly.

(Edelstein 1945, Vol.1)

People coming to the sanctuary would enter into sleep and aided by the temple atmosphere and their belief in the healing powers of the God would dream of their own cures. This temple incubation involved a unique form of healing based on dreams and the innate ability of each individual to release their own healing potential which resided within them (Kerenyi 1974;Simboli 1927). There was the recognition in this Greek medicine that, "It was the right and duty of everyone to ask for divine assistance where human power fails" (Edelstein 1937,V:243). The peaceful, clean surroundings within which the person could contact the healing God allowed the individual's healing power to be realized.

Dream therapy was not the sole treatment attributed to Asclepius. He was said to have invented surgery and pharmacology, the two oldest branches of medicine. He was also credited with the discovery of certain remedies and drugs.

The most effecient remedies for diseases of the rectum are wool- grease, the ashes of a dog's head; a serpent's slough with vinegar. In cases where there are chaps, the ashes of the white portion of dog's dung mixed with the oil of roses. They say this was the invention of Asclepius.

Plinius XXX 8(22)69.

Clean water, a restful environment, dreaming to gain spiritual guidance and medication, all were part of the Asclepian ritual. In daily life Asclepius was less likely to be forgotten than other deities. The preoccupation of the ancients with bodily well-being, the fear of disease thought to be a constant threat may have caused a strict adherence to the God of Healing (Nilsson 1945:63; Ferguson 1906:131; Merritt and Pritchett 1940). It was to Asclepius that the function of relieving disease and giving health was attributed.

Farnell (1904:276) writes of this forming Greek belief in health as a value:

No physical need of man is more imperious than the need to escape from physical suffering; no divine ministration is more vehemently craved, more ardently besought than that which provides this escape; and none other wakens so warmly the gratitudes of the worshipper.

Health and the freedom from disease were becoming valued as things to strive for. Health was beginning to constitute the basic essential of life. In post-Hellenic times, with the destruction of political freedom, the interest in health, the appreciation of bodily fitness intensifies. In a society, where people are citizens and subjects to a king, dependent on professional soldiers and royal servants, this "bourgeoise society naturally delighted in the worship of healing and health" (Edelstein 1945:276).

Health was beginning to become not merely the absence of disease. Health was characterized by physical and intellectual vigour and the ability to carry out military and civil duties. The Greeks began to place a high value on health and devoted time to maintain it (Mettler 1947). The world of human life is now the problem with which to contend by the guidance and judgement of kings and by the medical instruction of physicians. Asclepius was doubly revered, first, because he distributed health and, secondly, because he was mandated by the divine Apollo (Cunston 1987).

3. Hippocratic Health, Being, and Place

Out of the mythology of Asclepius would emerge the tradition associated with the name of Hippocrates culminating in the Greek medicine which has had a lasting effect on Western medical science (Dubos 1968). At the core of Hippocratic medicine is the conviction that disease is not the result of the imbalance of macro-natural forces but is a mundane and micro-natural phenomena that can be studied merely rationally and technically. The course of the disease can be influenced by therapeutic measures and sensible living habits, diet and exercise. Thus, medicine should be practised as a scientific discipline, derived from appropriated natural science and encompassing the prevention of illness as well as diagnosis and therapy.

Airs, Waters and Places (Adams 1939), one of the most significant books of the Hippocratic Corpus shows in a detailed way the influence of environmental factors, the quality of air, water and food, the living habits of the people, and the topography of the land on the health of individuals. The understanding of environmental factors is essential to the practice of medicine. Evidence suggests that these ideas developed with the extensive commerce and travel by the Greeks. To be successful, Greek maritime travel required a firm knowledge of geography and weather (Mettler 1947; Castiglioni 1947) influencing the beliefs in air, water and place as conditioning factors in the health of individuals (Taton 1936).

Hippocrates conceived health to be an expression of the balanced interplay between the organism as a whole and its environment, "physis" and environment being part of the greater unity, life itself (Brock 1929; Major 1954). Thus there existed a bond uniting organism and environment. In this interplay, even though organism was constantly affected by the environment, the organism was believed to be the master. Growth of the organism took place at the expense of the environment, extracting what was required for its needs and rejecting materials not needed.

Pepsis was the name for this extraction, or kind of digestion. To Hippocrates, disease was a case in which the organism had difficulty dys-pepsis over this digestive act (Brock 1929). When the environment acted adversely, the organism exhibited a natural tendency to adjust to this adversity and restore itself to equilibrium. Hippocrates viewed vis medicatrix naturae as a type of digestion of the environment by the organism (Brock 1929). The states of health and disease differed only in this aspect: that in disease, the organism had greater difficulty, a dis-ease, in mastering the environment (Brock 1929:11).

The environmental descriptions of Hippocrates, based on weather, season, topography, orientation to sun and wind, diet and physical exercise, and sleep of the individual was said to be comprehensive (Farrington 1953) in its relation to the health of people. Hippocrates (400B.C.) emphasized the importance of the physician in learning as much as possible about the place where he will practice, for such knowledge will aid in diagnosis and therapy.

When a physician comes to a district previously unknown to him, he should consider both its situation and its aspect to the winds. The affect of any town upon the health of its population varies according as it faces north or south, east or west.

Similarly, the nature of the water supply must be considered; is it marshy and soft, hard as it when it flows from high and rocky ground, or salty with a hardness which is permanent? Then think of the soil, whether it be bare and waterless or thickly covered with vegetation and well-watered; whether in a hollow and stifling, or exposed and cold.

Lastly consider the life of the inhabitants themselves; are they heavy drinkers and eaters consequently unable to stand fatigue or, being fond of work and exercise, eat wisely but drink sparingly?

Airs, Waters and Places Hippocrates 400 B.C.
(Lloyd 1983:148).

It is this insight which will be recalled under the discipline of medical geography in the 18th century (Petersen 1946). The place to be studied is no longer a personal one occupied by spirits but is one capable of objective discovery by keen observation of the influence of climate, water supply and situation.

In the collection of essays On Airs, Waters and Places, Hippocrates proceeds from this interest in soil and water, climate, and exposure as affecting the health of cities and their populations. He believes that "both the physique and character of men will follow Nature" (Jones 1923:1;XXI). By Nature he means the nature of the country and its location in the world. Hippocrates describes the inhabitable world as a plain between uninhabitable cold, the Rhipaean Mountains in the north and the uninhabitable heat of the south Libya, Egypt, the land of Ethiopians.

What is true of the soil is true of the men. Where the weather shows the greatest and most frequent variations, there the land is wildest and most uneven. You will find mountains, plains, forests and meadows. But where there is not much difference in the weather throughout the year, the ground will be all very level. Reflection will show this is true of the inhabitants too. Some men's characters resemble well-wooded and watered mountains, others a thin and water-less soil, others plains or dry bare earth. Climates differ and cause differences in character; the greater the variations in climate, the greater will be the differences in character.

Airs, Waters Places. Hippocrates 400 B.C.
(Lloyd 1983:161).

The cold north winds of snow and ice continually blowing down from the Rhipaen Mountains onto the steppe causes the wild animals to be small and few, the cattle small and hornless, the Scythians to be fat, sluggish of body and mind and infertile. The southern area of Egypt, Libya is very hot and dry with unchanging climate. This warmth produces many large animals. The people being all the same are fertile, large, "easy-going and clumsy craftsmen, never keen or delicate" (Ibid 168).

The middle climate (Medi-terrain) is marked by its diversity, having changes of seasons, landscape and soil. The peoples are fair and tall, strong, intelligent and spirited. "They are by nature keen and fond of work, they are wakeful, headstrong and, self-willed and inclined to fierceness rather than tame. They are keener at crafts, more intelligent, and better warriors. Other living things in the land show a similar nature" (Ibid 169).

This description belongs to the Greeks, but while some of Asia is contained in the same geographical place, the people are not as fortunate as the Greeks, states Hippocrates, because of the despotic rulers of Asia. "Deeds of valour and prowess redound to the advantage and advancement of their masters, while their own reward is danger and death. Such men lose their high-spiritedness. Even if man be born brave and of stout heart, his character is ruined by the form of government" (Ibid. 160). This recognition allows for the acceptance of conditioning factors other than those determined by the physical environment, for the development of populations. Hippocrates was not a strict determinist (Glacken 1990).

The influence of climate on the determination of the character of inhabitants will become a common theme with later Greeks, Herodotus, Plato, Pliny (Bunbury 1883; Beazley 1897-1906)

and continues to be expressed well into the twentieth century by geographers and historians (Huntington 1933;1945; Hertz 1928; Sikes 1914;Bury 1932).

Place, as described by Hippocrates, was in the realm of life now on the earth and not affected by any cosmic presence, but a place explainable by natural law (Moon 1923; Osler 1921). The unity of the three realms, Heaven, Earth and Underworld, as expressed in the pre-Hellenic mythology had disappeared. As Hippocrates wrote in Ancient Medicine only the one true reality that being the earthly existence, offered reliable data for analysis:

Wherefore I have not thought that medicine stood in need of an empty hypothesis, like those subjects which are occult and dubious, in attempting to handle which it is necessary to use some hypothesis: as for example, with regard to things above us and things below the earth; if any one should treat of these and undertake to declare how they are constituted, the reader or hearer could not find out, whether it is delivered to be true or false; for there is nothing which can be referred to in order to discover the truth.

Hippocrates 400 B.C.
(Adams 1939:1).

The Hippocratic writings are at the beginning of a systematic medical inquiry in Greece. In the medical oath, the Greeks will trace their origins of medicine back to the god Apollo:"I swear by Apollo the healer, by Asclepius, by Health and all the powers of healing and call to witness all the gods and goddesses that I may keep this oath" (Hippocrates: Lloyd 1983:430).

In spite of this oath by past deities, the Greek medicine which developed from Hippocrates was said to be based on "wisdom out of reason" in contrast to Hindu medicine whose "wisdom arose out of mythology" (Zimmer 1948); About 600 B.C. there arose in Greece a "wisdom which was new in the world and contained the germ of modern science. A series of wise men shook off the habit of thinking in myths and divine pedigrees" (Thomson 1965:94). Hippocrates was one of these "wise men" and Hippocratic medicine would be called the "first attempt to define and defend the status of medicine as a rational discipline or techne" (Lloyd 1978:13).

4. Approaching Myth

This distancing from mythology, the criticism of myth, can be traced back to the sixth century B.C. in Greece to Theagenes and Xenophanes (Pettazzoni 1954). In this Hellenic period, these

first critics of myth, held in disdain the beliefs of the Greek people and the depiction of the deities "in the fables of old" (Spence 1931:40-41). Western philosophy and medicine arose in this environment of "encountering and overcoming myth" (Vescey 1988:2). A contrast was developing between the folk and the educated beliefs toward the stories of old. While the uneducated continued to tell tales, the scholars were studying in critical manner these stories as things to be analyzed, rather than enjoyed. By finding myths untruthful Greek scholars were seeking explanation for the hidden realities in the world. Once the truth was known there was no need for mythology (Cassirer 1955).

The ancient philosophers, Homer, Hesiod, Plato, Aristotle and other Academy members attempted to describe the real origin of myths, "demythicalizing them" (Eliade 1967), by psychological, philosophical, natural, social or historical reasons. Honko (1984:44-46) elucidates how this "demythologisation" was an attempt to establish a more organized, rational state. There appeared to be a desire to squelch the existence of myth, by disparaging ancient mythological traditions, by seeking to show that these ancient stories were distortions of reality (Larsen 1976).

This view of myth as something based on insufficient knowledge or as a distortion of reality continued into the twentieth century. The scholar, Sir James Frazer, author of a twelve volume encyclopedic work The Golden Bough would restate these views of myths as attempts by primitives to explain natural events.

By myths I understand mistaken explanations of phenomena, whether of human life or of external nature. Such explanations originate in that instinctive curiosity concerning the causes of things which at a more advanced stage of knowledge seeks satisfaction in philosophy and science, but being founded on ignorance and misapprehension are always false, for were they true, they would cease to exist as myths.

Sir James Frazer 1959:6.

The popular use of the word myth now denotes a lie, untruth, a falsehood because as Eliade (1969:73) said: "The Greeks proclaimed it to be such twenty five centuries ago". The acquiring of "more advanced or more refined knowledge will cure one of believing in the old myths if not cure one of myth-making. However, if myth is approached as a celebration, a contemplation of life including its mysterious dimension, it does not need explanation. If myth is viewed as a

shadow to be removed as it hides the clear reality, then there is no celebration.

The first approach to myth leads to the imagination and the poetic voice which allows for the articulation of a wisdom not expressible in other form. The second approach leads to rational objective ways to reach beyond illusion and destroy myths or lies. Frances Yates (1964) has observed that, the difference between the attitude of the magician to the world and the attitude of the scientist towards the world is that the former wants to draw the world into himself, whilst the scientist does just the opposite, he externalizes and impersonalizes the world by a movement of will in an entirely opposite direction. Dialogue between these two approaches seems impossible but necessary. It is essential in this research.

Myths are not errors as they are not failed attempts to make correct empirical statements. While scientific, biomedicine, from its Hippocratic roots is based on a myth-purged view of the world, the approach to health and illness in the First Nations is intimately connected to the mythic spirit. Here myth is "a living thing, where it constitutes the very ground of the religious life; in other words, where myth, far from indicating a fiction, is considered to reveal the truth par excellence" (Eliade 1969:73).

Yet, the term myth has been used so often, by so many in pejorative tones that the words "sacred narratives", or "stories" or "traditions" are preferred by the first people of North America (Gunn 1988). In the next chapter I introduce the sacred narratives, the living myth of the Cree and enter into the ancient world and landscape of healing of the Shaman. The pre-Hellenic mythology of Mother Earth celebrated the place of the continual round of life out of death, re-birth, re-generation, re-affirmation of peoples close connection with their natural, physical, and supernatural worlds. With the creation of Asclepius, as healing God, the focus changed. The Greeks became offended with "primitive" ideas. The temple was an expression of the human conceived divinity and not of nature's holiness. The temples of healing were magnificent, grand buildings. They demonstrate, as such the desire for human control over and separation from the natural world. The ancient roots of Western medicine, derived from Hippocrates, were based on the importance of a balance between place and person. Knowledge of literal place was necessary for physicians, as was an understanding of the human cultural response to diet, exercise, and place. The mythic realm, the supernatural realm of human existence was denied.

In the next chapter, I explore the sacred and ancient narratives of the First Nations of North

America. The first people of Canada had a different view of place, humanity, and nature than those from the Hellenic heritage. To the people of First Nations, the land itself was sacred. Therefore, it is a divine place that is shared with all that exists, rocks, animals, plants, human beings, spirit beings, everything. From this world view, grew the roots of a very different healing tradition.

CHAPTER 4

THE ANCIENT AND SACRED NARRATIVES
OF
FIRST NATIONSWhen the First Light Came

When the first light came, O-ma-ma-ma, the earth mother of the Crees, gave birth to the spirits of the world. Her first born was powerful Binay-sih, the thunderbird who would protect the other animals of the world from the mysterious and destructive sea serpent, Genay-big.

The thunderbirds live in nests high in the mountains toward the setting sun. Clouds become black and roll across the sky when the thunderbirds are angry or are fighting with Genay-big. Often it rains and fire flashes through the air while the voices of the thunderbirds cry out in anger.

The second creature from the womb of O-ma-ma-ma was Omak-ki, the lowly frog who was given socerers' powers and would help control the insects of the world. Oma-ka-ki is often called upon by the other animals to help them when they are in trouble.

Third-born was the supernatural Indian, Wee-sa-kay-jac. O-ma-ma-ma gave Wee-sa-kay-jac many powers. He can change himself into any shape or form to protect himself from danger. Eventually he created the Indian people. But he is also an adventurer who likes to create mischief and play tricks on us. Sometimes he gets our people very angry; however, Wee-sa-kay-jac is to be respected by our people because he has great powers.

O-ma-ma-ma's fourth child was Ma-heegun, the wolf. Because Ma-heegun is the little brother of Wee-sa-kay-jac, they often travel together in the forest. Wee-sa-kay-jac will turn himself into a person and will ride on the hairy back of his four-legged brother. They have many adventures together.

After Ma-heegun came Amik, the beaver. Amik should also be respected by our people. It is said that beavers were once humans in a different world, but evil befell them and they became animals. Whenever you kill a beaver, you must throw his bones back into the pond as an offering to the spirit of the beaver.

Then, fish, rock, grass and trees on the earth and most of the animals eventually came from the womb of O-ma-ma-ma. It was for a long time that only animals and spirits inhabited the world because Wee-sa-kay-jac had not made any Indians.

Wee-Sa-Kay-Jac and the Flood

Then came a period when the waters of the lakes and rivers began to rise and cover the forests. Many of the animals drowned because the land was flooded. The birds and animals were afraid that they had angered O-ma-ma-ma. Some creatures said that the Mishipizhiw were digging in the bottom of the great lake and had opened the core of the world, which was full of water, causing O-ma-ma-ma to bleed to death.

At last only a small island remained with some birds and animals on it. Wee-sa-kay-jac was on the island and he helped the animals build a great canoe. Beavers cut down the trees and muskrats tied the poles together with roots, while the frogs packed mud between the poles to make the great vessel float. The birds built a huge nest in the canoe so everyone would be warm and comfortable and Wee-sa-kay-jac built a roof over it. It rained and the waters kept rising until the great brown canoe floated off on the ocean. The animals and Wee-sa-kay-jac had to ride the big canoe for many years over stormy seas and strong winds.

Finally one day, the rain stopped and the great canoe rocked gently once more as the winds began to stop blowing. Wee-sa-kay-jac realized to his horror that he had forgotten to bring along a piece of the earth with which to re-create the new world. The only way to obtain it was to dive to the bottom of the ocean; therefore he tied a vine to kitchi-amik a giant beaver, and told him to dive into the depths for some clay. After some time had passed Wee-sa-kay-jac pulled up the limp body of Kitchi-amik into the canoe. To his disappointment, there was no clay. Next, he told Nin-gig, the otter, to dive for clay, but the same thing happened. The otter could not reach the bottom and drowned.

In a last attempt, Wee-sa-kay-jac sent Wa-jusk, the muskrat into the ocean. The vine went down and down. When finally pulled the muskrat up, he discovered that Wa-jusk had drowned, but in his tiny paws was a piece of clay. Wee-sa-kay-jac was so happy that he brought the three swimmers back to life. He then put the clay into a pot and boiled it. The clay expanded over the sides of the pot falling into the sea until land was formed.

The next day Wee-sa-kay-jac asked Green-go-hongay, the wolverine to travel around the earth to find out how big it was. When Green-go-hongay returned two days later, Wee-sa-kay-jac told the animals the world was not yet big enough. He put more clay into the pot to boil over and sent the wolverine back to measure his work. Green-go-hongay never returned. The world was big enough.

Wee-Sa-Kay-Jac and the Animals

One night as Wee-sa-kay-jac slept, a dream came to him. He saw many creatures shaped like himself., singing, dancing and pounding on drums. In the morning when he awoke, he remembered his dream and he decided to make some of these people.



Figure 1. A carving of Wee-sa-kay-jac 1870, cut from sheet brass 3.5 inches high. Saultenaux Plains Ojibwa, Glenbow-Alberta Institute. (Johnson 1977:32)

He took clay from the pot and put it on the back of Misqua-day-sih, the turtle. The first man he moulded turned out to be too black and Wee-sa-kay-jac decided this was not an Indian. This man was hurled into the air, landing across the blue waters in an unknown land. More clay was moulded on the scaled back of Misqua-day-sih.

The man that resulted was pale and unhealthy looking. Wee-sa-kay-jac decided this man was not an Indian, and flung the man out across the flood. He took the remaining clay and worked with great skill and care. The man that came to be was olive-brown in colour. "This man is an Indian", declared Wee-sa-kay-jac.

Before the great flood all the animals were flesh eaters, so Wee-sa-kay-jac decided to change their eating habits to give our people a chance to multiply on earth. He ordered all the animals that had been in the canoe to line up. The newly created Indians were first. They were told they could eat plants and animals. The moose was next in line and Wee-sa-kay-jac told him they could eat swamp plants and twigs off trees. At the end of a long line was a large black bird.

Anxious to know what it would eat, it flew to the head of the line. "Go to your place and wait your turn", ordered Wee-sa-kay-jac. The bird reluctantly flew back squawking to itself. But soon it returned, being very impatient and demanded, "What am I going to eat?" Losing his temper, Wee-sa-kay-jac spoke angrily. "From now on you will be known as Ahan-sih, the raven. For the rest of your days you will have to devour rotten and decayed remains of other animals' prey. Only by stealing will you survive.

After the waters receded from the flood, human beings multiplied on the earth. They became many. One winter, Wee-sa-kay-jac called all the animals together and told them, "There must be one of you who will live with human beings to become their companions and partners." A race was held because all the animals, moose, fox, deer, caribou, elk, wolves, dogs wanted to become the companion of men. The dogs were the winners.

In those ancient days all animals could talk the same language as humans. And at one time in the village the dogs began to complain that human beings were abusing them. They were forcing the dogs to pull sleds and they were not feeding them. The dogs were told to sleep outside in the cold snow. They didn't like the way they were being treated. Finally the dogs called a pow-wow to discuss the situation.

"Dogs can talk: human beings are working us too hard and are treating us dreadfully. If we keep talking before long the Indians will send us to the ends of the earth just to deliver messages for them." So the dogs stopped talking and they still don't talk today (Stevens 1971:20-26).

1. The Place of Sacred Narratives

These sacred narratives belong to the Aninshinabek (Ojibwa word or Eyuek, the Cree word

for original people, literally "the first man"; Southcott 1984) of Sandy Lake in what is now northern Ontario. The language spoken by the people of Sandy Lake is a mixture of Saulteaux and Cree although they refer to themselves as Cree and are members of the Algonquian speaking groups of people (Driver 1972). These people inhabit, what is called the Subarctic Culture Area (Helm 1981; Trigger 1978).

This land area spans the whole North American continent from Cook inlet on the Pacific coast to the Gulf of St. Lawrence and Newfoundland in the Atlantic. On the north, it borders much of Hudson Bay touching Lake Superior in the south. This is the land of Northern Forest (taiga from the Russian), pine, spruce, fir, with intermittent birch, willow and aspen (Dawson 1983); to the north the treeless tundra of the Arctic. It also includes the Laurentian Shield.

This was home for small nomadic groups who, in the most northern places, followed the seasonal migrations of the caribou between the tundra and the forests (Bishop and Smith 1975; Bishop 1982). The Cree were closely dependent on their forest environment and its inhabitants, moose, beaver, otter, muskrat, deer and porcupine, fish and water fowl (Rogers 1963). The fur of the animals was just as valuable as the nourishment it supplied to the hunters, who entered into an I-Thou (Campbell 1988:78) relationship with the animals they needed to kill (Speck 1915) in order to survive.

The greatest peril of life lies in the fact that human food consists entirely of souls. All the creatures that we have to kill and eat, all those that we have to strike down and destroy to make clothes for ourselves, have souls, souls that do not perish with the body and which must therefore be pacified lest they should revenge themselves on us for taking their bodies.

(Rasmussen 1930:55-56)

Geographically this vast forest is interspersed by a multitude of streams, rivers, ponds, and lakes. According to the Cree and the Ojibway of the woodland, powerful beings other than the animals, moose, beaver, otter also dwelt in the land. There were spirits who lived in the sky and the water and in rocks, animals or fish (Morriseau 1965; Ians 1965:61-63).

One of the most terrifying creatures was the Mishipizhiw, sea-monster, with features like a lynx, having legs and horns moving more like an animal than a serpent. It was Mishipizhiw who was blamed for digging in the bottom of the lake, opening the core of the world which was full

of water causing O-ma-ma-ma to bleed to death.

This mythical being also known as the Great Water Lynx was all-powerful on rough water, having the ability to cause turbulence to drag people into its underwater home (Grant 1983:54; Stevens 1971). He could move just as freely on the land as in the water. Because of these features and due to his cunning he was sought for his curative powers and was in a sense the progenitor of the medicine man. Only the Thunderbird was more powerful (Ritzenthaler and Ritzenthaler 1970:139).

At least one shaman-warrior who was "skilled in the Meda (miday or medicine society)" had claimed the special protection of Mishipizhiw and of the sea-serpent (Schoolcraft 1851). This rock painting appears on the face of the rock at Wazhenaubikiniguning Augawong, or Inscription Rock, on the north shore of Lake Superior (Dewdney and Kidd 1967:85).

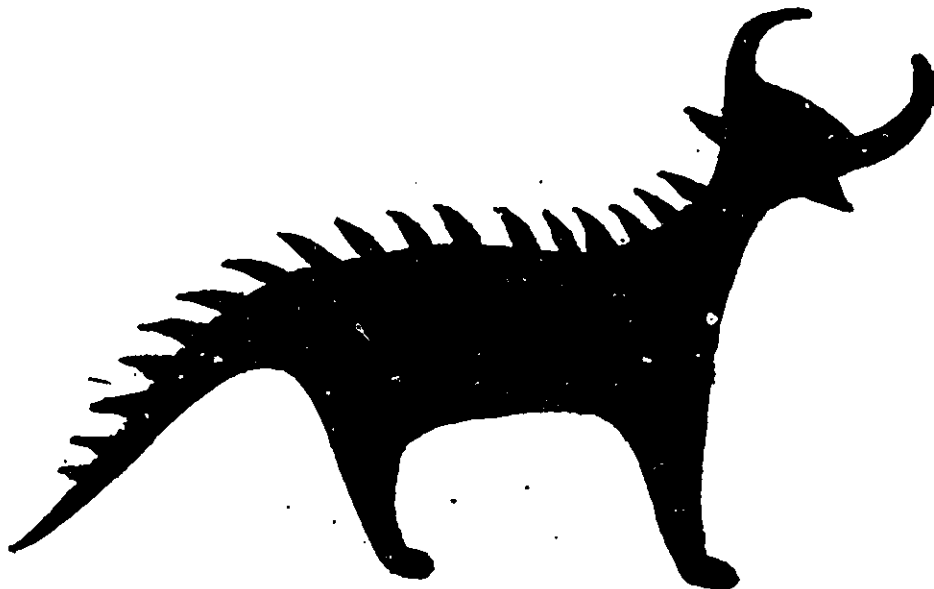


Figure 2. Mishipizhiw: Rock Painting at Wazhenaubikiniguning, Lake Superior

Among the Menomini he appears as a horned water serpent and he can also be seen guarding the portals of the lodges incised on birchbark medicine rolls of the Grand Medicine lodge

(Hoffman 1888;1892; Coe 1977).

The sacred narratives of the Cree from Northern Ontario speak of the remote past in these lands, in the beginning of light, of the powerful thunderbirds and of the destructive horned sea-serpent Mishipizhiw, of the time when all animals could talk the same language, of the creation of the earth on the scaly back of Mis-qua-day-sih, the turtle, of spirits, animals, birds, rocks, trees, of Wee-Sa-Kay-Jac, the supernatural shaman creator.

While the narratives described above belong to the Cree, there exist some common themes, the wandering culture hero, the raven and the animal tales to the mythology of The Koryak, the People of the North Pacific coast, and the Iroquois, Athapasans, and other groups. Jochelson (1905:355) writes that these common myths reflect "for a very long time and very tenaciously the state of mind of the people of the remotest period", of a very ancient connection between people of vast geographic distance. The sacred narratives tell of the ability of all creatures to share in the process of creation. The initial creative force in the world is Earth Mother. The character assigned to the cosmos determines the inner meaning it will have for humans, and therefore their part to play in the universe (MacLagan 1977).

In the Cree mythology, as with many myths of the people of the First Nations of North America, the role of humans is one of co-operation with other beings. Although the common language which once had been spoken by all creatures was now lost, all phenomena in the cosmos are still interrelated. The action of human elements can profoundly affect the life of nature and of the spirits.

The supernatural shaman, Wee-Sa-Kay-Jac (Ahenakew 1929) is powerful having the ability to change form, and through visions to gain the creative strength required to fashion people. However, it is through the joint efforts of the animals, muskrat, otter, beaver, and Wee-Sa-Kay-Jac that the earth is re-created. The animals give of their lives in the search of soil required to re-build the earth. Animals will be killed by hunters in order for the people to live.

While there are several creation myths told by the first North American people (Dundes 1967; Fisher 1946; Grinnel 1893; Thompson 1929 ; Clark 1969; Dixon 1909; Carson 1917), this earth-diver myth with variations existing among people of different places (Boas 1891; Wheeler-Voegelin and Moore 1957) is the most widespread creation narrative in North America (Rooth 1957; Wheeler-Voegelin 1949).

The earth-diver narrative is concerned with water, primeval water or the deluge. Stories of the flood were "in existence in oral tradition in non-western cultures, before being recorded in what we now know as the Bible" (Dundes 1988:319). They appear in traditional Australian thought (Kolig 1980), in Filipino mythology (Demetrio 1968) and in North American mythology of the Carriers (Jenness 1934:vol.48).

With the exception of Arizona and New Mexico, the earth-diver sacred narrative (A812 Thompson 1932-1936 Vol.1) is found in all places of North America (Count 1952). This may explain the origin of the name Turtle Island as recognized by all native groups to describe the North American continent. The distribution of the Earth-Diver extends far beyond North America into Eurasia. It has been proposed that this myth originated in the eastern Asiatic coastal area spreading westward across Siberia and eastwards across the North American continent (Rooth 1957; Kongas 1960).

This is also the route that the Paleo-Siberian people, the original founders of North America, at least as early as 10,000 B.C. (some authors speculate up to 60,000 B.C.) followed to enter into the continent from Beringia (Harris 1987; Hopkins 1967; Hopkins et al. 1982; Fladmark 1979; Bryan 1978; Martin 1973 Morlan and Cinq-Mars 1982). The movement of these people into North America took place over several thousands of years (Harris 1987). The heritage of these immigrants appears to point to a circumpolar (Northernmost Arctic and Sub-Arctic North America and Eurasia) and circumboreal (Northern woodlands) culture that stretched from Scandinavia across northern Russia to Siberia.

2. Shamanic World

The Northern Hunter

The way of life of these peoples was rooted in the ancient Paleolithic world of hunting (Hallowell 1926). Hunting and healing rituals, vision trances, animal ceremonialism commemorating the kinship between humans and animals, the belief in the master of the animals (Benedict 1923; Hultkrantz 1965) and shamanism are common to people as geographically distant as the Samoyeds of northern Asia, the Saamis or Lapps of northern Europe, the Algonquians and Inuit of northern Canada, the Ainu of northern Japan and the Tungus of Siberia (Hultkrantz 1981 :11-28 ;Campbell 1983; Batchelor 1901).

The origins of Shamanism in the paleolithic period link it intimately with the animal-human world of the hunt (Eliade 1951). It was the animal which was the source of food, shelter, and clothing provided for the survival and health of the people. The shaman had the responsibility to maintain relationships with the spirits in order to ensure this continued good hunting and good health.

Anisimov (1949 as translated in Lommel 1967) explains in his studies on Siberia, how shamanism grew out of the hunting magic. Shingken, the Lord of the Animals existed in the sky or in the taiga, or in the river. The whole of nature belonged to him. He would give one of his possessions only when offerings were given in return.

It is said that in the past the Tungus would pray directly to Shingken.

Great father, great mother, mountains, rivers,
hear us, have mercy, open the doors,
that the spirits of the sables may come out

Later the hunters began to rely on the shaman who approaches the spirit and asks for the animals to be released. First he goes to a sacred stone covering the spirit of Mother Earth. He asked for her help. She sends him to the spirit of the Mother of the Whole World who appears as a giant cow elk. From her the shaman earned the permission to catch animals. He then returns home leading the animals he caught into the hunting area of the community.

The spirit of Mother Earth wears a bag which contains the pieces of fur of all the different kinds of animals. The shaman, pretending to be looking for lice on the woman, steals hairs and pieces of fur. He scatters these on his way home all over the taiga. Real animals spring from these hairs and fur. Everyone celebrates the shaman's successful journey. They create a scene with leaves to represent the taiga placing birds and carved animals in the branches then they enact a hunt.

To the most northern people Sedna was the sea-goddess, the "spirit woman who lives beneath the waves", who was to be respected for she released the food of the sea for the people to catch (Rink 1875:37-40; Ians 1965:23-24; Rasmussen 1921).

This shaman song, Oh You Men Now Listen To Me comes from the people who lived along the Bering Sea-Arctic Ocean coast and the islands offshore (Bogoras 1910-1913, Vol.X11, Part 111:447).

Oh You Men Now Listen To Me

oh you men
now listen
to me

look to the sea
to the spirit-woman
who lives beneath
the waves
the spirit-woman
deep beneath the waves
she takes her dish
she fills it up
she takes her dish
and shoves it out

all kinds of food
for us

oh you men
now
listen to me

she makes us
glad
she feeds us
she makes us
glad
she feeds us
and every living thing
near here
she feeds us

Caplak (as told to Bogoras)
(Cloutier 1973:37-40).

When the seal-hunting was poor, the shaman on behalf of the community would visit the spirit-woman, Mother of the Sea. For this woman is both nourisher, giver of life, and also, in her role as mistress of the underworld she can withhold the game in a way similar to Hecate of the Greek world. For she is the universe, which having given all things life again, reclaims their lives. The shaman enters her underworld in order to transform this woman once more into her role as giver of nourishment and life.

Before the great magician the path through the earth down into the sea opens up of its own accord; he goes down it without meeting any obstacles, as though falling through a tube....Her house is like an ordinary human house, only the roof is missing. It is open at the top so that from her place she can keep an eye on the dwelling-places of men. All kinds of game, common seals, bearded seals, walruses and whales are gathered in a dragnet on the right of her lamp.

As a sign of her anger, The Mother of the sea creatures is sitting with her back to the lamp, with her back to all the animals she would otherwise send up to the shores. Her hair, washed down over her face and eyes, is untidy and dishevelled.

The shaman must use all his art in order to pacify her anger. As soon as she has been mollified she picks up the animals and drops them one by one on the ground. The animals vanish into the sea. This means good hunting and plenty.

(Rasmussen 1926:70-73)

The shaman returns to the waiting people of the community. There is silence at first until he gives permission for everyone to state their breaking of taboos. People afraid of hunger begin to declare wrong doings until everyone in the room has spoken. The shaman acts for the community by entering into the underworld to alter the conditions in the physical world, to give them game, and to keep them healthy. However, the participation of the whole community is required in order to appease Sedna. "All animals belong to the Great Mother and the killing of any wild animal is a transgression against the Mother" (Jung 1956:327).

The violation of hunting prohibitions is also believed to cause the hands of Sedna to become sore, for which she punishes the transgressor (Boas 1900:626). While hunters depended on the killing of animals for their survival, the event was not taken lightly. A covenant developed between the hunter and the prey, a ritual of respect between the human and animal world, created to assure that the animal was an equal and willing partner in the hunt, for the bear had similar qualities to man.

The Thompson River, Shasta and Carrier tribes of the Northwest as well as the Montagnais, Naskapi, Penobscot, Abnaki and Malecite of the Northeast would first invite the bear to come out of the den and then inform him, with apologies of the challenge (Hallowell 1926:53-54). The Ottawa north of Lake Huron would plead and flatter the animal. "Do not leave with an evil thought against us because we have killed you. You have intelligence and can see for yourself

that our children are starving. They love you. They wish you to enter their bodies" (Hallowell 1926:55).

The Lillooet would give their homage to the beast (Teit 1900-1908, Vol. 2:274).

You were the first to die, greatest of beasts.

We respect and shall treat you accordingly;
 No woman will eat your flesh,
 No dog will insult you.
 May the lesser animals all follow you
 And die by our traps and arrows.
 May we now kill plenty of game.
 May the gods of those we gamble with
 Follow us as we leave the play,
 And come into our possession
 May the gods of those we play Lehol with
 Become completely ours
 Even as a beast that we have slain.

To the family groups who lived in the northern woodlands, hunting, trapping, and fishing activities to maintain a sufficient supply of food were closely associated with shamanic powers (Speck 1915; Rogers 1963). The cultural life of the Ojibwa families revolved around the hunt. These early hunters had a covenant between the animal world and the human world involving a bonding between them that allowed one to be killed and consumed by the other.

There existed an Owner for each natural being. The most important owners were those of large animals, deer or bear hunted by the people. Without the help of these owners the Ojibwas believed that the animals could not be caught. If the Owner of the animal was insulted there would be no game but if the Owner looked favourably on the hunter he would be successful. The animals killed were treated with respect and offerings of thanks were spoken to the Owners (Vecesy 1983:76; Hultkrantz 1961, Vol.1:53ff).

In order to survive the hunter must kill. However, if the animal gives of its life willingly there is "the understanding that its life transcends the physical entity and will be restored to the soil or to the mother through some ritual of restoration" (Campbell 1988:72). The hunter and the prey play significant roles representing two aspects of existence, life through death. The hunt was a ritual act. As a ritual act there was "a recognition of your dependency on the voluntary giving

of this food to you by the animal who has given its life" (Campbell 1988:73).

The shaman would also invoke the spirits of plants to convey their curative powers upon the herbs used in curing ceremonies (Vecesy 1983). For just as there existed a bond between the hunter and the prey, the plant was approached with respect. Just as the animals would give of their lives willingly, if approached properly with respect, so would the plants. These beliefs and rituals linked individuals with the mysteries of life. The explorer William Keating would write that the Ojibwas think they were created to hunt and make medicine (Keating 1824:Vol 1, 168).

While to all members of the group, the earth and her beings were sacred, it was the shaman who had the most wisdom and knowledge to be able to use the powers of the animals or the plants. Shaman is a noun derived from the Tunguso-Manchurian verb *sa* "to know" meaning "he who knows" (Campbell 1983, Vol.1:156). In the strict sense of the origin of the word, shaman refers to a characteristic phenomena of the North Eurasian peoples (Laufer 1917; Campbell 1983). However, Bouteiller (1950) and Eliade (1951; Hultkrantz 1963) in their extensive works have stressed the parallels between North American and Old World shamanism from psychological, phenomenological, and religious points of view.

In this work I use the term shaman after Hultkrantz (1962) to include the practitioner who with the help of spirits cures the sick or reveals hidden things while in an ecstasy. During the trance he may leave his body or he may simply ask for help from the spirits.

"In aboriginal days at least one conjuror must have been found in every winter group" (Hallowell 1942:28). Shamanism was present in all groups throughout the subarctic (Speck 1915a; Speck 1915b; Rogers 1963; Flannery 1939; Cooper 1944) and in other areas of North America (Cortlett 1935; Parker 1928) with the shaman being the elder leader (Boggs 1958:56) having the most power within the group to deal with the mysteries of life and ensuring survival of the people by ensuring health and game (Dixon 1908). Shamanism also appeared in distinct forms, for example, as the medicine-lodge society of the Central Algonquian or the cannibal society of the Kwakiutl (Hultkrantz 1963:114).

An Algonquin legend first noted by Father Brebeuf in his Jesuit Relations (Burkholder 1923:127-129) speaks to the intimate connection between medicine-man and hunter. He tells of a young man "of very noble character" who became sick. While nearly dead he had a dream instructing him "to enter the land of the spirits and receive from an old man who dwelt there a

wonderful bow rolled in birch bark". This young man sets off for a long journey and first enters "a valley which connects the spirit world with his". After an arduous voyage in which one of his companions was "turned into a pine tree", the man was presented with the magic bow.

He passed through a region "thickly crowded with animals as it had leaves on its trees". Here his magic bow came in handy for he could kill the animals as they approached. Finally the man returns among his own people back on earth, who rejoiced and celebrated his return. "The youth became a mighty hunter and medicine-man".

The bow, weapon of the earthly hunt, is also the caller of spirits. It functions as a conductor, first in attracting the man who was close to death in a trance-like state and then in being transferred to him. "The bow thus bridges and unites earth and heaven as it brings together spirit and matter" (Halifax 1982:56).

In this story are also the classic elements of the Shaman initiate who, being possessed by a great sickness, is in a death-like trance when he has a vision instructing him to enter the "land of the spirits". "To die and to suffer a severe sickness are part of the basic experience of the shaman's path" (Kalweit 1988:76). The young man released from his normal earthly existence travels to places unknown and communicates with the dwellers in this land. Every illness is an attempt at healing; a transformation is needed. By experiencing his journey to the symbolically rich "land of the spirits" and by contacting "the old man", he has now gained the secrets and knowledge of this other world. He now has perceived directly the flowing pulse of the world.

It is dangerous in the hunt when one has to deal with the souls and spirits of animals killed. The one who possesses most wisdom and expanded knowledge about these spirits is the shaman who can use these powers for healing (Campbell 1983).

The shaman being the one best able to draw upon the powers of animals and other beings would also use this ability to deal with offences of individuals (Lips 1947:447), maintaining the proper balance between all forces. The Cree of Eastern James Bay tell of Cheeosh Awash, a shaman who long ago lived with his grandfather who used his powers to ensure a good hunt. The only animal that he hunted was the hare. This was because the hare was his helper, the spirit that gave him guidance and assistance. Cheeosh Awash used his powers to bring food to the people in time of scarcity.

"At other times he used his power to teach certain persons a lesson". When some young girls

refused to share their smoked fish he evoked the force of storms and turbulent water preventing the people from checking their nets and causing food supplies to dwindle quickly. Finally, the girls grew alarmed. "They went to their father and told him about how they had refused food to Cheecosh Awash." The father ordered the girls to give Cheecosh Awash some smoked fish, which they promptly did. No sooner had they given him the food than the storm departed as quickly as it had come and the people were once again able to check their nets" (Kaspu 1989).

While the shaman gains his powers through individual means his therapy is directed toward the whole community. The shaman helps to maintain the proper balance between individuals and the groups survival within their environment between autonomy and social responsibility (Preston,R.1975;1976: Preston, S.;1988). When the communal responsibilities were ignored, when the girls did not share their food the whole group suffered. Just as in other First Nation groups sharing meant survival (Dewdney and Arbuckle 1975).

The shaman is metaphysically linked with the untamed beings needed for survival, fish, animals, plants and the forces of water, wind and storm. While the North American shaman's chief function is healing, he also plays an important role in the hunt and is able to claim power over the atmosphere, bringing on storms and quieting them (Park 1938:62, 139).

In North America, the ancient roots of healing practices, beliefs, and rituals associated with the spirit world developed from the mythologies of the two great cultural traditions, the northern hunting tradition and the southern agricultural tradition. It was the nomadic hunting life of those who lived in the frozen arctic places or the northern boreal forests which was intimately connected with shamanism and dated back to the original founders of North America.

The Southern Planter

The more recent southern agrarian culture spread northward from Mexico bringing with it the practice of cultivation of maize (500A.D.). The cultivation of beans, sunflower, and squash followed later by tobacco commonly being grown by the fourteenth century in southern Ontario (Harris 1987).

With the agrarian culture came sacred stories of the Corn Mother and her three sisters, corn, beans and squash (Jenness 1956). One creation myth of the Iroquois relates how the Divine Woman fell through a hole in the sky from the land of her people beyond the sky into an endless

lake. With her fell a cosmic tree with magical earth clinging to its roots. Her fall is softened by water birds who place her on the back of grandmother turtle. With the advice of the Great Turtle, master of all animals, Otter, Beaver, Muskrat, and Toad all dived into the lake to try to recover some of the earth on the tree's roots.

All die, but Toad managed to bring up a mouthful of dirt and with this dirt, on the turtle's back, earth-island is formed and Divine Woman becomes the mother of all humans (Sanders and Peek 1973:41-43; Akwesasne 1982; Gunn 1989:65-68 Ians 1974:223). When this Divine Woman is buried in the earth: "From her body grew the plants that the new earth needed for the people to be created, from her head grew the pumpkin vine, from her breasts the corn, and from her limbs the beans" (Clark 1960:2). All of which is needed to nourish the people.

According to the Pueblos the power of the people lies in the corn that contains the essence of life, embodied in the Corn Mother Irriaku which connects the people to the power of the earth in the form of Earth Woman Iyatiku (Gunn 1917). Iyatiku creates the prototypes of all creatures in the Underworld, but her twin daughters carry out the actual planting of trees, releasing the animals from their medicine baskets, and also appearing as the mothers of human beings (Tyler 1964). The generative source of fertility and new life resides in Mother Earth and her plant creations and people participate in this creative power by observing the seasonal cycles of planting crops.

The Hopi Indians also believe that the Earth reveals herself in the form of Corn-Mother, for corn is a "living entity with a body similar to man's in many respects, and the people build its flesh into their own" (Waters 1963). By eating the corn, people play their part in continuing the creation of the world.

The earth is viewed as the elementary basis of creation, the first and original giver of life and the source of all that comes into existence. The earth is the mother of all things. According to the sacred narratives of the Thompson Indians of the North-West coast of British Columbia, Earth lived up in the sky at first, but because she complained of the Sun's ardour, the Old One placed her below:

Henceforth you will be the earth and people will live on you and trample on your

belly. You will be as their mother, for from you bodies will spring and to you they will return. People will live as in your bosom and sleep in your lap. They will derive nourishment from you, for you are fat.

(MacLagan 1976:26)

Among the tribes where agriculture developed, a mythology of fertility evolved featuring goddesses and the moon, rain and fertility ceremonies and permanent shrines (Hultkrantz 1981;1987) and medicine societies. Twenty miles off the Yucatan peninsula, on the island of Cozumel was a shrine dedicated to Ixchel.

She was the goddess of the Moon, water-childbirth, weaving and love. Women could go to her shrine to gain or increase their powers and to reinforce their sense of these powers. For Ixchel possessed the power of birth and re-vitalization associated with water and weaving. Also connected with Ixchel is the power to end life. As moon-woman, she, like Rhea Coronis and Artemis, has twin powers of giving and ending life, of waxing and waning. Ixchel's power to weave includes the capability of unraveling. In her manifestations as the weaver and the moon, she can create, disrupt by changing the pattern and re-create (Turner 1982:228).

Both traditions recognized water as primeval substance and Earth Mother as the source of creation, sustenance, and death. Earth-diver creation narratives centered around the supernatural shaman and the co-operation of all in re-creating the earth. The northern narratives expressed the close bonds between the animals and the hunters, while the southern narratives dwelt on the primacy of the plant as the source of continued sustenance. Both expressed the belief that in order to live, change, transformation was needed. From death, whether of seed or animal, new life would spring forth.

Permeating all of these groups were the celebrations of the complex spiritual nature of their life which sprang from a knowledge of their environment which included beings both visible or invisible in the animal, plant, human worlds.

The hunters, the people of the plains, the people of the forests, the planters intimately participated within their landscape. The animals, the land, the plants were invested with spiritual powers. For this reason, shamanism has been described as a "nature oriented religion one for which mythology and sacred art derives from the physical environment" (Wasson 1968:21). This was art for survival, for it gave structure and coherence to the intangible. By making visible

through rock painting, song, poetry or carving, the shaman attained a certain degree of control over the awesome forces of the universe. He was the first artist (Lommel 1967).

While shamanism is intimately connected with the northern climate and the life of the hunters, the spirit of shamanism also permeates southern agricultural societies like the Tukano of the Vaupes region of Columbia (Reichel-Dolmatoff 1971), the Huichol of Mexico (Furst 1977) the Ainu of Hokkaido, Japan (Batchelor 1901) and the Mapuche (Araucanians) of Chile and Argentina (Faron 1968) linking the ancient life of hunting populations with the more recent farming way of life. The roots of shamanism speak from the remote past.

This link to the past has been depicted by the artist shaman Ramon Medina (Furst 1977:2), in his wool yarn on beeswax painting. Here the shaman is surrounded by the beliefs and sacred images of the universe of the Huichol who inhabit the Sierra Madre Occidental of western Mexico.



Figure 3. Sacred Images of Huichol Universe by Ramon Medina (Furst 1977:2)

The triangular figure at the right is Grandmother Nakawe, the old earth goddess. Between

her and the shaman is Moon, with her two guardian animals and a symbol of three representing female-male sexuality. Below the shaman is a snake representing the Mother of the Ocean Haramara or the Mothers of Terrestrial Water and Rain. To the shaman's left is the drum decorated with prayer arrows. The divine deer, as the principal spiritual helper of the shaman, appears as an antlered mask, or as itself.

Ramon Medina was a shaman. His ability to portray these sacred beliefs was acceptable to the Huichol as he was recognized as having greater creative power being a shaman, which allowed him to paint the sacred narratives of his people (Furst 1977:13).

When Carl Ray (Tall Straight Poplar) dared to paint for the first time the sacred beliefs and narratives of the Cree of Sandy Lake he endured the sorcery of the medicine men. These Cree narratives transcribed in this chapter were sacred. They were powerful myths relating how the world and humans came to be in the world. The power of the medicine men was so effective that Carl did not paint for years. After several years of work elsewhere and a period of recovery in a tuberculosis sanatorium, Carl returned to his home village, welcomed back by the elders. During his time away from the community another young artist, Norval Morrisseau, had begun to paint the sacred images (Stevens 1971: Xi-Xii).

Norval Morrisseau (Copper Thunderbird) as a boy heard the sacred stories of his tribe at his grandfather's knee. "He was the mythman, the shaman" (Morrisseau 1979:41). Norval was the first to break the sacred taboo of his people (only shamans were artists in his culture), by painting the images based on the colourful myths handed down to him by his grandfather the shaman.

While recuperating from tuberculosis at the Fort William sanitarium Norval had many powerful visions. After receiving divine permission given to him in a vision he began to paint. First he drew in the wet sand realizing the waves would wash these images away. He then began to paint permanent impressions on bark and on paper (NFB 1973;1974). This early pen and ink drawing on brown wrapping paper Legendary Scroll Motifs contains many of the themes Norval would develop later in more colorful detail in the creative act of remythologizing the environment (Campbell 1988) and re-creating the impressions of a deep underlying tradition (Dewdney 1962;1975; Coe 1986; McLuhan and Hill 1984).

Legendary Scroll Motifs (Morrisseau 1959) includes animals, birds and serpents as spirit

helpers and as themselves; Thunderbird, Sacred Turtle, Beaver, Mishipashoo (Mishipizhiw in Cree); the lines of power and communication which connect all living beings of the three worlds, the sky, the earth and the underworld; Shaman receiving powers from his animal spirit helper; the circles as symbols of life and death, male and female. This work was a visual expression of the Ojibway universe, of the sacred narratives Norval had listened to while growing up and based on his visionary narratives (Morrisseau 1979).

It also contains images reminiscent of the ancient aboriginal rock paintings in Canada (Dewdney and Kidd 1962). The rock paintings like the paintings of Morrisseau and the yarn paintings of Medina describe the narratives of the sacred landscapes of their respective worlds, containing the images both tangible (moose) and those envisioned but no less real (Mishipizhiw), all having power.

3. Sacred, Power, and Medicine

The words Sacred, Power, and Medicine denote meanings different than the words do to those of Western cultures as they are derived from a different sense of place and being in the world. While most First Nation languages have "words which are equivalent to medicine, sometimes with curative properties, the Indians' translation of medicine used in the sense of magic or supernatural, would be mysterious, inexplicable, unaccountable" (Grinnel 1935:180). In Basil Johnston's (1982:14) Ojibway Ceremonies, the deep reverence for life of all beings and the inter-connection of meanings of the three words, sacred, power, and medicine is expressed in this passage describing the collection of medicine.

The old man had gone up the hill to gather medicine at the far end of the ridge. When Ogauh finally found Cheengwun he was on his knees in the middle of his work, and because gathering medicine was much more than an act of digging roots, he did not disturb the man. Chopping leaves and pruning stalks and unearthing roots was in itself an enactment of ritual, the deepest expression of reverence for the mystery of life and the essence and curative power of the plant. During the collection, Cheengwun addressed the plants as sentient beings, petitioning them to confer their healing powers upon the sick and asking their pardon for removing them from the land and from their hold upon life.

"The sick need you. You are strong and well and have done your work. Kitchie Manitou has endowed you with an essence for your good and for the well-being of others. I have come for you, not for myself, but for the sick that they may get well. Pardon me for taking you. To you and Kitchie Manitou I offer this tobacco".

Thus Cheongwu spoke to each plant as he removed it from its place and implanted an offering of tobacco in the soil.

An understanding of the related meanings of these words is necessary in the study of the shamanic healing tradition. The concept of power among the first people of North America was related to their understanding of the relationships between the human and non-human beings. Their reverence for the mystery of life animated all beings, human, animal, plant, fish, and the earth and sky. An important distinction was made by Hallowell (1975:148) concerning this animation of beings. While Jenness (1935:21) wrote that "To the Ojibwa....All objects have life", this is a simplification of the Ojibwa belief concerning the nature of objects, plants, trees and stones. While Western belief does not allow for the possibility of stones to "manifest animate properties of any kind under any circumstances, the Ojibwa recognize, a priori, potentialities for animation". With experience and testimony of others viewing moving stones and through mythology some stones became animate.

There was a belief that all were linked within a vast living sphere. "The Great Spirit is in all things" (Curtis 1950:11). This connection was spiritual while the essence of power enabled magical things to happen.

Everything the Power of the World does is done in a circle. The sky is round, and I have heard that the earth is round like a ball, and so are all the stars. The wind, in its greatest power, whirls. Birds make their nests in circles, for theirs is the same religion as ours. The sun comes forth and goes down in a circle. The moon does the same, and both are round. Even the seasons form a great circle in their changing, and always come back to where they are. The life of a man is a circle from childhood to childhood, and so it is in everything where power moves. Our tepees were round like the nests of birds, and these were always set in a circle, the nation's hoop, a nest of many nests where the Great Spirit meant for us to hatch our children.

Black Elk (Neihardt 1961:35)

The word sacred does not mean "to set apart for the service of worship of deity, as a tree to the gods. Sacred means having power. All, "the ants, the birds, pebbles, leaves whatever are filled", by the Great Spirit with a real "unimaginable amount of force" (Lame Deer

1972:115). The Lakota believed that all life forms that comprise the universe, the stars in the sky and the grass were considered one. Everything in the natural world was circular, for roundness indicated life. It was this circle which was held to be sacred "wakan" (Walker 1980; 1917).

The sun, sky, earth, moon, a human body, all were sacred circles. In respect for this natural order, tepees were circular and pitched in the formation of a circle. "The wholeness of the circle, from beginning to end represented the wholeness and oneness of the universe" (DeMallie 1984:80). Having power means being able to use this extra force without being harmed by it. All people have this ability, to a greater or lesser degree. As related in the creation narratives, power was expressed in the ability of the Shaman, We-sa-kay-jac, or in the stories of Ixchel to transform, to create. For the people of First Nations, the ability of all creatures to share in a process of ongoing creation makes everything sacred, everything with power.

A person is an active participant in an ongoing interaction with other people, natural beings, and other forces within their environment. "Interference with the self-determination of any of the living beings may have unpleasant consequences" (Black 1977:145). Relationships among all beings of the universe must be fulfilled. For it is in this way that each individual life may also be in harmony. The Medicine Wheels of the Plains tribes (Hyemehosts 1972) or the Sacred Hoop (Black Elk 1961) point to the belief in the need of humans to be in harmony with the universe. The outstanding characteristic of the shamanistic conception of health and illness is the belief that human beings are integral parts of an ordered world (Heinze 1984-1988).

To the Ojibwa, the central goal of life is pimadaziwin, or life in its fullest sense, longevity, health, and freedom from mishap. However, this goal can not be reached without the help and cooperation of "both human and non-human persons", as well as one's own personal efforts" (Hallowell 1975:171). In spite of this kinship, however, the world is perceived as filled with peril. Illness is the result of a disharmony within the cosmic order, possibly as a result of mis-use by humans in conducting their daily life.

There is a power we call Sila, which is not to be explained in simple words. A great spirit supporting the world and the weather and all life on earth, a spirit so mighty that what he says to mankind is not through common words but by storm and snow and rain and the fury of the sea; all the forces of nature that men fear. But he has also another way; by sunlight and calm of the sea and little children innocently at play. Children hear a soft, gentle voice, almost like that of a woman. It comes to them in a mysterious way, but so gently that they are not afraid. They

only hear that some danger threatens. The children mention it when they come home and then it is the business of the shaman to take such measures as shall guard against the danger. When all is well, Sila sends no message to mankind, but withdraws into his own endless nothingness, apart. So he remains as long as men do not abuse life, but act with reverence toward their daily food.

(Inuit Shaman as told to Rasmussen 1968:385-6).

The mystic power that can so strongly affect people's destinies according to the Inuit is Sila, a word that has three meanings, weather, universe and a mixture of intelligence and understanding. Sila is used in its spiritual sense as power which can be taken possession of by men. According to the Inuit all taboos are directed towards Sila and exist to maintain a proper relationship of power. Sila can punish improper behaviour by giving bad weather or by driving away game by sickness. The shaman acts between Sila and the people and his main function is the healing of sick people (Rasmussen 1925).

4. Shaman: The Healing Guide

The ancient art of the shaman consists in healing by guiding the person to the sphere of the sacred and by allowing him or her to experience nature as a whole once again (Rothenberg 1968). Therapy emphasizes the restoration of harmony or balance within nature, in human relationships, and with the spirit world (Harner 1982; Naranjo 1973) for the natural state of existence is whole.

The shaman personalizes all the phenomena in the universe, imbuing them with human qualities. All things have emotions which can be influenced. In this way the land and all creatures are invested with spiritual powers. This turned the land where they lived into "a place of spiritual relevance" (Campbell 1988:93).

THINGS A SHAMAN SEES

Everything that is
is alive

on a steep river bank
there's a voice that speaks
I've seen the master of that voice
he bowed to me

I spoke with him
he answers all my questions

everything that is
is alive

little gray bird
little blue breast
sings in a hollow bough
she calls her spirits dances
sings her shaman songs
woodpecker on a tree

that's his drum
he's got a drumming nose
and the tree shakes
cries out like a drum
when the axe bites its side
all these things answer my call

everything that is
is alive

the lantern walks around
the walls of this house have tongue
even the bowl has its own true home
the hides asleep in their bags
were up talking all night
antlers on the graves
rise and circle the mounds
while the dead themselves get up
and go visit the living ones.

Chukchee (cited in Bogoras 1904 -1909:281:

Cloutier 1973:32)

All that exists in the revealed world has a living energy force. Medicine is the term for the personal force through which a person gains power. Every individual seeks to attain for her or his own personal advantage a number of powers, usually identified with certain helping spirits (Bear and Bear 1980) and much attention has been placed on the importance of the vision quest to

people of First Nations in acquiring the help of their spiritual guardian (Benedict 1923: Blumensohn 1933).

The gaining of power through the personal vision quest has been termed "democratized shamanism" (Lowie 1940:312). However, as Hultkrantz (1963:74-77) wrote, this quest represents a heritage derived from a much older practice of shamanism. In illustration of the beliefs and practices of the Beaver tribe, Dunne-Za of Peace River, Alberta, based on the extensive research of Robin Riddington (1978), elucidates the point that even when personal powers are attained by vision quests it is the shaman who through his powers of communication with the ancient "Dreamers" maintains the community in an organic harmony in communion with the past and distant worlds.

Ancient legends of the Beaver tribe describe their world in the beginning when the roles of the people and animals were reversed. Gigantic progenitors of the present species roamed the woodlands hunting and eating people. The culture hero, Saya, overcame these giants by gaining the knowledge of the medicine songs and turning the power of these songs against the giants.

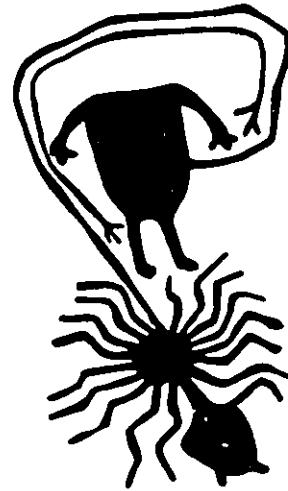
Every Beaver child goes on a vision quest in a re-enactment of the activities of Saya as told in the legends. The medicine song acquired in the vision, belonging to a certain animal, confers on the child "a wisdom that is in accord with all of nature" (op cit 3). This is a personal song having healing power for the owner.

It is the shaman who seeks "Dreamer songs" on which the tribal ceremonies are based. Like Saya, the shaman travels to and returns from distant lands. He flies along the same paths on which shaman dreamers of ancient times sent their dreams to the earth. The power of these dream songs, as mediated through the shaman, joins the community in harmony as they participate by drumming and dancing. These ancient sacred narratives are lived, lands of mythological symbols are experienced, and the people connect their past landscapes with their present existence. The shaman maintains communication with the distant places and gains power for keeping the community in harmony with their greater world.

In ancient times those who had the greatest power acquired as a result of direct, intense, personal experience were the shamans (Park 1938). This is the person who absorbs, experiences, and has communion with the purveyors of power.

Figure 4. Radiant Spirit Being

This drawing (after Wellman 1979; Dewdney and Kidd 1962:157) is derived from a rock painting in Menomini Territory, Manististique, Michigan. A radiant spirit being emanating much energy is connected with a headless figure by a power line going from the being's fontanel to the navel of the human. It may be a shaman receiving a direct transmission of power from his spirit helper.



"You doctor when you know you have the power" (Lame Deer, Erdoes 1980:159). Many shamans, particularly from North America, associate this power with their ally and guardian of the forces of nature, the serpent (Halifax 1982).

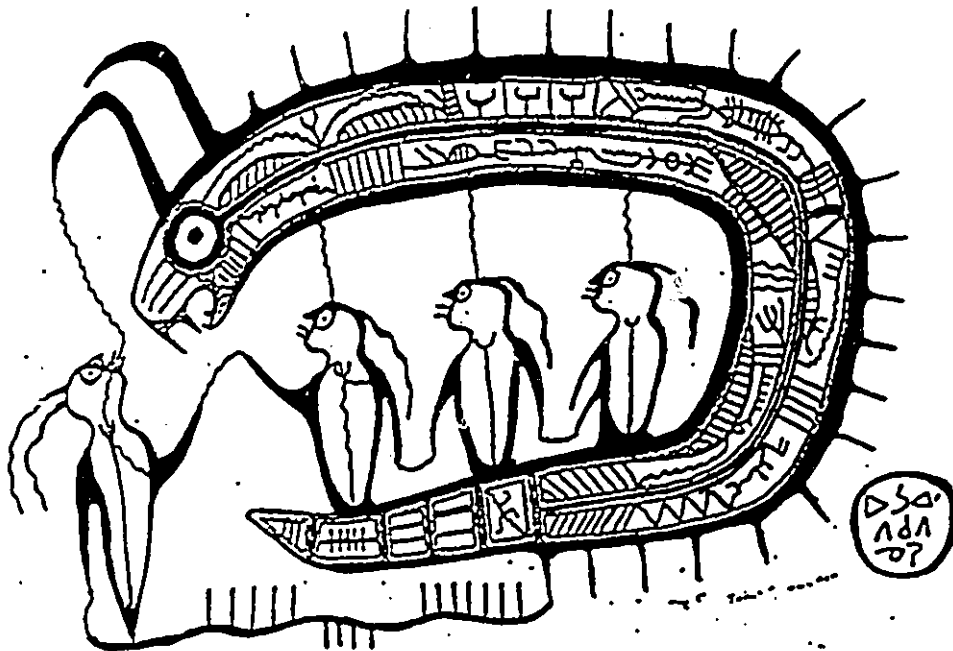


Figure 5. Medicine Men Receiving Power From the Sacred Serpent
Norval Morisseau 1979:76

Ania Teillard (1951:56) has described the serpent as "An animal endowed with magnetic force. Because it sheds its skin, it symbolizes resurrection. Because of its sinuous movement, it signifies strength. Because of its viciousness, it represents the evil side of nature". Bear medicine was also considered to be very powerful.

Figure 6 is drawn from a granite rock painting in Medicine Rapids Saskatchewan (Grant 1980) showing the thunderbird above the bear shaman and his helper.

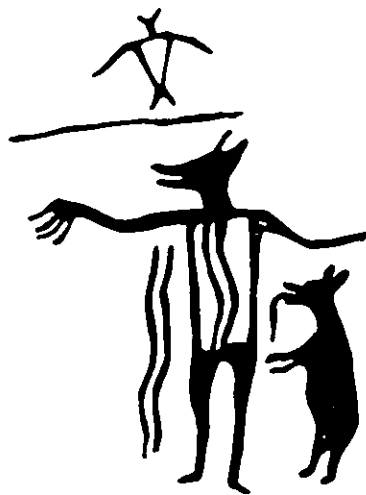


Figure 6. Thunderbird, Bear Shaman, and his Helper: Rock Painting Medicine Rapids, Saskatchewan

Kurath (1967:66-67) wrote, in describing Iroquois dance and music, that the "humorous as well as the formidable aspects of the bear" were imitated when "the Iroquois pair up and kick like dancing bears. But they also make a communion of offering when they strip the bushes and partake of nuts and berry juice". This dance, reinforcing the close relationship between the bear and the human and demonstrating the intimate knowledge of the animal, was performed to address the Sacred Spirit who brings on and cures illness. Both the thunderbird and the bear were recognized as powerful beings capable of powerful medicine directed through the shaman (Hofsnide 1955; 1966; Jenness 1977:302-3).

The shaman could be protected against evil spirits by donning the hide of a bear so that the sacred powers of the animal would surround him. In this oil painting by George Catlin (1832)

a Blackfeet shaman wears a bearskin mask adorned with the skins of many animals; including snakes, frogs and bats and the spirits of such animals being the source of the shaman's power to cure (Hassrick 1977:181). Catlin described the dress as having "the odds and ends and fag ends and tails and tips of almost everything that swims, flies or runs in this part of the world".



Figure 7. Blackfeet Shaman: Painting by George Catlin 1832

The shaman is able to communicate a special sustaining healing force. By tapping into the power of the universe, the shaman can change form, transcend time and space, and attempt to influence the forces of nature and thus "make disease yield to his personal efforts" (Greenlee 1944:318), for the chief function of the shaman is healing (Bouteiller 1950). The aim of the

healing therapy is to re-integrate the ill person back into the cosmic order.

The ancient narratives that link people to their social group affirm that they are a part of a larger being, the landscape, the world in which they move. The main theme in ritual is the linking of the individual to a much larger creation than that of their own physical body. By invoking the myths of the culture and by using the appropriate rituals the shaman helps the person to understand their illness in relation to the wider context (Levi-Strauss 1967).

Every person can obtain a spirit or power of some sort that makes them capable of visions and increases their reserves of the sacred but only the shaman by virtue of his or her relations with the spirits is able to enter deeply into the other worlds (Eliade 1970;1961 : Harner 1982). This entails a journey into the other worlds of existence, the shamanic universe, which included the Underworld, Earth, and Heavens.

Shamans related to the people of their communities by dance, poetry, song, and art the nature of the cosmic geographies that have been revealed to them while on soul journeys. For while the idea of worshipping Gods implies beings essentially superior to humanity, the shaman is capable of subduing everything with magical powers. Shamanism presupposes an elemental force which can be drawn upon, thus uniting the forces of nature, beasts, men, and divinities. The world tree represents one main path of symbolic access to other realms.

Then I was standing on the highest mountain of them all, and around about me was the whole hoop of the world. And while I stood there I saw more than I can tell and I understood more than I saw; for I was seeing in a sacred manner the shapes of all things in the spirit, and the shapes of all shapes as they must live together like one being. And I saw that the sacred hoop of my people was one of many hoops that made one circle, wide as daylight and as starlight, and in the center grew one mighty flowering tree to shelter all the children of one mother and father, and I saw that it was holy.

Black Elk 1872 (Neihardt 1961:53).

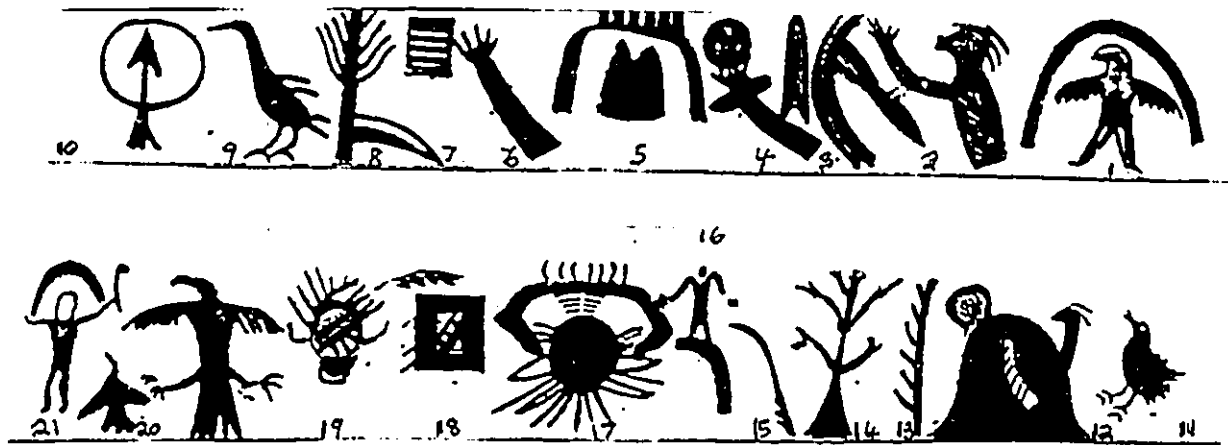
Black Elk said that the mountain he was standing on was Harney Peak in the Black Hills. He adds, however, "But anywhere is the center of the world". Mount Harney was their geographical centre of the universe. However, as the symbolic centre can be anywhere this belief gives rise to a universe in which every place, every tree and human is considered to be the center of the world.

The universe is sacred from all aspects, uniting and relating everything. The "Mighty Flowering Tree" is at "the True Centre" of the circle, the circle being the symbol of the Universe and signifying "an entire people as a whole" (Hyemeyohosts 1973:4,14). This Tree of Life intersects the three realms of existence, the Underworld, the Middle World, the belly of the earth and the Heavenly realm representing an enduring, ancient image of the cosmos (Cook 1974; Eliade 1958) and symbol of shamanism.

Because the tree represents the centre of the world it is used as a means of access for shamans entering other worlds of existence. The Buryat and Altai on Central Asia carve nine notches into the lower end of the trunk of a birch tree, where there are no branches. The shaman can use these as steps as he climbs into the heavens (Freidrich and Buddruss 1955:213 as related in Kalweit 1988:211).

Frank Speck (1915:59-60) described the Algonquian belief in the "great tree" located at the centre of axis of the universe. This great tree reached right into the "upper world" protruding through a hole in the sky marked by the Pleiades (a circle of seven stars). The shamans by climbing this tree were able to "reach very far up into the sky".

The two Chippewan pictographs (Figure 8) below record Midewiwin songs and the initiation rites of a candidate for admission into the society, drawn on birch bark as images depicting these sacred ceremonies and songs. In both of these pictographs the image of the sacred tree is prominent as are symbolisms of flight as shown in the small high-flying hawk. The importance of the sweat lodge, medicine root, and use of the drum to arouse within the shaman a state of ecstasy in his communion with other realms is evident.



1. Medicine lodge with winged figure of Great Spirit come to instruct. 2. Candidate for admission with pouch attached to arm 3. Pause, indicating feast preparation 4. Arm holding dish, hand of master of ceremony 5. Sweat lodge 6. Arm of shaman 7. Symbol of gift 8. Sacred tree with high flying hawk 12. The sky, Great Spirit above it, a manito's arm raised in supplication 13. Pause 14. Sacred or magic tree 15. Drumstick 16. Half of the sky with a man walking on it, symbol of midday 17. The Great Spirit filling all space with beams 18. Drum 19. Tambourine with feather 20. Crow 21. A shaman holding in one hand a drumstick, in the other the clouds of the celestial hemisphere.



1. A Wabeno's hand 2. Sacred tree or plant 3. A Wabeno's dog 4. Sick man vomiting blood 5. Pipe representing bad medicine 6. A worm that eats decaying wood 7. A Wabeno spirit called for aid 8. A hunter with Wabeno powers 9. The Spirit filling sky with presence 10. Sky with clouds 11. Fabulous monster chasing the clouds 12. Horned wolf 13. The war eagle 14. Bow and arrow, magically potent 15. A Mide initiate, or shaman holding the sky 16. The sun 17. Bow and arrows shooting power 18. Man with drum, in ecstasy.

Figure 8. Chippewa Pictographs of Midewiwin Songs and Initiation Rites
(Schoolcraft 1841, Part 1, Plate L1 Gray 1964:Volume K).

The following illustration, (Figure 9) derived from a birch-bark scroll, (Hoffman 1883:Vol 11:139, Figure 6:1891) depicts the initiation ceremonies of the Ojibwa of the Great Lakes into the fourth degree of the Midewiwin. Here "Mide posts" replace the World Tree, with the birds perched on the posts representing the desire to be able to fly to heavenly realms. Mircea Eliade has extensively documented this symbolism of flight: "The breaking of the plane effected by flight signifies an act of transcendence". "For one can only interpret the myths, rites, and legends by a longing to see the human body behaving like a spirit to transmute the corporeal modality of man into a spiritual modality" (Eliade 1961:106).

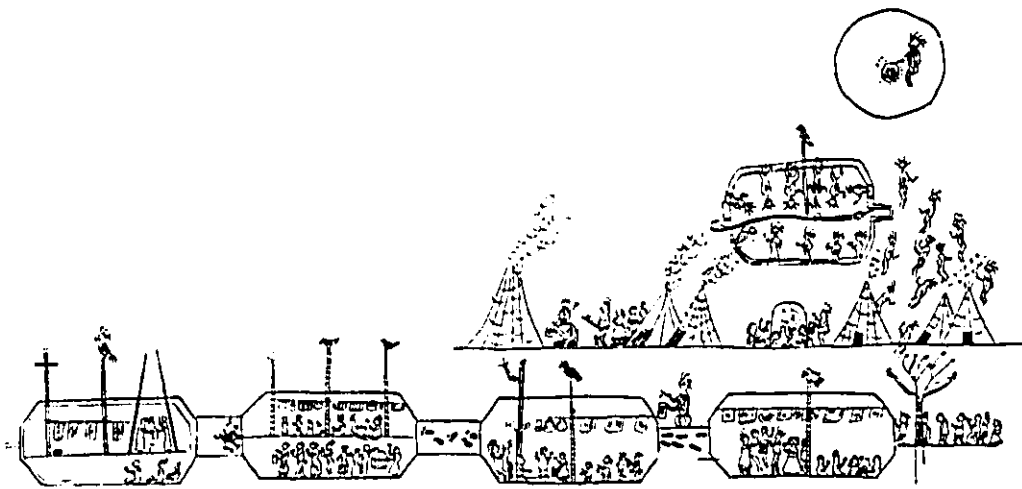


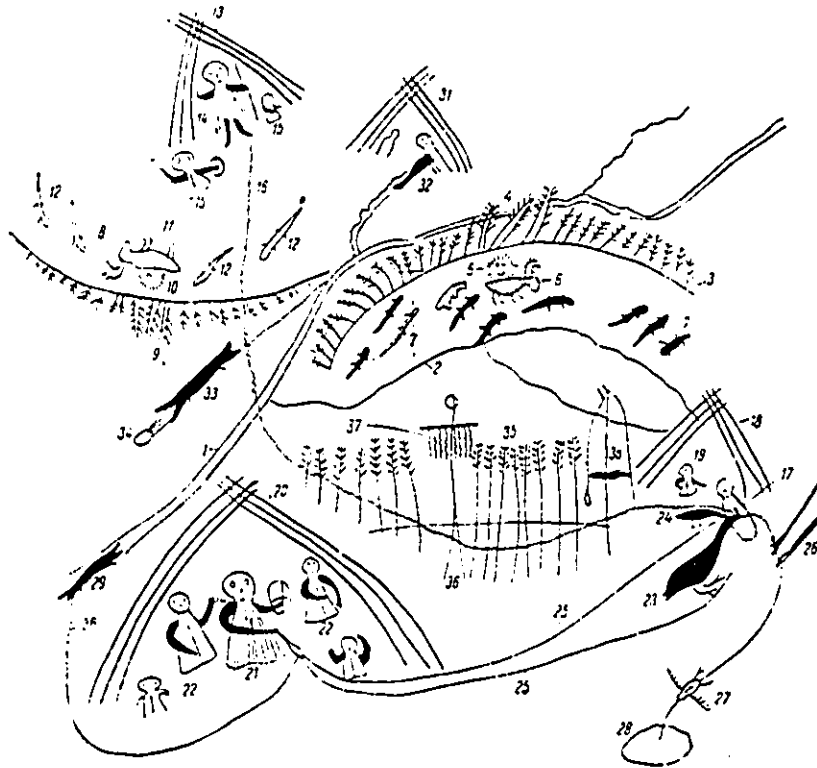
Figure 9. Birchbark Illustration Ojibwa Initiation Ceremonies Into Fourth Degree Midewiwin

Reading the pictograph from upper right to left are the stages of initiation followed by the initiate. On the sacred post in the upper right enclosure "Midewigan" is perched the Owl, "Ko-ko-ko-o. Within each enclosure are sacred posts with the Owl or other beings.

The sacred birch bark scrolls from which these pictographs were recorded are the repository of knowledge of the Anishnabe containing the history, philosophy, and medical information of these people (Hoffman 1891:1883; Dewdney 1975). The scrolls were devices for recording the rites and songs of the Midewiwin (Great Medicine Society). These sacred scrolls were used to instruct candidates in "the history of their people, the creation of the world, how disease entered the world, and the sacred rites and medicinal herbs that promote healing" (Southcott 1984:35). They demonstrate as such the particular sense of place and being in the world and the derived images of health, illness, and care.

The shaman, following the paths to other worlds, or sending his spirits, is embarked on a voyage of exploration, one in which the human spirit travels out of the worldly time and place. In this Siberian drawing one can follow the path of disease as sent by the shaman of the Nyurumnal clan to the Momol clan. The disease, at first in the form of a destructive spirit enters through the blockade of the watchmen and then, changing into "a wood-boring worm, enters the entrails of a Momol clansman and begins to destroy him" (Anisimov 1963:106). The other part of this drawing depicts the healing ceremony of the Momol shaman with his spirit helpers.

The ancient place of First Nations was experienced as one. The creation narratives and the healing ceremonies told that each being was a part of a living whole and a participant in recreating the whole. It is evident from these examples that there was no strict division between the natural and what would be called supernatural. The natural state of existence was whole. The healing ceremonies emphasized the restoration of wholeness as the illness was a result of being un-connected, separated from the harmony of the world. The therapeutic goal was to re-integrate the person back into the cosmic realm. The shaman as guide, promoted healing by maintaining the connections within the realm of existence drawing upon the power of the natural forces.



1.Podkamennaya Tunguska River 2.Its tributaries 3.Lands of the Momol Clan 4.Sacred Clan Tree where the religious ceremonies are held 5.Spirit of the Clan Territory; the Mistress of the Clan Land 6. Patron Spirit of the Clan 7.Clan Marylya (stockade fence) built by shamanistic spirit-watchmen 8.Lands of the Nyurumnal Clan 9. The Place of their Clan Cult 10. Patron Spirit of the Nyurumnal Clan 11. Their Patron Spirit 12.Marylya of the Nyurumnal Clan 13. The Nyurumnal shaman's tent 14. The Nyurumnal shaman 15.His assistants 16. Track of the shamanistic spirit sent by the Nyurumnal shaman to the Momol clan in order to destroy the Momols 17. Penetrating unnoticed through the marylya of the Momol Clan the spirit changes into a wood-boring worm and enters the entrails of one member of the Momol and begins to destroy his corporeal (body) soul 18.Tent of the sick member of the Momol Clan 19. His wife 20.Tent of the Momol shaman 21. Momol shaman begins to shamanize to find out the cause of his clansman's disease; his spirits tell him and the clansmen what has happened 22. Clansmen who attended shamanistic performance 23. Shamanistic spirit, a goose 24. Shamanistic spirit, a snipe; these spirits are sent by the shaman to the sick man with orders to expel the disease-spirit; the goose and the snipe poke their beaks into the sick man's entrails and try to catch the disease-spirit 25.Track of the shamanistic spirits 26. Disease-spirit jumps out of the patient and tries to escape; the shaman spirit helpers, the splintered pole and knife catch the disease-spirit; the splintered pole clutches the spirit, the knife stands guard 27.Momol shaman orders his spirit owl to swallow the disease-spirit and carry it to the abyss of the lower world, to release it through the anal opening. 28. entrance to lower world 29. Momol sends spirit, two-headed pike to revenge Nyurumnal clan 30. track of two-headed pike 31. tent of clan member 32.Pike tears the corporeal soul out of the sick person 33.pike spirit takes the soul away 34. the soul 35. Momol shaman builds a fence out of larch-spirits at the place the alien spirit entered 36. He puts watchmen over the track of the alien spirit 37.Skins of animals hang 38. Reindeer skin

Figure 10. Siberian Depiction of the Path of Disease as Sent by Shaman of Nyurumnal Clan to Momol Clan: Healing Ceremony of Momol Shaman and Spirit Helpers

The following chapter pursues the study of health practices and beliefs of the people of the First Nations of Canada, by exploring the early documents of missionaries and early visitors to Canada. This reveals that the tribes had a detailed knowledge of anatomy, physiology, and of effective means of treating illnesses. This is elaborated by the recognition of the wide use of plants, herbs, roots, barks. The significance of the spiritual meaning of place is also highlighted by the First Nations groups approaches to healing.

CHAPTER 5

CANADIAN HEALTH PRE-EUROPEAN

Turtle Island which had been inhabited for thousands of years by nomadic and semi-permanent groups of people, the First Nations, would be ⁴discovered in the fifteenth century by Christopher Columbus as the fabled and much documented land the Indies. The Catholic Sovereigns, Don Ferdinand and Dona Isabella of Spain granted to Admiral Columbus, the privilege of discovering "certain islands and mainland in the said Ocean Sea and in the said regions of the Indies" signed in the city of Granada on the 30th day of April in the year 1492 (Keen 1978:105).

Columbus believed he was capable of discovering the Indies for three principle reasons as elucidated in The Life of the Admiral Christopher Columbus by His Son Ferdinand (Fernando Colon 1488-1539:15-18): natural reasons, the authority of writers, and the testimony of sailors. It is from these reasons that we are able to approach the geographical sense of the world as it was viewed at this period. It is from actions based on this knowledge and beliefs that will lead to European contact with other worlds, the Indies, other peoples, Indians and other developed senses of place.

Since all the water and land in the world formed a sphere, Columbus knew it would be possible to go around the world from east to west. A large part of this sphere had already been navigated, so there remained to be discovered only a space extending from the eastern end of India which was well documented in the writings of Ptolemy (1479) Geography.

Support for a sea route to India shorter than one by land was found in the authority of Strabo in his book XV of Geography, in which he stated that no armies ever reached the eastern bounds of India. The land was thought to be so great in size that it would be placed closer to Spain on the West. Columbus would also feel justified in giving the name "Indies" to the land discovered

⁴ In his work The Invention of America, O'Gorman (1972:9) explains that the word "discovered" implies that the thing or object found whether it be a planet or land, was already known to exist for the founder.

based on the further authority of many learned men who stated that one could sail westward from Africa and Spain to the eastern end of India, as there was no great sea in between. Aristotle affirmed this belief in the conclusion of his second book On the Heavens by observing that from the Indies to Cadiz is but a few days sailing.

Columbus might have sailed from the main Spanish seaport, Cadiz, but it was crowded on that day for this was also the principal port for the Jews who must leave Spain or risk execution if they did not renounce their faith and embrace Christianity August 2, 1492 was the deadline for this expulsion of Jews from Spain. In his own journal Columbus recorded that his trip was ordered only after the Spanish realm was emptied of Jews. The Catholic Sovereigns now were sending Columbus to India on another great Catholic Mission being not only the discovery of the Indies but the converting of souls found to Catholicism.

Their conversion to our Holy Faith and ordained that I should not go by land (the usual way) to the Orient but by the route of the Occident by which no one to this day knows for sure that anyone has gone.

(Columbus as quoted in Boorstein 1985:232)

Columbus, outfitted with three caravels, was prepared to discover the Indies. He found what was expected, a part of Asia, an island which he believed to be one of a group in the vicinity of Japan. He died believing that while he had found some islands and peninsulas, they all really belonged to the east coast of Asia. After these voyages of confirmation, the Spanish government would name irrevocably the new people encountered, "Indians", convene a Council of the Indies, and formulate laws of the Indies (Morison 1971-1974, 2 vols.; Keen 1959).

At the time of Columbus' explorations, the view of the world was based on the authoritative geographical writings of Ptolemy (Portinaro and Knirsch 1987:10). All habitable parts of the earth were thought to be parts of one single land mass or Island Earth, including Europe, Asia and Africa. This land was surrounded by a lesser amount of water. Therefore, it was believed impossible to have a land mass (America) separated from the Earth Island by oceans on both sides. This formation suggested the existence of more water than was thought possible at the time. With the discoveries of Columbus, this view of the world was not altered rather the information was made to fit existing geographical images as described by Ptolemy.

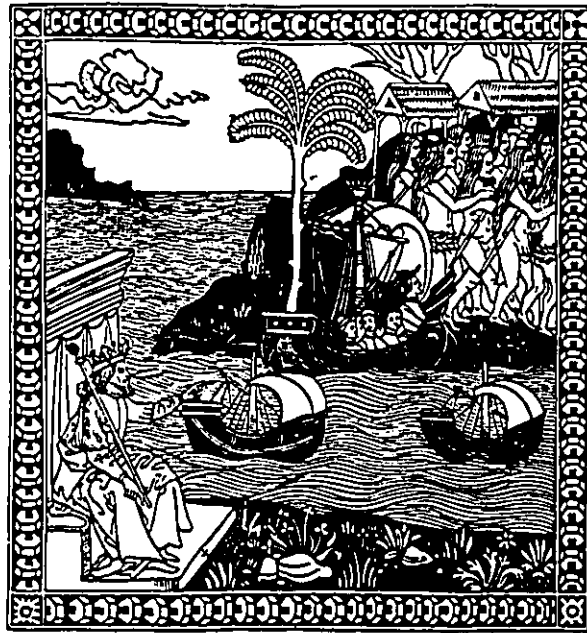


Figure 11. Woodcut from Christopher Columbus' Letter 1493, published in Barcelona. This depicts Columbus watching Indians fleeing from his ship while the King of Spain observes from the other side of the ocean (Crone 1969:50).

While there was public curiosity and interest aroused in reading the Columbus Letter of March 14 th, 1493 (Columbus 1963) describing his voyages to the lands of the Indies, what became much more exciting was the possibility of the existence of a new world, the "fourth part of the world", as revealed by Amerigo Vespucci in his explorations a decade after Columbus (Pohl 1966; Thacher 1896: Arciniegas 1955: Waldseemuller 1507). Waldseemuller published in France (1507) a small book, Cosmographiae Introductio in which he described the earth divisions, the climata, the winds, principles of cosmography, and also an account of the new "fourth part of the world".

Now these parts of the earth (Europe, Africa, Asia) have been more extensively explored and a fourth part has been discovered by Amerigo Vespucci. Inasmuch as both Europe and Asia received their names from women, I see no reason why any one should justly object to calling this part Amerige (from Greek "ge" meaning "land of"), i.e., the land of Amerigo, or America, after Amerigo, its discover a man of great ability.
(Waldseemuller 1507,1966).

Waldseemuller printed, in this book a large map made from wood blocks. At the top of the

map were two portraits, Claudius Ptolmey gazing east and Amerigo Vesspucci gazing west. America was mentioned in what would now be South America. On this map, the two Americas were connected with an ocean, new to the contemporary maps, separating Asia from the new world. Waldseemuller had used the word America, only to refer to the southern continent, but Gerardus Mercator in his map, published in 1538 would show both a North America, Americal pars septentrionalis and a South America, Americal pars medidionalis (Portinaro 1987:42).

The boundaries of the known world were being expanded and described by explorers, geographers, and cartographers. From this New World and the Indies would come descriptions of exotic plants and animals. As this map shows, often the inhabitants of First Nations were drawn as exotic curios, blending in with the flora and fauna.



Figure 12. The Arrival of the French in Florida (engraving from Theodore de Bry, America, Frankfurt 1590 British Museum, London) in Toynbee 1972:435).

The coastal explorations of the Cabots, the Corte Reales and Verrazzano prepared the way for Jacques Cartier who sailed up the St. Lawrence River looking for a route to the riches of China. Instead he found a passage into the heart of Canada. It is from the early descriptions of explorers that we gain the first written accounts of how the sense of place of First Nations was

expressed in relation to their health beliefs and practices through the knowledge and use of plants, leaves, roots, bark from the surrounding landscape. As Moerman (1986:1X) wrote concerning the First Nation knowledge of medicinal plants and herbs: "Native people provided the fountain of human knowledge from which we are privileged to drink".

The Healing Tree

In 1535 Jacques Cartier would encounter the inhabitants along the St. Lawrence River. Writing in his journal, Cartier would express his belief that these "simple" folk regarded him as a superior being and brought their sick to him to be cured. Cartier did what he could to soothe their minds and recited verses and scriptures, made the sign of the cross upon the sick and distributed chaplets and images of the Agnus Dei amongst them. He impressed the people with the belief that these objects had great healing value. "The objects", he says "delighted" the "natives beyond measure" (Quoted in British Medical Association 1906:31).

However, in spite of this reputation of being a healer, when his own crew members became severely stricken with a mysterious disease Cartier had no response which would aid them in their misery. In his narration of his Bref Recit, 1535-1536, Cartier gave a detailed description of this mysterious pestilence which was causing death to his sailors as they wintered in Quebec. This is followed by the first recorded account of an autopsy performed in North America and the earliest mention made of the application of First Nation remedies to severe illness.

Disease

In the months of December we understoode that the plague or pestilence was come to the people of Stadagona in such sort, that before we knew of it according to their confession there were dead about fifty, whereupon we forbade them neyther to come near us or on foote nor about our ships. And albeit, we had driven them from us the said unknown sickness beganne to spread itself amongst us after the strangest sort that ever was eyther heard of or seen, insomuch as some did lose their strength and could not stand on their feete, then did their legs swell, their sinnows shrink as black as any cole. To others all their skinnnes were spotted with spottes of bloode of a purple coloure, then did it ascende up alofte to their ankles, thighs, shoulders, armes and necke; their mouth became stincking, theyre gummies so rotten that all the flesh did fall off, even to the rootes of their teeth which did also almost all fall out. With such infection did this sicknesse spread itselfe in our three shippes, that about the middle of February of One Hundred and Tenne persons that we were, not tenne whole so that one coulde

not helpe the other, a most horrible and pitifull case.

Autopsy

The daye Phillipe Rougement, borne in Ambrosia, died, being two and twenty years olde, because the sicknesse was to us unknown. Our Capitayne caused him to be ripped to see if by any means possible we might know what it was and to seeke if by any means possible we might know what it was and to seeke means to save and preserve the rest of the Companie. He was found to have his heart white but rotten and more than a pottle of red water about it. His liver was indifferente faire, but his lungs black and mortified. His blood was altogether shrunk aboute his heart; his milt towards the back was somewhat perished and rough as if it had been rubbed against a stone. Moreover because one of his thighes was very black without, it was opened, but within was whole and sound, that done as well as we could he was buried.

Cure

In such sorte did the sickness continue increase thatthere were not above three sounde men in the shippe. We were so oppressed and greved with that sickness that we had lost all hope ever to see France againe, if God in his infinite mercie had not revealed a singular and excellent remedy unto us. Our Capitayne considering oure estate one daye wen forthe walking, when he saw a troupe of those country men coming from Stadgona, among which was Domagaia who passing tenne or twelve days before had been very sick with that disease. Oure Capitayne seeing him whole and sounde was thereat marvellous glad. He asked Domagaia how he had done to heale hymselfe. He answered that he had taken the juice and sappe of the leaves of a certain tree and therefore had healed hymselfe. Our Capitayne asked him if any were to be had thereabout desiring him to show it. Domagaia straight sent two women to fetch some of it whyche brought tenne or twelve branches of it and therewithal showed us the waye how to use it thus: to take the bark and leaves of the said tree and boile it together, then to drink of the saide decoction one daye and the other not and the dregges of it to be put upon his legges that is sicke. The tree in their language is called Ameda. Our Capitayne presently caused some of that drink to be made, but there was none durst taste it, except one or two who ventured the drinking of it only to taste and prove it, the others seeing that did the like and presently recovered their health and were delivered of that sicknesse soever.

After this medicine was founde and proved to be true there was much strife about it that they were readie to kill one another, that a tree as bigge as anye oake in France was spoyled and lapped

bare.

(Cartier 1535-1536 in B.M.A. Historic Notes 1906:17-18).

The remedy was dramatically effective and after five or six days of drinking frequent copious amounts of boiled leaves and bark and the application of poultices made with the residue of wet leaves and bark, Cartier wrote, "the medicine produced an effect that all the doctors of Louvain and Montpellier could not have brought about in a year if they had all the drug shops of Alexandria at their disposal" (Simpson 1980:12).

The source of this powerful medicine has been attributed to the white spruce or *Epinette Blanche* (Harris 1916), to either the white pine or hemlock (Fenton 1941), the eastern cedar or *Arbor Vitae*, the tree of life, *Thuja occidentalis*, the healing tree (Hosie 1973:98; Rousseau 1954).

While Cartier raved about the powerful remedy derived from the tree, it appears that he did not pass on the information to his colleague and rival Roberval. For in 1542, while at Cap Rouge on the St. Lawrence, Roberval lost 50 of his sailors who died of scurvy, during the winter (Simpson 1980:131). Lescarbot who came to Port Royal (1606) wrote about scurvy claiming many of Champlains sailors during the long winter of 1604-05 and wrote that "the doctors of physic in France were consulted about his illness found it very new and unknown, so that our apothecary was not charged with any order for the cure thereof....notwithstanding it seemeth that Hippocrates hath had knowledge of it" (Lescarbot 1606:1928).

Champlain reporting in 1609 on the "maladies de la terre" translated into "the scurvy" (Biggar 1925, Vol.2:59). Ten out of the eighteen men died from this disease which Cartier described as having two causes; "the overeating of salt food which" heats the "blood and corrupts the inward parts" and secondly, the winter "checks the natural heat and causes greater corruption of the blood. Also from the earth, when it is opened, come forth vapours enclosed therein and these infect the air". Champlain confirmed this causation based on observation of other settlements.

Once the land was cleared, Champlain believed that the vapours were released into the air and the people, both those "who live in a nice way" and those "who are wretched", became ill (Ibid 59-61). The earth, disturbed of its natural covering, was the cause of disease vapours normally held within. By the nineteenth century the belief in "bad air", arising as "miasma" from

swamps as the cause of malaria would be strong (Frenkel and Western 1988).

For two centuries, scurvy remained the deadly scourge of all seafaring men. However, James Lind, a naval surgeon of Edinburgh (1716-94) took note of Cartier's Journal. After experiments conducted with people having scurvy, Lind recommended that taking lemon juice as an antiscorbutic would prevent the disease (Vogel 1970:86). Ethnic arrogance prevented listening to the first inhabitants of North America and learning from them the different healing properties of various plants.

There is no further reference made to First Nation health beliefs and practices until the 17th century. This is a significant period, for during this time, from observations made by the first European contacts, the Recollect Missionaries (1615), the Jesuits (1625), early explorers Samuel de Champlain (1604-1635) and through oral traditions of the past, legends and tales, we can gain insight into pre-European contact First Nations.

In the early chase for souls, then furs, the French would learn the Algonkian and Iroquoian languages. The missionaries to their New World would document, for the first time, the voices of the people of the First Nations. The French scientists would relay to the European community the descriptions of plants and their medicinal properties in their hunt for new specimens of flora and fauna. This activity will be followed in the next chapter.

The encounters with the native people puzzled the French. Missionaries, travellers, and explorers often made conflicting accounts. Lescarbot and Champlain, for example, visited the same area at the same time yet discovered different people. In Acadie, the Parisian barrister Lescarbot found a noble savage superior to civilized man. While Champlain described poor rude people of little interest (Chinard 1911:111). An author's social background his personality, the specific motivations leading him to record his observations and the villages visited, were factors affecting the interpretations and descriptions made by the traveller. However, original written descriptions of the health of native Canadians are generally restricted to these stories and impressions recorded by early European travellers to North America.

1. First Nation Health Enhancement

European travellers to North America were unanimous about the good health of the people they encountered. Baron de Lahontan, the French writer who lived for seven years in New France

confirmed the existence of the noble savage stating that while the French were enslaved the Amerindians were free (Chinard 1911:177) and in Volume II (1905, Vol.II:465) of his monumental work, Lahontan declared:

The savages are a robust and vigorous sort of people of a sanguine temperament, and admirable complexion,unacquainted with the great many diseases that afflict the Europeans, such as the gout, gravel and dropsy etc. Their health is firm, notwithstanding that they use no precaution to preserve it.

While Lahontan claimed the "savages" used no precaution to preserve health, several practices described would obviously promote and sustain healthy bodies: drinking only non-alcoholic beverages, exercise, protection of skin, bathing, sweating, general diet and knowledge of medicinal herbs and roots and care of wounds.

In comparison with the French medical knowledge of the seventeenth century the health practices of the First Nations based on the intimate knowledge of being in place, an expression of both a physical and spiritual reality which had developed over years of experience, was well advanced (Speiser, Andrae and Krickberg 1940:291-318).

Gabriel Sagard (1636) believed that the state of good health of the Hurons was partially a result of the "excellent nourishment" consisting of maize, fish, and water and no alcohol. "Our savages indeed dance and practise sobriety" but they had other means of health maintenance, the use of "hot-rooms and sweats". He also attributed the harmony existing among the Hurons in their social relationships as conducive to serenity as compared with the tense way of life in the French society which created disease (Wrong 1939:105-6;192).

That the people were accustomed to much exercise was attributed to their practices of child rearing which strengthened the leg muscles, as described by an early observer of New England native customs(Williams 1643:71).

They are generally quick on foot brought up from the breasts to running: their legs being also from the womb stretched and bound up in a strange way on their cradle backward, as also annointed; I have known many of them to between four courses on hundred miles in a Summer day and back within the two days.

To protect from insect bites and to make the skin "very serviceable to old age" Peter Kalm, in his travels through Quebec (1749:1972;365) related how the "Indians prepare an oil from

bear's grease, with which in summer they daub their face, hands and all naked parts of their body, to secure them from the bite of gnats. With this oil they likewise frequently smear the body, when they are excessively cold, tired with labour, hurt, and in other cases. They believe it softens the skin and makes the body pliant".

Shes-Ka-Ne-Shu, or bathing in the river,"constitutes one of their greatest pleasures....and contributes very much to the strength of the body" (Hunter 1823:403). This was an activity that the French could not understand, believing it to be an immodest and unhealthy activity (Jaenen 1976:104). This fact was a point of consternation for nurses well into the nineteenth century in dealing with patients in the Montreal General Hospital (1892:542). "First you must persuade your patient that such a method of cleansing is necessary. There are some, however, that no amount of cajoling will so much as induce them to wet the smallest portion of their precious bodies. They say they never have taken a bath which is evident and that they never intend to".

The seventeenth century French medical practice of bleeding "as a panacea" required the barber-surgeon to know only two things, "how to sharpen a knife and the proper location for the incision into one of the great veins" (Abbott 1931:18). This strong practice was frowned upon by the First Nations and when a woman converted to Catholicism sought French medical advice for her ill son her relatives pleaded with her to use remedies "which all the tribe had always used before the coming of those cursed Europeans" (Du Creux in Conacher 1951.Vol.11:651).

The Recollect missionary Le Clercq (1675-1691) wrote that his food was that "of the savages, namely squashes, beans and cornmeal, to which we added as seasoning marjoram, purslane, a certain species of balm and small wild onions. Our drink is water from the brook" (Harvard 1896:42). Kiotseaton, a Mohawk chief and orator would declare at Trois-Rivieres on July 12, 1645, in his address to the French Governor Huault de Montmagny:

Our country is well stocked with fish, with venison and with game; it is everywhere full of deer, of Elk of beaver. Give up those stinking hogs that run about among your houses, that eat nothing but filth; and come and eat good meat with us.

(Jesuit Relations, Thwaites XXV11; 1642-5:261)

The diet and activity related with hunting and gathering groups contributed to the people "being possessed of lusty and healthful bodies" (Wood 1764:74) and to the development of strong teeth

with a low incidence of dental caries as evidenced in archeological investigations of ancient village sites and burial mounds in Ontario (Anderson 1968:34).

Around the turn of the sixteenth century, French essayist Michel Montaigne (1902, Vol.1:192) declared:

As my testimonies have told me, it is very rare to see a sickly body amongst them; they have further assured me, they never saw a any man there either shaking with palsie, toothless, with eyes drooping or crooked and stooping with age.

The healthy condition noted by early observers might be explained in terms that those in very poor health were either left behind or that mercy killing was practiced. Vogel (1970:149), however, stated after an exhaustive review of the literature that the evidence was insufficient to warrant the conclusion that "mercy killing or suicide fully explain the healthy condition of the Indians as it is described in early years". Vogel claims that it is more likely that environmental factors operating over the centuries weeded out weaker types in the process of natural selection.

While it is difficult to determine life expectancy of the early inhabitants of First Nations, some studies have indicated that longevity averaged 37 to 39 years, about the same as that of Western European countries during the same era (Church and Kenyon 1960:249). Based on the two Iroquois ossuaries of Tabor Hill, York County, Ontario, which are approximately seven hundred years old, the mean annual death rate for the native population was estimated to be 2.46 similar to that of France in 1866-7 (Church and Kenyon 1960:249).

Many reports told of the exceptional number of old people in native communities. Kalm (1749:647) quoted newspaper articles attesting to Indians who were well over one hundred years at the time of their death. "Primitive man" of Canada in the time of Champlain was said to live a very long time (Harris 1913:35). Hrdlicka (1908) wrote that the proportion of people over 80 years old is much larger for the native population than that of the native white American. "The relative excess of aged persons (80 years and over) among the Indians can signify only that the infirmities and diseases known ordinarily as those of old age are less grave among them, a conclusion in harmony with general observation" (Hrdlicka 1908:41). That diseases were not as gravely suffered by the Indians is another indication of their relative state of good health.

As Nicolas Denys (Ganong 1636:241-242) noted, in his observations of the tribes of the Atlantic coast at the beginning of the seventeenth century, "They were not subject to disease....

They had knowledge of herbs, of which they made use and straightway grew well". The importance and the benefits of the sweat lodge to tribes of Canada have been well documented (Williams 1643:189; Young 1978; Vogel 1970:43; Symington 1969, Chap.10; Redsky 1972:63; Ritzenhaller 1963:326).

This rock drawing from Lake Ontario demonstrates the antiquity of the practice. Various types of sweat houses were used teepees, earth mounds and saplings covered with skins. Heated stones were placed in a hole in the ground then drenched with water to produce thick steam. Sometimes medicines would be added to the water. Following the bath a plunge in a nearby stream a deep sleep would naturally restore and renew tired, aching bodies.



Figure 13. There is a tree beside this sweat lodge. Within the lodge is a "bird-man" which could be a shaman performing his sweat bath ceremony. This could be the Sacred Tree. It is the only recorded Shield pictograph that clearly portrays a plant form (Dewdney and Kidd 1962:32).

Infectious diseases like smallpox, measles, scarlet fever or bubonic plague were unknown, as First Nations lived in small semi-nomadic groups and were surrounded by good hygienic conditions (Stone 1932:22). Columbus reported that the Indians he encountered isolated their sick in a special stockade (Graham-Cumming 1967:121), thus preventing spread of disease when it did occur. The diseases that were common, resulting from the way of life and the habitat

(dysentery, eye inflammation caused by smoke, bronchitis, lung infections, rheumatism, wounds) were well known and often treated effectively with the use of a broad range of medicinal herbs, concoctions, and surgery (Corlett 1935; Harris 1886; Vogel 1977:3-7).

Bone tuberculosis and osteoarthritic changes were present in pre-Columbian populations (Anderson 1968:43). Larocque (1980) offers physical anthropological evidence for much chronic illness among the Iroquois prior to seventeenth century. From a study of an Iroquois burial site at Kleinberg, Ontario dated 1600, there was evidence of arthritis, osteomyelitis and Pott's tumour in the thoracic vertebrae. Also visible was the apparent successful result of a healed skull following trepanning. The edges of the skull were closed demonstrating the person survived for some time after surgery (Jackes 1977).

2. Herbal Knowledge

In the beginning, men and women lived as long as two hundred or three hundred years, and to endure like an oak tree was attributed to the possession of powerful medicines. Then, mysteriously, the people lost the gift of health and long life.

Basil Johnston Ojibway Ceremonies (1987:95)

Place was experienced by the tribes of First Nations as a spiritual and physical reality. This is evidenced in their conception of disease causation and in the therapeutic healing methods derived from these beliefs and knowledge based on past experience. Therapy was based on experiment and study and on the efficacious use of "medicines".

Through ceremonies passed down over centuries, the shaman and the patient believed in the existence of spirits which would come to their aid. This receptive state plus the prescription of a plant or animal remedy would create a healing environment. To the Huron as to other groups, every part of the therapy, dancing, drumming, chanting, swallowing a decoction, or sucking out the offensive spirit had meaning (Tooker 1960; 1967:91-99; Chafe 1964).

As discussed in the previous chapter, the word medicine meant much more than the utilitarian use of a medicinal item. Medicine represented powerful spiritual forces which surrounded the person in their environment (Stone 1932). Herbs used by the shaman were believed to gather strength from ceremonies performed to increase their power. The Jesuit priest Jean de Quen, wrote :

All the village Sorcerers and Jugglers, the Physicians of the Country, assemble, to give strength to their drugs, and by the ceremony performed, to impart to them a virtue entirely distinct from that derived from the soil

(Thwaites 1896-1901, 72:173).

In the study of First Nation medical practice it is important to remember that basic beliefs concerning place influence not only the treatment of disease but also affect all other phases of their life. One aspect cannot be separated from the another.

Treatment of disease in which the origin was obvious, as in fractures, wounds, or rheumatism involved a rational response. Splints were used in treatment of fractures, embedded objects were removed using methods which equalled or were better than the European practices (Vogel 1973:203-4). Because of the frequency of rheumatism, and arthritis a wide variety of approaches were used, including sweating, followed by massage, friction and the application of ointments to the joints (Vogel 1973:196-197).

In order to treat rheumatism the Chippewa and Ojibway worked into the skin a medicine (a decoction of *Trillium Grandiflorum*, Liliacea, a member of the lily family recognized in U.S. Pharmacopoeia 8th revision) by means of an instrument consisting of several needles fastened at the end of a wooden handle (Densmore 1928:333). Prickly ash (*Han-to-la*) was a remedy for rheumatism. Algonquins "freely chewed the inner bark and the roots of the tree. They boiled and drank liberal draughts of the water during the day. The inner bark steeped for hours in bear's oil they applied as poultices and as embrocations" (Harris 1916:36; Hunter 1823:417).

The understanding of anatomy and physiology developed partially from the close relationship between the hunter and the hunted. They were familiar with the vital organs of both humans and animals and had names describing both location and functions of these internal organs (Harris 1916: 35). Stephen Powers (1873-74, 5:373-79) also recognized this native knowledge of human anatomy and physiology, stating it was a result of the "medicine men who are always crafty men and keen observers.....in the operation of medicine at least as respectable as that of the Chinese".

Internal conditions which had no clear or simple explanation were believed to be the result of a wide variety of supernatural causes (Tooker 1967:82; Vogel 1973:22-23). In a world survey of aboriginal disease causation, Clements (1932:185-252) delineated five primary theories, sorcery, breach of taboo, disease object intrusion, spirit intrusion and soul loss.

Since all things in the world, animals, trees, plants, rocks, rivers, lakes, possessed a spirit, it was important to be respectful and not induce the anger of a spirit, as a way of protecting against illness or accident (Rogers 1969; Boas 1900:626). The spirits of animals may seek revenge for abuses (Hallowell 1963:258). It was necessary for the hunter to first explain carefully to the soul of the animal why it would be killed.

Another cause of disease, one which Clements ignored, but is important in the study of North American First Nations is dreaming. This involves dreams not only prophetic of disease, but which are also the cause of illness. While the importance of this disease causation among the Paviosta (Park 1938), the Southern Tribes of the Navaho (Morgan 1931), the Yuma (Forde 1931) and the Pima (Russell 1908) has been well illustrated, it was highly developed among the Iroquois as written by the Jesuit priest Joseph Jouvency (Thwaites 1896, Vol.1:259): "They believe there are two main causes of disease. One of these is in the mind of the patient himself, which will vex the body of a sick man until it possesses the thing required."

By delving into dreams, the shaman was to discover what was troubling the person. Jean de Brebeuf (Thwaites 1901, X:169-171) would write about his experience with the Hurons:

The dream is the oracle that all these poor Peoples consult and listen to, the Prophet which predicts to them future events, the Cassandra which warns them of misfortunes that threaten them, the usual Physician in their sickness, the Esculapius and Galen of the whole country.....

The soul wandered while a person slept creating dreams. The dream must be interpreted. It was the shaman who had the most power, gained by his direct access to other realms and with the help of spirits who could communicate to other beings and treat diseases of supernatural causes. He would determine the reason for the soul wandering and seek the appropriate response to satisfy it. This therapy could be in the form of a present to the dis-eased person or by the shaman performing a certain ritual. This form of dream therapy has been described as sophisticated psychotherapy by Wallace (1958) in his detailed study of seventeenth century Iroquois. In their therapeutic practice, the shaman and the psychoanalyst use a similar method to provide a context for the patient to resolve their dis-ease (Levi-Straus 1963:193).

The shaman was the mythman, the keeper and perpetuator of the sacred narratives of his community. While his powers and expertise were required there also existed a general

knowledge of the medicinal properties of plant and animal products. This overall knowledge was recognized by early scientists. As Stephen Powers, botanist (1873-1874) stated:

I assert without hesitation, that an average intelligent Indian even if not a medicine-man knows a much greater catalogue of names than nine tenths of Americans. Nothing escapes him, he has a name for everything. They know the properties of all herbs, shrubs, roots, leaves whether they are poisonous, nutritive, purgative astringent, sedative or other active principle.

The forest which often meant a dark, threatening, menacing place, or even "the Devil's Den" (Wigglesworth 1662) to the settler was the same place offering a rich supply of plants to the original inhabitants. The curative properties of springs containing salt, sulphur and iron were recognized by the Iroquois.

The role of herbalist and lay healer often was the responsibility of the woman who passed the lore on to her daughters, just as she had received the knowledge from her mother and grandmother. To the small Cree and Ojibwa hunting groups who may not have access to a shaman when they tended their trapping lines over great distances during the winter months this wealth of medical lore meant survival (Densmore 1928:325-7).

Depending on the environment of its travels, each group had its own remedies, a supply of herbs and roots for common ailments. If these failed and illness appeared serious, and a medicine-man or medicine-woman was in the vicinity, he or she was then consulted. The collection of medicinal plants was usually conducted in the autumn.

The part of the plant most commonly used was the root. In some plants the healing power was thought to be strongest in a certain part of the root, either the main part or the fine tendrils. Stalks, leaves, flowers to be used as remedies were dried and kept clean. After drying each variety was wrapped and stored separately (Densmore 1928; Brown 1868:378-396; Smith 1932). Medicinal barks were generally available and therefore collected when needed. The medicine-man would be most secretive about the plants collected, storing them combined or separately using his own markings indicating their identity (Symington 1969).

When gathering medicinal plants care was taken to give respect to the plant picked and attention given so not to disturb the surrounding vegetation. It was important to protect the land so the plants and the people could survive. A little hole would be dug in the ground beside the

removed plant and tobacco left as an offering "partially to appease and partially to acknowledge a presence" of Kitchi Manitou as an act of reverence (Johnston 1987:33).

Tobacco was highly regarded as containing medicinal properties, being an intermediary "between the material and the spiritual, possessing both substance and essence" (Corlett 1935:136). For this reason tobacco was an especially appropriate gift. Well into the twentieth century the practise of carefully removing the medicinal plant while placing a gift of tobacco in the ground was observed (Parker 1928).

The shape of the medicinal roots seems to have had a symbolic significance for example, Ginseng was an important "ingredient of the medicine man's commodities" (Newberry 1887) being a divided tap root resembling legs. The form of ginseng indicated its value for promoting female fertility (Speck 1917:306). Ginseng was also greatly valued in China for its ability to restore strength to the body and for the curing of disease (Kalm 1749:415-6). The important economic consequences of this were not lost on the early French botanists. Kalm relates the discovery of Canadian ginseng, (called Garantoging by the Iroquois, meaning child, as this is the shape it resembles) by French botanists. A brisk trade in this root developed, from Canada to France, then from France to China.

In 1748 a pound of Ginseng sold for six Francs in Quebec. During his stay in Canada, Kalm stated that : "all the merchants at Quebec and Montreal received orders from their correspondents in France to send over a quantity of Ginseng, there being an uncommon demand for it this summer" (Kalm 1749:417). So intense was the collection in the summer of 1748, that there was fear that too few roots would be left for continuation of the species. This example illustrates the radical difference in approach to the collection of medicinal roots, one for a purely economic reason, the other for medical, spiritual, personal use.

The knowledge of a wide variety of plants also included the ability to recognize, when and what plant to collect. Some 24 remedies required the separate collection of both fertile and sterile plants. The Chippewa and Ojibwa treatment for dysentery calls for the leaves and top of the flowering plant, Mugwort (*Artemisia Drunculoides*) to be dried, steeped and taken internally as a decoction (Densmore 1928:344). To treat the stoppage of menstruation, a decoction made from 8 roots of the sterile Mugwort plant, to 1 quart water, is to be drunk daily (ibid 356).

The Cree of Hudson's Bay and Northern Ontario may have lived in a colder environment

with a more rugged terrain, however, it was rich in plants. A Mr. Walter Haydon, being a resident of Hudson's Bay for many years donated to the Museum of the Pharmaceutical Society in 1884, a collection of the some of the medicinal plants used by the Cree. The museum curator, Holmes (1884:302-303) presented his evaluation of these specimens:

Although the list of materia medica is a small one, there is remarkable judgement shown in the choice of remedies. Thus *Prunella vulgaris* makes an excellent substitute for sal prunella balls in sore throat, and the bark of the juniper and Canada balsam tree are doubtless as good an application to wounds as a people unversed in antiseptic applications and ignorant of the existence of bacteria could devise. The use of *Lobelia* as an emetic and of *Iris versicolor* as a cholagogue and purgative approaches closely to the practice of more civilized nations.

The Cree recognized twenty classes of medicines, which distinguished between, "good or beneficial medicines and those which were injurious or bad" (Bell 1886:462). The majority of these were of vegetable origin, but some were derived from 25 animals, deer, toads, beaver, skunk, muskrat, insects. The clear liquid gum of the balsam tree is applied freely to fresh wounds; *Prunella vulgaris*, self-heal when chewed relieves sore throat; an infusion of the bark of any of these dogwoods (*Cornus circinata*, *Cornus sericea*, *Cornus stolonifera*) is taken in moderate amounts for diarrhoea, a decoction in large doses is emetic, in small doses, the decoction is used for fevers, coughs, colds and the bark when dried is smoked alone or with tobacco (Bell 1886:535-7).

While these scientists recognized the knowledge of medicinal substances used by the Cree, the benefits of these were always based on the context of the standard medical and plant knowledge of the outside observer. While Bell suggested that it "might prove valuable" to learn the medicinal properties of the plants of the region as it is difficult to carry a big stock of "real" medicines on travels in the north. "In case of emergency, it is therefore desirable to know the virtues of the native plants, in order that one can make the most of them in the absence of more powerful remedies"(Ibid 537).

3. The Healing Societies

Besides the medicines which were recognized by the whole community, the Curing Societies in existence in many different groups (Rogers 1966; Hofsinde 1955:1966; Hosbach and Doyle 1976; Jenness 1977), had their own specialized lore based on narratives, songs and rituals passed

on through centuries. I give short examples of three of these societies to demonstrate the wide variety of experience in place and creative approaches to health, illness and health care. Much discussion has focused on the history and existence of the healing societies. Were these societies formed in antiquity with their special knowledge passed down through the ages?

Or were they created as responses to cope with the massive threat to the native population caused by the European introduction of previously unknown infectious diseases as argued by Brasser (1971)? The first detailed description of the Midewiwin was by Hoffman published by the Bureau of American Ethnology in 1885 in which he assumed this society was an aboriginal ceremony. Hickerson (1970:57) proposes that while the curing rites were undoubtedly ancient, being the knowledge of individual shamans, the formation of these practitioners into a complex ritual society were a reaction to contact with Europeans. The ceremonies represented "new modes of organization, not ancient ones" (Ibid 63).

Others (Quimby 1960:126, 131, 138-142; Jenness 1977: 69-78) have written that the Midewiwin was formed to prevent the control and abuses of the individual shamans and to promote high ethical standards based on the tenets of Christianity in the late eighteenth century. This was accomplished by the creation of a secret medical association cloaked in religious clothes (Dailey 1958).

This interpretation is disputed by Ojibwa Basil Johnston (1987:95) who states that: "Of all the Ojibway societies the Midewiwin was the oldest". There now also is archaeological evidence that supports the ancient existence of these medicine societies (Kidd 1981; Tuck 1971:213).

It has been suggested that the False Face Society of the Iroquois originated among the Hurons in response to the epidemics of 1630 and among the Iroquois by the Huron's twenty years later (Blau 1966). However, one of the first things noticed by the French trappers and Jesuit missionaries who came among the Iroquois was the presence of dancers wearing grotesque masks with twisted faces. Some of the Jesuits wrote home comparing these dancers to the masqueraders of provincial France. From this we can probably assume that the masked societies existed before contact with the French (Fenton 1937).

In part, the academic assumptions that relate all but the most basic institutions as being native to First Nations, and delegate a major role to the influence of the European contact as changing every aspect of First Nation life is dangerous (Trigger 1985) and tends to place too

much emphasis on the European. My goal in this research is not to prove the exact date of existence. What I do intend is to express the varied creative responses to dis-ease which do suggest diverse ways of being in place. The Iroquois, False Face Society was the best known curing group.

Far through the loneliness of the sparsely settled forest and swamp, their strange hollow voices float in a weird cry that plays an intonation of two half notes in a high key. Few people ever get a glimpse of the odd-looking group going their round, each carrying a staff, and wearing the most atrocious masks, made of wood, painted, chiseled into hideous human features, fringed with lengths of grey and black hair. On they go, their figure bent forward, almost to a right angle, striking the earth periodically with their staffs, with always that evil call and a peculiar slight motion of the feet, that is both a dance and a shuffle.

E. Pauline Johnson (1892:142)

Stories relate the origin of the Society to a time long ago when hunters went into the woods to hunt in the fall. They would be bothered by shy beings who would flit behind trees. Sometimes, when returning to camp a hunter would find his ashes strewn about. A man stayed behind in the camp to observe what the strange beings wanted. A False Face appeared and scattered ashes about as if searching for something. In a dream that night the hunter saw the Face ask for tobacco and mush. The next day when the False Faces came they had a pot for them. The Faces then taught the hunters their songs and methods of healing with hot ashes. Appearing in another dream they requested a feast be held each year to remember them (Wallace 1958:224).

These visiting medicine-men, in their practice of ceremonial rites exercised generalized medical functions by twice a year driving away "disease spirits". It is this aspect that has been compared to the work of public health officers. Often, as in the creation narratives, the origin of the medicine societies were expressions of the interdependence of animals and people. In this following story the young man depends on the kindness and help of the animals, not only to cure him but to reveal the ceremonies and special medicinal formulae to cure wounds. The Little Water Company was one of the thirteen secret medical societies of the Seneca (Parker 1909:161-85). The origin of this society is based on the following narrative.

Once there was a young chief, a great hunter who always observed the proper respect when killing animals. When this man became wounded his friends the animals, being the great medicine men, decided to cure him.

Many animals participated; some giving up their lives for him. When he regained consciousness he recognized his friends and understood the song and dance of the animals. He was married and the secret medicinal combinations could be given only to youths.

Sent on the search for this secret, the youths located a mysterious voice coming from a magic corn stalk whose roots spread in four directions.

After a ceremony they were given the composition of the medicine and taught the song which makes the medicine strong and capable of curing all wounds.

The "small dose" medicine of the Little Water Company is comprised of the brains of various mammals, birds, fish, and the pollen and roots of several plants, vegetables, and trees. All these ingrediants are pulverized into a fine powder and combined with squash seeds and corn roots. Meetings were held four times a year to preserve this powerful powder (Parker 1923:447-8).

The term Midewiwin could also mean to the Ojibway The Society of Good Hearted Ones (mino "good" and dewewin "hearted") or The Resonance (midewe "the sound"), in reference to the chants and drums used in the ceremonies (Johnston 1987:95). The men or women who were successful passed through the four stages of initiation gaining an extensive knowledge of the use of plant and animal remedies (Dewdney 1975).

According to Hoffman (1885-91:159) these four levels of practioners were: the priests of the Midewiwin, gaining highest rank by initiation and the payment of gifts. The next in rank were the Wabenos (dawn men) who practiced magic, hunting medicine, love potions. The Jessakid were seers and prophets, who could reveal the hidden truths, receiving this powerful ability from the thunder god and at the first level were the herbalists, Mashki-kike-winini.

These people would then be able to guide others to promote a good long life. The knowledge of the medicinal use of herbs was handed down for generations in the Midewiwin. To proceed from a lower degree to a higher level the members sometimes followed "the bear path" and the best remedies were to be received from the bear. The strongest medicines were known as "bear medicine" (*Apocynum androsaemilifolium* or dogbane)(Densmore 1928:323-4). The roots of "bear medicine" were cut into 2 inch pieces, strung ~~on~~ a cord and stored for later use. The result resembled a necklace of bear claws (Redsky 1972:59).

In the old days the Indians had few diseases, and so there was not a demand for

a large variety of medicines. A medicine man usually treated one special disease and treated it successfully. He did that in accordance with his dream. A medicine man would not try to dream of all herbs and treat all diseases, for then he could not expect to succeed in all nor to fulfill properly the dream of any one herb or animal. He would fail. That is one reason why our medicine lost their power when many diseases came among us with the white man.

(Sioux medicine man Bull. 61, Bur. Amer. Ethn. 1918:244-45).

The varied use of herbs, roots, bark as medicinal substances to be drunk, inhaled, applied as poultices or pricked under the skin arose from centuries of experience and knowledge of the natural world. About 170 drugs based on First Nation medicinal products have been listed in the official Pharmacopoeia of the U.S. (Vogel 1977) and in a reference guide to First Nation medicinal plants Moerman (1986; 2 vols.) lists 17,634 entries.

There was a variety of therapies based on the specific belief of disease causation of each tribe, on the understanding of anatomy and physiology, on the efficacy of the remedy, on the knowledge of the medicinal qualities of flora and fauna in place and on each group's experience of that place. The antiquity of these practices is evident (Tooker 1960; Chafe 1960). That place was simultaneously experienced in the spiritual and physical dimension is revealed in the beliefs and approaches to health and disease as practised by First Nations. The distinct medicine societies represent a varied approach to health and illness.

While everyone had general knowledge of herbs and simple therapeutic procedures, it was the shaman who had direct access to the other realms, thus gaining access to specific healing herbs, animal helpers and ceremonial chants necessary to complete the healing cycle. He was the keeper of the sacred narratives linking all aspects of life together. The healing societies were based on the shamanistic sense of place, usually involving a dream, and an encounter with a mythical spirit. From this experience the shaman acquires some special ability or power which is "brought back" to the benefit of the community.

What appears to have been an almost ideal adaptation to the natural environment of North America, for health maintenance, or in retrospect must have seemed so, was upset catastrophically with the first close contact with the European early settlers. First Peoples encountered several diseases to which they responded creatively and often effectively. Such was

not the case with the great infectious diseases.

Social conditions in Europe had spawned a series of virulent diseases which during the Middle Ages decimated European populations (e.g. bubonic plague, small pox). Over the generations European societies had weathered the most socially destructive aspects of these epidemics and had developed a certain level of immunity to the destructive effects of these diseases and created varied medical responses to them.

In the next chapter the sense of place and the healing therapies of Europe in the seventeenth and eighteenth century are discussed with specific reference to French medical views. There is a revival in the Hippocratic approach to the importance of place for the physician which is promoted by the Montpellier School of Medicine. After the new world was discovered the explorations of the following centuries would focus on the direct study of the "natural history" of these places. How does this affect the early French approach to health and disease in New France? How is place experienced by both groups? In this chapter, the encounter between Shaman and Jesuit priest, French physicians and naturalists, and the people of First Nations is explored. The contrast between world views of the two groups is dramatic illustrating the different healing traditions created from different senses of humanity, nature, and place.

CHAPTER 6

HYGEIA OR PANACEA? FRENCH AND FIRST NATION ENCOUNTER

I am greatly astonished that the French have so little cleverness, as they seem to exhibit in the matter of which thou hast just told me on their behalf, in the effort to persuade us to convert our poles, our barks, and our wigwams into those houses of stone and of wood which are tall and lofty, according to their account, as these trees. Very well! But why now do men of five to six feet in height need houses which are sixty to eighty?

My brother, hast thou as much ingenuity and cleverness as the Indians, who carry their houses and their wigwams with them so that they may lodge wheresoever they please, independently of any seignor whatsoever? Thou are not as bold nor as stout as we, because when thou goest on a voyage thou canst not carry upon thy shoulders thy buildings and edifices.

Thou reproachest us, very inappropriately, that our country is a little hell in contrast with France, which thou comparest to a terrestrial paradise, inasmuch as it yields thee, so thou sayest, every kind of provision in abundance. Thou sayest of us also that we are the most miserable and unhappy of all men, living without religion, without manners, without honour, without social order, and in a word, without any rules, like the beasts in our woods and our forests, lacking bread, wine, and a thousand other comforts which thou hast in superfluity in Europe.

Well, my brother, if thou dost not yet know the real feelings which our Indians have towards thy country and towards all thy nation, it is proper that I inform thee at once. I beg thee now to believe that, all miserable as we seem in thine eyes, we consider ourselves netherless much happier than thou in this, that we are very content with the little that we have; and believe also once and for all, I pray, thou deceivest myself greatly if thou thinkest to persuade us that thy country is better than ours. For if France, as thou sayest, is a little terrestrial paradise, art thou sensible to leave it?

And why abandon wives, children, relatives, and friends? Why risk thy life and thy property every year, and why venture thyself with such risk, in any season whatsoever, to the storms and tempests of the sea in order to come to a strange and barbarous country which thou considerest the poorest and least fortunate of the world? Besides, since we are wholly convinced of the contrary, we scarcely take the trouble to go to France, because we fear, with good reason, lest we find little satisfaction there, seeing, in our own experience, that those who are natives thereof leave it every year in order to enrich themselves on our shores.

We believe, further, that you are also incomparably poorer than we, and that you are only simple journeyman, valets, servants, and slaves, all masters and grand captains though you may appear, seeing that you glory in our old rags and in our miserable suits of beaver which can no longer be of use to us, and that you may find among us, in the fishery for cod which you make in these parts, the wherewithal to comfort your misery and poverty which oppresses you.

As to us, we find all our riches and all our conveniences among ourselves, without trouble and without exposing our lives to the dangers in which you find yourselves constantly through your long voyages. Whilst feeling compassion for you in the sweetness of your repose, we wonder at the anxieties and cares which you give yourselves night and day in order to load your ship.

We see also that all your people live, as a rule, only by cod which you catch among us. It is everlasting nothing but cod-cod in the morning, cod at midday, cod at evening, and always cod, until things come to pass that if you wish some good morsels, it is at our expense; and you are obliged to have recourse to the Indians, whom you despise so much, to beg them to go a-hunting that you may be regaled.

Now tell me this one little thing, if thou hast any sense: Which of these two is the wisest and happiest-he who labours without ceasing and only obtains, and that with great trouble, enough to live on, or he who rests in comfort and finds all that he needs in the pleasure of hunting and fishing? It is true that we have not always had the use of bread and wine which your France produces; but in fact, before the arrival of the French in these parts, but did not the Gaspesians live much longer than now?

And if we have not any longer among us any of these old men of a hundred and thirty to forty years, it is only because we are gradually adopting your manner of living, for experience is making it very plain that those of us live longest who, despising your bread, your wine, and your brandy, are content with their natural food of beaver, of moose, of waterfowl, and fish, in accord with the customs of our ancestors and of all the Gaspesian nation.

Learn now, my brother, once and for all, because I must open to thee my heart; there is no Indian who does not consider himself infinitely more happy and more powerful than the French.

Christien Le Clercq, 1676, a Recollet priest repeats the words of the Micmac chief as he responds to Le Clercq when asked why his people did not build houses in the manner of the French (Ganong 1910:103-6).

While the fifteenth and sixteenth centuries of the great maritime explorations, ended with the conquest of the world's ocean routes, it was during the seventeenth and eighteenth centuries that the voyages around the world had no other goal than to obtain new information about geography, the natural world, and the mores of the different peoples (Braudel 1967). The meeting of two cultures was more than an opportunity to learn "the mores of different people": It was often a time of persuasion. But, as the Micmac chief reminded Le Clercq, the Indians did not want to adopt all the ways of the French and did not desire to leave their country and move to France. The First Nations, however had no choice in accepting disease introduced by the Europeans.

The first great migration into the Americas took place centuries ago by way of the Bering Strait by land and by boat. People of First Nations, with rare exceptions, still live in the Americas; Aborigines dwell in Australia; the Inuit reside in the circumpolar lands as their ancestors did. While all of these people have expanded geographically into adjacent territories, or into lands near to which they once lived, there is no comparison to the great spread of the people from the European nations. "Europeans, a division of Caucasians distinctive in their politics and technologies rather than in their physiques", now occupy many more parts of the world, neo-Europes, than they did one thousand years ago (Crosby 1986:2).

This compulsion of the western world to explore, discover and usually conquer, is such a long continuous process that it has been called the distinctive characteristic feature of "occidental man" (Goetzmann 1987:2). In this chapter, I examine the consequences of this compulsion as expressed in the changing experience of disease by First Nations and Europeans, as well as concepts of health, illness, and health care as reflections of a certain sense of place. How did the meeting of the two cultures, first French, then British, with the indigenous peoples affect these conceptions?

With the voyages of exploration and colonization, beginning in the fifteenth century, information on disease, place, the nature of inhabitants, settler and indigenous in different parts of the world began to accumulate at a rapid pace. Physicians with this geographical experience began to compare the different types of disease and responses to illness of varied therapies in diverse countries. Out of this documentation and study, physicians would develop medical topographies and geographies. The earliest work in a Canadian context on medical

topography appeared in the early nineteenth century.

1. European Place and the Study of Nature

Before entering the place of Canada it is necessary to discuss the European landscape of disease and therapy to understand what effects the new North American environment would have on the beliefs and practices of the Old World. From Jacques Cartier's encounters in 1535 to the conquest by the British in 1760, Nouvelle France was patterned off the mother country. How would encounter with a drastically different cultural landscape change opinions or be made to fit existing knowledge during the period?

The seventeenth century was one of scientific fervour and of fundamental change in how the natural world was to be studied. The extensive explorations overseas, by Europeans had expanded the known world and the existing institutions of learning no longer were adequate. Europe's ancient institutions of learning, colleges and universities had been formed to maintain and transmit an ancient heritage. Knowledge was codified and stored in the learned languages of Greek, Latin, Arabic and Hebrew which kept it secret and inaccessible to most people.

The authoritarian Church of the Middle Ages believed that the earth had been designed for the sole use of humanity. Nature was the evidence of divine creation. Astrology explained natural phenomenon. Many universities established chairs of medicine, law, and astrology (Riley 1926; Gordon 1959). While the Church's official view stated that astrology was a "perverse science" (Gordon 1959:310), every pope had his own astrologer (Reisman 1936:104). Galen appears to be typical of the strong interest in astrological medicine and three of his works devoted to astrology (Coxe 1846), were required readings for the School of Scholastic Medicine (Scarborough 1969; Castiglioni 1941; Gordon 1959).

According to astrological medicine the diseases and epidemics suffered by people depended upon the movement of the planets. Therapy, therefore, was also related to the planets which determined the proper time to draw blood, when to prepare medicine and how effective medicine would be (Castiglioni 1941; Reisman 1935; Gordon 1959; Albutt 1921). By knowing when the person became ill, and the corresponding position of the planets, the illness could be diagnosed and treatment prescribed (Miller 1953). During this time the importance of the knowledge of place, as expressed by Hippocrates had been ignored and

emphasis was placed solely on the determining influence of the stars (astrology), or on the maintenance of humoral balance within the individual body (Elliot 1914; Reisman 1935; Albutt 1921).

There was no need to examine the ill person or the immediate environment to determine the cause of disease for the philosophical belief in the unity of the universe (macrocosm) and in the unity of the individual (microcosm) led to the conception that, the sun, the moon, the stars, all mysteriously influenced people. If these influences could be understood, then health could be maintained. "The environment, climate, soils, relief was studied little for its own sake; men accepted it as given and applied traditional generalizations as a matter of course to contemporary affairs" (Glacken 1990:256).

Traditional generalizations no longer would be adequate to explain the nature of the world as the very place of the world was expanding. In 1530, the poet, physician, and scientist, Girolamo Fracastoro wrote a poem at Verona in which he described both the tumultuous calamities of the time and the excitement of "the age of the discovery of the world and of man":

Syphilis sive morbus Gallicus

Although a cruel tempest rages, and the conjunction of the stars has been wicked, yet we are not completely deprived of divine clemency. If this century has seen a new disease, the ravages of war, the sack of cities, floods and drought, yet it has also been able to navigate oceans denied to the ancients, and has reached beyond the bounds of the previously known world.

Girolamo Fracastoro 1530;1935.

It gradually became clear with extensive explorations as more previously unknown diseases, examples of flora, and fauna became collected from diverse regions of the world, that reason could not explain both natural processes and religious experience. People began to question. "Academic erudition and philosophy" provided inadequate answers to the growing "crisis" of science and of religion (Pachter 1961:34) in an age which witnessed religious wars and periodic epidemics of scurvy, measles, small pox, influenza, and plague. Nature and natural history had already begun to be studied for their own sake (Glacken 1990:251-253; Thorndike 1926, Vol.3:470).

The ancient medical geography of Hippocrates based on the direct study of nature and person in place would reappear in the writings of Phillipus Theophrastus Bombastus von Hohenheim, called Paracelsus (1493-1541). Although a physician, he probably never completed a medical degree (Pachter 1961:40-9). His work was controversial, written in colloquial German, and published only after his death (Tempkin 1952:201-217). Paracelsus wandered constantly through Germany, worked in mines and smelters, treated the sick, and introduced chemical drugs (Cumston 1987:314-5 ;Sigerist 1941:154-8). While he wrote several volumes on mental diseases and on occupational diseases of miners, it was his Seven Defensions, that he proposed the fundamentals of a medical geography. A physician, in order to understand illness, must be a "Geographus" or "Cosmographus" and explore the nature of each country "with his feet", as "scripture is explored through its letters; but nature from land to land. Every land is a leaf. Such is the Codex Naturae; thus must her leaves be turned" (Sigerist 1941:27).

With increased voyages abroad, the world was being drawn into Europe and each country wanted to be the first to capture the "Codex Naturae". The British Royal Society, the French Academie Royale des Sciences, and the other parliaments of scientists with academies in Berlin, Rome, Florence, were established to increase knowledge, to discover the newness of nature (Ornstein 1938; Yates 1947; Crane 1972; Brown 1934).

These societies, replacing the individual collectors' cupboards of exotic curios gathered from voyages abroad, would affect the very nature of exploration. Examination of the secrets of nature became a favourite theme. "Nobody could tell in advance, before exploration, what the secrets might be, and nobody could be certain that his predecessors had shown the right way once and for all (Tempkin 1973:163).

As Bishop Spratt (1667;1958) stated in his defense of the Royal Society of London:

If to be the Author of new things be a crime, how will the first Civilizers of Men, and makers of laws and Founders of Governments escape? Whatever new delights us in the Works of Nature, that excells the rudeness of the first Creation, is New.

Spratt continues that Britain was determined to be a leader in the discovery of the New because, "our climate, the air, the influence of the heaven, the composition of the English blood; as well as the embraces of the Oceans, predisposed the country to be a Land of

Experimental Knowledge" (Ibid). This was an age when people sought escape from mystery and scholasticism, by practical methods. Sensible men would seek answers from Nature.

Francis Bacon (1561-1626) attempted in his writings to provide a philosophical framework for these emerging investigations of nature (Webster 1976). In his section entitled, "Preparative toward Natural and Experimental History", of The Great Instauration, Bacon explained what was to be the focus of the natural history of man. To be omitted were tales and fables of ceremonial magic and natural magic, along with testimonies, disputes and controversy (Bacon 1960:274). "The sciences may be no more troubled by them, for they concern things not true" (Ibid 281). By determining what "facts" were to be discovered, Bacon (1960:23) developed the method of science, for those:

Who aspire not to guess and divine, but to discover and know, who propose not to devise mimic and fabulous worlds of their own, but to examine and dissect the nature of this very world itself, must go to the facts themselves for everything.

The world was to be experienced directly and described precisely, without the filters of past tales. While unique stories of old, from travellers and explorers could be recounted, enjoyed, and retold, now the novel items of knowledge collected, must be examined, confirmed, catalogued and added to the existing pile of facts. Place was to be dissected piece by piece.

This seventeenth century scientific revolution promoted the belief in the systematic examination of all parts of the globe in the hope of promoting universal progress (Matson 1964). The great model for the advancement of all intellectual inquiry in this age was that of natural science as intensely expressed by d'Alembert, philosopher and mathematician, in Elements de Philosophie (quoted by Cassirer 1955:46-7):

Natural science from day to day accumulates new riches. The true system of the world has been recognized...In short, from the earth to Saturn, from the history of the heavens to that of insects, natural philosophy has been revolutionized; and nearly all other fields of knowledge have assumed new forms...Spreading throughout nature in all directions this fermentation has swept with a sort of violence everything which stood in its way, like a river that has burst its dams.

2. The Landscape of Health in France

At the end of the Middle Ages two medical approaches had been dominant in Europe; one was that of Scholastic Medicine which promoted the doctrines of the Church and the writings of Aristotle and Galen ignoring the person and the place (Gordon 1959); the other was the

School of Salerno which passed on the teachings of Hippocrates to the School of Montpellier (Castiglioni 1941:323).

The influences of the Jewish-Arabian physicians (Avicenna was a most popular teacher) meant there was a combination of "the doctrines of Hippocrates with materia medica of the Islamic physicians" which resulted in "the continual observation of Nature as taught by the Father of medicine" (Cumston 1987:234). The other major French Medical Faculty, at Paris, the protector of the official French medical theory, however was based on the authoritative writings of Galen. In fact, fifty years after Harvey (1628) had described the circulation of blood, the faculty refused recognition of this new knowledge. They also ignored the use of chemical remedies. Hygiene remained a personal matter of keeping the proper balance between food intake, air, water, and sleep as the factors that affected health (Coleman 1974: Soloman 1972; Tempkin 1973:135-6,156-8; Cumston 1987:315).

Therapy was therefore directed at the maintenance or restoration of humoural balance with phlebotomy, the use of diuretics and purgatives being the most commonly practised methods.

By the eighteenth century, the Paris Faculty had adopted the idea of the body as machine. The Montpellier School, however, did not follow the Parisian example and proposed an interpretation of the unique qualities of living matter. They refused to believe that living processes could be simply reduced to either physical or chemical functions alone (Cumston 1987:356-7; Staum 1980:78-93) and championed both the idea of clinical observation of the sick person and the study of the environment, weather, soil, flora, geological features to determine the natural history of the disease epidemics (Hannaway 1972) basically a medical topography.

New drugs became abundant in Europe arriving from around the world in the form of exotic plants, powders, or barks. Heated debates occurred as to the medicinal value of these products (Cumston 1987:316). Quinine is an alkaloid extracted from the bark of the cinchona tree of Peru and Colombia (Rollo 1965). It was introduced to Europe in the 1640's by Jesuit priests who observed natives using this "fever bark" for treating malaria. The "Jesuit bark" or "cardinals bark" was looked upon with disdain by the conservative Paris School of Medicine. However, it was dispensed in secret potions, by charlatans, for many years (Taylor 1965). By the end of the seventeenth century cinchona bark was widely accepted as a treatment for

malaria.

The monasteries, during the Middle Ages, had operated "infirmatoria" for their own monks and religious travelers and supplied themselves with medicinal plants from their gardens (Rosen 1976:75). Now with the novelties flooding into Europe from other places, botanists began to consider how to arrange all these plants. How was one to know if in fact, the plant was new or old? A system of nature must be found to make sense of this. In 1649 Tournefort published three volumes, the beginning of a botanical classification system (Cumston 1987:316).

This was not only theoretical work, for Professor Tournefort, under the auspices of Louis XIV created the Jardin Royal des Plantes, in Paris, as a museum of living plants collected by world travellers (Abbott 1931:24) and physicians from the Paris Faculty of Medicine were studying the "interior of plants" and "the composition of all sorts of drugs" (Vallee 1927:39). With the revival of physicians direct interest in place, and with the possibility of new medicines being discovered from the collection of plants, physicians adopted an expectant attitude to therapy (Ackerknecht 1973:65-92). The study of botany and medicine were now inseparable.

Concurrently the Academie Royale des Sciences was reorganized to send scientists from diverse fields, to correspond from distant places and to report on their discoveries. On March 1699, Tournefort would chose Michel Sarrazin, physician and naturalist, as a member to correspond from Nouvelle France, at the same time he chose Isaac Newton as an "associe etranger" (Vallee 1927:82).

Place was being examined and nature catalogued. Faculties of Medicine were proposing close attention to both the person and the environment. This close attention did not necessarily translate into a focus on the Hippocratic promotion of supportive, healthful place. The search for a panacea from among the new medicines derived from plants and barks would often fit within the Galenic theory of restoring humoural balance.

The close clinical observation of patients recommended by the medical teachings meant that the hospitals would gain prominence. Large general hospitals were built in the seventeenth century and by the next century about 2,000 charity hospitals dotted France (Joerger 1980:104-36). By the 1770's, disease, as Foucault (1973:42) deemed it would be

captured in a "double system of observation, in the family, which was the "natural locus of disease" and in the hospital, which duplicated, "like a microcosm, the specific configuration of the pathological world".

There appears to be little benefit derived from the medical theories proposed and the increased scientific activity on the level of health of the french population. The benefit of the physician remained negligible. Few could afford a physician and if they could his presence made little difference (McNeill 1976:212). In France, the physician had the right to practice legally and was to command the barber-surgeons and apothecaries in their respective work. Many medical men were never consulted by the poor, much to the dismay of surgeons, apothecaries, and doctors, who felt that these people simply lacked the ability to make the right decisions affecting their health (Goubert 1976:77,410-27; Mitchell 1979:82-112).

Peasant life in eighteenth century France, with an overwhelmingly rural population appears to be one of misery (Goubert 1969) though improved from the previous century (Rousset 1963). Periodic famines, epidemics, and chronic infections would run through various parts of the country, malaria, tuberculosis, dysentery, pneumonia, and the "military sweats" (syphilis) killing thousands of people after 1775, when records became first available (Lebrun 1971; Goubert 1974). In the urban centers, disease resulted from medical procedures; "hospital gangrene" followed surgery and peuperal fever resulted from obstetrical techniques following delivery while the infectious diseases, bubonic lague and leprosy disappeared (Rousset 1963). The large hospitals evoked fear, among the people and were called "gateways to death" (Sigsworth 1972) for good reasons as Tenon (1788;278 in Mitchell 1980:76) estimated the mortality rate in them being about 22 per cent.

The frequent contacts at ports of embarkation for ships back and forth across the ocean and the travel through Europe meant at first more frequent epidemics. As people developed a level of immunity through continous exposure, it meant that the disease became endemic in the population affecting only those who had not been exposed enough to resist it, mainly children. Small pox in eighteenth century France, as in the rest of Europe, became a disease of children (Helleiner 1967; Colnat 1937; Rousset 1963; Flinn 1981:62-3).

The relative isolation of the dispersed populations of North America meant that this level of immunity was never reached and the biggest import to this land from Europe was probably

disease pathogens causing "virgin soil epidemics" (Crosby 1976:293-4). The pathogens were embodied in people who brought with them vastly different visions of place and how life was to be lived. How would interaction in the new world change either groups' concepts of health, illness, or health care?

3. The Place of Shamans and Jesuits

Along the Atlantic coast, First nation tribes had early contact with the French fishermen and settlers when an outpost was being established at Port Royal. Later the Jesuits (1616) reported that the tribes are:

astonished and often complain that, since the French mingle with and carry on trade with them, they are dying fast and the population is thinning out. For they assert before this association and intercourse, all their countries were very populous and they tell how one by one the different coasts, according as they have begun to traffic with us, have been more reduced by disease.

(Bailey 1937:13).

Wherever there was contact between the First Nations and the newcomers, the result was similar: Diseases that had become less virulent to the Europeans, due to their frequent exposure and acquired immunity, would cause severe illness to those who had no resistance. This phenomenon was understood in different ways. The first recorded epidemics of small pox, in North America occurred among the Algonkins of the Masscheusetts' Baay area in the early 1630's (Duffy 1951:327). The Pilgrim immigrants took this as a message from God that the place was being cleared for their rightful claim on the land. As William Wood (1634) explained:

Lord put an end to this quarrel by smiting them with smallpox...thus did the Lord allay their quarrelsome spirit and make room for the following part of his army.

(Stearn & Stearn 1945:22).

God was on the side of the British. God did not spare the colonists, who would also be smitten with small pox. The earliest medical document printed in North America, A brief rule to guide the common-people of New England how to order themselves and theirs in the small-pocks or measles, published in 1677-8, by Thomas Thacher shows the persistent threat of the disease, to the settlers (Rosen 1976:100). During the decade 1630-1640, the disease

spread through the St. Lawrence Valley into the Great Lakes region claiming the lives of one-half of the population of the Hurons and Iroquois (Trigger 1976:588-602).

Whenever, a previously isolated group came in contact with an infected person, the cycle of infection would continue. The Huron were not sure what caused the infection but believed that it must be a powerful force of evil to cause the deaths of so many. The Nipissings blamed the Kichisipirins for bringing disease, because these people had refused to help the Nipissings fight in a war against the Iroquois in 1635 (Thwaites 1896-1901, 13:211). As the epidemics spread in French Canada, the Jesuits began to deplore the rage of the disease as it made their mission of converting the savages such a difficult one for them:

Hardly had they left Tadoussac, where they had listened with love to the Christian truths and presented their children for baptism...when death fell upon those little innocents, and disease upon part of their parents. There is no human eloquence which can persuade a people to embrace a Religion which seems to have for companions only pestilence, war, and famine.

(Simpson 1980:4).

The fact that their children died soon after baptism was noticed by the Hurons and made them suspicious of the activities of the priests (Thwaites 1896-1901, 14:67-9). The Jesuits were also accused of speaking constantly about death when a person was ill instead of encouraging the person to become well again as the Huron would (Thwaites 1896-1901, 13:127).

With the specific cause of the disease unknown, the many religious rituals of the priests were thought to cause death. Rene Goupil, a Jesuit missionary-surgeon left Trois Rivières with a group of people in twelve canoes, to enter Huron country, so he could practice his religious and his medical missions among them. The group was attacked by Iroquois and taken to their land in Ossernenon, New York. Here (1640) Goupil was felled by a hatchet blow, when he made the sign of a cross over a child, becoming the first Jesuit martyr in Canada (Goupil 1640, Vol.1:333-4 DCB).

If the "savages" could be cured, possibly they would convert to Christianity. In 1635, therefore, Father LeJeune would write: "If we had a hospital here it would do more for the conversion of the savages than all our journeys and sermons" (Quoted by Abbott 1931:22). By the summer of 1639, land had been set aside and three volunteer nuns from Hotel Dieu of

Dieppe, France, arrived in Quebec. Soon after their arrival, so many people developed small pox, that tents were erected to shelter them. A hospital, built the following spring, would be visited only by the French and avoided by the natives who called it, "the house of death" (Dom Jamet 1939:25; Jaenen 1974:118).

The various tribes afflicted by small pox would try their traditional therapeutic methods to cure the people. But these remedies did not work as before, as is clearly expressed by Algonkins who blamed the priests:

Now our dreams and our prophesies no longer come true...prayer has spoiled everything for us...you, you are the cause of it: For if you had stayed in your country without speaking to us of God, he would not say a word to us, since we would not have him or his will. You would then do much better to return to your country and live at rest, for it is you who kill.

(Thwaites 1642-3, 24:211).

Spirits were believed to appear to the Hurons in visions and warn them that no Hurons would remain alive unless the priests were forced away from the country (Thwaites 1640-1:20;27-31). Councils were held to discuss whether or not to kill the Jesuits. This never happened, but in 1640 Paul Tessaout, an Algonkin chief of the Allumette Island tribe, defended his actions to the Governor, Francois de Champflour as to why he threw hot cinders in the priest's eyes and tried to kill him with a rope, in these words:

As for the rope which I took in my hand, it was never in my mind to bind the father, much less to strangle him. But, when he reproached me with making the Savages die by my charms, and I, in my anger, reproached him with making them die by prayers, I took a noose, to show him that, if we both spoke truly, we both merited death; to have made an attempt upon his life, that is what never entered my head.

(Thwaites 1640-1:20:265).

Only with the defeat or the coercion of the shaman, the medicine man, did the priests exert their full control over the people. To the extent that these healers' influence could be weakened, then the place could become safe for "civilized" people (Vogel 1970:35). The shaman held the cultural historical traditions of the people. The most important goal of the priest, according to Axtell (1981:71), was to "supplant the shaman". The shamens were called, by the Jesuits, "Jugglers, liars, and cheats" (Thwaites 1896-1901, Vol.3:117), possibly

because:

They claim that medicinal herbs are gods, from whom they have life, and that no others must be worshipped. Every day they sing songs in honour of their little manitous, as they call them. They inveigh against our religion and against the missionaries.

(Thwaites 1896-1901, Vol. 65:65).

Given that disease was widespread and that old remedies were no longer effective, did the shaman in fact lose his power? Place was no longer experienced in ways easily explained; dreams could not be depended upon; people could no longer trust the responses or actions of others. Villagers were mourning the loss of half of their members.

The Jesuits learned the peoples languages, lived closely with them, studied their habits, and actively questioned every aspect of the traditional way of life, while offering various therapies (Duignan 1958:726; Kennedy 1950; Kalm 1749:427). In the library of the College of Jesuits in Quebec, medicine was second only to religion in the collection (Drolet 1960-61) and several Jesuits were apothecaries or surgeons who were able to practice in New France but not in France (Delaunay 1948).

It appears that the First Nations retained their sense of place and belief in their practices. Etienne Pigarouich, who was a leading medicine man among the Algonquins of Trois-Riviere was baptized in 1639. He explained, however, to the missionary, that old ways run deep:

What dost thou think Pigarouich is? He is a great tree, strongly rooted in the ground; dost thou think to blow it down all at once? Strike, strike heavy blows of the axe, and continue a long time, and at last thou wilt overthrow it. It desires to fall, but it cannot, its roots, that is its bad habits hold it down, in spite of itself.

(Thwaites 1896-1901, Vol.26:159).

Christianity was not an inevitable choice for the First Nations (deTocqueville 1835; Axtell 1982:72). Marie L'Incantation, foundress of the Ursuline order in New France, would express the impossible task of converting "Indians" to French ways of life. In both the Jesuit seminaries and the Ursuline convent, the experiment was a disaster.

It is however a very difficult thing, if not an impossible one to adapt the Indians to French customs or to civilize them. We have had more experience with it than anyone else and we have observed that of one hundred girls who passed through our hands, we have scarcely civilized one.

(L'Incantation 1650, Vol. 1:354, DCB).

In spite of the great hardships of the epidemics, the groups did not totally panic, but in fact resorted with greater efforts to old ways (Trigger 1989:248-9). The fact that the healing societies were now more active, or formed anew, as discussed in the previous chapter, means a dynamic approach to illness, based on their meaning of place was intact. The difference in approach to health was expressed by a seventy year old Huron man, when he was told that God had no pity on him because he had suffered a stroke, which made the use of one of his arms impossible:

What! Would you wish that there should be no dried trees in the woods and no dead branches on a tree that is growing old?

(Thwaites 1896-1901, 1645, Vol.28:77).

Possibly the greatest loss to the communities, from the epidemics was among the very young and the very old. In a nation which respected the wisdom and knowledge of the old who were guardians of the sacred narratives and the historians of tribal practices, and the young who were its future members, the losses were immense especially in view of the continual invasion into their lands by the Europeans. Meanwhile the priests who demeaned the shamanistic practices were interested in the knowledge of herbal remedies. The First Nations' approach to health based on their meanings of place involving both physical and spiritual dimensions was offensive to the priests.

4. France in Canada: Military Medicine

The permanent settlement of Quebec, by the French was not assured. The population was small, by the 1660's numbering only 3000 (Trudel 1973:1968) and while the Huron were trading partners, the iroquois were always threatening. Peter Kalm wrote that Quebec could not produce inhabitants as healthy as those from France, and for this reason the French would live longer than those born in Quebec. "European Frenchmen can do more work, perform more journeys in winter without prejudice to their health, than those born in this country" (Kalm 1749:363).

The members of the settlement suffered from diseases (typhus, influenza, typhoid) brought over from France, so the epidemics were often named simply after the ship on which

they arrived (Roy 1943). Medicine can barely be separated from the military in the life of the colony. The second hospital, the Hotel Dieu, of Montreal (1651) was constructed, to hold the colony from the Iroquois. "Their determined efforts to exterminate the settlement. The indomitable resistance which the little hospital presented along with its male defenders, together with the bitter cold of the Canadian winters" (Abbott 1931:22) became one of legendary status. Many lost their lives fighting. In 1660, the surgeon, Louis Chartier drowned while defending the island from the iroquois in an attack, he had financially sponsored. Thirty years later, at the same spot, fifteen out of the twenty-five colonists sent to fight the Iroquois were killed including two surgeons (Massicotte 1914 XX:252-8; 1921 XXV11:41-7).

Because Quebec was fundamentally a military outpost, the majority of practioners came as army or navy surgeons (Eccles 1971; Gelfand 1984:19) and appeared in great numbers to equal 6 per 1000 colonists by 1663 (Trudel 1973:100-2). The therapeutic methods employed reflected the emphasis on "surgery" meant that bloodletting was practiced liberally (Vallee 1927:57). On August 20, 1667, Michel de Sirsee, Chiurgien, entered into an agreement, "for three years to shave and bleed the said vendor, his wife and children at his house" (Abbott 1931:18).

The frequent use of bloodletting plus enemas as therapies of choice continued into the eighteenth century. Charles Feltz, the first major-surgeon to Montreal 1738, also gained notoriety for his use of toads to relieve a sore on Mother d'Youville's knee (Feltz 1738, DCB, Vol.1:265). From account books kept by surgeons in MOntréal, in the eighteenth century (Massicotte 1922:151-3), we gain some idea of the common medicinal practices of the time.

ordinary bloodletting	15 sous
bloodletting from the foot	2 livre
pulling a tooth	1 livre
cordial potion	6 livre
watching the person all night	6 livre

These aggressive French medical practices based on phlebotomy, emetics, purgatives drew criticism from Algonquin observers as described by Baron de Lahontan wrote, that when ill, the Algonquins will, "only drink broth and eat sparingly". Their condemnation of French practices echoes the cartoon depictions of Moliere and the English caricaturist, Gillray.

They cannot conceive how we came to be such fools as to make use of vomits; for when ever they see a Frenchman take down such a violent remedy, they cannot forbear saying that he swallows an Iroquese. They plead, that this sort of remedy shakes the whole machine and makes terrible efforts upon all the inward parts. But they are more astonished at our custom of bleeding; For they say the blood being the taper of life, we have more occasion to pour it in, than to take it out, considering that life sinks when its principal cause is mov'd off; from whence 'tis a natural consequence, that after loss of blood, nature acts but feebly and heavily, the intrails are overheated, and the parts are dry'd which gives rise to all the diseases that afflict Europeans.

(Lahontan 1905:469).

Conversely, the curing abilities of native groups were recognized and respected by many French. Pierre Charlevoix (Kellog 1923:162) reported remedies for "Palsy, dropsy, and venereal complaints"; a cure for a soldier suffering from epilepsy, by eating the pulverized powder of a certain root, and the quick healing of a broken bone when set by the medicine man. Kalm (1749:375) wrote that while both the "Frenchmen and the Indians" are affected with venereal disease, only the Indians are "possessed of the art of curing it". Kalm attributed this cure to the "use of roots which are unknown to the French".

In the search for these medicinal plants, or mineral products, known to the First Nation healers, the French physician naturalists would collect, grow, catalogue, and forward to France living specimens, thus creating a natural history of Quebec. Europe was eager for descriptions of Canada and for exotic remedies. Explorations were drawing other places into Europe.

5. The Nature of Canada in France

Francois Gendron, surgeon-donne, of the Jesuits, lived with the Huron for seven years and made a fortune in France with the sale of his ointment created for the healing of fistulas, stubborn cancers, and ulcers. The base of this ointment was powdered stones from Lake Erie, "Pierres Eriennes", Gendron called it. When back in Europe, he treated Queen Anne of Austria for her breast cancer (Gendron 1650, DCB, Vol.1:328), thereby assuring the popularity of this ointment. Apothecaries in France demanded tree gums, maple sugar, beaver kidneys (musk glands) and other medicinal products from Canada (Drolet 1970:30).

From his year spent in Acadia (1699-70) collecting information on the habitat and

lifestyles of both the French and First Peoples, Dierville (surgeon) wrote a book Relation du Voyage du Port Royale de l'Acadie ou de la Nouvelle France, which became a best seller in France when published in Rouen in 1708 (Champlain Society 1933).

Europeans could enter foreign landscapes by reading tales of the Canadian winter and images of fine drifting snow, "foudrille", or the springtime activity of maple sugar production, as well as more exotic items, for example, how the First Peoples revived those who had drownwd by giving them enemas of tobacco smoke (Ibid 180). Dierville

also collected and described plants. One of the "Dierville Acadensis" (now the Dierville Lonicera), Tournefort dedicated to him as being the only known species of that genus thought to exist in the world (Rousseau 1969:188-9).

On n'herborise pas au Canada comme en France. Je parcourrais pas plus aisement toute l'Europe et avec plus de peril.

Michel Sarrazin (Vallee 1927:7).

In spite of the hazards of living in a land constantly involved in warfare, Sarrazin came to New France (1685) as a surgeon with the Marine. In the following year, he became surgeon-major of the colonial troops at both Montreal and Quebec attending those wounded in duels or injured while fighting Iroquois.

After his experience gained in the British invasion (1690) of caring for the soldiers, he created a list of the Medicaments Necessaire Pour les Troupes du Roy en Canada a Envoyer en 1693 as shown in Table 5 (after Vallee 1927:273-6). His list included 89 essential medicines, (honeys, oils, cinnamon water, saffron, iris of Florence etc.) and was small in comparison with the 362 varieties recommended by the Swiss physician Fabricus (1588) for their military medicine chest (B.M.A. 1906:82). What is pertinent from this list of oils, honeys, minerals, is that the essential ingrediants suggested by sarrazin were the same as those of the British military as recommended by the surgeon George Jackson in the assault against the French (Vallee 1927:21).

Table 5. Memoires des Medicaments Necessaires Pour les Troupes du Roy en Canada a Envoyer en 1693 (Vallee 1927:273-276).

6 L	Theriaque fine	1 L	Confection de Hyancinthe
1 L	Confection alkermes	4 L	Extrait de genevieve
2 L	Eau theriacle	6 L	Eau de gland
12 L	Manne de Calabre	2 L	Confection Hamec
4 L	Diaphene	10 L	Catholicum fin de rhubarbe
8 L	Sene	8 L	Anise verde
4 L	Rhubarbe choisie	2 L	Therebinthe commeux
20 L	Catolicum simple	8 L	Miel mercurial
8 L	Miel violat	6 L	Miel de Narbonne
3 L	Miel rozat	2 L	Cristal mineral
2 L	Sirop de pavot rouge	2 L	Sirop de pavot blanc
2 L	Sirop d'alkermes	2 L	Huile d'ypericon
2 L	Sirop de camomille	2 L	Huile d'abceinte
3 L	Huile de lis blanc	3 L	Huile d'anet
1 L	Huile d'amendes	10 L	Huile de noix
4 L	Huile d'espica	4 L	Huile de laurier
3 L	Pois de Bourgogne	6 L	Tamarins de Marseille
4 L	Egyptis	2 L	Therebentine Venise
4 L	Supratif	4 L	Souffre vif
4 L	Cire blanche	4 L	Farines
4 L	Sirop de nerpran	4 L	Sirop de Grenades
2 L	Eau de canelle	4 L	Sirop de Beriberis
1 L	Aristolochie ronde	2 L	Alun de roche
1 L	Conserve Quironondon	2 L	Conserve rose de Provence
1 L	Sel armoniac: 8 onces Gomme edragante 6 suc de reglisse noir 4 onces esponge fin 2 fleur de Stecas d'Arabie (Herbes de scourdi, bitoine, chevrefeuille, melisse, souchot, sage, santaure, tim, lavande, salniavita)		
1 L	Santa! citrin et rouge		
2 L	Ungant Napoliy anum de Coras		

With this list of required medicines were descriptions of the specific desired action (sudorific, emetic, laxative). Also listed with the medicinal substances were lances, syringes, bandgages used for phlebotomy with the accompaning salves, and ointments used to stop the flow of blood. The medicines were not indigenous to Canada. The supplies came from international trade, reflecting collection from many different countries. It was the search for

the medical virtues of new plant and animal species by Sarrazin (Rousseau 1966:592-600) and later by Gaultier (Boivin 1966:675-8), that would ensure Canada entered this marketplace. The great distances between countries was being reduced by the continued exploration and colonization of places by the European powers. Once "discovered", plants, barks, and other substances would enter the world market.

Sarrazin's interest in this quest for new plants was piqued by the classes of botany taken from Tournefort, as part of his medical studies (1694-7), and from the time he had spent in the Jardin Royal des Plantes. Returning to Canada in 1697 with a doctorate in medicine, Sarrazin was confined no more to military-medical activities, but was constantly seeking rare specimens of flora and fauna.

The king's chief doctor has instructed the Sieur Sarrazin to collect in Canada, the special plants, fruits, and other things which that country produces and which may be useful for the Jardin Royal. You are to load onto the king's ships, the cases and boxes which the said Sieur Sarrazin will send addressed to the King's doctor.

March 1698 (Rousseau 1966:596).

Tournefort dedicated one of these first plants, he received from Sarrazin, the "Sarracenia Purpurea", the pitcher plant. Along with these plants destined for the Jardin, Sarrazin maintained contact with the botanist, Sebastien Valliant, who, on receiving specimens from Canada, preserved them in his own herbarium and also dispatched specimens to the British botanist, William Sherard, where they still survive today in the "Sherardian Herbarium" at Oxford University (Ibid:596). As part of the effort to further knowledge of the natural history of foreign countries, the Academie Royale des Sciences de Paris had named Sarrazin one of its correspondents.

Notes would arrive with each specimen, and Valliant, the initiator of the natural classification of plants, studied these carefully and added his comments, to create a Catalogue des Plantes du Canada. The list included two hundred living plants. Among the Canadian plants introduced to France, were the four varieties of sugar maple, the blueberry, and gingseng, each with a correspondence to be read, in France, by a member of the Academy.

While the descriptions of plants, indigenous to Canada was growing, the therapies employed by sarrazin were not enlarged. Kalm (1749:375) wrote, that to treat pleurisy in a

patient, Sarrazin: "Gave him sudorifics, which were to operate between eight and ten hours; he was then bled, and the sudorific was repeated; he was bled again, and that effectively cured him". Possibly, it could have cured the patient from taking any more treatment.

The lances Sarrazin used for phlebotomy were also used on extremely minute dissections of Canadian animals whose natural history was published in France, many by the Journal des Scavans, as "Histoire naturelle et anatomique du Castor", "Observations sur le porc-epic", "L'Histoire anatomique du veau-marin" (Rousseau 1966:595; Vallee 1927:105-125). The Academie eagerly gathered information on Canadian animal and plant life as described by Sarrazin until his death in 1734.

The interest was continued with the next medecin du roi, (at Quebec) and corresponding member of the Academy, Jean Francois Gaultier, who sent large contributions of natural history to the Jardin du Roi, with several new discoveries, the Gaultheria Procumbens (winter-green) being one. Not limited to the study of plant life, Gaultier kept daily records of heat and cold, the variations of the seasons, character of the harvests, direction of the winds, combined with notes on insects, minerals, and animals. An abstract of these notes, Botanico-Meteorological Observations was published in the Academie's transactions of 1745, 1746, 1747 (Boivin 1966:675-8).

When Kalm came to Canada on July 1749, he was impressed with the work of Gaultier:

Great efforts are made here for the advancement of Natural History, and there are few places in the world where such good regulations are made for this useful purpose, all of which is chiefly owing to the care and zeal of a single person.

(Kalm 1749:362).

To this effort, Gaultier printed a memorandum to be forwarded to all the officers in the forts, specifying how they can assist in this "advancement of Natural History":

A number of trees and plants which deserve to be collected and cultivated because of their useful qualities....It is further requested that all kinds of seeds and roots be gathered here; to assist in such an undertaking, a method of preserving the gathered seeds and roots is prescribed so that they may grow and be sent to Paris. Specimens of all kinds of minerals are required; all the places in the French settlements are mentioned, where any useful or remarkable stone, earth or ore has been found. There is likewise a manner of making

observations, collections of curiosities in the animal kingdom.

(Kalm 1749:362).

Gaultier requested the soldiers to enquire and to observe how the Indians employ certain plants for medicinal purposes. Those men who showed the greatest effort in this quest would be promoted or otherwise rewarded. For this great stimulation to the acquisition of new "useful" natural items, Kalm commends the French and condemns the English for not having such a taste for the promotion of "natural history".

While the "useful" plants, minerals, and animals were being transported to Europe the French were ensuring that this new place of Canada would resemble their old country, and were therefore importing the "useful" plants and animals, so the European traditional way of life could be created.

All the horses in Canada are strong, well made, swift, as tall as the horses of our calvary and of a breed imported from France. The cows have likewise been imported from France...and the sheep which, however degenerate here each year.

(Kalm 1749:449).

Green and reddish brown grapes were grown on vines brought from France (Ibid 485). French kitchen herbs were not as hardy so new seeds were brought from France each year, "as they commonly lose their strength" in Quebec (Ibid 418). Michel Sarrazin planted Swedish wheat and rye with success (Rousseau DCB 1966:597), but until the implantation of Swedish or Norwegian corn to Canada, the people looked upon "Canada as little better than an useless country" (Kalm 1749:438). The common dandelion and the housefly were not actively promoted, but became entrenched in Canada (Ibid 365,388) arriving with the ships from Europe as they were introduced into all the colonial countries (Crosby 1986).

The landscape was becoming transformed into a place which held more familiar meaning to the invading Europeans. The intense interest in Natural History and the study of the medicinal properties of plants, animals, minerals did not appear to change the French medical approach to disease. The benefit of the plants was described according to their derivative qualities as purgative, emetic, sudorific (Kalm 1749; Dierville 1933:181-2), in keeping with the belief in the restoration of the body humoral balance.

As previously discussed, the French physicians therapy of choice was still phlebotomy,

well into the eighteenth century. When new medicines were acquired from the First peoples, these were simply added to the list of existing French remedies. France continued to supply Quebec with Old World medicines (myrrh, aloes, almonds), the apothecaries of Dieppe, Paris, Bordeaux, and La Rochelle supplied the drugs to the Hotel-Dieu, in Quebec (Nadeau 1951:80,721; Kenton 1956:169-70). In spite of the descriptions of the landscape, the flora, the fauna, climate, seasons by Gaultier, the therapeutic approach remained focused on the individual and did not inspire a regime reminiscent of Hippocratic medical geography based on the principles of Hygiene. The search for "useful" medicinal plants echoed much more, the quest for Panacea.

With the increased scepticism in Europe and the loosening of traditional authoritative power, religious, medical, philosophical, and scientific, the Jesuits, by the eighteenth century had lost their monopoly on the "Indian" (Kennedy 1950). The publication of the Jesuit Relations described for the European audience, for the first time, these new people. The Jesuit descriptions of the First peoples were affected by these priests' need to maintain continuing support from France and also by the continuing refusal by the Indians of converting to Christianity.

With the focus on the "Indians", by the natural historians and by the "enlightened" intellectual of France, the First Peoples could be now described as being more noble, while still needing Christianity to become truly civilized. Lafitau, for example (1724:5) criticized the Jesuits for writing about matters unknown to them and in his books compared the customs of the iroquois as similar to those of the ancient Greeks (Fenton 1969:173-187). Of course, all of these explanations and descriptions of the First Peoples, their habits, and character, reflected more about the character and beliefs of the French observers than about those of the "Indians".

The ever-increasing "facts" gathered concerning the multiplicity of plants, animals, minerals, and human beings, from many countries made the classifications of natural historians, a difficult one. It was Carl von Linne who attempted to place all the earth's living creatures into one system, The Systema Naturae, in 1735

(Blunt 1971). The classification was based on the appearance, habits, relation, and uses. Humans, homo sapiens, a species of animals stood at the top of the list of flora and fauna

(British Museum 1933; Steflau 1971; Hagberg 1952). Five varieties of "man" were recognized, and their characteristics were determined by their place of origin. This classification of humans was similar to the environmentalism of the Greeks.

Wild Man	American
hairy, mute four-footed	erect, straight black hair, copper-coloured, face harsh, choleric, obstinate, regulated by customs
European	Asiatic
fair, brawny, sanguine, gentle, hair yellow, flowing garments, governed by laws	sooty, melancholy, rigid, hair black, severe, haughty, covetous, governed by opinions
African	
Black, relaxed, phlegmatic, hair black, frizzled, nose flat, lips tumid, crafty, indolent, governed by caprice	

In this description, the American became the European image of the First Nations' peoples as created by the natural historian viewpoint. The American Indian was inferior in physique, and in character because of his environment (Berkhoffer 1979:38-49). The reason given for the European animals and people degenerating, after living in North America, as Kalm had stated was due to the deterministic characteristic of place.

The First Peoples had suffered from diseases brought from Europe and had lost one half of their populations in one decade. The very landscape was changed, with the French efforts to impose the European culture of agriculture by introducing new animal and plant species. First, the Jesuits attempted to remove the spiritual significance of place. The military followed with the fight for the physical place. The military physicians supported the conquest by maintaining the soldiers and were used in attempting conversion. The natural historians

sought First nation "useful" knowledge, "facts" of flora, fauna to be expropriated for French use to make "the country powerful" (Marquis de la Glissonnerie 1749; Kalm 1749:475).

The First Nations' peoples meanings of place, spiritual and physical determined to a great extent, their approach to health and the care of those who were ill. Every action was important, including the aid from spirit helpers. The French approach to health and illness reflected their strong growing confidence in the ability to "dissect nature" and to discover the "natural facts". There was no room for a mythic sense of place; context was not important, as science knew no boundaries. The academies drew into Europe, the curiosities of the world. The ingredients, once classified and given scientific meaning, then entered the marketplace. The physician treated the person devoid of environmental consideration and depended upon techniques to restore the humoral balance within the individual.

In spite of the continued pressure on the First nations, these peoples remained unconvinced that Christianity, a French lifestyle, and aggressive medical practices were worth emulating. The next chapter examines the continued pressure on the First nations to separate them from their place in both literal and metaphorical senses. In the medical topography of Upper Canada, 1819, the natural history of place and disease, based on observations of one region are explored.

7. A Medical Topography of Upper Canada

John Douglas, assistant surgeon, of the British eighth regiment, came to Canada with the military as did the majority of physicians. This regiment came to Canada (1809), directly from the French West Indies and was engaged in war in the southern part of Ontario for the next five years (Roland 1985:X-X1). Out of this experience, Dr. Douglas wrote, A medical Topography (1819), in which he discussed:

1. The topography of the country
2. The soil and climate
3. The services of the troops
4. The diseases which prevailed
5. The state of the wounded
6. The provincial militia and Indian nations who co-operated with the army.

Hippocrates had made clear the idea that variations in disease distribution occurred from place to place according to the changing climate, soil, wind, quality of water, vegetation.

Parcelsus had stressed the notion that the physician needed to walk through the land, to become a "Geographus" in order to understand what diseases would develop in various regions. The French physician naturalists had examined the climate, the vegetation, temperature, the fauna of specific landscapes. The importance of the examination of nature to the practice of effective medicine is clear in the book of Douglas.

Douglas (1819:14-15) explained that, "in every remote region, there are many objects to engage the attention of a medical observer". He gains personal enjoyment from finding plants known previously by written descriptions, or by recognizing ones familiar "to his native soil". His mind is "no less interested with the peculiarities of the climate, than with the different forms of those diseases prevalent in the country". Each season, with its accompanying changes in climate, wind, sun, temperature, rain, soil, is "connected with different states of health and sickness". In spite of many unknowns, Douglas is convinced that there exists an, "evident analogy between each season of the year and its attending diseases". Both catarrh and pneumonia were common in the spring. Catarrh depended on the "changeableness of the weather; pneumonia, on the great and sudden transitions of temperature" (Ibid 15).

There were inherent diseases due to the environmental state, but the "young soldier being addicted to intemperance" and going without sufficient clothing, or getting overheated, suffers more severely from disease (Ibid 16). Although Douglas mentioned the use of blisters, warm baths, and purgatives, prompt and copious blood letting was the therapy of choice. "To combat pneumonia in one patient, sixteen pounds of blood were taken from the arm within the space of four days" (Ibid 19).

The Hippocratic approach to health and disease is evident in these statements. While the physician needs to study carefully the physical environment, because diseases arose out of the climatic changes and conditions, the person needs to maintain an equilibrium within her/his own physical milieu. As Paracelsus had written, a physician must be a "Geographus", "not to describe how the countries wear their trousers, but how to attack more bravely what diseases they have" (Sigerist 1941:27). The concept that climate, weather, seasonal change and certain human factors were related to disease was explored by physicians who had travelled to new colonial environments and were published as medical topographies (Currie 1792; Drake 1854; Hirsch 1883-1886).

Douglas was disappointed that, "an insurmountable barrier is opposed to our inquiries concerning those remedies which the rude tribes of North America employ in the cure of their diseases" (Douglas 1819:41). He did comment that due to the "wild and inconsistent" mythology of the "Indians", they believed in the existence of spirits and some individuals, "employ spells and incantations, or have recourse to a variety of mysterious rites in order to impose on the credulity of their weaker brethren" (Ibid 41). The "diviners" also employed "purgatives, emetics, blisters, sudorifics".

The knowledge of physical place was important to the British physicians in their approach to health and disease. This place did not include recognition of the existence of a spiritual realm as did the place of "the rude tribes of North America". In the study of the natural history of place, only the "facts" need be examined, as Francis Bacon had proposed.

The following chapter discusses the pressures exerted by the presence of the colonists, and the young Canadian government, on the experience of the peoples of the First Nations. This involved the restriction of their literal place by the imposition of reservations and the forcible containment of the indigenous people into confined areas. The ways of celebration, as means of maintaining close connections with their world of spirit and nature, as expressed in the Sun Dance and Potlatch were made illegal. By restricting, both physical place and the free expression of the metaphorical place by First nations, the Eurocanadian authorities were limiting the healing practices of these First Peoples.

CHAPTER 7

RESERVATIONS AND RESTRICTIONS:
THE CONTROL OF FIRST NATION PLACE

It is necessary, however, in the first instance to lay down the principles on which the future management of the Indians should be conducted and by which the efforts of the Government on their behalf should be regulated. It has been shown that up to a recent period the policy of the Government towards this race was directed rather to securing their services in time of war, than to reclaiming them from barbarianism and encouraging them in the adoption of the habits and arts of civilization. With this view they were for many years placed under the superintendence of the military authorities in the Province.

Since 1830 a more enlightened policy has been pursued under instructions of the Secretary of State and much has been done in Upper Canada both by the Government and by religious bodies to promote their civilization, but the system although improved has had a tendency to keep the Indian in a state of isolation and tutelage and materially to retard their progress. The true and only practical policy of the Government with reference to their interests both of the Indians and the community at large is to endeavour to raise the tribes within the British Territory to the level of their white neighbours; to prepare them to undertake the offices and duties of citizens; by degrees to abolish the necessity for its further interference in their affairs.

Experience has shown that Indians can no longer lead a wild and roving life in the midst of a numerous and rapidly expanding white population. Their hunting grounds are broken up by settlements; the game is exhausted: their resources as hunters and trappers are cut off; want and disease spread rapidly among them and reduce their numbers. To escape these consequences no choice is left but to remove beyond the pale of civilization or to settle and cultivate. From this cause and under the influence of the missionaries, few Indians remain unsettled in the inhabited parts of Canada.

The chief obstacles to the advancement of the race are their want of self-dependence and their habits of indolence which have been fostered, not created by the past policy of the Government; their ignorance or imperfect knowledge of the language, customs, modes of traffic of the whites: and that feebleness of the reasoning powers which is the consequence of the entire absence of mental cultivation.

The above Report on the affairs of the Indians in Canada, submitted to the Honourable Legislative Assembly (Canada, Parliament Sessional Papers; Secretary of State 1868-1873, Appendix T:1847) revealed a change in focus of the government in dealing with the original peoples. When no longer needed as military allies, the focus of the government towards the Indians becomes one of management and of reclaiming them from barbarianism and encouraging them in the adoption of the habits and arts of civilization.

Whether to "remove" the "Indians" to geographic locations separate from those of the white populations or to "civilize" them in the ways of life of the invader had been much discussed a decade earlier. The Aborigines Protection Society established in London recognized that "the Aborigines have diminished wherever they have come in contact with civilization"(Report on the Indians of Upper Canada 1839:23). After a study into this phenomenon the Society put forth suggestions (April 3, 1838) as to how these people could be "rescued from annihilation" by protecting and elevating "the North American Aborigines " and therefore setting "a new and noble example for the imitation of the civilized world" (Ibid 27).

The introduction of "civilized habits" and "bona fide conversion to Christianity" were recognized as "having mutually promoted each other and proved the best security" against the rapidly decreasing numbers of First Peoples (Ibid 28). The fact that the "Indians" suffered severely from epidemics was attributed to their "irregular" mode of life and their lack of civilized habits, diet, mode of dress, habitation, and child-rearing practices. They did not observe proper mealtimes. The "Indians" ate only when hungry not at specific hours like the Europeans. They exposed themselves to the wind, rain, cold and snow preferring not to live in permanent houses. But viewed most damaging to the health of the young were their child-rearing practices viewed critically by Samuel Jarvis (Superintendent of Indian Affairs 1842) who reported:

The parents of Indian children seldom correct or restrain them in any way and as soon as they can walk they are permitted to follow their own inclination, if the weather be hot they go naked and near to water which is generally the case to bathe often. In winter they are imperfectly clothed, the covering of their feet being moccasins is no protection against wet..... Hence it follows that children of tender age of weak constitutions fall prey to consumptions and

various other complaints which are aggravated by such a mode of life.

(Canada Parliament Sessional Papers 1886-1873,
Appendix T 1842).

The children were accustomed to going naked in the summer. This had ensured them an adequate supply of vitamin D, but as no one knew about this vitamin, there was much pressure by the authorities to have the children clothed. Rickets would also develop in children more from lack of sun than from dietary changes. The love and leniency shown by parents to their children was not understood by the Europeans who demanded obedience. The strict schools designed to instill European ways and to erase the children's heritage would become places of disease and death as would the squalid communities designed to enforce a stationary "civilized life" on the people accustomed to a migratory life (Bryce 1922; Graham-Cumming 1967).

That conversion to Christianity assured the well-being of the First Peoples was statistically proven (Table 6) in a submission by the Reverend Mr. Stinson (agent of the Wesleyan Missionary Committee) in reference to the Credit Mission, near Toronto, to the sub-committee in London for their enquiry into the "Aborigines of British North America" (Canada Report 1839:34).

As shown in this table, the Meedai, shaman, the tribes' own healers and the person's vices including the abuse of alcohol were blamed as causes of death. Therefore only by embracing Christianity and forgetting old ways would the people survive. According to Stinson the Indians needed to be saved from themselves. One aspect of "civilization" meant keeping the evils of European society from the people.

Alcohol became a major preoccupation of the church leaders. But, as F.L. Barron, in Alcoholism, Indians and the Anti-Drink Cause in the Protestant Indian Missions of Upper Canada 1822-1850 (Getty and Lussier 1983) explained drinking in the Canadian colonies was a widespread social problem as it was in Europe in the eighteenth and nineteenth centuries. It was not restricted to the original peoples. The shaman continued to be feared and resented by the clergy.

Table 6. Number of Deaths During Four Years Previous to Embracing Christianity 1827

Number of Deaths During Four Years Previous to Embracing Christianity 1827

Natural deaths, hastened by vices	12
Died drunk	9
Killed by being stabbed, bruised, or otherwise injured by their associates, or relations	14
Burned to death by falling in the fire when drunk	2
Drowned when drunk	2
Poisoned by the Conjurors or Meedai (persons frequently employed by the Pagans to avenge real or supposed injuries)	4
Insane through continued drunkenness, eaten by wolves	1
Killed by accident when drunk	1
Killed by accident when sober	1
Died in childhood	1
Total	47

Number of Deaths Since Embracing Christianity

Natural deaths	3
Total	3

Source: Canada Sub-Committee. 1839. Report on the Indians of Upper Canada. Sub Committee Inquiry into the state of the Aborigines of B.N.A. page 34.
Reverend Stinson agent of the Wesleyan Missionary Committee. Reprinted 1968 in full by Toronto Canadiana House.

1. Reservations, Rations, and Disease

While the tribes of the East had been in contact with the Europeans for two decades and were under considerable pressure to deny their traditional way of life and to accept the Europeans religion and medicine, the people of the Plains were less influenced. The Old World diseases proceeded with the European into the prairies and passed rapidly from tribe to tribe. Following La Verendyre's explorations, small pox spread in 1763 among the

Assiniboiné and Sioux, by 1783 reached the western tribes and wiping out nine-tenths of the Chipewyn population of the Northwest Territories (Purich 1986:29).

Epidemics of influenza, measles, scarlet fever and fevers of unknown origin followed (Ray 1976:139-57). In the 1837 small pox epidemic in the Hudson's Bay Company's Northern Department, the fur traders estimated that the Indians, chiefly Assiniboiné, Blood, Sarsé, Piegan, Blackfoot, and Gros Ventre lost up to three-quarters of their population. The relative isolation of the Plains tribes ended in the late nineteenth century.

The missionaries entered the communities, the American Sioux fled north from the army and by 1878 European immigrants entered the country surrounding the "reserves". The speed of transition was alarming. The acquisition of the North-West Territories, the organization of the Province of Manitoba and the admission of British Columbia into the Dominion widely extended the sphere of operations of the Government.

"In anticipation of the movements of the troops across the country lying between Thunder Bay and Manitoba in 1870, agents were sent to visit the Indian tribes to placate them with presents and to assure them that a right of way for troops and immigrants was required" (Indian Branch of the Dept. of Sec. of State, Sessional Papers No.22, 1872:32). By 1871, Wemys Simpson was selected General Indian Agent to make treaties with the tribes (Ibid 4). More than a right of way was wanted and the government "desire to throw open to settlement any portion of the land which may be susceptible of improvement and profitable occupation" (Joseph Howe, May 1871, Sec. of State for Prov. 6-7).

Within the next two years it became evident that "reservations" were needed to locate the "Indians" upon, as "white settlers are now anxious to pre-empt homesteads" (Supt. of Indian Affairs, Sec. of State, Sessional Papers Vol.5:Session 1873). Small pox raged and famine was suffered by the First Nations (Maundrell 1941). Among the Blackfoot alone six hundred starved to death in the winter of 1879 (Jenness 1932:324). The Dominion of Canada issued rations of white flour, bannock, and salt pork and proceeded to settle the people onto reserves to teach them agriculture.

This transition to a settled reserve life was disastrous. By crowding into confined spaces, sanitary conditions were made worse, nutrition was poor, the "rations" were inadequate and contagion became more inevitable and widespread. Tuberculosis now was rampant among the

Cree, Sarcee and Blackfoot, reaching deaths of 137 per 1,000 among the Crees in 1890 (Ferguson 1928).

It is unfortunate, although probably inevitable that the First Peoples susceptibility to European diseases would be used as a "military tool" by the Colonial Government in establishing European settlements. The Fort Benton Weekly Record of September 24, 1880 reported such an event in southern Alberta. In his epic book Seven Arrows, Hyemeyohsts Storm (1972) described a similar deplorable activity in symbolic form:

As you probably have heard, the Brotherhood is now only a thing of memory. Confusion, distrust, greed and the new way of the war God are destroying everyone. The north river of the medicine wheel, by which the whites call the Missouri was visited not long ago by whitemen who left great piles of robes as gifts for the people who live there. Word of the gift robes spread quickly and many of the people rushed to these places to get them. The robes killed them....."But how" Green Fire Mouse asked, his voice shaking? "What is this great power that can make robes kill?" "The white man somehow called sickness into the robes, little brother and it killed them.

It is clear that the whole social fabric of the First Nation communities was disrupted during this period of European expansion. Disease was introduced to which the people had no resistance or cure, their land was taken away, the buffalo disappeared, their way of life was threatened. Treaty No. 6, signed in 1876 between Canada and the Crees of central Alberta and Saskatchewan was the only Treaty which specified governmental assistance of medical care and provision of food in time of need:

In the event hereafter of the Indians....being overtaken by any pestilence, or by general famine, the Queen will grant to the Indians assistance...sufficient to relieve them from the calamity that shall have befallen them. A medicine chest shall be kept at the house of each Indian Agent for the use and benefit of the Indians at the direction of such Agent
(Morris 1880:355).

However, these measures were ineffective in the face of the epidemics and the loss of freedom experienced by the Cree as by the other Nations to live on all places of their lands. The Cree chief Poundmaker (1870), responding to the dramatic loss of his community members explained his understanding of this tragedy:

Of old the Indian trusted in his God and his faith was not in vain. He was fed, clothed and free from sickness. Along came the whites and persuaded the Indian that his God was not able to keep up the care. The Indian took the white man's word and deserted to the new God. Hunger followed and disease and death.

(Jefferson 1926-31, Vol.1, No.5).

The failure of their "medicine" to cure or to reduce the ravaging effects of the European diseases likely went in favour of the European invasion. It was also the pressure on all aspects of the First Peoples lives, beyond the epidemics which did harm. The forced movement of independent Nations onto reserves, the stripping of medical/religious expression, changes of diet were all crucial in reducing the health and social well-being of the communities. The introduction of European medicine was an integral part of the governmental goal of "civilizing" the First Nations. An Indian Agent stated in his report of 1912 (Canada, Sessional Papers No.27,1913:130):

A permanent medical officer at this point would be a great benefit to the Indians: nothing has a more civilising effect upon them than a display of the white man's skill in healing, nothing convinces them more readily of the white man's interest in them.

While this demonstrates the prevailing governmental attitude of paternalism (Young 1984:260), it also reflects the belief that European, technical/medical solutions could be imposed upon what were complex spiritual, social, environmental and political realities (Arnold 1988:1-27). Healing could take place separate from milieu. Just as Christianity at an earlier time "proved" to save "Indians" from death, now European medicine was required to deal with the "new" diseases. While Christianity and European medicine were being imposed, what, if any form of control was exerted by the government upon the First Nations Medicine Men or Shaman?

2. Potlatch and Sun Dance

The Canadian government has never passed laws specifically to control the healing activities of First Nation medicine men. However, at certain times, since non-natives assumed control of First Nations affairs, laws were made and policy established that had the effect of severely limiting traditional medical practices. These controls explicitly focussed on the

economic, religious, or political aspects of subjects, not strictly medical;

1. The Indian Act (1884) prohibited the performance of certain ceremonies; 2. Provincial laws restricted all (alternative) unlicensed medical practitioners and their use of medicines to a non-charge status (Hamowy 1984); 3. Informal control exerted by religious officials would deny "non-conforming" behaviours, censure "traditional approaches", and enforce "European ways".

In concert with these influences, the practice of traditional health care had already been affected by the malnutrition and epidemic diseases. But the legislation restricting the celebration of ceremonies was a denial of the First Nations' unique sense of place, and further removed them from their experiencing of place, and as a consequence would affect the practice of healing.

The first Federal control enacted was the Indian Act 1884 (Revised Statutes of Canada 1886, Vol.1, Chap.43: 647-686) which stated:

Every Indian or person who engages in or assists in celebrating the Indian festival known as "Potlach" or the Indian dance known as "Tamanawas" is guilty of a misdemeanor and liable to imprisonment for a term not exceeding 6 months and not less than 2 months. Every Indian or person who encourages either directly or indirectly an Indian to celebrate the same or who assists in the celebration of the same is guilty of a like offence and shall be liable to the same punishment

(Canada Statutes 1886, Vol.1, Chap.43:682).

The government's intention in forming this law was to stop the giving away of large amounts of goods during these festivals. Previous to the law, "The indiscriminate donation of property for display commonly called Patlatch", a "pernicious custom" (Canada Sessional Papers, No. 22, 1872: Appendix F :31) was acknowledged with alarm and distaste. The specific items and their monetary value were documented carefully by Indian agents, school teachers and missionaries. The following articles were counted at a "usual" Bella Bella Festival held in 1873 (Ibid 32):

Table 7. Potlatches of Bella Coola Tribes of Indians at Bella Bella December 22, 1872,
by Invitation of Chief of the Bella Bella Tribe

Items Distributed at Potlatch held by the Chief of the Bella Bella Tribe December 1872

		\$
350	2.5 and 3 point, white and coloured blankets averaging \$3.00 each	1,050
100	2.5 and 3 point, white and coloured blankets destroyed and distributed in pieces	300
1000	yards of printed and white cloth donated in prices at 20 cents a yard	200
7	cases of molasses costing \$12.00 a cask	84
10	boxes of biscuits at \$6.00 a box	60
200	pounds of pitch at 10 cents a pound	20
40	boxes, each containing 10 pounds of crab apples in oslahan oil (traded with other tribes at 2 blankets per box) \$5.00	200
Three canoes given value each at ten blankets		75
Three muskets costing Indians each \$15.00		45
Sundries as dried fish, fruits, beads etc.		100
400 pounds midlings at 5 cents a pound		20
TOTAL COST		2,154

Source: Canada Sessional Papers. 1872 No.22, Appendix F:32.

The cataloguing and appraising of items strips the festival of its significance. The Potlatch was a feast to mark various life crises such as death, birth of an heir, marriage, the raising of a totem pole. Potlatching served the economic role of redistributing food and goods. Maybe the greatest social utility of the potlatch was to neutralize and eliminate the rich/poor discrepancy. The feast included dances and theatre re-enacting ancestral encounters

with the supernatural world, when certain powers passed into human domain. In this way the potlatch joined the whole community in a celebration and re-newal of connection with the worlds of physical and spiritual domain (Clutesi 1969; Barnett 1938, 40:349-358; Adams 1973).

This celebration, however, interfered with the attempts to enforce the concepts of individual property ownership and thrift (Fisher 1977:207-211). The law was expanded (1895) to encompass all festivals which included the giving-away of goods and sometimes the self-mutilation of the dancers (Canada Statutes 1895, Chapter 35:Section 6) and was in effect until 1951 (Canada Statutes Chapter 29).

Just as the Potlatch as practiced on the west coast was viewed with distaste, the Sun Dance or Thirst Dance as celebrated on the plains was under similiar scrutiny by Indian Agents and missionaries who wrote to Ottawa officials demanding action. There was discussion by officials as to what exactly the festival entailed. No mention of medical factors in correspondence surrounding these amendments. As far as the Government was concerned, the main reasons for prohibitions were economic and political (PAC RG-10, Vol. 1620; Vol.3825; Vol. 6808: Vol.2378). A further consideration may have been the threat of an uprising by preventing assemblies of large numbers of First Peoples.

Before the law, the celebration was hindered by zealous officials. Agent D.Clink, of Hobbema sought help from the North West Mounted Police at Edmonton as in this letter of June 8, 1893:

The Indians are expecting a lodge for the purpose of holding a Thirst Dance or Potlach at Battle River Settlement to begin tomorrow. I want you to send out and have two or three of the ringleaders punished and arrested.... For several years past "Accasianent" and two or three others tried to get dances causing discontent among Indians and taking them from their work. I think the only way to stop it is to punish the ringleaders.

(Indian Affairs:Black Series Vol.3825, file 60,511-1:1889-1903)

Each Agent was to report on First Peoples Sun Dance activity, and was encouraged to substitute this activity for "tea dances, quadrilles, reels, more civilized dances" (Battleford 1894, Ibid). The participants' inability to work was always emphasized. The Reverend McLeod and the Farm Instructor wanted the dances stopped as: "Indians can't work for a

couple of days after, consequent on their working themselves into a complete frenzy in the Sioux Dance" (Ibid). The clergy called for more missionaries so "Christianity could be introduced quickly to these fierce tribes" who were supposed to be "dying quickly from practices of their heathen religion" (RG-10, Vol.3825).

With the law in place the Manitoba Free Press, July 1, 1895 (PAC RG-10, Vol.3825) described, in this article, the successful prevention of the ceremony:

No Sun Dance: Agent Wright of Touchwood Reserve Suppresses the Braves

An interesting warfare has been waged during the past week between Agent Wright and the Indians in this vicinity to decide whether or not they should do the Sun Dance and contrary to expectations, the Agent has succeeded in the contest. It is claimed that the Indians have been too much humoured in the past; that the presents of flour at the time of the dance only encouraged them in the performance of the unnatural ceremony, when they became so excited as to be drawn away from all peaceful employment such as tilling the soil, tending the stock.

Mr. Wright did not use the gentle method but stated plainly that the dance would not be allowed and to show he was not trifling, had the Leaders arrested and bound over to keep the peace. As a result, the braves are now moving back to their reserves sadder but no doubt further on their way to civilization.

In spite of prohibitions (arrest, holding children in school, withholding rations), Sun Dances continued. In 1903, when the ninety year old Shaman, Gayfapasagsnug was arrested by 8 policemen and sentenced to two months of hard labour for instigating the Sun Dance. There was a public uproar demanding the release of this "old man" who subsequently was (Winnipeg Free Press Jan.27,1903, RG-10, Vol.3825, 60,511-2). But the Indian Department hoped that with time and the active promotion of the Dominion Day celebrations of football, tug of war, three-legged race etc. (sponsored by Hudson Bay Co. and the Government), the "annual dance will become merely a picturesque ceremony" (Manitoba Free Press 1902, RG 10, 3825).

The First Peoples appealed to the Agents to be permitted to "legally" practice their celebration of Sun Dance and in one instance, for healing purposes, demonstrated the deep

significance of the ceremony. Chief Big Plume of the Blackfoot Nation (1897) when ill, and with his young son who was suffering from pneumonia requested permission from the Agent of Winnipeg to hold a Dance as "their lives depend on it" (PAC RG-10 3825). The request was denied. Bulls Head chief of the Sarcee 1889 planned a large Dance to "give expression to their feelings on the recovery of several sick" as the agent Cornish wrote in his demand for troops from Regina (RG 10, Vol.3825,1889-1903) to suppress the activity.

There were attempts by the people to explain the significance of the ceremony to the government officials. For, in spite of the increased restrictions on the dance, it was central to the native experience of their place and would not easily be displaced. Little Bear, a Cree Chief described the Dance to an Indian Agent (1872):

In the Springtime, when the children of Manitoba are sick and the grass is coming up, and the trees are putting forth their leaves, we dance the Sun Dance that we may be made well and to thank Manitou for the things that grow.

The young men listen to me and I instruct them in the ways of our fathers. My father and father-in-law and other oldmen of our race told me to take their places when they were gone and teach the people to make the Sun Dance in the Spring and that day the next spring to dance again. We Crees meet for days and nights before the dance, we eat nothing and grow very thin. The men sit on one side of the lodge, the women sit on the other. All think of Manitou.

Then the old men go into the woods, selecting a growing tree, report to the lodges going from teepee to teepee singing the songs of Manitou. The people form a procession on horseback the young men with bows and the squaws sitting behind them on the ponies.

They move forward to the tree and dismounting, gather about it singing and dancing. As the tree is falling, the braves discharge their weapons, shooting it down to show their happiness at the leaves growing. At the camp we set up the tree, making stalls in which naked warriors screened to the waist dance until they fall and up above we weave a roof of willows. When all has been done the young men come to me and ask that they may be put to the test. I cut slits in the skin of their arms. I run small sticks through and on these hang weights by strings. I make medicines over them, which keep the wounds from festering. We dance 2 days and 2 nights without stopping and as one man falls another takes his place.

(Public Archives Canada, RG10, 3825, file 60-511-1)

The World Tree as a shamanistic symbol has been one of the most ancient and enduring in the world (Cook 1988). It is the "Flowering Tree" at the "True Centre" of the Circle, being the symbol of the universe and representing all the "people as a whole" (Hyemeyohsts 1973:4,14). It was around this sacred tree that First Nations performed rituals to strengthen their connections with their spiritual and physical world. The tree selected by the Cree was "a growing tree", by the Arikara, a Cedar, sacred because it was a "symbol of the annually fading and renewing vegetation of the earth and of the unceasing drama of human passing and renewal" (Alexander 1953:29). A cottonwood was used by the Sioux (Black Elk 1961).

The Sacred Tree is placed at the centre of the world, symbol of the cosmic axis and the Sun Dance involves all participants in the rejuvenation or perpetual rebirth of life (Hulkrantz 1987:141-2; Larousse 1964:440). The Lakota, on the third day of the Sun Dance erected the Sun Pole and in a fork on the pole they placed sage, sweet grass, buffalo hair. To celebrate the powerful moment songs would be sung:

At the centre of the Earth
Stand looking around you.
Recognizing the tribe
Stand looking around you.

(Lame and Erdoes 1973)

In the sacred re-enactment of renewal, around the tree of the sun dance lodge radiated twenty-eight poles, representing the twenty-eight days in a lunar month. According to Black Elk (1973), the lodge represents creation and the universe.

The Shaman knows that he is a spirit that seeks a greater Spirit. The great Spirit knows death. Mother Earth knows life. We are all born from the spirit and once we have lived, we will return to the Spirit. The Shaman knows that Death is the Changer. We do not eat live food. We kill our animals. If the seed or berry does not die when it is plucked, it will die in the teeth or in the caustic juices of the stomach. All Shamans know that Death furnishes all with life

Hyemeyohsts Storm, Northern Cheyenne Medicine-Man

(Halifax 1982:41)

These words of Hyemeyohsts convey the essence of the practice of Give-Away. In preparation for the Sun Dance or other sacred ceremony, the people prepare by giving away, prayers, thoughts, herbs, or the braves give their own flesh and blood to the sun. All things know of their harmony with every other being and know how to give-away one to the other, life to death, day to night; except humans.

"Of all the Universe's creatures, it is we alone who do not begin our lives with knowledge of this great Harmony" (Hyemeyhsts Storm 1973:5). All beings have spirit: the plants, the animals, the water, but only humans have "determining spirit" which can be made whole only by finding the place within the circle of life,

the Medicine Wheel. "To determine this place, we must learn to Give-Away" (Ibid 5). In this way, the human spirit could learn to live in harmony with all other spirits of the world.

The celebration of the Sun Dance involved the continuing renewal of bonds between the First Peoples and their Universe. It ensured their place within the circle of life. To prohibit the celebration of this sacred ceremony was to attempt to deny the very sense of being and place of the Plains Tribes from which arose their approach to healing. While the laws prohibiting the celebration of Potlatch and the Sun Dance were not focussed on medical control, they would, of course affect the practice of healing and limit the power of the shaman.

The Provincial laws which regulated conventional European physicians could be used to regulate the medicine mens practice but only if they charged money. It was not until 1912 that the passage of the Canada Medical Act succeeded in standardizing medical licensing procedures across Canada. One of the motives in creating this act was to limit the number of practioners in Canada (Stevenson 1967:6-7). Up to that time there was a wide variety of practioners, homeopaths, thompsonians, herbal doctors, midwives, barber-surgeons (Hamowy 1984). In the licensing of private medical practice the First Nation medicine man was more vulnerable to outside pressure and prosecution than the European trained practioner.

In the days before Canadian government, the missionaries competed with the First Peoples' religious leaders who were also the healers. Later, the European authorities established qualification tests and by 1890 a compromise existed where "alternative" physicians could practice as long as they charged no money (Neatby 1981:168). In their

struggle to gain dominance, the "regular" physicians (with British or United States training) would attempt to bring the major "alternatives" under their legislation, as nurses and pharmacists (Biggs 1983; Woods 1980:187; Paterson 1967:851; Canadian Pharmaceutical Association 1967; McNabb 1970:12-13) and exclude other "irregulars" from full participation in the profession to reduce competition for "regulars" (McDermott 1967:54-5; Hamowy 1984:Chap3).

The governmental health services designed for the "Indian Reservations" varied. On some larger reserves doctors were employed on a full-time basis. On others, neighbouring physicians were called in when needed and paid a set amount for each visit. The Department of Indian Affairs did not have resources to employ physicians to work exclusively on the reserves (Graham-Cumming 1967:123). Physicians (1880) who wished to supplement their income could take "jail appointments and appointments to Indian Reserves" (Neatby 1981:166). Indian Agents sometimes were physicians, however there was no co-ordinated medical effort until 1904, when Dr. Peter Bryce became chief medical officer for the Department of Indian Affairs (Kue Young 1984:258).

He became appalled with the high rate of tuberculosis on the reserves and frustrated that nothing was being done by government to prevent it. Bryce made public this frustration by printing The Story of a National Crime (Bryce 1922). The position of chief medical officer was left vacant for fourteen years until Dr. Stone took over in 1927,"a sad indication of the low priority accorded health services" (Kue Young 1984:259) to the reserves.

3. Persistence of First Nation Healing Practices

While much has been documented concerning the psychological benefits of First Peoples healing (Jilek 1974 a,b.; Wallace 1959:63-96; Miles 1967, 12:429-431), the medicine man often offered the only healing approach, and where European medicine was available it was not always accepted as being effective for the people as it often made no sense in their belief system. A study of the records of the Department of Indian Affairs shows that the medicine men continued to practice in spite of continued pressure both informal and formal, to stop.

As a Blackfoot medicine man, Wolf Collar (1853-1928 Alberta) was asked especially to cure people who were struck by lightning, curing Self Offering, wife of Duck Chief, when she

was struck. During the famine and disease of 1879-81, he saved many people. Wolf Collar had gained his healing powers in 1870 when he dreamt a vision after being struck by lightning. Thunder, first as a bird then as a woman took him into her tipi, gave him a drum and four songs to heal. In his second vision Wolf Collar was given a shield and additional songs. He was an artist, like shamans of the past, and painted his powerful thunderbirds with power lines of lightning on his drum, shield, and tipi (Brasser 1977:38-41).

The Medical Act did not apply to medicine men as long as they confined themselves to the practice of medicine among their own people on the reserve. However, they were "liable if they practiced medicine off the reserve" (Canada PAC RG-10, Dept. of Indian Affairs, Vol.10243, T-7545). This permission was resented by the officials who "managed the Indians" and in a letter to the Indian Agent, the Field Matron of Little Pine Reserve (Nov. 1913) regreted that the medicine men could still practice as:

It interferes with my work as Matron and dispenser and tends to destroy or stultify the excellent arrangement made by the Indian Department for the physical and moral welfare of the Indians.

She continued to condemn the medicine men of the reserve as being the "laziest" and the "most cunning" who work on the "credulity and ignorance of their brethen". The relatives of the sick would not allow the Department doctor to see them. The Matron finished her letter with the threat "the time is ripe for drastic action by the department". The Medicine Men were seen simply as hindrances to the functioning of the Indian Department. But in February 1930, Dr. Stone in his report on the reserve of Angusville, Manitoba blamed the treatment of the medicine men for the "death of many children" (PAC RG-10, 10243). It is impossible to determine from the archival records the substance of these reports, as no treatment, or description of illness is mentioned. It is clear, however that the government authorities had no understanding of First Peoples medicine and resented its continued practice.

The Indian Agent exerted extreme power over the day to day life on the Reserves. His permission was needed by the European doctors before they hospitalized a patient (Kue Young 1984:259). The Agent "warned the medicine men not to practice" (Canada PAC, Dept. of Indian Affairs RG-10, 10243) and made it difficult for the First Peoples to practice their own choice of healing. When Mike Yellow Bull of the Blood Band from Cardston, Alberta

(1939) was paying \$81.00 to a Herbalist of Lethbridge, the Agent notified the RCMP. Yellow Bull would "not listen to our hospital" and did not believe "our doctors could cure him". While European medicine and hospitals were available here they were not chosen. The hospitals were often seen as places of unfamiliar language, of demeaning practices, or as places of death (DeMontigny 1974:150-159; Robertson 1970:34-77) and not as therapeutic choices.

In several instances medicine men were prevented from practicing medicine off their own reserves. At St. Regis, the Indian Agent (1948) proposed that all :

Visiting Indians coming here for the purpose of supposedly curing ailing Indians be removed from the Reserve by the police.

The Agent stated that there was a resident nurse and interfering Medicine Men were not allowed (Canada PAC RG 10, 10243,T-7545). The medical profession increased its pressure to prevent medicine men practicing on their own reserves as these latter competed with the doctors.

In a strongly worded letter, the Registrar of the Provincial Medical Board of Nova Scotia appealed to the Department of Indian Affairs (1949) to order the police to investigate the case of Frank Cope, "an Indian who is unduly active in prescribing herbs for the sick". The registrar continued that "while the medical profession has been tolerant in the past this practice is serious and cannot be tolerated in the interests of Public Health".

In spite of this supposed threat to the public health, the issue appeared to be the refusal of the people to accept the treatment by government doctors and their continued preference of the medicine men. Frank Cope was investigated and a file containing the claims of many people "cured" by him was documented by the police. No charge was laid as the Police report stated, "the people on the reserve respected him as a healer" (Canada PAC RG 10, 10243, T-7545).

Charges of illegally practicing medicine were laid at least two times, when medicine men treated non-natives. Chief Dominique of Caughnawaga was fined \$200.00 for selling his "bottled Indian Medicine Chief's Linament" and for "diagnosing" and practicing medicine in Montreal (1946) (Ibid). Chief White Eagle, also of Caughnawaga was fined \$50.00 for

practicing illegal medicine from a "birch bark tent" (Montreal Gazette, 24 May 1946:RG-10,10243,T-7545). The exotic rituals of healing continued to be reported on and observed by the authorities who were unclear what to do about them.

At Smithers, British Columbia police await instructions. They have confiscated the paraphernalia used in an elaborate ritual carried out by medicine men as others danced to the tom- toms.

(The Albertan, Thursday, May 14,1942 Ibid)

Confiscated were a wolverine cape, with pieces of bone,teeth and feathers attached.

The different approaches to the practice of medicine were expressed by 73 year old Chief Walking Buffalo, medicine man of the Stoney Tribe of Alberta. "We are different from white doctors. We don't need them. Our skins are different, our language and our many ways are not alike. The Indian wants to maintain their rights and live their own lives". But, the chief continued, the young are now educated in the "ways of the white man" and therefore "neither fit in white man life or Indian tradition" (Calgary Albertan, July 25, 1946: Canada Archives RG-10, 10243, T-7545).

The practice of First Nations medicine was restricted over a period of years since non-natives controlled the affairs of the people and attempted to impose a European health care system upon the reserves. The activities of medicine men were restricted, often indirectly, by the prohibition of sacred ceremonies, by the forced education of children in boarding schools, by the restriction of "alternative" physicians, and by pressures from Indian Agents, field matrons, and missionaries to conform to the "civilized" way of life. The period of transition, the loss of land, the forced settlement onto reserves and the introduction of diseases also diminished the effectiveness of healing. It is clear that in spite of these pressures, Medicine Men did continue to offer traditional therapies to members of their communities. The Medicine Man was ignored, resented, threatened, charged by non-natives, but never approached in a collegial manner by physicians of Eurocanadian background. The literal place of First Nations and the ability to celebrate their unique expression of place as in the Sun Dance was severely limited. In spite of these severe restrictions on their place, Shaman continued to practice their healing traditions based on a very different sense of nature, being, and place.

CONCLUSION

A PLACE FOR HEALTH IN CANADA ?

This thesis assumed at its point of departure that the place in which human beings dwell can be experienced quite differently by different cultural groups. The term place, of course has both literal and metaphorical connotations. Places not only constitute the spatio-temporal settings where human life and activity are conducted; they also are imbued with different symbolic meanings by people.

It is especially in its metaphorical sense that the concept of place serves to highlight differences between the two healing traditions whose historical backgrounds have been described in this thesis. Overriding the major differences among the groups of First Nation peoples on the one hand, and among European immigrants to North America during seventeenth to nineteenth centuries on the other, there is evidence of some fundamentally different conceptions of health and place between them.

It seems justified therefore to speak of two quite distinct healing traditions, each reflecting a different set of environmental experiences and cultural traditions. This concluding chapter summarizes the fundamental features of the contrast and discusses the contemporary revival of "holistic" healing practices, not only among First Nations, but also among Canadians of European ancestry. Implications of these developments, albeit tentative, afford fresh perspectives on the place of health in Canada. Beyond issues of health care and disease, the connections between place and health offer potential grounds for mutual understanding and complementarity between the diverse cultural worlds of contemporary Canadian society.

Peoples of First Nations did not separate place into discrete realms (personal, natural, and spiritual). The healing traditions practiced by the Shaman, while differently expressed by each group, involved the restoration of links among the various realms of existence (material, social, spiritual), in place. Their faith proclaimed that nature could not be controlled and that communication with the forces of nature was possible by living in accord with the beings of nature. It was through this communication that the power of life forces could be directly encountered and used for healing: by placing oneself in contact with the energy flow of Cosmos, the ailing person was restored to wholeness. Knowledge of one's literal place of

existence was, of course, an essential precondition of this: from place were collected the medicinal herbs, barks, roots, food, and skins required for existence.

European medicine, too, developed from ancient roots of Hippocrates who had stressed that a physician must be keenly aware of the physical aspects of place---the soil, climate, location, and winds---in order to understand connections between the individual and environment. Health was experienced when the person was able to live harmoniously within a given environment. Later, however, it was proposed that environments, analytically described in terms of natural elements and location, could determine to a great extent the person's character and disease. From epistemological stances which demanded selective focus on tangible and material elements, there emerged a denial of the existence of a broader, mythic, spiritual realm of human experience. Only the literal meanings of place were emphasized. Emphases in Western approaches to medicine were placed on connections between place and disease rather than on the care of the person in place.

European physicians who practiced medicine in North America from the seventeenth to nineteenth century, were apparently convinced that "the secrets of nature" could be revealed by the direct study of nature. The French Medical School encouraged a more "expectant" attitude of waiting for the latest medicinal property of a plant to be discovered and analyzed, a belief that nature could cure. The resident North American physician from the seventeenth century on took a more aggressive approach both to diagnosis and to therapy.

Following the discovery of the first specific medicine, cinchonabark, which acted on one well-defined fever, malaria, there was a desire to form a classification of disease similar to "botanical phytology" (Sydenham 1676; Garrison 1929). Disease became the focus. While bloodletting, emetics, and purges were being used in Europe, it was assumed that in the very wild place of North America, stronger measures would be required (Warner 1935:213-31; Ackerknecht 1982:221-22; Duffy 1976; Pernick 1983:26-36). There was the desire to bring under control the wild, untamed, limitless place (Cronon 1983) and most of all to bind off the First Peoples who were seen as unpredictable (Turner 1980).

The natural environment of North America was to be conquered by the imposition of Old World plants, animals, diseases and ways of life. The diseases were also to be conquered,

preferably by removing something rather than adding something to increase human resistance. Disease might also be prevented by cleansing the environment of "hostile" elements. The very words for earth, in the English language, soil and dirt, connote filth and disease, not an inviting place.

The earth, to people of First Nations was a vibrant, marvelous and personal world of many layers---the underwater place of Sedna (Inuit), or the lower world of disease spirits (Ojibway), the deep and rough waters in which Mishipizhiw dwelt; the middle layer of the animals, plants, rocks, waterfalls, trees and; the upper sky regions---a multiverse not a universe. The forest represented a wild, dark, frightening abode to the European, requiring taming and altering to be brought under human control. To the indigenous peoples, the forest was their natural dwelling place, the home they shared with other beings.

The nature of this North American place, as perceived by the European, was to be controlled, made more familiar to the newcomer. The imposition of European medicine was one aspect of exerting control as was the introduction of European ways of timing the interactions with place, e.g., with regular mealtimes, work habits, a settled life, and the growing of European plants and animals. The forcing of people onto reservations restricted First Nations place literally. The pressure on the First Nations to change their experience of place, for example in the government bans on celebrations of Sun Dance and Potlatch, reduced their (symbolic) experience of place. Over time, however, it is now apparent that despite their official subjugation, traditional healing practices were not extinguished.

It was not surprising then, that indigenous powers over time and space, those of the Shaman in various ceremonies which united the communities, were suppressed during the early days of European occupation. The Jesuits, of course, played a major role in this suppression process denying First Nation spiritual expression of place. In the eighteenth and nineteenth centuries, the missionaries were operating under the same assumptions and views prevailing among the Europeans and were given government sanction to accelerate "civilization", to make the people "European". The Shaman probably would not have been suppressed to the same degree, if his power had been exclusively medical. However, it was recognized that the Shaman was the visionary healer, the central repository and perpetuator of the cultural traditions and myths of the tribe. He had the ability to centre the people within

their place of existence.

During the 1980's the First Nations medicine has become a topic of widespread interest to the development of health care in Canada (Berger 1981). "Western" models of health care, too, have been perceived as ineffectual to meet the health needs of the First Nations (Kennedy 1984). Far from any concerted effort, the official health care system and the existing traditional First Nations health beliefs and practices have continued to operate separately, departing as they do from different premises.

The Government of Canada's Special Committee on Indian self-government (Penner 1983:34) stated clearly what aspects of traditional First Nation medicine would be used:

We have come to appreciate very much the relevance and utility of traditional approaches, particularly to mental health problems, approaches which address the suicide rate, approaches which address addiction problems. The application of traditional medicine and Native culture perhaps can be more successful than anything we could offer in terms of contemporary psychiatric approaches to those kinds of problems.

This policy has not been implemented, but the idea that "Native culture" and traditional medicine could be applied in the areas of "mental health problems" has been acknowledged. Primary Health Care, meanwhile, has become a priority within the policies of the World Health Organization (Bannerman 1983). From within the Western world's policy makers, therefore, comes the recognition of useful resources and some useful practices of traditional healers.

It appears that there is still no recognition that the health care practices of First Peoples are based on a different sense of place and a different historical presence. There is little recognition that the First Nations healer is a colleague of the Western physician with just as valid basis for therapeutic practice. To validate the First Nation healer entails the understanding, by the Western physician, of alternative views of health and disease which developed from within a different political, social, historical context. It does not mean, some traditional practices are "useful" to the Western trained physician, but involves seeing in a new way.

Various aspects of traditional healing, such as the sweat lodge ceremony, spirituality (Achterberg 1985:33-34; Young 1978; Riddington 1968) and the use of herbal remedies

(Moermann 1986; Ayer and Brown 1980) have been studied and their effectiveness evaluated. It has been indicated that the purified active ingredient (sought by chemists) from plants is sometimes less effective than the crude plant extract which contains trace elements and alkaloids which are vital in preventing "side effects" (Burch 1972). It has also been suggested that the methods of drug treatment may be affected by many variables other than the properties of the drug itself (Kulat 1984).

Therapeutic healing is a complex ritual. The attempt to take apart pieces of therapies from the overall context demonstrates a failure to recognize this complexity. An example may illustrate the dilemma of attempting to capture "the one" active ingredient of a healing therapy out of its total place:

Russell Willier is a Woods Cree Medicine Man, from Sucker Creek, whose father and grandfather were also healers. Russell participated in this research as he believes it is important to promote native ways, not by returning to the past and attempting "pristine independence" but by "making the strengths of native culture known to the outside world (Willier in Young 1989:130) to the benefit of people, native and non-native. In Russell's own words:

For the Great Spirit, the problems you have are nothing. He can cure them easily. But I need your mind and your faith, and your confidence. Everything will come through the power of the Great Spirit. He might test your faith. He might make your disease worse for a few days just to test you out. You might get scared if you think it's going to get worse, but you have to have faith in yourself, in God and in the power of the herbs. He has planted these herbs all over the world for people to use. They're not mine or any medicine man's. They're taken from Mother Earth and combined into medicines to help cure your sickness.

Russell Willier, Cree Medicine Man, Boyie McCauley Health Centre Edmonton, Alberta November, 1984 (Young, Ingram and Swartz 1989:98).

Russell requested that each person bring him an offering of tobacco and a piece of cloth in one of the colours of the earth, green, blue, white, red, yellow. "The tobacco is given to Mother Earth whenever herbs are taken and the cloth is hung in the bush as an offering to the spirit helpers". Russell explained that these offerings opened doorways to the spirit world, providing "a pathway for healing powers to flow through the medicine man to patients" (Willier Ibid 98).

The five volunteer people involved in this scientific study, were suffering from

the chronic skin condition, psoriasis. The study conducted by anthropologists and sanctioned by the College of Physicians and Surgeons initially took place at the health clinic, in order to have a "controlled environment" for scientific purposes. Results were moderately successful. However, Russell felt restricted by this place and the study was then conducted at the Sucker Creek Reserve where Russell could be in his own familiar environment and could attend to the people for a continuous period of time, incorporating the sweat lodge ceremony and the sharing of natural foods.

The place of healing was important to Russell. The results were much better, for those treated in Russell's home community. Here the clients and the researchers witnessed complete cures to moderate improvement of psoriasis (Young, Morse, Swartz and McConnell 1988; Young, Morse, Swartz and Ingram 1988).

It was this "traditional context" of healing on the reserve which drew criticism from the president of the Dermatological Association of Alberta, who questioned the fact that university funds were being used for "unscientific activities" being carried out within an uncontrolled environment. In Russell's community, several people accused him of disclosing sacred knowledge that should be kept within the native tradition (Young 1989:110). There are inherent dangers in being a potential "bridge-builder" between two healing traditions. Ethnocentricity is not only a property of Western medicine. Most groups believe in their unique and exclusive way of being in the world.

Russell Willier was censured by the elders on his reserve and the anthropologists conducting the study were chastised by the authorities of the medical association of Alberta for ignoring the official recognized research boundaries. Bridges cannot be built without first creating strong supports on both sides of the river. Policy directives, from one side only cannot bridge the gap as they get stretched too thin and fall. Healing cannot be understood only from the perspective of "objective science" because comparisons inevitably are made from the viewpoint of the Western medical model. Statistics and information are not enough. Good will and the desire to bridge the gap are not enough. Bridges can be built if there is an acceptance, by both First Nation and Western healers that a variety of approaches to healing exist. While one approach may be dominant, it does not preclude the validity of others. Allowing for these differences, by recognizing cultural pluralism in healing, involves a

growing interest in healing traditions, for those of First Nations and of Euro-canadian background.

There is a renewed interest in traditional practices among First Nations in Canada. The Dene Medicine pilot project's goal is, "to identify individuals who have traditional knowledge about the use of plants and animal parts for healing, to collect the information for cultural archives and to publish it for general information" (Ryan 1989). The Native Diabetes Project for Cree and Ojibway people living in Toronto was designed to "facilitate a learning environment within the native community to promote means of coping with diabetes which was derived from the native culture" (Hagey and Buller 1985).

A traditional healer from British Columbia has received federal funds to travel to China to study traditional Chinese herbology as an extension of the herbal practice already available to the First Nations of British Columbia (McKormick 1988:13). In northern Manitoba, on Nelson House reserve, Nazer Linklater is an eighty-seven year old medicine man. His remedies are wrapped in small plastic bundles and hidden in a moose-hide pouch. In a potful of water, he boils dried herbs, roots, muskeg grass, and other plants for his patients to drink. Sometimes he only talks with his clients (York 1989:263).

What is unique about the goals of Russell Willier is his contention that, collaboratively, Western physicians and First Nation healers can offer a more comprehensive therapy to all people regardless of culture. They can refer clients, depending on their need. They both can offer valid therapies which are derived from different premises, different senses of place. This situation requires a full recognition of the First Nations healing tradition. It will require the medical professional and the traditional First Nation healer to work collaboratively.

Given the past historical record, how can the place of health in Canada be shared? Granted that, historically speaking, the senses of First Nations peoples and those of place of Eurocanadians have indeed been different from one another, each healing tradition still brings its own unique experience, history, belief and skills to potentially joint effort. Attention might indeed be attuned to listen and to nurture an appreciation of each other, of different views and of healing approaches which together can create a place of healing. This will involve the breaking down of hierarchies and the changing of definitions and of boundaries, geographically, professionally, and above all, institutionally.

Cultures may differ in their assumptions about the nature of life, the place of their existence and the place of humanity within their terrestrial environment. These differences in turn depend upon and at the same time sustain certain culturally contingent perceptions of health and illness. While Western medicine may lean on technological methods of maintaining or restoring health, the First Nations healing traditions have valued more philosophical and spiritual means. Neither approach is mutually exclusive. While health may be valued by both, belief in what is and was health, illness and therefore healing for both cultural groups have highlighted different approaches to being in place as developed in this thesis.

If health is thought to be the absence of disease then disease becomes the enemy to be feared, fought at all costs, by ever more precise, invasive techniques. The diseased part of the body can become the focus of attention isolated from the rest of the body. Because the body is thought to be a self-contained unit and illness is a process experienced by the individual, the most effective, efficient technical, chemical means of treatment are invoked. Treatment, however, may necessitate the placing of the person in a foreign, environment, the place of the hospital. The person becomes a passive receiver of treatment. Change in an individual's body is interpreted as a threat and therefore is to be avoided.

If however, dynamic change is thought to be a constant reality in the changing context of an evolving world, health must be viewed as encompassing illness. For renewal, reformation and change, all living organisms, including humans change, grow and die. Health is not a status to be achieved, but rather involves the continual being in the world. Western biomedical approaches have tended to make adversaries of health and disease, life and death, person and place, natural and spiritual place. First Nation healing approaches have valued the circular connection of forces. Health can be viewed as harmony, grounded as all things are in the wholeness of life and not in any one separate part.

Illness for First Nations people has been seen as a communal process. Healing involves the renewal of bonds with the community of spiritual, physical and personal relationships. Only through the rituals and expressions of dancing, drumming, singing, and feasting, which involved the whole community could healing be achieved. This in turn, re-instated the importance of place in both its literal and metaphorical senses.

To allow for dialogue between healing approaches of First Nations and Western medicine, different forms of explanation are required if both are to be validated. Past encounters of these two healing traditions have shown that the Eurocanadian tended to devalue the full cultural expression of the other, the First Nations, by calling them simplistic, crude or not scientific. The literal knowledge of places, and their associated herbal remedies, were appreciated by the European, but the spiritual sense of place and its importance to healing for the people of First Nations was not understood.

In a world where nurturance, integration, and a sense of our embeddedness in nature is becoming preferred to dominion over nature or control of nature, diverse ways of being in place are appreciated. It is not that other ways have been unscientific, but rather that scientific approaches in accord with elegant and uncontaminated methodologies have tended to be too rigid and narrow to allow for understanding essential difference. Yet it may be that the most fruitful developments take place where two different ways of thought meet.

The roots of these two healing traditions reach back to distinct human cultures, in different times and in different environments. If conditions for mutually-respectful interaction are allowed, then a more caring place can be created. For it is in the continued and renewed presence of First Nation healing practices, and in the growing awareness that Western scientifically-grounded medicine does not fully address the needs of people, in Canada today, whether of Eurocanadian or of First Nation background, that a curiosity has been piqued in Eurocanadians to remember their past healing traditions. This involves the value and use of herbal knowledge. But more central to this thesis, it also involves the recognition of the importance of the metaphorical senses of place to the health of people. The present state of dis-ease among First Nations, and the impact of past actions increasingly demands that we critically re-examine Canada's past. In doing so, it may be possible to be reminded of the forgotten and neglected dimensions of Eurocanadians own healing heritage.

Basic to health is the need to be at home, at ease in one's place. This entails more than the bounded, literal sense of the word place. To be out of place, to have no meaningful place creates a dis-ease. While shelter, adequate nutrition, clean environment, availability of medical services, are important to maintain health, this research has demonstrated the importance of the symbolic senses of place. Future geographic research could explore the implications of

this reality by studying these metaphorical senses of place. This thesis has demonstrated some differences in the way place is conceived between the two healing traditions.

Future research could pursue questions as to what is a healing place as conceived by both clients and health care practitioners of "alternative" healing therapies. By focussing on place in both its literal and metaphorical senses, the study of health becomes broad enough to encompass the creation of supportive places. When people, from any background become more aware of the poetic nature of place, the meaning of place, one can begin to speak of shared human experiences in place. Instead of "wars" against certain diseases, the focus could be on the creation of places supportive to the well-being and health of humans. This involves attunement to the needs of humans in dialogue with nature, space, and time. While there is no going back to ancient times, geographers have much to contribute to the quality of place as lived by people of diverse backgrounds, in contemporary societies.

The place of health in Canada can be shared only if there is a recognition and desire to share a land which has been experienced differently in the past and in the present. There exists no one valid truth or "reality" of experience. The health of the First Canadians, the First Nations, depends upon the meaning of place and the free participation of expression of that meaning. First Nations people have survived, in spite of continued assaults upon their physical space, culture, and being. To survive as a whole people, in health, harmony, and peace involves knowing one's dwelling place, and realizing the significance of this. The place of Canada can be shared and an open dialogue established between the two healing traditions so that each may reaffirm the symbolic dimensions of their own heritage.

It may be that some little root of
the sacred tree still lives. Nourish
it then, that it may leaf and bloom
and fill with singing birds.

Black Elk (1971)

GLOSSARY

Ahan-sih

(Cree) the Raven.

Amik

(Cree) the mythic Beaver.

Aninshinabek

(Cree) for original people.

Artemis

Goddess of untamed nature in Pre-Hellenic Greece. Artemis assisted females of all species in giving birth by offering them Artemisia (Mugwort) to encourage delivery.

Artemesia Drunculoides (Mugwort)

The Chippewa and Ojibwa dried, steeped, and drank the leaves and tops of the flowering plant to treat dysentery. To induce menstruation, a decoction of eight roots of sterile mugwort plant and one quart of water was to be drunk daily.

Binay-sih

(Cree) Powerful Thunderbird, first born of O-ma-ma-ma.

Cheesh Awash

Ancient shaman of the Cree of eastern region of James Bay.

Cinchonabark

The bark of the cinchona tree of Peru and Columbia called "Jesuits bark" or "Cardinals bark". Jesuit priests introduced this bark to Europe (1640) after observing the natives of Peru and of Columbia using it for the relief of fever. By the end of the seventeenth century, this bark was widely recognized by Europeans as an effective remedy for malaria.

Genay-big

(Cree) The destructive sea serpent.

Grandmother Nakawe

(Huichol) Old Earth Goddess.

Han-to-la

(Chippewa) The prickly ash was used to treat rheumatism.

Irriaku

(Pueblo) Corn Mother who connects the people with the power of the earth.

Iyatiku

(Pueblo) Earth Woman creates the prototypes of all creatures in the Underworld.

Ma-heegun

(Cree) The wolf and fourth child of earth mother O- ma-ma-ma. When Wee-sa-kay-jac takes human form, he rides on the back of Ma-heegun sharing adventures with the wolf.

Maladies de la terre

(French) The term used by Champlain (1609) to describe the illness later known to be scurvy. Champlain believed that once the natural brush cover of the land was removed, the vapours normally contained beneath the cover were allowed to escape and to infect people with disease.

Medicine

(First Nations of North America) The personal force through which a person gains power. Powerful spiritual forces which surround the person in their milieu.

Mishipizhiw (Cree), Mishipashoo (Ojibwa)

The mythical being, also known as Great Water Lynx which appears as a horned water serpent sometimes recognized as the progenitor of medicine men because of its ability to move freely in both water and land and due to its cunning.

Omak-ki

(Cree) The second born of O-ma-ma-ma, a frog who was given sorcerers powers and could help control the insects of the world.

O-ma-ma-ma

(Cree) Earth Mother who gave birth to all the spirits of the world.

Pierres Eriennes

(French) An ointment made from powdered stones collected on the shores of Lake Erie by Francois Gendron, surgeon-donne to the Jesuits among the Hurons. This ointment was created to treat fistulas, stubborn cancers, and ulcers. When Gendron returned to France, he was reported to have cured the breast cancer of the Queen of Austria by using the ointment.

Pimadaziwin

(Ojibwa) Life in its fullest sense, meaning longevity, health, and freedom from mishap.

Saya

The culture hero of the Beaver tribe, Dunne-za of Peace River, Alberta.

Sedna

(Inuit) Powerful mother of the sea who can release or withhold the creatures of the sea or of the land to the hunters depending on the observance or ignorance of the people to the maintenance of harmony within their place.

Shaman

The medicine woman or man, the visionary healer who is the central figure in many tribal cultures. The Shaman is the repository of the group's myths and secret lore. Although Shamans are mostly associated with the geographies of northern and central Asia, they can be found in Africa, Australia, Oceania, the Americas, northern and eastern Europe, wherever hunter-gathering people exist and wherever this sacred, ancient tradition has been perpetuated in spite of cultural changes.

Sila

(Inuit) Great spirit supporting the world, the weather, and all life on the earth.

Wabeno (Ojibwa)

Men of the dawn sky, who could manipulate fire in order to interpret dreams, guide novices through spirit contact, and heal the sick. They use herbal concoctions to protect themselves from the flames so they can briefly manipulate the hot coals near the patient's body. The Wabeno act as mediators of the power they encounter while in a trance state.

Wee-sa-kay-jac

(Cree) The third born of O-ma-ma-ma is the supernatural Shaman creator of the First People of Canada. Wee-sa-kay-jac has the ability to transform, to re-create the earth with the help of the animals, beaver, otter, and muskrat.

World Tree

This sacred tree at the centre of the universe is one of the most ancient and enduring shamanistic symbols in the world. Around this tree, people of First Nations performed rituals (Sun Dance) to strengthen their connections with their universe. The World Tree is symbolic of the place of meeting of people, drawing the group together by directing energy toward the powerful centre. The Shaman is in direct contact with this Axis Mundi and therefore centers the group by creating a balance, a harmony derived from the life force. In pre-Hellenic mythology, those who worshipped Artemis danced around this life-giving tree. When the moon turned full Artemis became the Axis Mundi bringing together all creatures within the three realms of existence, the underworld (roots), the middle world (trunk), the Heavens (upper branches).

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