VISIONS OF THE WAY:
A STUDY OF THE TRADITIONAL SYSTEM OF
EDUCATION OF THE INDIANS OF NORTH AMERICA

by

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B.G.S., Simon Fraser University, 1984

A THESIS SUBMITTED IN PARTIAL FULFILLMENT OF
THE REQUIREMENTS FOR THE DEGREE OF
MASTER OF ARTS (EDUCATION)

in the Faculty
of
Education

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SIMON FRASER UNIVERSITY
October 1985

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<th>Name:</th>
<th>Raymond Howard Merkel</th>
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Visions of the Way: A Study of the Traditional System of Education

of the Indians of North America

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March 26, 1986
Abstract

The purpose of this thesis is to develop a generalized model of the educational system common to traditional North American Indian societies. To this end, this thesis has three specific objectives:

I. To identify the essential cultural values upon which the educational practices of the native Indians of North America were based, and to identify the character traits that embodied these values.

II. To identify the methods whereby these values, and their personality contexts, were transmitted to each generation, and to determine the structure of these methods within the social framework.

III. To develop from these findings a detailed outline for a contemporary educational programme replicating the traditional model.

This thesis consists of six chapters:

Chapter One examines a range of contributions of North American Indian culture to the modern world, and particularly such contributions as have been recognized - or even perceived - only in very recent times.

Chapter Two considers anthropological evidences of certain cultural "mechanisms of survival" that have evolved within human societies.
The third chapter relates these mechanisms of survival to specific cultural values, and relates these values to the essential character traits in which they are culturally contexted. The subject of "survival" is variously examined in reference to these relationships.

In Chapter Four a synthesis of the dominant cultural values of the North American Indian societies is presented in the form of a generalized system of values, and this proposed system is analyzed relative to other generalized systems.

Chapter Five focuses on the unique cultural institutions and methodologies whereby these values— in the form of specific character-traits— were transmitted through succeeding generations in the Indian societies. The greater part of this chapter consists of seven monographic sub-chapters concerned with the character-traits of: Self-Reliance; Perceptive Insight; Competence; Cooperation; Resourcefulness; Determination; and Creativity.

Chapter Six presents a proposed educational programme based on the generalized model of the "traditional Indian educational system."
There is the distinct possibility that by adopting some parts of the Indian life-way we can at last recapture a portion of that superb freedom, adventure, and happiness which characterized the Plains Dweller... and share in certain valuable religious truths of the Indians which have been kept secret or overlooked... the charity and hospitality of the Plains Indians could easily offer itself as an ideal model for the world... they were a creative and innovative people of such a unique kind; that aspect of their life could now be added to the many abilities already possessed in creative areas...

Thomas E. Mails
The author wishes first to express sincere gratitude to Dr. Milton McLaren, to Dr. Maurice Gibbons, and to Dr. Basil McDermott, for their patient consideration, support, and wisdom over these past year. It was the advice of one of these gentlemen to seek out the very best people with whom to study and learn, no matter where it might take you; it is the belief of the author that he has been fortunate enough to do precisely that.

Secondly, and most deeply felt, is the considerable debt owed to the author's wife, Patricia, for the countless hours of typing and word-processing, proof-reading, listening, correcting, coffee-making, and just plain suffering. A very special appreciation is also due to Mr. David Chong, and to Joe, Chong, Chen and Barbour, Barristers and Solicitors, for the many kindnesses accorded to the author.

Finally, though far from last, the author wishes to dedicate this work to the late Jeffrey Benson, elder of the Eagle Tribe of the Nishga, of Kincolith, B.C. - adopted grandfather, name-giver, and good friend.

Ray H. Merkel,
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Title Page</th>
<th>i</th>
</tr>
</thead>
<tbody>
<tr>
<td>Approval Page</td>
<td>ii</td>
</tr>
<tr>
<td>Abstract</td>
<td>iii</td>
</tr>
<tr>
<td>Quotation</td>
<td>v</td>
</tr>
<tr>
<td>Acknowledgements</td>
<td>vi</td>
</tr>
<tr>
<td>List of Charts</td>
<td>vii</td>
</tr>
<tr>
<td>Preface</td>
<td>ix</td>
</tr>
</tbody>
</table>

## PART ONE

<table>
<thead>
<tr>
<th>Chapter 1: &quot;Of Gold and Sassafras&quot;</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chapter 2: &quot;The 20,000 Year Plan&quot;</td>
<td>19</td>
</tr>
<tr>
<td>Chapter 3: &quot;The Four Horsemen&quot;</td>
<td>53</td>
</tr>
</tbody>
</table>

## PART TWO

| Chapter 4: "The Richest People in the World" | 86 |
| Chapter 5: "Seven Paths on the Mountain"     | 124|

<table>
<thead>
<tr>
<th>Firemaking</th>
<th>135</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tracking</td>
<td>161</td>
</tr>
<tr>
<td>Toolmaking</td>
<td>183</td>
</tr>
<tr>
<td>Voyaging</td>
<td>190</td>
</tr>
<tr>
<td>Protecting</td>
<td>104</td>
</tr>
<tr>
<td>Healing</td>
<td>216</td>
</tr>
<tr>
<td>Dancing</td>
<td>230</td>
</tr>
</tbody>
</table>

| Chapter 6: "Make Men of Them" | 242 |

## APPENDICES

<table>
<thead>
<tr>
<th>Appendix &quot;A&quot;</th>
<th>282</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appendix &quot;B&quot;</td>
<td>286</td>
</tr>
<tr>
<td>Notes</td>
<td>291</td>
</tr>
<tr>
<td>Bibliography</td>
<td>314</td>
</tr>
<tr>
<td>Title</td>
<td>Page</td>
</tr>
<tr>
<td>----------------------------------------------------------------------</td>
<td>------</td>
</tr>
<tr>
<td>An Analytical Generalization of Two Value Systems:</td>
<td>112</td>
</tr>
<tr>
<td>Overt and Covert Value Systems:</td>
<td>116</td>
</tr>
<tr>
<td>Piagetian Observations on Moral Development:</td>
<td>118</td>
</tr>
<tr>
<td>Two Scales of Human Behaviour:</td>
<td>119</td>
</tr>
<tr>
<td>Traditional Native-Indian Values Related to Educational Practices:</td>
<td>264</td>
</tr>
<tr>
<td>Contrasting Models of Development:</td>
<td>265</td>
</tr>
<tr>
<td>Contemporary Educational Models:</td>
<td>284-285</td>
</tr>
<tr>
<td>An Outline of Character Development:</td>
<td>289</td>
</tr>
<tr>
<td>An Outline for An Integrated Approach to Traditional Education Today:</td>
<td>290</td>
</tr>
</tbody>
</table>
Nowhere has our modern system of public education failed more completely in its objectives than in the native Indian communities of North America. What was intended to be a road to salvation, to some meaningful place in the modern world, has instead, as many native Indian leaders have pointed out, actually contributed to the disillusionment, cynicism and despair that so often prevails in native Indian communities today. These are very disturbing observations, and they are not made lightly; they are stated here as conclusions reached by the author after more than fifteen years in the field of Indian education as a teacher, school principal, child-care counsellor and educational researcher. They are therefore very personal conclusions, but conclusions for which there is nonetheless considerable corroborative evidence. The purpose here, however, is neither to document this record of failure nor to indict our educational system for it; but rather to begin a re-examination of certain basic, seldom-questioned assumptions that underlie our concepts of education, and to explore a number of possible alternatives to our present system of public schooling. To these ends, this inquiry
must go beyond Indian education as a field to the whole of education and culture, and perhaps to some of our most basic perceptions of civilization itself.

The monumental failure of our institutionalized system of schooling for native Indian peoples has, of course, serious implications for the whole of contemporary educational criticism. Nowhere else, for example, can it be so forcefully demonstrated that "schooling," as we practice it, incorporates in its basic structures a number of profoundly negative influences which, in native Indian communities in particular, have contributed to pervasive and endemic patterns of cultural decay. That this may also be true for modern society as a whole is suggested in much of the content of current educational criticism. This plays a central role, in fact, in the dichotomy between arguments for various reforms within the existing system, and demands that it is the system itself which must be replaced. These latter demands have tended to focus on the negative influences of institutionalized schooling, which have often forced those advocating less drastic reforms to take the role of apologists for the existing system, willingly or otherwise. This has led, in many instances, to a confusion between the structure of the system as it exists, and the functions that the system was intended to fulfill.
A striking example of this can be found in educator Neil Postman's essay, "My Ivan Illich Problem." In Illich's arguments for a radical deschooling of society, Postman finds a number of crucial similarities to his own published views: "The two obviously go together," he writes, "and even if Illich's goes deeper, it is surely implicit in my own passage that the problem is not simply that schools are bad, but that schooling is bad." Having said this, Postman proceeds to denounce Illich as a mystical, utopian dreamer, who offers no concrete alternatives to what he wants to tear down. With this, Postman explains, "...it has been most satisfying...to lay Illich to rest."

There is, however, a double confusion here. First, Illich's failure to provide concrete alternatives, however much his notions of "deschooling" are thus rendered impractical, in no way detracts from the merits of his criticisms of schooling on their own. Illich's failure, in this sense, must not be confused with the possibility or desirability of such alternatives. The second confusion is that in his defense of schooling Postman assumes that this particular institution must necessarily provide the setting for the resolution of our educational problems, which is no more a given than is Illich's demand that it must not. This confusion is similar to what in literary criticism is called
the "affective fallacy," in which the effect of a work is mistaken for the work itself; it is also similar to Albert Einstein's observations on the confusion of means and ends as characteristic of our time, and which lies at the root of many of our worst problems, and bitterest conflicts. It is important to remember that in such confusions, the original or central concerns are often assumed to have been "dealt with" when in fact they have only been rendered more difficult to identify.

In Postman's book *Teaching as a Conserving Activity*, written several years later, for example, there is no discussion of Illich's "brilliant analysis," of institutionalized schooling, as Postman described it, while Illich himself is dismissed in terms that are not only harsher, but considerably briefer than in Postman's earlier commentary. The original concerns, therefore, have not merely been overlooked, but obscured and confused, so that while Illich may have been laid to rest, his analytical insights have not, and remain as haunting reminders that the original problem of Ivan Illich is still unresolved.

In this more recent book, it is interesting to note, Postman does not attempt to pursue any ideas concerning possible alternatives to our modern practice of education, - why this is interesting is that he chooses, oddly
enough, to begin this work with a description of an existing, functioning educational system that is radically different in design and practice from our own:

There is a group of aborigines in western Australia that has survived more or less intact for over twenty thousand years. Although they do not think of themselves as having an educational philosophy, we can guess that they have one and that it is very good indeed. It has produced the kind of people needed to live effectively within the conditions of their culture, which is exactly what an educational philosophy is supposed to do.

This passage suggests an intriguing question: Could we learn anything of importance from a better understanding of the basic structure and practice of this "educational philosophy" - something that might help to resolve, for example, Postman's "Ivan Illich problem?" Postman does not ask this question - he has other concerns, and this passage is but a stepping-stone to them. In having dismissed not only Illich's alternatives, but the very question of such alternatives itself, there is a predisposition to not see as relevant this important question. In fact, Postman explains that this "twenty thousand year old curriculum," having remained for all that time "isolated from any contact with a new idea or new artifact," must necessarily succumb to the pressures of modern civilization, so that their culture must "come apart," and vanish from the earth. Twenty thousand years, however, is a very long per-
iod of time about which to make such broad assumptions; and a culture that has survived for so long a time should perhaps not be written off so easily. The aborigines may have their own ideas on the subject—consider, for example, the following excerpt from an article in the "Vancouver Sun" (Aug. 12th, 1985):

Aborigines start Exodus: Alice Springs, Australia (Reuter) — Thousands of aborigines are moving out of Alice Springs in the remote heart of Australia, to reclaim traditional lands so they can pass on to their children the world's oldest way of life.

Their exodus to the sacred lands of their ancestors is a voluntary escape from town life and a journey to rediscover 40,000-year-old traditions, aboriginal leaders say.

More than 8,000 aborigines have set up about 300 traditional camps in "settle-down country" in a migration from Alice Springs that has become a torrent in recent months.

The article continues that this attempt to return to their traditional lifestyle is a reaction to the many ills of urban existence, and a rejection of the value-system of the dominant society. Their leaders state that this is being done for the sake of their children, and that all they ask is enough land to live on, and otherwise to be left alone. Now contrast the above with the following excerpt from an article in "Time Magazine" (Oct. 21st, 1985):

Torn between their native culture and that of the surrounding American society, Indian reservations have often been visited by despair and violence. The Native American suicide rate is far
above the national average, but even that depressing fact could not account for the events of the past two months at the Wind River Reservation (pop. 6,000) in Wyoming, where nine young tribesmen have taken their lives. That rate is some 24 times the average for Indian men ages 15 to 24, and 60 times the national figure. Last week tribal elders returned to a long-abandoned tradition in the hope of saving their children.

This article goes on to explain that the cultural traditions referred to above include ceremonial rites and healing rituals that have not been practiced since the killing flu epidemics of 1918, having been suppressed by Christian missionaries, and that their resurgence now is part of a much wider attempt, in many native communities, to salvage as much as possible of their traditional way of life. The American Indians, like the Australian aborigines, made up less than 1% of their respective continental populations, yet they too cling tenaciously to a way of life that has endured for over twenty thousand years. Were these peoples to achieve some success in restoring their traditional cultures, what might we learn from them?

In Education in a Free Society educator and historian S. Alexander Rippa includes a small chapter on Indian education in North America today. In consideration of the Indian's point of view he writes:

Too often acculturation is viewed as a narrow, one-way process. While Indian children and youth are being taught about life in modern
America, non-Indian pupils and teachers might also learn something from projects on Indian cultures: for example, a respect for the beauty of nature, the value of group identity, and the age-old struggle of man for self-determination over his own destiny. As one Indian leader explained: "The question is not how you can Americanize us but how we can Americanize you. The first thing we want to teach you is that, in the American way of life, each man has respect for his brother's vision." Still proud and defiant, Indian leaders today are struggling to conserve an ancient and priceless heritage.

These sentiments are not unique; they can be found in the range of our social commentary from Benjamin Franklin to Marshall McLuhan, but unless we act upon them in some way they will remain little more than platitudes. For over 300 years Indian tribal elders have looked at our society and considered that although we are powerful, and able to create marvelous things, we do not seem to be very good people. The historical record of our relations with the Indians, even when strongly slanted in our favour, remains admittedly lamentable. Instances of peaceful and cooperative co-existence are exceedingly rare, though nonetheless instructive; the early Pennsylvania Quakers, for example, lived in harmony with the Indians for nearly a century, and were held in such esteem by them that it became a widespread policy among nearly all eastern tribes to not sign any treaty or agreement less a Quaker was present. Concerns of this nature have only strengthened the Indian's resolve to
cling to their own way, to somehow exist in our modern world without becoming merely another part of it.

In the institutionalization of education in the modern world, as both Illich and Postman have pointed out, there is a confusion of process and substance: of teaching with learning; of grades with education; and of mere fluency with any real depth of understanding. Any number of educators have written of the impact that such confusions have had on what we expect schools to be, and to do. In the question of "what should we do with schools" it is important to recognize - as, in fact, Illich forcefully argues - that schooling is a very effective means of providing for certain kinds of knowledge. The problem is that for other kinds of knowledge schooling, as well as being ineffective, can be seriously disruptive or even harmful. Schooling may be very useful, for example, where "information" - that is, the knowledge we have of "things, facts, ideas or skills - and the processing of such information is concerned, but schooling is an extremely inappropriate means of providing for what we call "self-knowledge." This kind of knowledge not only has to do with discovering our capacities and strengths, but also our limitations and weaknesses, and how these effect our relative place in the scheme of things around us. The learning experiences of greatest importance to this process of self-discovery by their very
nature conflict with the structural demands of institutional schooling; in turn, of course, these kinds of learning experiences are themselves inappropriate for the mastery of factual or informational knowledge. Yet of the two it must surely be obvious that it is self-discovery - the determination of what and who we are as individuals rather than simply what or how much we know - that must be given priority. One of the central arguments in this paper is that the traditional educational practices of North American Indian societies were in fact far more successful in achieving these ends than are our modern methods of child rearing and schooling, and that the Indian societies, on the whole, tended to produce better people than our modern societies - and by our own standards. To achieve this, it is also argued, the Indians maintained a sophisticated, institutionally varied, yet coherent and effective system of education and socialization. The essential question of this paper, as an inquiry and as an exploration, is therefore concerned with how we might benefit from a better understanding of this traditional system, particularly where such understanding might help us to become better people, and more worthy of survival as a culture, and way of life.

Something of the sense of these two approaches - of worldly knowledge and of self-knowledge; of old values and of new powers and abilities - was captured by
Chief Dan George in his address on Canada's centenary. In the last words of this address there is reflected a profound grasp of what the recombining of these two forces, the inner and the outward, could mean:

Oh God in heaven give me back the courage of the olden chiefs. Let me again, as in the days of old, dominate my environment. Like the thunderbird of old, I shall rise again out of the sea. I shall grab the instruments of the white man's success - his education, his skills - and with these new tools I shall build my race into the proudest segment of your society. Before I follow the great chiefs who have gone on before us, oh Canada, I shall see these things come to pass. So shall we shatter the barriers of our isolation. So shall the next hundred years be the greatest in the proud history of our tribes and nations.
In the deepest roots of trees,
on the highest mountain paths,
and in all the voices of the waters,
are the Visions of the Way...
On February 14th, 1493, Christopher Columbus dispatched a letter to Ferdinand and Isabella of Spain informing them of his arrival in the Indian Ocean and of his discovery of several of the islands of India, as well as the Coast of China, together with a lengthy description of the inhabitants thereof. Columbus also described how he had taken possession of these Islands, "with proclaiming heralds and flying standards," all in the name of the King of Spain - carefully noting that no one had objected at the time. Of the resulting benefits to their Majesties for having underwritten his successful voyage he was quite specific: "...as much gold can be supplied as they will need, Indeed as much of spices, of cotton, of chewing gum, also as much of aloes-wood and as many slaves for the Navy as their Majesty's will wish to demand." The creators of this great wealth Columbus described again and again as exceedingly amiable and co-operative: "They show greater love for all
others than for themselves; they give valuable things for trifles, being satisfied with a very small return, or with nothing..." He also implied that bringing them to Christianity would greatly help in these economic arrangements — to the great satisfaction of Spain and to the spiritual benefaction of the Indians.  

What is perhaps most instructive in examining this document — this very first account of the American Indian to reach Europe — is not simply the unvarnished rapacity that would continue to underwrite European interests in the new world, but also the way that it mirrors the values and perceptions of European civilization during these the golden years of the Renaissance period. Columbus wrote of gold, of spices and of slaves; there is no mention of art, of music, of anything of value to be learned from the culture of these people — technologically, intellectually, or artistically — though of course there were things of great value there, things that would alter the course of European history as profoundly as any to that time. American Indian technology would, for example, greatly influence the rise of world economies based on shipping and sea-power, and the intellectual achievements of North American Indian societies would profoundly influence the development of forms of government that make up our modern world. That the American Indians have received little credit for their con-
tributions to our modern world reflects not only the bias of history and historians, but the built-in blind spots of our own culture. The values that dominated European thought and action during the first centuries of contact with North America were strongly materialistic and tended toward immediate or short-term gains. The common economic strategy of virtually all European colonial expansion, in fact, was to rapidly exploit identifiable resources, and then use these colonial holdings as a base from which to locate other profitable opportunities, and provide sufficient force to deter any potential competitors. This orientation, of course, strongly influenced European perceptions in the new world, and helped to preclude an awareness of things that were of a longer term - and often higher order - of value. 

Many of these contributions "of a higher order" required as much as three or four centuries of contact before they were exploited. An example is the discovery of a treatment for scurvy. Until the late 18th Century the impact of this degenerative disease was so great that few long-term voyages were undertaken. In 1536 three ships under the command of Jacques Cartier were trapped in the ice of the St. Lawrence River with snows sufficiently deep to prevent travel on foot. Of the 110 men trapped in the ships, 25 soon died of scurvy and everyone else was too ill to function, save 3 or 4 who managed to cook the food
and care for the others. Indian hunters happened upon the ships and a local Chief, Domogaia, brought medications which Cartier described as having been concocted from the bark and sap of a "certain tree;" the remedy immediate results, and all of the crewmen quickly recovered. Cartier was greatly impressed by the Indian remedy, and wrote at some length in his diary what he knew of its preparation. It would be nearly 250 years, however, before any notice was taken of this discovery. In 1774 a British naval surgeon, James Lind, read Cartier's account and launched experiments which led to the development of a reliable preventative diet for scurvy. At that time, Europeans believed that scurvy resulted from bad air, laziness, and a phlegmatic disposition. In 1776, Captain James Cook would put to sea in three ships with 100 crewmen for a period of 4 years. On this voyage, following Lind's recommendations, not one serious case of scurvy occurred. 

In 1778 Cook visited the western coastline of Canada, exploring as far north as Nootka Sound on Vancouver Island. Like many of the Spanish explorers before him, he was greatly impressed by the large, sea-going canoes constructed by the native inhabitants. Nearly 100 years later, in his annual report of 1872, Superintendent Dr. I.W. Powell would report to the Governor-General of Canada that the lines of the first clipper ship built in Boston had been
taken from a Nootka sea-going canoe by American naval architects. Dr. Powell hastened to add that while the Indians were "superb craftsmen of unsurpassed perfection in design and workmanship," they were otherwise "depraved." 5

The cure for scurvy, which permitted much smaller crews, 6 and the efficient hull designs of the clipper-ships helped make possible the new era in commercial navigation of the late 1800's - an era in which the foundations would be laid for America's later rise to economic predominance in the world. The failure to credit these contributions may be simply an oversight, but if so it is an oversight for which we seem to have a particular talent. The use of sails on the canoes of the Northwest Coast Indians, for example, has generally been assumed to have been a mimicry of European sails, although the configuration of the Indian's sails are a type of fore-and-aft rigging - almost identical with very ancient Melanesian examples - which predates any European use of fore-and-aft rigging on sailing ships by several decades. One of the ultimate expressions of these technical innovations in hull design and sail configuration, which would become one of Canada's most enduring national symbols, was a sailing ship named "The Bluenose."
The greatest contributions from North American Indian technology, however, have been in the areas of agriculture and pharmacy. In 1607 a band of "gentlemen adventurers" attempted to establish the first English colony in North America at Jamestown. These colonists managed to survive their first two years only through the charity of local Indians who brought them food and later taught them to plant corn and other native crops. Life was so hard, however, that the settlement would have been abandoned had it not been for a medicinal herb obtained from the Indians - Sassafrass - which became the chief export product from North America until about 10 years later, when tobacco would surpass it. The first European colonists were not particularly adept students of the soil, however, and later, when the vast prairie lands of the west were opened to settlement, large numbers of immigrants from the rich farmlands of eastern Europe would be brought in. What has been overlooked in our histories of this settlement is that the original Indian inhabitants were themselves excellent farmers.

The Pawnee, for example, utilized complex forms of companion planting, while the Hopi, with their "arroyo-flood farming," utilized lands that in even recent times were judged to be agriculturally unusable. Some aspects of Indian agricultural technology, such as the Iroquois use of shallow trenches that functioned as cold-sinks
between the rows of plants, protecting them from unseasonal frosts, have only been discovered in the past few years. Nonetheless, crops domesticated by the Indians and not introduced to Europe until after the 15th Century account for nearly half of all the varieties of foodcrops grown in the world today. 8

The pharmacopia of the North American Indians was developed far beyond anything comparable in Europe. Investigators have credited the North American Indian with the recognition and use of over 500 species of plants for medicinal purposes. European adoption was slow. The Spanish, for example, were aware of Central American Indian use of the coca plant for medicinal and ceremonial purposes as early as 1520, but it was not until 1884 that Carl Koller would determine the value of cocaine as a local anaesthetic. In American Indian Medicine Virgil J. Vogel states that over 170 drugs in regular use today originated with the Indians, including aspirin, the heart drug digitalis — which was used correctly in North America for hundreds of years before its European discovery — cough syrups, antiseptics, laxatives, astringents and anesthetics. 9 Even such recent innovations as the birth control pill, which followed lines of research into the successful use of oral contraceptives by various Indian tribes, owe some debt of gratitude to the pharmacopoeia of the American Indian. 10
If European recognition of the technological achievements of the North American Indians was slow, then recognition of their intellectual accomplishments was almost non-existent. Prevailing European assumptions of the time, of course, would not have fit comfortably with the suggestion that the Indians were in any way capable of philosophical contributions - and what does not fit comfortably with "self-evident truths" is often conveniently afflicted with that curiously selective invisibility that serves to protect "the obvious." Benjamin Franklin and Thomas Jefferson, among others of their age, were deeply impressed by the oratory and statesmanship of their Indian contemporaries, which they described as generally superior to that found in Colonial politics. Jefferson, for example, wrote of the Mingo Chief Logan that: "I may challenge the whole orations of Demosthenes and Cicero, or any more eminent orator...to produce a single passage superior to the speech of Logan." Franklin, after a lifetime of public service and extensive dealings with the Indians, wrote of their high integrity, trustworthiness and strength of character, which he attributed to their social organization and methods of bringing up their children.

Franklin also commented on the strong influence that the Iroquois League had on the framing of the
American Constitution, and particularly on the concept of government by the consent of the governed, rather than the European tradition of hereditary divine right. In this influence the Indians can perhaps claim to have contributed as much as any other group to the making of modern North America. Both Canada and the United States are made up of confederations of relatively independent provinces or states, much like the structure of the Iroquois confederacy. To ignore or overlook the contributions of the Indians to our modern world is a great injustice, and nowhere, perhaps, has this injustice been more bitterly ironic than in American history, where the Indian has so widely been portrayed as an impediment to progress and national consolidation. In American history there is no event pointed to with more pride than the ordeal of Washington's army at Valley Forge. Not only were there Indians fighting alongside the colonial troops - indeed, the first American to be killed in their revolutionary war, Crispus Attucks, was half Indian as well as half negro - but it was the Oneida and Tuscarora Indians who brought food to Valley Forge, while local farmers refused to accept the colonial script, preferring the hard cash of the British. Washington would later write that "If these Indians had been our enemies instead of our friends, the war would not have ended in American Independence."

Other intellectual influences of the Indians
of North America have been more indirect, and have in some instances manifested themselves in far-reaching and often surprising connections. For example, to suggest that the Boy Scout movement, which began in England in 1908, and the "Japanese economic miracle," from about 1960 onward, have in common an important debt to North American Indian culture might appear to challenge the credulity of the reader. Yet the facts of the matter are readily verifiable. The founder of the Boy Scout movement, General Robert Baden-Powell, a popular English war hero, was touring a training camp for young cadets in Scotland where he strongly criticised the practice of marching drills for boys. The General, in turn, was challenged to come up with something better. Baden-Powell had recently written a manual on army scouting techniques, and this suggested the idea of "scouting for boys," which became the title of the first Boy Scout handbook. Two years before its publication a Canadian naturalist and outdoorsman, Ernest Thomas Seton, sent Baden-Powell a copy of Seton's own book which outlined a programme for boys based on American Indian woodcraft skills. When Baden-Powell's book was published, Seton was surprised to find the entire content of his own book incorporated as the content of Baden-Powell's scouting programme. Baden-Powell later promised Seton that he would be given credit for his contributions in the next issue of the book, but this was somehow
overlooked. Seton went on to become America's first Chief Scout, but was later ousted for not being an American citizen. His arguments concerning the values and traditions of American Indian life, particularly their reverence for nature, were not popular at the time - the last of the Indian wars had been fought not many years earlier, and public sentiments toward the Indians were particularly negative. Thus, the source of inspiration which had given form and meaning to scouting was stifled, and the movement would later lose considerable momentum under the drabness of the bureaucratic regimen that replaced it. Who, then, should be recognized as the real father of scouting? Baden-Powell once credited Ernest Thomas Seton with this distinction, but Seton, in turn, would probably have named Dr. Charles A. Eastman, a Sioux Indian who had been raised in the traditional lifestyle, and who had written several books on Indian life under his real name, Ohiyesa. It had been these books more than anything else that had influenced the work that Seton had sent to Baden-Powell, who would receive a knighthood for his work in creating the Boy Scout movement.

The "Indian connection" to the Japanese economic successes of the last two decades is more tenuous, perhaps, but no less valid as a contribution. Probably more has been written in North America of the "Theory Z" style of Japanese business management than has been written in Japan.
Conversely, when Abraham Maslow's *Eupyschian Management* was published in 1965, it sold far more copies in Japan than in the United States. The inspirational source of Maslow's book, however, was neither Western nor Eastern, but from the culture of the Northern Blackfoot Indians of Alberta, among whom he had lived for a time at the urging of his friend, anthropologist Ruth Benedict. In his biography of Maslow, Colin Wilson implies Maslow's experience with the Blackfoot Indians provided him with the first concrete examples of many of his abstract ideas actually functioning in a living society. Maslow himself wrote of the profound changes in the whole of his social outlook that resulted from his experiencing the contrast between Blackfoot and White social realities.

The assumptions that Maslow argues are foundational to his managerial policies can be found reflected in both Japanese and Blackfoot cultural traditions, but tend to conflict with the assumptions of the human condition that permeate modern industrial societies. The popularity of Maslow's writings in Japan can perhaps be attributed to the kinds of descriptive imagery they provided. Such imagery would certainly have provided a quite different perspective, or vantage point, for assessing cultural elements that might otherwise have been taken for granted, or overlooked in the background of experience. The value of Maslow's work for
the Japanese was probably reflective rather than inspirational, for it would have reaffirmed the importance of certain cultural traits or traditions that, in Blackfoot society, had been shaped more by social evolution than by formulations contrived to serve isolated situations. An example of such cultural traditions would be those individuals designated in Japan as "national treasures," who receive artistic or literary pensions from the government. The only literary pension ever granted by the United States government, as it happens, was to a Cherokee Indian named Sequoyah, who single-handedly created an entire written language for his people, although he could neither read nor speak English. Another tribute to Sequoyah, for which his name is best known, are the giant California redwood trees named in his honour. It is ironic that one of the largest of these, still standing today in a national park, was named the "General Sherman."

Where the technological achievements of the Indians were exploited with little credit given in return, and where their intellectual achievements were widely assumed not to exist, the European approach to the artistic achievements of the new world might best be described as one of looting, pillage, vandalism, and religiously-inspired vandalism. The arrival of the first of the treasure ships of Hernan Cortez on July 12th, 1520, marked the first Euro-
pean exposure to the artistic achievements of North American Indians. Albrecht Durer, who had started his own career as a goldsmith, was on hand for the presentation of these treasures to King Charles V, the precariously seated Holy Roman Emperor. Durer described in his diary "...a sun entirely of gold, a whole fathom broad; likewise a moon entirely of silver," and went on to describe finely wrought hollow goldwork including curious weapons, personal ornaments and intricately detailed golden ducks - "all of which is fairer to see than marvels...I have never seen in all my days what so rejoiced my heart as these." The King, less inspired, and more concerned with financing his current war in Flanders, immediately ordered that all these artifacts, together with all subsequent gold and silver objects from the new Golden Land, be melted down. This sort of reception would prevail for the next four centuries, and would lead to the destruction of nearly all of what these Meso-American Indian artists had produced. In fact, until quite recent discoveries were unearthed, the lingering tales of spectacular treasures from the new world were considered simply to be gross exaggerations. 

In his book *The Primal Mind* Jamake Highwater outlines the history of the influence of North American Indian art on European traditions, and examines this influence in the work of painters such as Gauguin, Derain,
Matisse, Picasso and Jackson Pollock; Sculptor Henry Moore; Architects Frank Lloyd Wright and Paolo Soleri; Composers Debussy, Stravinsky and Bartok; Dancer Martha Graham; and in the writing styles of Mark Twain, Ernest Hemmingway and Ken Kesey. Highwater's analysis of the 20th Century "discovery" of the potential of North American Indian art provides a dramatically different view than that of the familiar "primitive" vs. "advanced" society that has long comforted apologists for the less appetizing details of civilized American history. While European and European-American civilization was undoubtedly far advanced in mechanics and physical technology, it is less certain that any similar superiority can be claimed in other areas. Indeed, North American Indian society seems to have been clearly the more sophisticated in botany, in pharmacy, and in most aspects of agriculture. Indian society also seems to reflect a more viable perception of the human condition and the mechanisms of social integrity and stability - these perceptions strongly influenced Franklin, Jefferson and John Marshall two centuries ago, and they continue to influence such thinkers as Benjamin Lee Whorf, Aldous Huxley and Marshall McLuhan in our time.

The exploitation of specific aspects of the Indian's material, intellectual and artistic cultures - without properly crediting their origins - marked a per-
vasive blind-spot in the European perceptions of North America, and we have inherited much of this same blindness. Thus it seems paradoxical that as modern society increases in technical and intellectual sophistication, the distance between modern society and that of the aboriginal inhabitants seems in more ways to actually decrease rather than become greater. This may explain the seemingly inexplicable gaps between the exposure of the Europeans to important aspects of aboriginal native American technical, intellectual and artistic accomplishments, and the first recognized awareness of these or of any attempt to adopt or exploit them. It may be that the most important potential contributions of American Indian cultures have not as yet entered our perceptions, or are only now beginning to do so. Perhaps, in the attainment of wisdom, there comes a humility that allows one to learn from what appear to be humble sources.

In conclusion, it should be recognized that the Indians have contributed as much to the making of modern North America as any other group of people. Without these contributions, in fact, the European presence in North America would have been far more precarious ‐ as in the examples of the Jamestown and Plymouth colonies ‐ and the creation of modern North America would have taken a very
different direction. The independent nations of Canada, the United States and Mexico, for example, might well have remained under colonial administration, or broken into a balkanized hodge-podge of minor states and principalities, after the manner of Europe. The whole of modern experience, in fact, would be a thoroughly different kind of experience were it not for the contributions of the Indians of North America.

It is not enough, however, that recognition of these contributions be forthcoming; we must also come to terms with the inadequacies and injustices that exist not only in our histories, but in our national characters as well. We profess to be great nations, and we aspire to achieve great things in the world, but we seem to have forgotten that the greatness of spirit upon which all achievement ultimately depends is as important in what we take to be minor considerations as it is in the larger courses of human affairs—and often more so.
It is the business of the future to be dangerous... the major advances in civilization all but wreck the societies in which they occur.

Alfred North Whitehead

The myth of progress that has evolved in Western Civilization has become virtually a universal solvent of apologies, removing all tarnish from the baser elements of history, and dissolving away those aspects that won't shine. In the history of North America "progress," the child of manifest destiny and the grandchild of the divine right of kings, has grown to assume the proportions of some mercantile Ark of the Covenant, from which we hold an exclusive franchise. The indigenous inhabitants of the continent, savages who had no progress, who rejected it and even stood in its way, had failed to develop the land, and therefore, were not really "using" it. As Vine Deloria has described in Custer Died for your Sins, the black man was made a beast of burden, a chattel of progress, but the Indian remained a wild animal, like the wolf or the coyote, to be driven back with the threatening wilderness, hunted for
bounty, and finally, in the end, penned on reserves much like modern game parks. Progress, it was explained to them, is part of God's plan; the old ways must go...and the new ways must be accepted.

The truth of the matter, as the archeological record bears out, is that there is no evidence of human existence anywhere that does not include – over a sufficient period of time – unmistakable signs of sustained material progress. The real question is not whether progress takes place in any particular society, but rather at what rate and in what direction. Richard E. Leakey has suggested that mankind's material culture is as least six million years old, and that advances in its complexity can be seen throughout this continuum. These advances have taken so long to develop, however, compared to the explosive growth of recent centuries, that the societies in which they have occurred have generally been regarded as rather backward and perhaps lacking in some vital element that, in our society, accounts for our tremendous material advancements. What is crucial here is that while Western Civilization has demonstrated a wonderful ability to bring about very high rates of change, there has never been demonstrated any long-term advantage in such accelerated rates of change over substantially slower ones. It might be more readily argued, in fact, that these higher rates of change tend to accumulate
attendant costs which, were these more immediately visible, would tend to greatly diminish the enthusiasm inspired by the more obvious short-term gains. 4

Traditional societies, in contrast, tend to be suspicious of change and obstinately resist any attempts to "modernize" them. This has led some observers to claim a decided "conservative bias" for traditional cultures. This bias, however, exists as but one aspect of a larger and more complex mechanism. Anthropologists, in studying these oldest forms of human social organization, have noted that their rates of material or cultural change are generally so gradual that the individuals in these societies have no awareness of any progression, and tend to explain existing technologies or social structures in terms of supernatural origins rather than any process of human creation. On the other hand, anthropologists have also observed that these traditional societies have in other circumstances demonstrated an ability to adapt or change relatively swiftly in adopting technological innovations or cultural practices from others. 5

North American Indian societies, for example, strongly resisted not only European encroachment, but also attempts at religious indoctrination, formal schooling, shoes, the use of cow's milk for food - a practice the In-
diands found hilariously bizarre - and strange economic concepts such as the "job." 6 At the same time, however, Indian societies adapted to or incorporated other forms of change with remarkable alacrity and success. From their acquisition of the horse in the early 1700's it required scarcely more than a generation for the Sioux and the Cheyenne, who had lived for centuries as sedentary agriculturalists in large, permanent communities, to completely re-create their society into the complex tribal affiliations of independent bands that early commentators, such as George Catlin and Prince Maximillian, would describe as the most accomplished equestrian societies on earth. 7 During this same period of time the Iroquois, who had taught the first European colonists the agricultural methods that allowed them to survive in the new world, were incorporating into their way of life selected aspects of European technology including ironworking, the use of wagons and draught animals, firearms, and writing. When the soldiers of the Sullivan Expedition of 1779 encountered the first of some 40 Iroquois towns that they had been sent forth to burn (the idea being to push the Indian threat further West in what was perhaps America's first "pre-emptive strike") they were profoundly shocked to discover how much better the Indians seem to live than themselves. There were cabins with glass windows as well as the traditional Iroquois longhouses, there were blacksmith shops and large granaries, broad well-
kept roadways, and vast fields and orchards surrounding all. Such primitive affluence might suggest that perhaps the Indians had been more judicious and able in learning from the European way of life than the Europeans had been of the Indian. 8

The Indians did seem to have very definite ideas about what was - and was not - worth adopting. These ideas were not guided simply by an awareness of opportunity, but more by the functioning of a complex mechanism of cultural maintenance which served to regulate the rate of change, or progress, which the society would experience. This mechanism, which survives relatively intact only in traditional - or primal - human societies, operates through the medium of cultural institutions and traditions, and at the level of our most basic assumptions. These assumptions, the things we tend to take for granted, and are often unaware of, are the foundation upon which - and along the lines of - we erect our structures of logic and reason.

The functioning of this mechanism is analogous to that of biological homeostasis in that it operates on the principal of negative feedback to maintain certain states of equilibrium and certain margins of tolerance within the flux of the environmental field. Following the biological model,
also referred to as "organicism," this state of equilibrium is never static, but exists along a continuum of orderly change analogous to the balance of anabolism and catabolism in living organisms. In the context of culture this mechanism may serve to limit the rate of change in order to maintain the social equilibrium, or it may switch over to promote an accelerated rate of change in attempting to regain this same state of equilibrium. The process has been compared to that of a household thermostat, but this comparison is more on the order of metaphor than analogy, for the state of social equilibrium "regained" through an adaptation or innovation at such an accelerated rate will, for one thing, be markedly different than the state maintained formerly. It may assume merely an altered pattern - such as a society adjusting to climatic changes by becoming somewhat more (or less) nomadic - or the society may actually grow to become more complex, progressing along a continuum whereby new technologies or cultural patterns are integrated with the existing order of things. The key here, of course, is the concept of integration, for to "progress" very far without it is to override the mechanism or mechanisms that maintain societal equilibrium, thereby reducing the margins of tolerance for survival.
An important consideration in this process of accommodation is the intricate relationship between the rate of change and the direction that this change takes. As Gregory Bateson has pointed out the "new" is always from the random and selection, or incorporation, is always determined in accordance with the existing patterns of order or experience. In selecting or rejecting opportunities for incorporating new structures or patterns these existing patterns of order and experience also determine the direction of the process of change. When change as a process is introduced into complex systems, however, there are reverberations throughout the system that in turn create secondary levels of change so that some period of time is required for the system as a whole to return to or regain equilibrium. When change is introduced at too high a rate interference patterns are set up as the ripples of secondary orders of change intersect. When the processes of change introduced are from inconsistent lines of continuity, moreover, these secondary orders of change may set up patterns that create quite unexpected, unaccountable, and sometimes unwanted circumstances or results. Just as speech played too fast becomes only noise, so will any sufficiently accelerated rate of change reduce the process of selection to meaninglessness simply because the process of incorporation can never proceed more than a step or two before the field of
relevance - the existing meaning of the system as a whole - undergoes substantial change once again. If you keep changing the maze, the rat cannot learn. 11

An example of this is provided in C.H. Waddington's *Tools for Thought*, in which he describes the influence of an accelerating rate of technological change on the relevance of a scientific education. Waddington shows that a scientific professional graduating in 1941 would have found after five years that his training had become 20% obsolete, and that after twenty years it had become 60% obsolete. A graduate in 1970, however, would have experienced on the order of 60% obsolescence after five years, and nearly total obsolescence even before twenty years had passed. Eventually, of course, a graduate would find his education completely out of date several years before graduating - unless the system collapsed first. 12 An example of secondary change in this example is the process of increasingly narrow and fragmented, specialized and sub-specialized fields that place increasing limitations on obtaining any breadth of perspective. Potential innovations, in such circumstances, will therefore tend to be exploited for immediate short-term gains, with less and less consideration for longer-term implications. 13 When these implications eventually result in problems that demand some solution, there is already a strongly habituated tendency to
visualize such problems in technological frames of reference, so that only technological solutions will be seen as consistent and sensible. Such solutions, one might say, are like emptying a box of cobras into the basement to get rid of the mice, and then stocking up on shotgun shells to deal with the snakes. The "integrity" of the house - structurally and otherwise - is bound to suffer.  

This dependence on the "technological fix" tends to preclude longer-term considerations so that future consequences arise unforseen and with little understanding of the original causes. As in the model of biological homeostasis, exponentially accelerating rates of change can result when a controlling or balancing mechanism fails or malfunctions. This run-away condition, often referred to as "snowballing," can be precipitated in virtually any complex system: a malfunctioning governor on a steam engine could result in an explosion; a failure of the temperature control mechanism of the human body can lead to heat stroke; a shift from orderly behaviour to panic in the evacuation of a crowded theatre could bring about an unnecessary disaster. On the larger scale of our world system the failure of certain cultural mechanisms have precipitated exponential increases in human population growth, in the rate of environmental exploitation and degradation, in the proliferation of war and other social aberrations, and in our growing fears
that our chances for survival are rapidly diminishing.\textsuperscript{15} The magnitude of these problems in our time has led many people to assume that they are relatively new: that they are either simply bugs to be worked out of the technological system, or conversely, good reason to reject technological progress altogether in favour of some older and simpler way of life. In truth, of course, these problems are as old as human existence. The greatest fears of our time are reflected in the ancient and profound symbolic imagery of the Four Horsemen of the Apocalypse from the Book of Revelations.\textsuperscript{16} Famine is the reality of overpopulation; Pestilence is environmental degradation as personal experience. The spectres of War and Death, their relentless companions, have grown to threaten perhaps even life itself on this earth. In his book, \textit{An Inquiry Into the Human Prospect}, economist and historian Robert L. Heilbroner has attempted to evaluate the present proportions of this threat to human survival, and has commented that in all his studies he could find but one cause for hope in contemplating the future, and that was the simple fact that some human societies have managed to survive for thousands or even tens of thousands of years. This cause for hope, however, rests on how well we are able to understand the essentials of human survival, how they have evolved, and what constraints they might place upon our present directions of change. \textsuperscript{17}
If we were to state in one concept the first and most important aspect of human survival, whether as an individual in isolation or as a social community, that one concept would have to be "values." Values are the essential element of human experience through which all social or cultural mechanisms function, and which collectively determine our sense of who we are. When we speak of the integrity of an individual, or of a group, we are essentially concerned with how well their values are integrated or internally consistent. What we call individual freedom is essentially the opportunity to follow the dictates of values that have become integrated with our innermost sense of self; \(^{18}\) the extent to which individuals in a community share consistent and harmonious values determines how free their society really is. This follows the concept of "social synergy" described by Ruth Benedict, and later Abraham Maslow, \(^{19}\) in the sense of component members contributing to something very significantly more than merely their aggregate group — much in the way that members of an orchestra contribute to a symphony concert, in that each member also realizes his or her own highest expectations or goals in so doing. There are obvious survival advantages in such examples of finely-tuned group achievement, but of greater significance is the sense of higher purpose that this synergy creates, and the margins of tolerance for the unexpected and sometimes overwhelming conditions of life that are
thereby maintained. Such personal achievements or sacrifices require greater determination, strength of character, and toughness than are required by the familiar demands of everyday life, and by such achievement or sacrifice these qualities are strengthened. Traditional societies generally expend as much or more energy on ritual and cultural forms of social maintenance than on the actual production of material goods. In our society, material productivity has grown to all but exclude these cultural structures which we have attempted to replace with mass institutions—though with less than overwhelming success. The steady growth of these institutions, moreover, has served to remove them even further from any meaningful relationship with the "human scale" of things, and it is this human scale that most characterizes the mechanisms of survival in primal societies. 20

Our present understanding of primal societies—to which computer-enhanced studies have made important contributions—includes a number of statistical constants in band and tribal levels of social organization that indicate a degree of complexity and order that previously would not have been thought to be considered possible. One set of these constants relates to the size of human communities. The average size of hunter-gatherer bands, for example, is 25 individuals. The variation may range from 12
to 50, but the mean is a world-wide constant. These bands are not random, moreover, but belong to gene-pool groups with average populations that stay very close to 500. Bands occupy "catchment territories" within the larger tribal territory and these have a regular pattern of size that correlate with climate and geographical conditions. These bands, however, spend considerable portions of their time on social visits to other bands in the same tribal groups and may co-operate in the activities in any of the roughly 20 associated territories. The ratios 25 and 500, referred to as "magic numbers" by anthropologist John Pfeiffer because of their recurrence in human history, are the products of biological and social co-evolution. In one study by Martin Wobst, it was determined that the optimum human population for genetic variety and age-sex ratios ranges from 475 to 500 individuals. Another recent discovery from brain research is that the brain has a specialized area that provides us with the ability to recognize approximately 500 human faces (lesions to this area can cause a condition called "prosopagnosia" in which the person afflicted becomes incapable of recognizing anyone, even close family members, until told who they are). Kirkpatrick Sale, in his book *Human Scale*, reports that in the United States a few years ago the President of a prestigious boys' school resigned when the Board of Directors allowed the population to exceed 500, stating that when the Head of a school can no longer main-
tain a personal relationship with each student the essential character of the institution drastically changes. Charles Erasmus, Professor of anthropology at the University of California, has shown that successful communes in North America from 1800 to 1980 maintained average populations very close to 500.

The instant recognition of members of one's own group has obvious survival advantages - particularly recognition at some distance - an ability often reported to be highly developed in contemporary tribal societies. This recognition capacity, however, has a wider range of application than simple identification. It is closely linked to our ability to "read" a wide range of non-verbal signals that are perhaps our most important input concerning the emotional and relational tensions of the social group. These non-verbal signals, which operate for the most part below the level of conscious attention, function in traditional societies as a kind of communications net in which everyone in the group communicates with everyone else simultaneously and continuously. The signals themselves are made up of patterns of movement, gesture, facial expression and tone of voice. Many things that concern any particular individual, consciously or otherwise, register in an accumulative process that the person will react to emotionally, and it is at this level that this communications net normally operates.
In this way a great deal of "social maintenance" can be attended to without the necessity of verbal interaction. This non-verbal communications net is one kind of cultural mechanism that functions as a medium through which more specific mechanisms of cultural maintenance operate. 24

One of these mechanisms of cultural maintenance operates on feedback information concerning the relationship of group size, structure, and stability to the environmental substrate—particularly in terms of the patterns of resource availability and distribution. Individuals in primal societies such as those of the Kalahari Bushmen of Botswana display remarkable abilities in reading territory, such as the ability to return to and dig up a tuber that had been noticed but considered not ready for harvesting as much as a year or two earlier. 25 In North America there are numerous recorded assertions by early frontiersmen that it was not possible, even by subterfuge, to confuse an Indian so that he would not be able to find his way. 26 Our visual memory for terrain is indeed staggering. Ralph Haber, at the University of Rochester, found that people were able to accurately identify upwards of 95% of 2,560 photographic slides—shown at the rate of one every 10 seconds—when tested later by having them select these slides from a larger group of similar ones. Our linguistic memory, by
comparison, is extremely limited: even so few as 10 new words can overtax our ability to recall them, even minutes later.  

Terrain recognition and the ability to read subtle cues in group behaviour and relationships have very distinct and immediate survival advantages, but to combine them— as certainly happens in actual experience— provides a different kind of information that is less obvious and direct, but no less important to survival in the long run. This information, collectively, might be described as the concept of a standard of living, which is formed and maintained through the same communications net described earlier. This concept of a standard of living in turn provides a framework within which the individuals of the social group categorize and evaluate not only their conscious perceptions, but those outside the focus of conscious attention as well. We know that primal societies deal with perceptions of this order from the evidence for anthropological interpretations of such concepts such as Leibig's *Rule of the Minimum*, in which maximum population densities are understood to be regulated by the availability of resources during periods of greatest scarcity, rather than by seasonal or annual means. What this means is that these traditional societies maintain stable populations— with zero population growth— that tend to stay within 20% to 60% of the maximum
supportable population levels and which extract resources from the environment at some 30% to 40% of the maximum renewable rate. 29 The old notion that the population levels of primitive societies were controlled by the availability of food resources so that only starvation prevented their numbers from increasing, was an assumption that probably originated in the seemingly unalterable Malthusian experience of Western Civilization. 30

In primal societies, marriage is nearly always closely tied to territorial resources through patterns of kinship and kinship obligations. This direct relationship between individuals and a defined environment is essential to decisions concerning birth spacing and local group size. Birth spacing averages approximately three years in primal societies, and in North American Indian societies was often closer to four years. How this is managed varies from culture to culture, but both social and biological controls are involved. The human potential for a wide range of non-procreative sexual bonding is a product of socio-biological co-evolution, as is the prolongation of non-fertile periods through extended breast-feeding, which in many societies may be continued for five years or more. 31 (Even resorting to abstinence, which seems a purely behavioural or social process, is rooted in the emotional aspects of experience which are, in turn, determined through the biochemistry of the
brain. This is why, in primal societies, traditions are embodied in a system of values and obligations that individual members of the society do not merely recognize cognitively as idealized abstractions, but are deeply moved to uphold and abide by from stong emotional and reactive conditioning. While this deeper level of conditioning is the more powerful determinant of behaviour in any society, the real key to understanding the mechanisms of societal homeostasis is not this alone, but rather the finely-tuned harmony maintained between such conditioning and our rational or reasoned perceptions and interpretations.

The relationship between population growth and Pestilence, the second of the Four Horsemen, involves a different but interrelated set of homeostatic mechanisms. According to population ecologist Thomas McKeown, studies of the decline in mortality rates from infectious diseases over the past two centuries have determined that an improved environment - and not advances in medical science - has been the primary factor. McKeown elaborates that it has been adequate food supplies, proper nutrition and minimal standards of hygiene that have accounted for these declines, with occasional medical breakthroughs playing important, but relatively minor, roles. This led McKeown to the interrelationship of food supply, population density and epidemiology, and to the eventual conclusion that the agricultural
revolution of 10,000 years ago, in bringing greater population densities, allowed the propagation and transmission of micro-organisms which quickly evolved to become more virulent disease forms. When food supplies became marginal, increased population density and malnutrition created ideal conditions for epidemic outbreaks of disease. McKeown implies that before the agricultural revolution, with the much lower population densities of hunter-gatherer societies, disease undoubtedly played a much less significant role in mortality rates. 34

Agriculture, per se, is practised in a number of hunter-gatherer bands, but the impact of the agricultural revolution of 10,000 or so years ago was one of intensified cultivation by communities that were apparently disposed to living in fortified walled towns. 35 This makes sense in the light of recent archeological evidence from the Ancon-Chillon region of the Peruvian Coast that intensified agriculture may itself be a reaction to population pressures. 36 Fortified towns would be necessary if population pressure forced some communities into marginal and increasingly desperate existences, and the inevitable periods of drought would reduce nutritional health and thereby invite epidemic outbreaks of disease in these crowded habitations. Infant and childhood mortality rates would then render attempts to regulate local population levels meaningless, and
larger towns would appear safer refuges from attack, so that higher rates of childbirth would seem advantageous. Thus, as the mechanisms of territorial spacing and the intricately connected sense of the quality and health of the community are overridden in attempts to increase both population and food supply, not only does population begin to grow in exponential spirals, but also mortality rates from starvation, disease, and war. These great waves of death should never, therefore, be thought of as "natural controls" that correct overpopulation, but rather as direct and contributory aspects of overpopulation itself, for they are not controls at all, but the consequences of controls removed, overpowered, or damaged.  

Population density and territorial occupation in primal societies are closely related aspects of what has been referred to as the "primitive standard of living." As stated earlier, population density is kept to within a manageable range, and food and resources are extracted from the environment at a rate that averages 30% to 40% of the maximum renewable rate. An important mechanism in the regulation of these factors, mundane as it may seem, is what might be termed the "primitive work week." In a Harvard study of the Bushmen of Southwest Africa, Richard B. Lee estimates that the !Kung San average fifteen hours per week on subsistence labour, and maintain a caloric intake averaging
2,140 calories per day for adults. Other studies have determined the work week in primal societies to range from 12 to 19 hours per week, with an average of 2,200 calories per day for adult members. Any population increase relative to food supply will obviously increase the rate of extraction, and at 70% or 80% of the maximum the workweek will increase proportionately. At rates very much higher than this the workweek will begin to increase exponentially.

The number of mouths to feed relative to the time spent providing food is a clear and direct part of everyday life in such communities; even a slight increase in the amount of time required to maintain food supplies provides immediate information feedback.

One of the pressures on members of primal societies to maintain a relatively low subsistence workweek is that they simply have a number of other important things to do. These other activities might be collectively envisioned, in fact, as a kind of "cultural maintenance workweek." Taken together, these activities would probably average two or three times the number of hours spent on subsistence. This cultural workweek is regulated by patterns of visiting common to bands of any tribal or gene-pool group. These patterns of regular visiting maintain the internal consistency of the communications net of the larger tribal affiliation, which in turn regulates patterns of
land-use rights, sharing, and the structure of all cooperative efforts through the shared system of values and obligations of the affiliated groups. Archeologist Richard Leakey has observed in *The People of the Lake* that people in primal societies devote more time to these congregational gatherings than to any other activity. Sociologist A.R. Gillis, in studies based on the "behavioural sink" concept, from Calhoun's famous experiments in rat population cycles, has suggested that there are important cultural and psychological variables in man's reaction to population density, and that these can be seen in the variations from one human society to another—particularly in the patterns of social pathology. This supports the argument that regularized cultural practices have evolved to function as controls for population growth and for the maintenance of the physical and mental health of the community, and that these controlling mechanisms operate from patterns of information that function in ways analogous to the principle of negative feedback in biological systems. At the most general level these mechanisms can be seen as controls that regulate the rates of change in cultural systems, but at the level of day-to-day reality they have often appeared to outsiders as primitive backwardness. The apparent laziness of the hunter-gatherer, his penchant for idle and superstitious pastimes, and particularly his conviction that the world of
nature is saturated and controlled by great powers beyond his limited vision, may in fact be the real secret to his timeless endurance as a cultural species. 

War, the Third Horsemen, the escalating struggle for power, may well be the deepest and truest meaning of the phenomenon we call civilization. From the first walled towns defending their surrounding fields we have grown to inconceivable power, but the essential model, the old triad of City, Nation, Army, has not changed. Vladimir Illich Lenin once said that power must inevitably concentrate in the hands of the few. Joseph Stalin would later add that if this were true, then power must inevitably concentrate in the hands of one. What we call history has been to a very great extent little more than a scorecard of this process, and perhaps what we call civilization is this process.

The problems of leadership, power and social stability in primal societies has generally been dealt with according to a very different process, and this process is in no way merely the scaled-down, crude and unsophisticated version of civilized politics and warfare that it has widely been assumed to be. The ritualized pattern of primitive warfare, which seldom consists of anything more than occasional raiding may, in fact, function as a kind of in-
noculation against war, in ways analogous to our practice of biological inoculation against disease. How this is possible is through the cultivation of what could be termed statesmanship, or the qualities of true leadership, by structuring experiences that place extraordinary demands upon judgment, courage and fidelity. Any understanding of this function, however, must include an appreciation of the essential differences between primitive and civilized practices of war.

The primary objective of civilized war is to take and hold territory by killing or capturing or otherwise defeating the enemy forces - to this end armies are totally expendable, but should, for the most part, be spent economically. In primitive war the objectives are quite the opposite. No territory is taken or held, the enemy is generally to be avoided as the stealing of trophies is of greater concern, and the overriding obligation of war party leaders is to return all of their men unharmed, regardless of opportunities thereby lost. Actually, fighting in primitive warfare tends to take the form of individual combats in which death is usually rare, and the main objective is individual glory, or trophy-taking, such as in the "counting of coup" practiced by the plains Indian tribes of North
America. Primitive war, in this sense, is remarkable like the patterns of fighting among animals in maintaining dominance and in mating. 48

How these patterns have evolved in cultural settings has been explored in a remarkable study by Robert Axelrod, as outlined in his book The Evolution of Co-operation. Axelrod notes that in World War I it was common for troops facing each other in fixed positions for extended periods of time to develop tacit "agreements" as to certain "time-out" periods when it would be safe to attend to field mass, mail-call, and like activities. Army commanders found it frustratingly difficult to break these unspoken truces, and often resorted to extensive and costly troop movements to do so. 49 Axelrod notes that time spent in fixed positions is necessary for this process, which he refers to as "reciprocity," to function. Axelrod later devised a contest for computer simulation conflict strategies and in three play-offs found that the same programme, which had been submitted by Anatol Rapoport, won each time. This programme, called "Tit for Tat," consists of perhaps the simplest possible form of reciprocity: it operates by always making a positive first move and then doing whatever the opponent did on his last move thereafter. 50
Social and biological co-evolution has shaped humanity in ways that correspond to the reciprocity model, though much of this "shaping" is still poorly understood. George Bernard Shaw, interviewing the explorer Sir Henry Morton Stanley, inquired as to the importance of leadership in his attempts to penetrate Central Africa with large columns of men and asked whether anyone could have replaced him (Stanley) had he fallen ill. Stanley answered in the affirmative that there were two others that could have taken over in such an event. Shaw pressed him on this and Stanley confided that in his experience precisely one in twenty men is a "natural leader." Shaw was intrigued with this ratio, but never recorded any theories as to its origins. Recently in the United States an organization called the Yonan Codex has determined that this same ratio accounts for many of the people we have incarcerated in prisons, and has developed an astonishingly successful programme of rehabilitation for dealing with inmates who have also been identified as natural leaders.

As has been stated, hunter-gatherer bands average 25 individuals. On a scale of from 1 to 60 years of age, given their average birth rates, this will mean 20 adults. It would be remarkably convenient, therefore, for human evolution to produce one "natural leader" for each such group. Such an explanation is, of course, a consid-
erable over-simplification, for cultural traditions also play a role in this development. These traditions, moreover, define and structure the meaning of leadership and how it is to function in each particular society.

In primal societies leadership tends to be invisible unless needed. Under certain kinds of stress the group automatically looks to one person, and in this way leadership is invoked. Those who actually seek to attain leadership positions are usually censored or shunned as immature or of poor character. It is the "traditional way" that those with natural leadership potential tend to avoid such distinctions with self-effacing humility, and who accept leadership authority only if pressed upon them and freely agreed to by all.\(^5\) This was also the only means by which such authority was traditionally maintained or continued. It was also not unusual in societies such as those of the American Indians for the assumption of leadership to shift easily from person to person, depending upon the kinds of expertise required, so that there was a kind of equality that tended to support the disappearance of leadership when not required.\(^5\)

These mechanisms of control over the acquisition and use of power, which will be examined more closely later, seem to prevent exponential rates of increase in the
wielding of power. These mechanisms operated through traditional practices in primal societies at all age levels, and helped to define and empower the individual sense of self in the cultural scheme of things. Of critical importance in this process were the early child-rearing practices and the rights of passage to adulthood for adolescents common to these societies. These practices will be among the chief concerns of this paper.

The last of the Horsemen is Death, and this Death of the Apocalypse is the death of communities, of nations, and perhaps of humankind itself. Death as it comes to nations or to species is the death caused by exponentially accelerating change. We have no name for this malady in English, but in the Hopi language it is known as "Koyanisqaatsi:" life out of balance, the forgetting of the way, grating disharmony, the loss of grace. In primal societies change has always been suspect, avoided, and thus kept to a rate below that where people would become conscious of it. One reason for this may be that our conscious decision-making processes, our illusions of ourselves as rational and reasonable beings, are not adequate tools to judge what should or should not be changed. For primal man, everything had come from some power or reality far greater than his own understanding and was, therefore, sacred and to be protected; for who can say what will come of any new
thing? This does not mean that primal man rejected greater understanding; anthropologists have marveled at the "lively curiosity" and intense powers of observation commonly demonstrated by hunter-gatherers, but rather that understanding is one thing and meddling with a way of life is quite another.

In the late 1800's a number of American Indians were taken to Europe to be toured and displayed, including the great war chiefs Joseph Brant and Geronimo, and the Sioux shaman, Black Elk. One has only to read their own accounts of this experience to obtain some sense of the depth and fluency of what Jamake Highwater has termed the "primal mind." What is crucial here is that a stable and slowly progressing society or culture does not necessarily mean that the intellect, the freely inquiring analytical capacity of the human mind, must be stifled. Whether specific discoveries or innovations spread throughout a community or a nation is determined by the nature of the society in question, and not by any law of nature. Many cultures have chosen not to adopt certain innovations - the Chinese, for example, were well aware of the military advantages of gunpowder, but chose not to exploit those advantages. Similarly, the Japanese, who in the 18th Century decided that firearms were not desirable in the art of warfare, actually managed to dispose of all such weapons then
in Japan. Today, in North America, many communities have attempted to stop genetic engineering research from being conducted anywhere near them, although they would not protest such research being done elsewhere—as, say, on the other side of the moon. Just as high rates of progressive change cannot be demonstrated as superior to slower ones, progress in any form does not necessarily delimit the freedom of the mind's eye to look where it will.  

The traditional "conservative bias" of primal societies is more a cultural than biological mechanism, but there are physical attributes or capacities that underly this. We have, for example, certain limitations to the channel capacity and input rate of the human brain. Our channel capacity is limited to 7 or 8 simultaneous variables, or factors, and the rate of conscious input is limited to between 7 to 40 "bits" per second of data. The latter corresponds roughly to normal rates of human speech, and the former may relate to the size of working groups in hunter-gatherer bands. In such a group of 25 individuals there would be precisely 14 people between the ages of 13 and 50 (based upon the average birth-spacing of such communities) which on the basis of a sexual division of labour would mean 2 groups of 7 each. Modern research has determined that 7 seems to be the ideal group size (within a range of 5 to 12) for committees or other forms of co-oper-
ative endeavour, and that on a national average there are, in fact, exactly 7 people per working group in North America today. 62

The human brain has the ability to conceptualize data in gestalts, or wholes, which would otherwise be too complex to deal with. Seven members of a group therefore offer seven "points of view," and we can deal with these in one conceptual process. Such conscious conceptual processes are not, of course, the whole of what the mind deals with. In *Symbols, Signals and Noise*, James Pearce outlines aspects of research in communications theory that indicates an upward limit to the total — conscious and unconscious — input rate of the human brain at roughly 300,000 bits per second, the level of complexity required to accurately control the reproduction of symphony orchestra music. 63 In a study reported by Edward T. Hall in *Beyond Culture*, children on a playground were filmed from a blind and the high-speed film was analyzed to show that the seemingly random patterns of movement of the children were actually in perfect synchronization with a definite rhythm. 64 This communicated form of behavioural organization Hall calls "synchrony" and suggests that we have not even begun to understand the importance of its role in human society and behaviour. This pro-
cess of synchrony, in all its various facets, accurately describes the functioning of the communications net of primal societies referred to earlier. 65

Something on the order of Hall's synchrony, it seems, must surely have evolved in human society relative to rates of cultural change. Disrupted synchrony would be a form of negative feedback, and consciousness of this feedback could well be the mechanism of control that dampens excessive rates of change. In other circumstances, consciousness could, conversely, function as an accelerator. This could explain the observation of a "conservative bias" in cultures that also seem to produce individuals characterized by the "lively curiosity" and highly developed powers of observation and concentration referred to earlier.

All of these mechanisms that function in primal societies to limit population densities, provide for territorial maintenance, regulate the exercise of power, and control rates of innovative change, can be summed up as the "way of life" of a particular community or culture. Among the chief means whereby primal societies have transmitted this way of life from generation to generation has been through the telling of legends and stories. 66 The great body of such legends that anthropologists and folklorists have compiled has consistently baffled attempts at ana-
lytical analysis. There are, however, certain universal themes that have been recognized, including the theme of personal transcendence as one of the essential experiences of life. There are many examples of this theme in the legends and stories of people throughout the world, but one of the most beautiful of these was an African Bushman story recorded by Laurens Van Der Post.

A child of the !Kung San, drinking from a clear pool, briefly glimpses the reflection of a brilliantly-coloured bird in the water, but as he looks up it flies swiftly away. He decides to follow this bird, having been fascinated by its beauty and mystery. As the youth grows to manhood he continues to return to this quest, so that his life has become dedicated to it. Instead of a hunter of food, the man becomes a hunter of truth, and sets out once and for all to solve this great mystery. He travels from village to village, always one step behind his quarry. In his elder years, his travels find him far from home. Finally, he comes to the great mountain, Kilimanjaro, following the stories and directions he has been given. He does not hesitate, but begins to climb, and eventually reaches the top, only to find that he is surrounded by nothing but rock and snow under a darkening sky. He finds a place to rest, and as he lies quietly he realizes that death is coming upon him, and he reaches outward to the sky, cal-
ling aloud his mother's name, thanking her for having given him this wonderful and joyous life. As his eyes close for the last time, a solitary feather, drifting silently down from the grey sky, settles into his open hand, which closes as tightly on it in death as the quest for beauty and understanding had been held in life. 68

"This, the Bushmen say, was a life well lived, and the story a lasting joy to all." 69

Surely all but the most insensitive of readers must find in this story a common bond of human experience and human values. In focusing exclusively on the differences between human cultures such common bonds can be easily forgotten, though they are of more fundamental importance, and in fact provide the basis upon which the differences must be evaluated. In exploring the relationship between human values and the challenges to human survival that all cultures or societies must face, we might find that from the oldest and most enduring ways of life, such as those of the Bushmen or the Indians, will come the most primal and fundamental of lessons. Like the above story, they will be reminders of our own basic humanity.
"Savages we call them, because their manners differ from ours, which we think the perfection of civility; they think the same of theirs.

"Perhaps, if we could examine the manners of different nations with impartiality, we should find no people so rude as to be without any rules of politeness; nor any so polite as not to have some remains of rudeness.

"The Indian men, when young, are hunters and warriors; when old, counselors; for all their government is by the counsel or advice of the sages; there is no force, there are no prisons, no officers to compel obedience, or inflict punishment. Hence they generally study oratory; the best speaker having the most influence. The Indian women till the ground, dress the rood, nurse and bring up the children, and preserve and hand down to posterity the memory of public transactions. These employments of men and women are accounted natural and honorable. Having few artificial wants, they have abundance of leisure for improvement in conversation.

"Our laborious manner of life, compared with theirs, they esteem slavish and base; and the learning on which we value ourselves, they regard as frivolous and useless. An instance of this occurred at the treaty of Lancaster, in Pennsylvania, anno 1744, between the government of Virginia and the Six Nations. After the principal business was settled the commissioners from Virginia acquainted the Indians by a speech, that there was at Williamsburgh a college, with a fund, for educating Indian youth; and that if the chieftains of the Six Nations would send down half a dozen of their sons to that college, the government would take care that they should be well provided for, and instructed in all the learning of the white people.

"It is one of the Indian rules of politeness not to answer a public proposition the same day that it is made; they think that it would be treating it as a light matter, and they show it respect by taking time to consider it, as of a matter important. They therefore deferred their answer till the day following; when their speaker began by expressing their deep sense of the kindness of the Virginia government, in making them that offer."
"For we know," says he, 'that you highly esteem the kind of learning taught in those colleges, and that the maintenance of our young men, while with you, would be very expensive to you. We are convinced, therefore, that you mean to do us good by your proposal; and we thank you heartily. But you who are wise must know, that different nations have different conceptions of things; and you will therefore not take it amiss, if our ideas of this kind of education happen not to be the same with yours. We have had some experience of it; several of our young people were formerly brought up at the colleges of the northern provinces; they were instructed in all your sciences; but when they came back to us they were bad runners; ignorant of every means of living in the woods; unable to bear either cold or hunger; knew neither how to build a cabin, take a deer, or kill an enemy; spoke our language imperfectly; were therefore neither fit for hunters, warriors or counselors; they were totally good for nothing. We are not, however, the less obliged by your kind offer, though we decline accepting it; and to show our grateful sense of it, if the gentlemen of Virginia will send us a dozen of their sons, we will take great care of their education, instruct them in all we know, and MAKE MEN OF THEM.'

Benjamin Franklin - 1784

It was typical of Franklin's kindly nature that he should have so fairly understood the Indians' character and so clearly appreciated the better qualities of Indian society - though his intent in these observations was probably less to eulogize the Indians than to hold up a yardstick whereby those of European descent could find a measurement of their way of life different from their commonplace assumptions. Thomas Jefferson, a close friend and admirer of Franklin, wrote that it was one of Franklin's personal rules never to contradict anyone, and if urged to an opinion would invariably answer with questions, or by recounting parables. 2 Jefferson had once asked Franklin about the strong tendency of men to quarrel, and what
opinion he had on the possibility of ever resolving this tendency. Franklin, Jefferson wrote, replied that it reminded him of a story concerning the Eddystone Lighthouse in the English Channel. This facility employed two keepers who had to live in isolation throughout the winter, with only themselves for company until the spring supply boat arrived. Because of the sometimes murderous disputes that tended to erupt between men thus employed, great effort was made to find individuals suitable for the conditions imposed. One particular spring, Franklin continued, the supply boat arrived to find only one man awaiting it, and fearing the worst the boat captain inquired as to the other man's whereabouts. The keeper replied that he had no idea. The first week they had been there they had quarreled so bitterly that they finally divided the tiny islet in half, and neither had spoken to nor seen the other all winter! The other man, as it turned out, was waiting patiently on his side of the island. 3

It has long been considered in Western Society to be clear and incontrovertible common sense that men require strong leadership and discipline in order to accomplish anything, or, in some cases, to even survive. Without such imposed order, dissention rules - at least in western experience. In Northern British Columbia, during the gold rush years of the late 1800's, there occurred an interesting
parallel to Franklin's tale of the Eddystone Light. Men were hired to maintain telegraph line cabins along the "Tele-
ograph Trail," the only communications link with the North-
west Mounted Police assigned to patrol the gold fields. One
man alone, it was soon discovered, usually ended up "bushed"
(severely mentally disturbed), and therefore unreliable. Two
men, moreover, were as likely to end up trying to murder
each other. The only solution, as it turned out, was to
build two cabins at each site, a few hundred yards apart, so
that each man had his own private retreat.  

To endure a Northern winter in complete sol-
itude was a challenge that few white men managed to over-
come, and yet most of the trappers and prospectors, often
from bitter personal experience, tended to consider it the
wisest arrangement. There was an exception, however, and
that exception was the Indians. Indians were known to work
traplines all winter alone, in pairs, or in larger groups
pretty much as a matter of course, with seemingly little
concern for the hardships or privations involved. There
was an explanation for this, of course, which went that
Indians were relatively insensitive - were known, for ex-
ample, not to be able to feel pain the way white men did -
and were possessed of such coarse sensibilities that iso-
lation and other hardships meant no more to them than to so
many head of livestock. This ability to endure suffering
and even death with stoicism - as, for example, with the
singing of one's "death song," in the face of death itself - bordered on the incomprehensible to non-Indians, who
could only surmise that they must be of some different human
species or type. There were observers who, like Franklin,
suggested that the Indian way of life produced men of a
higher and more reliable character than did white soci-
ety, but these views were not popular among the greater
mass of civilization's representatives. In the predominant
view, every advantage an Indian might have claimed somehow
became a shortcoming; thus, the courage and devotion dis-
played by one's enemies becomes mere fanaticism, just as
generosity and sharing, as among the Northwest Coast tribes,
becomes profligate thriftlessness and weakness of character.
The true test of any culture, however, is not how it meas-
ures up in terms of such less-than-disinterested observa-
tions, but rather how it survives under stress, and how well
its integrity is maintained through difficulties and di-
sasters. In this sense, few people in all of history, we
might find, have been so brutally tested as were the Amer-
ican Indian societies over the past four centuries. 8

In the commonly accepted view of how civiliz-
ation spread across North America, as has been glibly ex-
pressed by such popular culture hero as Marion Morrison -
also known as John Wayne - God had led the pilgrims to North
America, the Indians selfishly tried to keep all of the land for themselves, and so the cavalry had to be sent to protect the settlers. America, therefore, has nothing to be ashamed of because a lot of money has been spent taking care of the Indians so that they can "catch up" with us. The Indian version differs somewhat, as does that of more scholarly history.

The Indians lost the North American continent essentially because of disease, starvation, and a conscious policy of genocide on the part of the European settlers - in roughly that order. Consider for a moment the impact of the Black Death that struck Europe in the fourteenth century. Historians such as Barbara Tuchman and Will Durant have described the devastation that virtually brought European civilization to the brink of collapse. It is generally estimated that one-quarter of the population died from these plagues. In North America, over one-half of the Indian population died from smallpox and influenza before they ever saw a white man, and fully 80% died from disease thereafter, bringing the total number of Indians, estimated at perhaps 1,000,000 before 1500, to well under 90,000 by 1870. Our most accurate records are of the Indians of California, who declined from an estimated 300,000 in 1500, to 16,000 in 1910, and the Northwest Coast Tribes, whose numbers at the time of contact were about 100,000, but fell to 20,000.
by the 1880's. The Haida alone, one of the remoter peoples, were reduced from over 6,000 in 1835, to only 588 in 1915. 

Inseparable from these epidemic outbreaks of disease were starvation and territorial pressures from the European colonists. These three forces, in fact, worked as one against the Indians. There are recorded instances of soiled blankets from smallpox infirmaries sent as "gifts" to Indian communities. Disease spread more quickly through villages where starvation had reduced resistance to infection, and the destruction of food sources quickly became the primary activity of military forces operating against the Indians. For Eastern Tribes this meant the burning of croplands and granaries: In one expedition alone, in 1779, 160,000 bushels of corn was reported destroyed, along with the burning of hundreds of acres of field crops and orchards. 

In the West, this policy led to the slaughter of the buffalo as the only means of reducing the plains tribes to submission. From an estimated 75 million buffalo before 1500, only about 800 survived in 1885. The first prairie settlers, inept as farmers, survived their first years as bone pickers for the railroads. Between 1872 and 1874 alone, more than 33 million lbs of bones were shipped
east where they were used in the manufacture of refined white sugar. 15 While the army did not actually kill buffalo themselves, being sensitive to the political implications, they did provide free ammunition in huge quantities to all who applied. 17 Both Sherman and Sheridan, the two senior army generals of the west, had gone on record to state that only by killing off the buffalo could the Indians be conquered. 18 Addressing the Texas legislature, in response to their efforts to pass legislation protecting the buffalo, General Sheridan argued that the buffalo hunters "have done more in two years and will do more in the next year to settle the vexed Indian question than the entire army has done in the last 30 years." 19 Sheridan then good-humouredly suggested the striking of a medal for the buffalo hunters - with a dead buffalo on one side, and a dejected and broken Indian on the other. 20

Sheridan's bitterness was, in fact, quite personal. Between 1840 and 1876, the Sioux and Cheyenne handed the U.S. cavalry a series of defeats so crushing that - as would happen in the Vietnam involvement a century later - congress began to question the costs of the Indians wars. It was estimated that each Indian killed was costing upwards of $1,000,000. 21 The Treaty of 1868, ending the Red Cloud War, was essentially an American surrender, but it would be broken in less than 7 years. It was commonly held
that there was no moral obligation to keep treaties made with Indians - as Andrew Jackson had argued earlier, "I have long viewed Treaties with the Indians an absurdity not to be reconciled to the Principles of our Government" (these same principles, one assumes, also allowed Jackson to purchase, through private connections, thousands of acres of Cherokee land at $.44 per acre, and re-sell it at $3.00 per acre, despite the ruling of Supreme Court Chief Justice John Marshall that the removal of the Cherokees had been illegal). 22 With the breaking of the Treaty of 1868, and the nearly total destruction of the buffalo, starvation, disease, and continued military harassment combined to destroy the supremacy of the Plains Indians that force of arms had abjectly failed to conquer. 23

In the Southwest, attacks on food bases were again the only really effective weapon against the Indians. General Carleton, at Fort Canby, offered a $20.00 bounty for each Navajo horse and $1.00 for each head of Navajo sheep brought in, as well as ordering every Navajo male to be killed or taken prisoner on sight. 24 But it was Kit Carson, operating under his command, who was most effective in ending the Navajo defiance. While the Navajo leaders were attempting to negotiate a Treaty allowing them to remain in their traditional home of Canyon de Chelly, Carson led a strong force that destroyed their gardens and live-
stock, and cut down over 5,000 peach trees that had been the pride of the Navajo People. With their food supplies gone, the starving Indians finally submitted to resettlement, though over 300 of them would die on the long march south to the desolate Bosque Redondo reserve.

In the Far West of California, those Indians not in servitude to the Spanish had long since fled into the mountains. With the coming of the Americans, however, even these remote habitations were to be contested. With no single food base to destroy, the peaceful Indians of California were themselves hunted like animals. In one recorded instance a man named Kingsley led a party that managed to trap about 30 Indians in a shallow cave. After all of the adults had been killed, Kingsley felt compelled to use his lighter calibre revolver to kill the children, because his .56 calibre Spencer rifle "tore them up so bad." Where disease and starvation failed, more direct means were always available. That any Indians survived is probably due more to the fact that at some point it became no longer advantageous to contest their existence, on the marginal lands set aside for them, than to any humanitarian measures intended to provide some form of redress. Since the early 1900's, however, the numbers of Indians in North America have risen dramatically, and now stand at three-quarters of a million or more. But even more amazing, perhaps, is the
degree to which native Indian cultures and cultural values have survived — considering the expense that has been gone to in attempting to force them to give up their old ways and become a part of civilization's relentless mission of progress. Surely the Indians have demonstrated a remarkable degree of tenacity and persistence in trying to maintain their cultural integrity. Were our modern society to experience such devasting invasions and disasters, on a comparable scale of magnitude, it is doubtful that our own cultural integrity would survive even a fraction of what the Indians had to endure over the last four centuries. The lessons that might be learned from their survival may prove to be among their greatest contributions to human experience.

There are some who doubt that our "cultural integrity" will survive much longer in any event, given the present major trends in worldly affairs. This reflects a growing pessimism in many societies today that is particularly noted in the very young, and which can be summed up as a diminished sense of hope in the future. Survival, whether of cultures, specific groups, or isolated individuals relies most on the quality of hope — and hope, in turn, depends upon certain attributes of character that can only be acquired through experience within a clear and consistent cultural context. Extensive survival studies conducted by
various military agencies have generally concluded that survivors have in common three specific attributes, and that these attributes seem to be of the greatest importance to survival by a considerable margin. These are:

A well-defined system of values
A capacity for competent self-direction
A strong sense of self-reliance and determination

Much of the research undertaken by the military has been for the purpose of devising specific training for survival situations; the attributes listed above, however, cannot be acquired through either lectures or field training, but require sound personal experiences which do not fit very well into military training schedules. This has stymied efforts by the military in this direction, as has been described by Dr. Paul H. Nesbitt, former Chief of the United States Air Force Survival Research Facility, who concurs that mental attitudes are of the greatest importance in survival situations. In many of the cases studied the only piece of data researchers were left with was that the individual concerned "had never given up hope." One of the most incredible of these cases, for example, is that of an Eskimo hunter named Gregory Ayac, who survived for over three weeks drifting on ice floes in the Bering Sea during mid-winter, enduring repeated blizzards and almost total
darkness, with neither food, nor water, nor any means of making a fire. Ayac survived, while two of his companions did not. The Air Force flew in a survival research team that interviewed the surgeon who had amputated part of Gregory's feet, and who had known him personally for some years. He described Gregory as unassuming, of "meagre physique," and possessing no particular qualities that would account for his virtually impossible feat of survival. Gregory himself could offer only that he had never given up hope. The same sort of statement has been made by many other survivors. Sir Ernest Shackleton, the most intrepid of polar explorers, gave much the same response after his celebrated escape from Antarctica, as did the world's record holder for survival at sea, Poon Lim, who spent 133 days on a tiny raft in the south Atlantic, and survived to receive England's highest civilian medal from King George VI.

The U.S. Army, finding itself unable to reduce survival training to a sufficiently economic unit of time, eventually turned to their Corps of Chemical Engineers to develop a "courage pill." One was actually developed in 1959, which seemed to work with rats, but the project was shelved before humans were tested. There have been some forms of survival training, however, that have been remarkably successful. Among the best known of these are the "Outward Bound" schools founded in the early days of World
War II by Kurt Hahn, a refugee from Nazi Germany, at the request of the owner of a British steamship line who was concerned with the disproportionate numbers of young seamen dying from exposure or other stresses as compared with the older men. Survivors rescued from lifeboats, for example, reported that the younger crew members seemed to just give up and die. The training programme Hahn set up proved remarkably successful, eventually reversing these survival statistics. Outward Bound schools have since proliferated, and the organization has grown to world-wide prominence. With such massive size, however, has come the inevitably calcifying bureaucracy, and the loss thereby of qualities difficult to define or allow for in organizational time-schedules. 37

Hahn's approach in the original programme relied heavily on psychological factors. Crews in training were placed in lifeboats beyond sight of land and left in circumstances carefully orchestrated to "allow" them to assume their situation to be far more dangerous than was in fact the case. 38 The experience of having successfully dealt with the stresses of such situations, however, would later bolster their abilities to deal with more demanding ones. What is crucial here is that both of these situations
were perceived as "real." Both elicited deep emotional and reactive responses, and both included the "unknown" as an important factor.

To successfully manage a training programme that includes experiences of this sort, however, requires more than well-trained instructors and good "curriculum planning," important as these may be. Of greater importance here is the establishment of what might be called a "continuity of like experience," which represents the communication of felt meaning through shared, personal interaction, much in the way of the non-verbal communications net described earlier. Since any evaluation of this process must rely on the most subjective of very long range considerations, it is virtually impossible to categorize in terms of normal administrative procedures. There are a number of cultural or social traditions that require direct person-to-person continuity if they are to maintain their essential vitality and meaning. A striking - if somewhat exotic - example of this is the practice of firewalking, which reportedly has attracted 30,000 practitioners in North America in recent years, and which apparently requires the presence of an experienced practitioner if initiates are to be successful. Something more than simply "moral support" is communicated, and something more than just the visual proof of watching someone else seems to be necessary as well. Dr.
Leonard Feinberg, on leave from the University of Illinois as Fulbright Professor at the University of Ceylon, studied firewalking in the mid-fifties, and reported how a Christian missionary became so agitated by what he saw—having been a strong skeptic—that he felt compelled to "test his own faith." He was not successful, however, and nearly died from the burns he received. Something seems to be communicated, some state of mind or mental capacity that allows us to perform otherwise impossible acts. In the April, 1966 National Geographic, their own in-house research team reported measuring the heat of such a firebed at 1,328 degrees Fahrenheit. Of the 20 walkers performing that day, none sustained even a slight injury, and their clothing, shown brushing the coals, was reportedly neither singed nor darkened by the intense heat. Firewalking is a startling example, perhaps, but it does suggest that there are aspects of our perceived world of reality that contradict certain of our basic assumptions, and that in order to clear up these contradictions our understanding will have to grow—and very likely grow considerably.

The "something communicated" in such shared experience may relate to aspects of reality to which we have simply never learned to pay attention or distinguish from the general background of experience. Firewalking is a most unusual case, but these unnoticed levels of conditioning or
Learning play an important role in much of human behaviour. Highly structured forms of endeavour, for example, such as martial-arts training, deep-water sailing, or any of the traditional apprenticeship systems - in either the arts or the trades - have in common a reliance, to varying degrees, on direct, person-to-person lines of continuity that are concerned not simply with skills or techniques, but also with attitudes, capacities, and even a shared sense of reverence for the common endeavour. These emotionally-connected commitments are never communicated or handed down from one generation to another by formally stated doctrines or credos - though these are commonly presumed to serve this function - but rather through deeper, less sharply-focused, levels of perception that are akin to what Michael Polanyi calls "tacit knowing," and which relate more to intuitive feelings than to logical objectivity. In this regard, it is one thing to be aware of the values of one's culture, or even to make impressive announcements of such awareness, but it is quite another to be strongly emotionally moved to maintain them, and to have the will and determination necessary to be able to do so. In the larger context of our cultural identity, these lines of continuity through shared experience fulfill their highest function, which is the maintenance of the integrity of the system of cultural values that, in one sense, is in fact the culture itself.
Contemporary Mass society has increasingly relied on various forms of prescription - rules, laws, codes of behaviour, professional standards, etc. - in attempting to curb a number of escalating forms of social pathology. Such measures, however, seem to grow in power and complexity directly proportional to the problems to which they are applied, and seldom, if ever, serve to eliminate or even significantly reduce them. This relationship, like that between starvation, disease and overpopulation, does not represent the control of social problems, as is commonly assumed, but merely a way of processing them. One of the counter-productive aspects of this processing is that when individuals find themselves in conflict with rules or values to which they have no strong emotional commitment, they invariably begin to build up strong defensive rationalizations to justify their behaviour, whatever it may be, and protect their self-image.

There appear to be few constraints upon the extremes to which human rationalization can go. We are all familiar with the stories of German concentration camp officers who could go home to play in their gardens with their own children - after sending hundreds of others to the gas chambers - with apparently little sense of emotional conflict. Joseph Goebbels, who worked closely with I.G. Farben to develop the death gas "Zyklon-B," enthusiastically des-
cried these efforts in his diary as a truly humanitarian gesture that had been intended solely to reduce suffering. Goebbels, it has been noted, was remarkably candid in his private writings, and apparently wrote this in complete sincerity. What appears as pure and cynical hypocrisy from the outside, however, may seem perfectly justified from within. Lt. William Calley, in another war in another time, reflected this same sincerity in defending his actions at My Lai. Nor are these cases isolated or atypical - it has recently been disclosed that a number of America's largest business corporations, including a number of primary defense contractors, provided massive financial backing for Hitler's rise to power, and that this support continued, even after the U.S. had entered the war. In recent years the exposure of business corporations indicted for cheating the government on defense contracts - often involving millions of dollars - has become almost monotonously commonplace. It is more than ironic that many of the individuals involved in these cases have been prominent business leaders, many known for their super-patriotic views, who nonetheless attempt to justify their foisting onto the military shoddy and unreliable equipment. The human capacity for rationalization seems capable of justifying virtually anything conceivable, while simultaneously blinding the self to how obviously hypocritical or bizarre these things must seem to others. In one recent example, on the subject of America surviving a
nuclear war, a senior foreign policy advisor to President Ronald Reagan was quoted by the New York Times as stating, "While the long-term toll of fall-out contamination could be a 30% increase in cancer incidences, this, though undesirable, could be cancelled out by neglecting to rebuild the cigarette industry." 49

How is it that people can be so sincerely committed to ideas or claims that any outsider would find blatantly hypocritical or even despicable? In the western perception of things there is a decided inclination to see man as an essentially rational being - though some dissenters consider this a dangerous conceit, and argue that our emotional reactions and baser appetites more often prevail. Indeed, we as often speak of "following our hearts," or of our "gut reactions," as we do of "using our heads." This triad of intellect, emotion and reaction - or mind, soul and body - has been interestingly described by psychologist and futurist David Loye:

This suggests that the brain's "manager" can perhaps be visualized as a three-headed figure, like some Hindu deity. The difference in executive functions or levels would then be something not unlike the management of a company by grandfather, father, and son or daughter. The lower brainstem (earliest to emerge in evolution, the founding grandfather) retains basic, and, if needed, instantaneous control. The higher brain stem and mid-brain (next in evolution, the aggrandizing father) concerns itself with keeping body and brain systems balanced and stabilized. The frontal lobes (last to evolve, the sophisticated son or
daughter) then perform the elaborate monitoring and mediating, continually expanding the dominion of our minds over past, present, and future. 50

This metaphoric imagery is particularly relevant in the context of western culture, for we can well appreciate the potential for destructive conflict between Loye's three generations of the mind's "board of directors," as experienced in our widening generation gaps and political polarizations. As in human society, the crucial question of control within the mind may ultimately be one of co-operation and consensus among the different "heads," rather than which shall be king.

There is considerable scientific evidence to support this "board of directors" analogy as a way of understanding the workings of the human brain. Recent research concerned with the different functions of the left and right hemispheres of the neocortex has allowed us to observe the mind's "executive staff" in operation with one or more of its members absent. Patients who have had their entire right or left hemisphere surgically removed 51 display certain consistent patterns of behavioural change. For example, if the right hemisphere is removed behaviour can predictably be described as:

The individuals operated on for brain tumour suffered a loss in terms of personality values. They became dependant, regressive and ineffective people. Systematic and psychological success demonstrate that in most of these subjects intellect per se is not the
outstanding deficit, for vocabulary and verbalization appear to suffer the least...and memory and more complex integration involving insight, emotional control, initiative, constructive ideation, and imagination that hemispherectomy takes its toll.  

Patients who have had their left hemisphere removed, however, display quite different patterns:

Loss of personality values or bizarre behaviour reported after similar cases with right hemispherectomy, however, was not observed...Affective reactions and general behaviour I have observed before and after hemispherectomy were appropriate, and consistent with his wife's report of no noticeably change in emotional responses or in a basically well-balanced personality.

Surgeons performing hemispherectomies have observed that it is possible to carry out a conversation with the patient throughout the operation with no discernable changes in their behaviour or their personality, and that the patients themselves report that they have no awareness of anything "suddenly missing." This same sense of wholeness of identity, of a retained integrity of the essential self, has also been noted in patients who have undergone prefrontal lobotomies, despite the fact that close acquaintances often express the feeling that these individuals seem to be missing the very qualities that make them uniquely who they are. Research findings indicate that removing the frontal lobes results in substantial losses in the ability to focus attention, regulate routine behaviours, develop concepts and anticipate future possibilities. The frontal lobes of the right hemisphere seem particularly
essential for emotional responses and for maintaining a sense of moral or social standards. Other research, using drugs or electric shock to temporarily anesthetise or turn off either the left or right hemisphere, have confirmed these findings.

It is also possible to temporarily eliminate the entire neocortex, as appears to happen in the use of the street drug P.C.P. Persons under the influence of this drug display behaviour patterns that range from perfectly normal (except verbally) to the extremes of violent and aggressive reactions. Dr. Paul MacLean at the National Institute of Mental Health surgically removed the entire neocortex from hamsters and found very little change in their behaviour—in fact, one female hamster continued to exhibit her usual playfulness, became a good mother to a litter of eight pups and displayed every other form of behaviour normal to hamsters. Such findings led MacLean to speculate that what he calls the brain's "neural chassis," the limbic system and R-complex levels of his triune brain model, may in fact be the source of our basic personalities. MacLean has noted that the behaviour of reptiles appears to be made up of little more than routine patterns of behaviour that function as complex hierarchies of routines and sub-routines, and that much of human behaviour may therefore be determined by these "lower" brain structures as well.
Striking evidence for this has been provided by studies of individuals suffering from Parkinson's disease or Huntington's chorea, which often attack these more basic structures of the brain. One woman was reported to have become completely incapable of going about the simple preparation of a meal, although she knew perfectly well how to do so, and could describe the process in detail. This may explain the familiar human capacity for carrying out much of each day's routine tasks while the conscious mind occupies itself with daydreams of more interesting involvements. Other evidence supporting the importance of R-complex structures in determining behaviour comes from experiments involving a complex brain structure called the Reticular Activating System. This structure seems to operate in ways that are analogous to the teleconferencing systems used in modern administrative communications. Experiments conducted by S.J. Goodman confirmed that the reticular core can activate learned or conditioned behaviours in reaction times well under 300 milliseconds, which is far below what the neocortex would require to respond in any meaningful way. Robert Malmo has described this reaction as the simultaneous firing of the reticular activating system both upwards to the neocortex and downwards through the motor pathways - so that the neocortex is becoming aware of certain behaviours at the same time that they are being carried out by the
body. 63 We are usually aware of when we have instantaneously reacted, when we "didn't have time to think," but in other patterns or routines of behaviour the conscious mind seems to automatically assume that it has initiated or decided on certain behaviours, even when it has not in fact done so. This capacity of the conscious mind for rationalization has been particularly noted in experiments involving "split-brain" patients.

In experiments conducted by Roger Sperry and Michael Gazzaniga, patients who had recently undergone split-brain surgery 64 tended to behave as though two separate consciousnesses were struggling to control one mind. In some cases, the verbal left-brain consciousness rationalized certain behaviours or responses in ways that required a complete fabrication of reasons to account for them. 65 In one series of experiments a tachiscope was used to simultaneously flash different pictures to each hemisphere. In one instance a chicken claw was shown to the subject's left hemisphere, while a snow scene was flashed to the right. When asked to select a matching picture from a chart, the patient verbally chose the chicken, but pointed to a shovel with his left hand. When asked to explain this, the patient stated "you have the clean out the chicken shed with a shovel." 66 Another of Gazzaniga's patients reported that while she could control her left hand, it often seemed to
act on its own, explaining that "...it grabs things that it shouldn't grab, or grabs things that I don't want it to grab...I don't like the idea of that, because I don't know what is happening...It may sound silly, but I slap it because I get mad at it, I really do, I get really mad at it, and I find that it doesn't do any good, except it hurts after it's slapped." 67

These findings suggest that the process of rationalization may itself be a conditioned or learned routine that can be triggered by cues from interpersonal communications. Further evidence for this comes from experiments in hypnosis. In one experiment described by C.H. Estabrooks, a person was given a post-hypnotic suggestion (which they were told they would not remember) to select the third book from the second row of a nearby bookcase, and read from a certain page. The person later did so, on cue, and when asked why he was reading from this book provided a seemingly plausible story about having had an argument with a certain professor on this subject. When later confronted with the proof that this conversation with the professor had never taken place, he protested that he could clearly remember that it had. 68 Estabrooks and others cite a number of such examples in which subjects attempt to rationalize behaviours from post-hypnotic instructions by fabricating
explanations that are totally false, but which would seem plausible to outsiders unaware of the prior hypnotic suggestions. 69

What is disquieting in these findings is the degree to which the subjects themselves tend to actually believe the fabrications they construct, and even more disturbing is the suggestion that the part of the brain that carries out the post-hypnotic instructions may also be capable of supplying the conscious mind with the "memories" used to substantiate these fabrications. This rationalizing process, however, seems to function only when the subject is under pressure from other persons to explain or justify particular actions; in the case of post-hypnotic suggestions, for example, unless challenged to account for their actions most subjects tend to perform them as routine behaviours to which they pay little conscious attention. This has also been observed in some of the split-brain cases referred to earlier. 70 This supports the argument that while the capacity for rationalization may be built in, its actual application tends to be structured according to socially-learned patterns of behaviour that are, in addition, triggered by socially-conditioned cues.
In the metaphoric image of the mind's "board of directors" rationalization is one way the various "directors" have of maintaining a united front, or the appearance of a rationally integrated single entity, to all outsiders. Obviously, it does not necessarily follow that such integrity or harmony must actually exist within the group, so long as appearances are maintained. But there are costs. Any group will suffer in efficiency, effectiveness and health in direct proportion to the degree of internal differences or frustrations that go unresolved, and any group can break down, cease to function in any organized way, or even decide to formally disband. It is all a matter of co-operation.

One of the fundamental assumptions derived from modern brain research is Sperry's Principle, which states that "the sole product of brain function is muscular coordination." In other words, the entire purpose of the human brain is to mobilize and regulate overt physical behaviour, or to support this regulating process in some way. In the human brain, the neocortex represents about 85% of the total mass, and is over three times as large as would be proportionate in any other primate of comparable body weight. The rapid evolutionary growth and development of the human neocortex to these proportions - following
Sperry's Principle - must have been an evolutionary response to environmental changes that represented a new reality for human experience, and which demanded radically different forms of overt behaviour. This new reality, as is reflected in the observable functioning of the neocortex itself, was almost entirely social - was, in fact, human society itself. Human culture, in this sense, has been the other strand of a co-evolutionary process that has determined both the physical structure of the human neocortex, and the social structure of human communities as well. If the whole purpose of brain function is to control or coordinate overt physical behaviour, and if the neocortex has evolved primarily in response to behavioural factors related to human culture, then perhaps what we conceptualize as "mind" and as "culture" in fact derive from the same source.

In light of the findings from brain research described earlier, one of the major implications here is that the neocortex has the capacity to determine - in advance - precisely what patterns of routine behaviour are to be acquired, and in what framework of hierarchical organization. Thus, it is the neocortex that is most involved in determining how well various powers of the mind will be able to work together, and which attempts to unify - or rationalize - any behaviours actually carried out, whether it has directly initiated them or not. The social reality of this
process is that we never – indeed, cannot – determine our own basic patterns of behaviour, but must rely instead on others because a great deal of this process must be accomplished in early childhood and infancy, and the rest continued throughout life. There is an old Japanese proverb which states that a person's character is essentially determined by the age of three. There is a growing body of evidence from modern research that increasingly supports this emphasis on early character or personality development, not only for reasons of social improvement, but for survival itself.

It was this fundamental question of survival that Benjamin Franklin addressed, though indirectly, in the remarks quoted at the beginning of this chapter. Franklin clearly perceived the relationship of values to cultural integrity and social continuity, and he was considerably less blind to the flaws of his own culture than were the great majority of his peers. Franklin's appreciation of the Indian's system of education was typical of his kindly, humanitarian disposition, but it was also typical of the shrewd and pragmatic insight that in Europe won him the reputation of being "the most dangerous man in North America." The school that Franklin himself founded in Philadelphia is indicative of his practical-mindedness, but his "down-to-earth" orientation was in turn guided by principles
derived from a more elevated and far-seeing vantage point. His admiration for the qualities of human existence he observed in the Indian's societies resulted from this broader vision, and there were others of his time who expressed similar sentiments. Thomas Jefferson, for example, also admired the oratory and political acumen of contemporary Indian leaders, as did George Washington, and Justice John Marshall. Many Europeans of the colonial period gradually came to change their opinions of the Indian's way of life to ungrudging admiration. Father Joseph Lafitou, writing half a century before Franklin, observed of the Iroquois that:

They act with a cold common-sense and a self control that would wear out our patience. As a matter of honour and through greatness of soul they never lose their tempers, seem to be always of themselves and are never angry... (They) exercise toward strangers and the unfortunate a charitable hospitality which would confound all the nations of Europe.

Another cleric, the Jesuit Father Jerome Lamont, wrote of the Indians that:

Hospitals for the poor would be useless among them because there are no beggars; those who have are so liberal to those who are in want, that everything is enjoyed in common. The whole village must be in distress before any individual is left in necessity.
These observations were made by individuals who had lived for years among the Indians, and who were well acquainted with their human faults and failings as well as their achievements and glories. The essence of these attitudes can be found reflected in the statements of others throughout the whole of European history in North America, and there is a remarkable consistency whether these remarks concern the Indians of the eastern woodlands, or of the southern savannahs, the central plains and western deserts, the farthest coasts, or the northern tundra. 79

"No force... no prisons, no officers to compel obedience or inflict punishment." Benjamin Franklin's words, in our modern world, do indeed seem romantic, utopian. Yet from within societies in which the attributes Franklin described were in fact the "norms," perhaps these would seem natural and necessary, and descriptions of our way of life would, in turn, seem impossible, or even frightful.

Character, whether of individuals or societal groups, is judged most truly under pressure. The greater part of what we know of the Indian societies comes from times of severe pressure, but even in the shadows of extinction the essential qualities of courage, and generosity of spirit prevailed, as these words of Seattle, the Great Chief of the Suquamish, eloquently reflect:
And when the last Red Man shall have perished, and the memory of my tribe shall have become a myth among the White Men, these shores will swarm with the invisible dead of my tribe, and when your children's children think themselves alone in the field, the store, the shop, upon the highway, or in the silence of the pathless woods, they will not be alone. At night when the streets of your cities and villages are silent and you think them deserted, they will throng with the returning hosts that once filled and still love this beautiful land. The White man will never be alone.

Chief Seattle, 1854
The politicians tell us, You must educate the Masses because they are going to be masters. The clergy join in the cry for education, for they affirm that the people are drifting away from the church and chapel into the broadest infidelity. The manufacturer and the capitalists swell the chorus lustily. They declare that ignorance makes bad workmen; that England will soon be unable to turn out cotton goods, or steam engines, cheaper than other people; and then, Ichabod! Ichabod! the glory will be departed from us... And a few voices are lifted up in favour of the doctrine that the masses should be educated because they are men and women with unlimited capacities of being, doing, and suffering, and that it is as true now, as ever it was, that the people perish for lack of knowledge.

Thomas Henry Huxley

Knowledge — information — is the food of culture; its assimilation should be thought of more as an art than as a science, for knowledge, like food, requires cultivation and preparation, a certain freshness of quality, and a fair degree of palatable familiarity if it is to provide sustenance. Conversely, as in physical malnutrition, when people "perish for lack of knowledge," an etiology can be approximated — akin to Freud's "pathology of civilized com-
munities" - which provides a natural starting point for remedial considerations. Freud, for example, in his famous letter to Albert Einstein summed up clearly and succinctly the theme of man's "strong, inborn tendency to aggression or violence." This exchange between two of the most influential men of our time is, in its conclusions, very similar to Thomas Jefferson's recounting of Benjamin Franklin's parable of the "Eddystone Light" discussed in the last chapter. These observations are of crucial significance because they reach the heart of our success or failure as communities, and the fundamental levels of our "being, doing, and suffering."

It was Freud's belief, based on his observations of European society, that man's frustrations are pathological, and that civilization's only hope is to somehow reconcile these powerful drives to society's need for orderliness and predictability. Freud believed that this reconciliation would require a degree of diminution or repression of the individual, and that this represented a major source of frustration. This problem, which might be called "Freud's paradox," is central to what Nietzsche termed "ressentiment:" the "free-floating disposition to visit upon others the bitterness that accumulates from one's own subordination and existential guilt at allowing oneself to be used up by other people for their purposes, while
one's own life rusts away unnoticed." 3 The paradox is therefore circular: For every Thomas Hobbes who declares that obedience to the law must be enforced if the state is to survive, there follows a Thomas Haliburton to remind us that the survival of any nation can never depend on its laws or form of government, but only on the character of its people. As Woodrow Wilson observed: "The law that will work is merely the summing up in legislative form of the moral judgment that the community has already reached." If this sentiment is correct, then we might assume that an examination of how well our society's existing laws and mores work, in actual practice, will tell us a great deal about the real values and moral judgments that drive it. First, a few recent observations about how effectively our laws seem to be working:

TIME magazine reports violent crimes up 600% since 1960; Robert Silberman calls this "a crime-wave of epic proportions." In Canada, a new 400-bed prison facility is needed every 8 months. In North America rural crime-rates are many times higher than in the City of Tokyo. 4

The F.B.I. reports that "white-collar crime" is 5 times as high as all other crimes of property combined. TIME suggests that FORTUNE may soon have to publish a "500-most Wanted List." E.F. Hutton is convicted of embezzling 8 million dollars over 2 years from 400 banks. 7 of the top 10 defence contractors in the United States are now under investigation for major fraud - Congress in the U.S.A. reports up to one trillion dollars wasted in last 4 years. 5

North America has the highest sexual abuse rates in the world - involving 1 in 4 of all children. Child molesting is 4 times as big as murder, rape and dope
combined. One-fourth of all sexual assaults, in the City of Vancouver, British Columbia, involve children aged 9 years or younger. Seventy-five per cent of cases of child molesting involve the child's own father.

Of 100 major crimes in North America only 50 will be reported - in only 12 of these will arrests be made - which will result in 6 convictions, with 1.5 actually going to jail. At this conviction rate, the annual cost runs to 30 million dollars. It costs 16 thousand dollars per year per prisoner which is more than it would cost to send them to Harvard or Yale. By comparison, the North American drug traffic market now runs to 70 million dollars annually.

A study conducted (but at the last minute not published) by the President's Commission on Crime found that 1 in 5 police regularly commit felony crimes - mostly muggings, bribe-taking, looting and assault - and over one-half routinely falsify reports. Of 44 assaults by police noted, only 1 was ever reported. Torture is becoming a more common police procedure - New York City's 106th Precinct is known as the "torture precinct." In Canada, it is safer not to notify the police if you are going to be away for a time.

Second, a number of similar observations regarding two of the essential "value symbols" of our society: the family - and children:

NEWSWEEK cover story, September, 1975, reports that family pathology has increased in all sections of the U.S. to the point where middle-income families are now experiencing levels equivalent to those experienced by the low-income families of the early 1960's. Also in NEWSWEEK, it was reported that by 1990 more than one-half of all households will be single parent families. 54% of single parent families are now below the poverty line (only 12% in 1970). One in 80 of all children are in foster homes.

The only suicide rates that have increased measurably in recent decades are among children. For the first time, suicides of children under 5 have been reported -
Some as young as 2 1/2 years of age. The children of the rich and famous seem to be more at risk for suicide than even ghetto children — Chicago's affluent North Shore is known to social workers as "the suicide belt." Of the nearly 70,000 total suicides in North America annually, 80% are in upper income brackets.

This is undeniably a slanted, one-sided view; the points made are nonetheless true. The "etiology of social pathology" that they suggest might be thought of as a form of "information disease" — a term applied to the mind control techniques used by cult organizations to maintain the "devotion" of their membership. Information disease, in this sense, implies an inability to make moral judgments or recognize values in the absence of outside direction. From an educational point of view this suggests not so much a failure in cognitive learning as a failure to develop emotionally. On this subject, George Bernard Shaw has written that:

The evils of modern society... are the result of an educational system which, instead of guiding the natural change from childhood to adolescence and maturity, arrests juvenile development at its most mischievous stage, and forces the experienced statesman to treat the country as an orphanage in which the age limit is 14, and the orphans as its mentally defective inmates.

But what of the society that creates such a system — from what origins, and by what direction has it come? Shaw's
observations were sharply anticipated nearly a century ear-
lier in this passage from Alexi de Tocqueville's *Democracy
in America*.

Above this race of men stands an im-
mense and tutelary power, which takes upon it-
self alone to secure their gratifications and to
watch over their fate. That power is absolute,
minute, regular, provident, and mild. It would
be like the authority of a parent if, like that
authority, its object was to prepare men for
manhood; but it seeks, on the contrary, to keep
them in perpetual childhood; it is well content
that the people should rejoice, provided that
they think of nothing but rejoicing. For their
happiness such a government willingly labours,
but it chooses to be the sole agent and the only
arbiter of their necessities, facilitates their
pleasures, manages their principal concerns,
directs their inheritances; what remains, but to
spare them all the care of thinking and all the
trouble of living?

To follow our earlier metaphor, Tocqueville's
"prognosis" is not good. The "immense and tutelary power"
of the modern nation-state may be incompatable, in the long
run, with humanity itself. As Neitzsche wrote, "the
stronger the state, the fainter is humanity." Freud, it
would seem, concurred, and of the inevitable conflict be-
tween the two, was decidedly pessimistic:

You are amazed that it is so easy to infect men
with the war fever, and you surmise that man has
in him an active instinct for hatred and destruc-
tion, amenable to such stimulations. I
entirely agree with you. ... The upshot of these
observations, as bearing on the subject at hand,
is that there is no likelihood of our being able to suppress humanity's aggressive tendencies. In some happy corner of the earth, they say, where nature brings forth abundantly whatever man desires, there flourish races whose lives go gently by, unknowing of aggression or constraint. This I can hardly credit; I would like further details about these happy folk." 14.

The suggestion that any human society could exist "unknowing of aggression or constraint" is at one level both romanticist and utopian. It is romanticist because it assumes the possibility of achieving a social reality beyond aggression and constraint, and it is utopian because it assumes that achieving this is a technical-rational problem. What is more useful, perhaps, is the concept of a "range of potential" for greater or lesser social harmony and cultural integrity - and the questions of what factors most influence the relative position of a society on this scale, and at what points the negative influences become irreversible (the concept of "margins of tolerance" for survival - as discussed in the second chapter of this paper - is an example of one such factor).

Modern North American society has been described as "250 million egos all pulling in different directions at once." This implies that the values we recognize as representing our way of life are not closely tied to the values that drive us individually. Traditional North
American Indian societies, in contrast, could be described as "individuated groups of egos" all pulling together, resulting in a generally synergetic effect. As the noted American Indian writer Jamake Highwater has written, "This does not mean that the 'Individual' is nonexistent among Indian communities, nor that each person cannot possess an access to sacredness, but it does mean that the highly individuated egocentricity of the western soul is alien to the Indians. The reality of persona is not preempted by the existence of cultural homogeniety..." 15 It has been said that we can know what we want, but we cannot want what we want. The "driving values" referred to here are acquired in ways that are largely unconscious - like our tastes in food, music, and dress, these are conditions of our experience. When these driving values are in conflict with the consciously recognized values of the culture as a whole, they will assuredly be in conflict with one another, reducing cooperative potential and increasing frustration and passive-aggressive behaviour. 16

If, among the North American Indian societies, these driving values were not in conflict with the consciously espoused values of their way of life, and if this relative harmony was maintained by their cultural institutions, then we might look upon these societies as hundreds
of "living laboratories" for human survival capable of providing us with information that would otherwise, for the greater part, remain beyond our resources.

* * *

The next part of this chapter will present a synthesis of the central or core value-system that provided a common foundation for the native Indian societies of North America. It is important to point out that this is not a claim for "universal" values in the sense of being imposed from without, or intuitively recognized from within these societies as absolute truths. As anthropologist Carl R. Cooley has pointed out, there are no universal values among North American Indian societies. The notion of universal values - what Alfred Kroeber refers to as the "fake universals" - has, however, come about from a recognition of strong similarities between the value systems of North American Indian cultures. These similarities have more to do with the shared environmental realities, and the fundamentals of the human condition, however, than with any perceptions of absolute and self-evident truths. The value-systems of North American Indian societies were completely
culturally contexted within the social perceptions and patterns of each community, and where there were similarities in these patterns and perceptions, there were similarities in values and ideals.

The presentation that follows has been derived from two basic sources: the first was an examination of the surviving original commentaries of the native leaders and elders of the past, and the second was a review of the anthropological and ethnological materials on the subject of values and value-systems—particularly the work of Alfred Kroeber, Carl R. Cooley, George A. Pettitt, Edward Curtis and educational psychologist John F. Bryde. Also of great influence, it should be added, have been the numerous interviews and discussions that the author has had with native elders throughout British Columbia. In keeping with the spirit that is still a part of the Indian's heritage, this presentation is made in the oratorical manner of the original sources:

THE WAY OF ONE SPIRIT
THE DOCTRINE OF NON-INTERFERENCE
THE SACRED PRINCIPAL OF THE CIRCLE
THE TRADITIONS OF GENEROSITY AND SHARING
THE INNER PATH OF COURAGE
RESPECT FOR TRADITIONAL WISDOM
THE WAY OF ONE SPIRIT

Garrick Mallery, the leading Smithsonian authority of his day, wrote in 1893 that "The most surprising fact relating to the North American Indians, which until lately had not been realized, is that they habitually lived in and by religion to a degree comparable to that of the old Israelites under the Theocracy. This was sometimes ignored, and many times denied, by many of the early missionaries and explorers." Spiritual unity was a deeply-felt value in the Indian's way of life. It permeated all behaviour with a disposition toward humility and tolerance, as many surviving commentaries reflect:

The first American mingled with his pride a singular humility. Spiritual arrogance was foreign to his nature and teaching. He never claimed that the power of articulate speech was proof of superiority over the dumb creation; on the other hand, it is to him a perfect gift. He believes profoundly in silence - the sign of perfect equilibrium. Silence is the absolute poise or balance of body, mind and spirit. The man who preserves his selfhood, ever calm and unshaken by the storms of existence - not a leaf, as it were, astir on the tree; not a ripple upon the surface of the shining pool - his, in the mind of the unlettered sage, is the ideal attitude and conduct of life. If you ask him, "What are the benefits of silence?" he will say, "They are self-control,
true courage, endurance, patience, dignity and reverence. Silence is the cornerstone of character." 17

- Ohiyesa

The concept of Hell in the hereafter was something entirely new to my people. There was no such word in our language. We had to invent a new word: "Wanari DaasiiTi" (The Bad Spirit's House).... Another theory among us is that in creating so much diversity in nature the Great Spirit revealed his love for diversity.... Surely such a Creator would accept more than just one religion. Would he listen to prayers of only one conventional form of worship? Surely not. Besides, these questions must be too deep for finite beings - here but for one short season - to comprehend." 18

- Chief John Snow

We regard all created beings as sacred and important, for everything has a "wochangi," or influence which can be given to us through which we may gain a little more understanding if we are attentive. We should understand well that all things are the works of the Great Spirit. We should know that He is within all things; the trees, the grasses, the rivers, the mountains and all the four-legged animals, and the winged peoples; and even more important, we should understand that He is also above all things, and all peoples. 19

- Black Elk

Did you know that the trees talk? Well, they do. They talk to each other, and they'll talk to you if you listen. Trouble is, white people don't listen. They never learned to listen to other voices in nature. But I have learned a lot from trees: sometimes about the weather, sometimes about animals, sometimes about the Great Spirit. 20

- Tatangi Mani
I tell you I never saw more kindness or real Christianity anywhere. The poor, the sick, the aged, the widows and the orphans were always looked after first. Whenever we moved camp, someone took care that the widow's lodges were moved first and set up first. After every hunt, a good-sized chunk of meat was dropped at each door where it was most needed. I was treated like a brother; and I tell you I have never seen any community of church people that was as really truly Christian as that band of Indians.

- Tom Newcomb, Cavalry Scout

THE DOCTRINE OF NON-INTERFERENCE

Dr. Gene Weltfish, who lived among the Pawnee for a number of years, wrote that: "Time after time I tried to find a case of orders given, and there was none. Gradually I began to realize that Democracy is a very personal thing which, like charity, begins at home. Basically, it means not being coerced and having no need to coerce anyone else. The Pawnee learned this way of living in the earliest beginnings of his life. In the detailed events of everyday living as a child, he began his development as a disciplined and free man or as a woman who felt her dignity and independence to be inviolate. I was often confronted with the feeling that they expected of me a kind of independence and decisiveness that was not considered becoming to a woman in our society. Men and woman expected the same clear and well-defined reaction from me, and among themselves it was evi-
dent that it was their accustomed mode of interacting." Other observers have commented on what Thomas Mails, perhaps the world's leading authority on Plains Indian cultures, has described as "The superb freedom, adventure and happiness which characterized their way of life." The source of this freedom, to a considerable extent, was the practice of non-interference:

In Native Indian society, behaviour is governed by very strict adherence to the principle of self-determination, or "non-interference." No interference or meddlin of any kind is allowed or tolerated, for the society operates on the basis of voluntary cooperation. Indians do not use any force or manipulation to get people to cooperate, even if it were to prevent a person from doing something foolish or dangerous. Therefore, when a white person tries to be "his brother's keeper," to an Indian the white person seems ill-mannered, rude, or even hostile. Yet for the Indian to tell the white person that he was being rude, intruding on the Indian's right to self-determination, would also be wrong, for then the Indian would be interfering with the white person's right to act as he sees fit. 22

- Jimm Good-Tracks

These things I remember very well. We were brought up to have a different relationship to the house and all the things that surrounded us. That is, the values that adults placed on things did not necessarily carry over into their children and lead them to place the same value on these things. Children discovered the value of these things on their own, and developed their own particular relationship to them. 23

- Wilfred Pelletier
I was raised according to the old traditional ways of the Navajo people. When we were children we were completely free; this does not mean that our parents took no concern for us, quite the opposite, for they closely controlled the environment that we grew up in, but within that environment we were free, and it was all the world that we knew. The way we were taught was through stories and legends; I remember my father telling us about Coyote, and all the trouble he got into, while we sat around the table after dinner. He never preached anything to us, never told us to be this way or that way, because it was important that we discover these things, what you might call values, for ourselves. We were never punished, not even scolded, not once. But my father was sure sneaky! I didn't learn till I was much older just how much trouble he took for us to learn certain things for ourselves.  

- Lora Largo

We love quiet; we suffer the mouse to play; when the woods are rustled by the wind, we fear not.  

- Tecumseh

THE SACRED PRINCIPAL OF THE CIRCLE

The principle of the circle, which for the Indian had to do with interconnectedness, with cycles of transformation and of returning, and with man's place in the scheme of nature, has powerfully anticipated much of what the modern world has come to learn through ecology, biochemistry and psychology. Even physics, with its "string theory," has come to speculate on the basic structure of
ultimate reality as consisting of incomprehensibly tiny "loops." Of this sacred principle of the circle, the Indian elders of the past have left us perhaps their most eloquent teachings:

You have noticed that everything an Indian does is in a circle, that is because the Power of the World always works in circles, and everything tries to be round. In the old days when we were a strong and happy people, all our power came to us from the sacred hoop of the nation, and so long as the hoop was unbroken, the people flourished. The flowering tree was the living center of the hoop, and the circle of the four quarters nourished it. The east gave peace and light, the south gave warmth, the west gave rain, and the north with its cold and mighty wind gave strength and endurance. This knowledge came to us from the outer world with our religion. 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 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 goes forth and goes down again 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 again to where they were. The life of a man is a circle from childhood to childhood, and so it is in everything where power moves. Our teepees 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. 26

- Black Elk

You must remember that the land is sacred, and you must teach your children that it is sacred, and that each ghostly reflection in the clear water of the lakes tells of events and memories in the life of my people. The water's murmur is the voice of my father's father.
You must remember and teach your children that the rivers are our brothers, and yours, and you must henceforth give the rivers the kindness you would give a brother.

You must remember and teach your children that the ground beneath their feet is the ashes of their grandfathers. So that they will respect the land, teach your children what we have taught our children, that the earth is our Mother. Whatever befalls the earth befalls the sons of the earth.

This we know: the earth does not belong to man; man belongs to the earth. This we know: all things are connected; man does not weave the web of life, he is merely a strand in that web. What he does to the web he does to himself. You must remember and you must teach your children these things.

- Chief Seattle

You will have to dig down through the surface before you can find nature's earth, as the upper portion is Crow. The land as it is, is my blood and my dead; it is consecrated; and I do not want to give up any part of it.

- Curley
  (Chief of Scouts)

My Grandfather's footsteps walked here...the blood of our peoples is in this soil...

- Chief Dan George
THE TRADITIONS OF GENEROSITY AND SHARING

Few white men who had any prolonged contact with the Indian communities of old failed to be profoundly moved by the generosity and sense of community that prevailed there. In 1884, Captain W. Philo Clark, after a long career in the west, observed that "I have seen white men reduced to the last 'hardtack,' with only tobacco enough for two smokes, and with no immediate prospect of anything better than 'horsemeat straight.' A portion of the hard bread was always hidden away and the smokes were taken in secret. An Indian, undemoralized by contact with the whites, under similar circumstances would divide down to the last morsel." Generosity and sharing, for the Indian, were spiritual values that were integral with one's sense of self. In 1645, the Jesuit Father Jerome Lalamont wrote that: "Hospitals for the poor would be useless among them, because there are no beggars; those who have are so liberal to those who are in want, that everything is enjoyed in common. The whole village must be in distress before any individual is left in necessity..." Generosity made the Indians rich, wealthy, able to provide for others - sharing made them strong, as is testified in the following:

We were the richest people in the world; we didn't have a penny in our pocket, but we were the richest people in the world. We had everything: we had game, we had fish, we had
everything. Everything was just natural, but I am told now I have to wait for my pension to buy my food, there's no more out there.

- Sam Mitchell
(Fountain Band, B.C.)

As a child I understood how to give; I have forgotten this grace since I became civilized. I lived the natural life, whereas now I live the artificial. Any pretty pebble was valuable to me then; every growing tree an object of reverence. Now I worship with the white man before a painted landscape whose value is estimated in dollars. Thus the Indian is reconstructed as the natural stones are ground into powder, and made into artificial stones which may be built into the walls of modern society.

- Ohiyesa
(Dr. Charles Eastman)

Tloo-qwah-nah later came to be known as the Potlatch by the early Europeans perhaps because the Nootka verb 'Pa-chitle,' 'to give,' was often heard during these festivities so naturally the early settlers mistook it for the name of the feast...It was through this practice of sharing that the society of the Tloo-qwah-nah came into being.

- George Clutesi

We always had plenty; our children never cried from hunger, neither were our people in want.

- Blackhawk
Hemmingway's famous dictum, "grace under pressure," the ability to face the overwhelming with subtlety and composure, is a quality personified by the Indians of North America in ways that are perhaps unique to human experience. Many cultures value courage, but only the American Indian composed in advance — indeed, in childhood — a song with which to face his own death. Captain Frank North, Commander of the Pawnee Scouts under General Dodge during the 1860's, wrote in his diary of the "death-song" of the plains Indians. He also recounted an incident in which he was thrown from his horse while he and a company of Scouts were attempting to escape a much larger Cheyenne war party. His Pawnee companions immediately rode back, to a man, and formed a ring about him as he was regaining consciousness. He later estimated that they had been outnumbered 15 to 1, and that his Scouts had turned back in the face of what must have seemed certain death. As it turned out, the Cheyenne broke off unexpectedly, and were not seen again. North would later write of the Pawnee that:

When I look I see a man, only a Plains Indian, without much acquaintance with the white civilization until a few months ago. On a dry, long day's march he saves the last cup of water in his canteen, does his stint of duty at making camp. He then hunts around in the dark for enough twigs or buffalo chips to heat the water for making a cup of tea, which he wakens me to drink. I discover too late he had not had any for himself.
Dr. Gene Weltfish, quoted earlier, recorded a Pawnee folk tale that— from the Pawnee point of view— described what they considered an example of true courage: A man heard that another was speaking ill of him, insulting his name. After a time had gone by, he heard that the man was continuing his abuse and so he felt that it was necessary to do something. Hitching up his team and wagon, he went to find the man. When he reached the man's home, he called out loudly, challenging the man to come out. Eventually the man emerged, scowling at him. "See these horses?" the Pawnee asked, "Well, you keep them. Wagon, too." Whereupon he walked away. It was the only team and wagon that he owned. 36

Ernest Thomas Seton, the naturalist and well-known authority on Indian life, has recorded a number of commentaries on the qualities of Indian courage:

They are high-minded and proud; possess a courage equal to every trial; and intrepid valour; the most heroic constancy under torments, and an equanimity which neither misfortunes nor reverses can shake. Toward each other, they behave with a natural politeness and attention, entertaining a high respect for the aged, and a consideration for their equals which appears scarcely reconcilable with that freedom and independence of which they are so jealous. 37

- Father J.F. Lafitou
In legislation, in eloquence, in fortitude, and in military sagacity, they had no equals.... On all occasions, and at whatever price, the Iroquois spoke the truth, without fear and without hesitation. 38

- Lewis Henry Morgan

They were the bravest men I have ever known. I never led an expedition against the Indians but I was ashamed of myself, ashamed of my government, and ashamed of my flag; for they were always in the right and we were always in the wrong. They never broke a Treaty, and we never kept one. 39

- William F. (Buffalo Bill) Cody

RESPECT FOR TRADITIONAL WISDOM

A reverence for the wisdom of the Tribal Elders is perhaps the most universal of the values that permeate the American Indian's way of life. The Canadian poet and playwright George Ryga speaking of Chief Dan George, captured something of this reverence when he wrote: "In him I saw the classic symbol of Indian integrity. I felt that I understood his values... the sense of community... the continuity of life from generation to generation. Because, like him, I had a rural background with minimal possibilities for education." In traditional Indian societies the elders
were the very heart of their sense of community, which stands in sharp contrast to the role of the "elderly" in our own society: 40

We had no old people's homes where we placed the aged to die "out of sight, out of mind." Old people were a very important part of the tribal society. They were the wise elders with a lifetime of rich experience that was valued by all. .... We did not have mental institutions. We did not have jails. Locks and keys were unnecessary in our communities because we were taught honesty and integrity, and we respected the creations of the Great Spirit. 41

- Chief John Snow

The ways of the Indian people are in the minds of the old people. Where they go, we go. 42

- Tina Maria Christian
  Spellumcheen Band, B.C.

Our words will come back to you like quiet echoes from the past. Be proud, be strong, have respect, keep our ways, give courage to your children that our words will not be empty - that our people will be strong. 43

- Caspar Charley,
  Anderson Lake Band, B.C.

* * * *
The first three chapters of this paper have essentially provided a descriptive account of the traditional societies of the North American Indians, as derived from generally accepted historical, anthropological and ethnological materials. The purpose of this descriptive account has been, primarily, to provide a foundation of substantive evidence concerning the actual nature of the value-systems of these traditional societies - insofar as it is still possible to do so. That the values expressed in the various quotes cited actually permeated and informed the cultural systems of the native peoples of North America is an important assumption upon which the various arguments of this paper rest; and the bulk of historical and ethnological data, as indicated in Part One of this paper, tend, on the whole, to support this assumption. But the essential purpose of this paper is concerned more with the processes whereby these values were maintained and renewed within their cultural systems, and to this end evidence will be cited as much from contemporary western experience as from that of the Indians, for it is the modern context that must ultimately concern us.

The synthesized system of values presented in this chapter has been structured, in part, in terms of the degree to which they tend to conflict with the value system
of the "dominant society" in contemporary North America. The general commentary on this conflict has tended to identify it as the "assimilation problem" of modern Indian people, while the Indians tend to think otherwise. To compare different value systems it is useful to obtain a more generalized reference point, and this brings us to another "either-or" dichotomy in thinking - the argument as to whether values are "universal and absolute," or "merely relative."

Dr. Carl R. Cooley, mentioned earlier, has argued that for North American Indian peoples there are no such thing as "universal values." In the Indian's society, all values are culturally contexted and directly "experienced," rather than abstractly reasoned. This argument is supported by the observations of philosopher Risieri Frondizi, who has pointed out that while "values" obviously incorporate aspects that are variously "universal" or "relative," values as a whole cannot be completely described by either of these polarized extremes. The best way to think about values, Dr. Frondizi suggests, is to think of them as "gestalts" - a concept that readily incorporates both the "absolute" and the "relative." In reference to Dr. Cooley's observation, this means that while the Indian societies may not have conceptualized their value systems in universal terms, this in no way implies that there were no commonali-
ties or parallels between these various systems. The existence of such parallels has been attested to by numerous sources, as cited in the foregoing text.

In the chart on the following page the "synthesized system of values" representative of the North American Indian societies (presented in this paper) is "translated" to a more generalized level, by way of C.S. Lewis' well-known "Universal Tao," which was itself a synthesis of nearly every known culture in historical times, and by the standard western philosophical framework as it applies to the basic value categories of the contemporary western society.
AN ANALYTICAL GENERALIZATION OF TWO PROPOSED VALUE SYSTEMS

The Six Statements of North American Indian Values - As expressed in original oratorical form of sources:

"The Way of One Spirit"  "The Doctrine of Non-Interference"
"The Sacred Principle of the Circle"
"The Inner Path of Courage"
"The Traditions of Generosity and Sharing"
"Respect for Traditional Wisdom"

C.S. Lewis' "Universal Tao" - A synthesis of eight objective values from a wide range of cultures:

"Laws of General & of Special Beneficence"
"Laws of Justice & of Mercy"
"Law of Magnanimity"
"Law of Good Faith and Veracity"
"Duties to Family & to Posterity"
"Duties to Elders and to Ancestral Traditions"

A generalisation of these statements in terms of contemporary Western conceptual categories:

<table>
<thead>
<tr>
<th>CONCEPT OF MORALITY</th>
<th>CONCEPT OF JUSTICE</th>
<th>MATERIAL VALUES</th>
<th>PERSONAL RESPONSIBILITY</th>
<th>SOCIAL VALUES</th>
<th>CULTURAL HERITAGE</th>
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<tbody>
<tr>
<td>(That is, a person should be: moral, law-abiding, industrious, responsible, private, and successful...)</td>
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<td>Special Metaphysics -</td>
<td>General Metaphysics -</td>
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</table>
In contemporary western society - and particularly in North American society - the explicit value systems tend to argue that "a person should be: moral, law-abiding, industrious, responsible, private, and successful."

For North American society, this has been explored in an interesting study entitled "Generic American Values," written in 1951 by Robin M. Williams, Jr., Professor of Sociology at Cornell University.

Generic American morality, according to Professor Williams, is bound up in polarizations of right or wrong, black or white, guilty or innocent. Morality tends to be absolute, universal, and judgmental. The conflicts in American concepts of law and order result essentially from this "moral overstrain," and tend to center on issues of enforcement and of punishment. There is a tendency to reinforce overconformity in the resolving of these issues.

Secular occupational achievement - industriousness - is identified as the "central stress" of American culture. The "cult of progress," "boosterism" and "workaholic" aspects of American society, Professor Williams observes, have been well captured in the word "Fordismus," coined in Germany during the 1920's. American values concerning responsibility are strongly oriented to "service-club responses" - in the form of aid to natural disasters, famines, etc. - rather than to personal involvements. Williams refers to an "enor-
amous range of relatively disinterested humanitarian activities," each with its own isolated area of specialization. American values also stress the exclusive, self-oriented private life, which closely follows Emile Durkheim's "cult of personality," which he identified as a dominant theme of western civilization in 1897. This orientation is particularly averse to any "invasions of privacy" of the individual - Civil rights tend to focus on the right to be let alone. Finally, success tends to be viewed essentially in terms of power - primarily financial and political. "The value attached to achievement," Williams writes, "does not comprehend the person as a whole, but only his accomplishments, emphasizing the objective results of his activity." Success in this system is through competition, and achievement is a matter of "winning." Professor Williams concludes with the observation that this last has increasingly emphasized individual self-interest, and de-emphasized group identity and responsibility. 46

The values described above, when viewed as processes, suggest certain tendencies toward another kind of polarization - that between the explicit, overt values as formally stated, and their opposing implicit, covert values as actually experienced in "real life." The formally stated values take the form of pious maxims - their "real-life" reverse-images tend to be expressed in pithy, sometimes
bitter cliches. The "official" values are loudly defended with high-sounding rhetoric - the real-life values are communicated by the nod, the wink and the nudge. It is suggested that, in many cases, this dichotomy represents the differences between what we say, and what we do. It is also the difference between appearances and underlying realities in a kind of schizophrenic split in our cultural psyche - between, one might say, the expressions "civilize" - and "civil lies." In the chart on the following page this mirror-image dichotomy is outlined in these contextual terms:
Describing our Overt & Covert Value Systems

Through Commonplace Expressions

---

**OVERT**

- **MORAL**
  "Morality is not merely a matter of choice: Right is right and wrong is wrong, no matter how you look at it. That is why we have laws."

- **LAW-ABIDING**
  "Society needs laws: without rules, anarchy and savagery would result. Obedience to the law is freedom."

- **INDUSTRIOUS**
  "Our free-enterprise system has given us the world's highest standard of living – sure, there have been problems, but no system is perfect. You can't stop progress."

- **RESPONSIBLE**
  "Enlightened self-interest means that hard work and perseverance will pay off. If some do not want to work, that's their problem. There is no such thing as a free lunch."

- **PRIVATE**
  "Charity begins at home. If there are problems, let the government or the police handle them – that's what we pay taxes for. People have a right to mind their own business & let others do the same."

- **SUCCESSFUL**
  "Anyone can be a success if they are willing to work hard enough and make sacrifices. People who have wealth and influence have generally earned it, and have a right to their property."

---

**COVERT**

- **SANCTION**
  "Don't rock the boat."
  
  - Absolutist – Authoritarian –

- **CONSTRAINT**
  "Don't get caught."
  
  - Punitive – Impersonal –

- **EXPLOITATION**
  "You can't make an omelet without breaking any eggs."
  
  - Expediency – Opportunism –

- **SELF-INTEREST**
  "Look out for #1."
  
  - Isolationism – Avarice –

- **INDIFFERENCE**
  "Don't get involved."
  
  - Apathy – Self-Indulgence –

- **POWER**
  "You can't fight city hall."
  
  - Obsessive-Compulsive, Passive-Aggressive –
Additional supporting evidence for the implications outlined in the preceding chart on "overt" and "covert" value systems follows in the form of research findings in psychology and social development. The charts on the following two pages attempt to establish the cultural reality of this "schizophrenic split" in contemporary values-systems in ways that also provide some understanding of the major causal factors involved. The first chart compares the polarized value-splits with corroborative observations from the research of Jean Piaget and his associates, as presented by John C. Gibbs in his essay "The Piagetian approach to Moral Development." The second graph consists of a comparison of two experiential processes - one by Erik Erikson, and the other by Louis Raths - that provide one possible set of causal factors explaining, or accounting for, the descriptions outlined in the preceding graphs. The "reinforcement process" and "effect, or state" descriptions on the second graph represent a synthesis of the arguments of both Raths and Erikson: 47
Piagetian Observations on Moral Development
applied to
The Rationalization of Overt & Covert Value Systems

** MORALITY by SANCTION: ** (Absolutist, Authoritarian)

"The young child seems to regard right and wrong in an absolute, black-or-white way, without appreciating a moral problem from different points of view... The authoritarian or 'coercive' quality of this absolutism is suggested in Piaget's finding that young children tend to interpret requests from adults for favors as commands to be obeyed."


** LAW-ENFORCEMENT by CONSTRAINT: ** (Punitive, Impersonal)

"Adult authority is understood by the young child in terms of the superior size and strength of adults... Punishment for misdeeds is considered to be as immanent and inevitable as is the physical 'punishment,' so to speak, which one receives after touching a hot stove or falling down stairs."

** INDUSTRY by EXPLOITATION: ** (Expediency, Opportunism)

"Fairness is supported by the consideration that others may 'get even' with you if you are unfair to them... interpersonal values are appreciated relative to one's instrumental ends."

** RESPONSIBILITY into SELF-INTEREST: ** (Isolationist, Avaricious)

"The interpersonal values expressed in mid-childhood tend to be justified in a pragmatic or self-serving way... sharing with others is recommended because if one does so then others are likely to share their things in return... Moral obligations are in effect what one 'has to do' because of the demands of external authorities..."

** PRIVACY into INDIFFERENCE: ** (Apathetic, Self-Indulgent)

"Both of these stages (which Kohlberg describes as 'conventional') seem to entail a perspective describable as third-person, impartial, and disinterested. Contained in 'conventional' morality are potentially formalizable principles of reciprocity, equality and universality; yet the ideality of conventional morality remains imbedded in character stereotypes, social norms, role-patterns and established laws."

** SUCCESS into POWER: ** (Obsessive-Compulsive, Passive-Aggressive)

"'Rights' are a matter of 'having the power or authority to control something or someone else...' (which follows) a narrowly egoistic motivation for positive social acts - or at least a justification to this effect - and a ready willingness to reciprocate negative ones."
REFLECTIONS ON TWO SCALES OF HUMAN BEHAVIOUR

- Reinforcement Process -

VALUES ACTUAL PERSON, NOT JUST ROLE BEHAVIOUR

NO SUBSTITUTE FOR OWN ACHIEVEMENTS

FACILITATES GROWING SKILLS OF INDIVIDUAL COMPETENCE

FACILITATES CLARITY IN THINKING AND VALUES

FOCUS ON TRUSTING RELATIONSHIPS

GIVES ORDERS; SETS STANDARDS

"CARROT & STICK" PERSUASION; USES SHAMING

REINFORCES "ACCEPTABLE" ROLES; USES GUILT FEELINGS

SEES "WINNERS" & "LOSERS" FEELINGS OF INFERIORITY

USES SANCTIONS OR FORCE TO CORRECT BEHAVIOUR

Erikson's Scale

IDENTITY

INDUSTRY

INITIATIVE

AUTONOMY

TRUST

AGGRESSION

SUBMISSION

WITHDRAWAL

REGRESSION

ILLNESS

CREATES SELF; INTERNALIZES VALUES

PERSONAL COMPETENCE; CREATES OWN FUTURE

SETS OWN GOALS - LAUNCHES OWN ENDEAVORS

SELF-RELIANCE FROM INDEPENDENT VALUES

BUILDS CONFIDENCE IN COOPERATION WITH OTHERS

MISTRUSTS OTHERS - ASSUMES ADVERSARY ROLE

MISTRUSTS SELF - SEeks OUT AUTHORITY

SURREndERS PREROGATIVES AVOIDS RESPONSIBILITY

IMMATURE BEHAVIOUR - RETREATS INTO PAST

VALUES & ROLE CONFUSION DESTRUCTION OF SELF

Raths' Scale

Based on Eric Erikson's Psychosocial Development Model, and Louis Raths' Scale of the Self-Destructive Process under Authoritarian Pressures.
There is in the western tradition a strong puritanical obsession with the "duty" of applying direct force in achieving social aims. The puritan preacher John Robinson wrote: "There is in all children, though not alike, a stubbornness and stoutness of mind arising from natural pride, which must, in the first place, be broken and beaten down." Only then, Robinson argued, could the young be moulded into proper, God-fearing citizens. Bertrand Russell, in describing this fixation with forceful control, quoted the indignant reaction of Dr. Thomas Arnold, one-time headmaster of Rugby College, to the suggestion that flogging be discontinued:

I know well of what feeling this is the expression; it originates in that proud notion of individual independence which is neither reasonable nor Christian, but essentially barbarian. It visited Europe with all the curses of the age of chivalry, and is threatening us now....

Of his own time, Russell described this process as foundational to developing the kind of civil servants that British Imperialism required. Of the schooling necessary to produce these administrators of the "benighted lands," he wrote: "But his happiness, such as it was, came from the exercise of trivial authority and admiration which he received for unimportant merits. Instinctively he looks about for opportunities of similar enjoyments in later life;
he desires people to govern, people to whom he will seem a god-like being." 50 In this way the "hidden curriculum" of Russell's day helped produce what was thought of as the great tradition of Britain as schoolmaster to the world.

John Dewey has written of the influences of this tradition in our own time:... when it comes to this matter of force as a method of settling social issues, we have unfortunately only to look at our own scene, both domestic and international... somehow we, too, have a belief that force, physical and brutal force, is the best reliance." 51 More contemporary versions of this belief, in educational terms, are not hard to find. 52 What is probably much more pervasive, however, is the influence that this had on our entire approach to child-rearing.

Recent research has indicated that mothers turn to physical punishment much earlier - and more often - than had been previously thought. 53 Philip Zimbardo cites evidence that mothers "retaliate physically" with infants as young as six months, and that 87% of all mothers use spanking or slapping before 24 months. Girls tend to be punished about 9 months's earlier than boys, and often more severely. A very common behaviour, not considered "punishment" by most
parents, is the use of harsh scolding and finger-shaking applied almost from birth. 54

This "style" in child-rearing may be the critical factor in perpetuating the "hidden agenda" in our society for the apparent and pervasive "need" to dominate, or force to our will the behaviour of others. This, of course, is a central theme in the work of Erich Fromm, who identifies this "syndrome" as the passive-aggressive, or sadomasochistic personality, whose fundamental drive is a deeply and often unconsciously felt lack of essential trust in one's self. 55

If education is to be concerned not only with the content of a person's informational knowledge, but also with the quality of each person as a person, then we must begin to emphasize - and to understand - the kinds of learning experiences that best help to promote self-knowledge, and the processes of self-creation that appear to be inseparable from it. In the approach of traditional Indian education, as has been argued earlier, the primary concern was with these learning experiences of self-discovery. If a better understanding of such learning experiences is going to be of any real benefit to our modern world, however, it is important that we also improve our understanding of our own world, including its "hidden agendas" and unconscious
curriculums, for all of understanding and of practice and of experience itself must be contexted within our cultural reality, else the very fabric of our social experience becomes frayed, and our society may, itself, begin to unravel and come apart.
"SEVEN PATHS ON THE MOUNTAIN"

In spite of (certain) evidences of success, there has been an ever more vociferous complaint from leading educators and observant layman that the public schools have failed in their basic responsibility; that they have filled the minds of youth with disparate and fragmentary bodies of knowledge intended to supplement living, without teaching them how to live, either as individuals or as members of a democratically inclined society... It might be more efficient to have children's characters built by professional character builders, but before that is decided, it would be well to consider the complexity of the process of culture transmission, and to devote serious thought to the intangibles of personality and character which give to a culture its underlying significance. These, among other reasons, explain the preparation of this work on primitive education in North America.

The above quotation is from the introduction to Professor George A. Pettitt's "Primitive Education in North America," first published in 1946. In a recent anthology that included excerpts from this work, anthropologist Walter Goldschmidt described it as the only systematic study of its kind ever attempted. The essence of Professor Pettitt's study is clearly outlined in his concluding summary, and is included here in condensed form:
1. Corporal punishment is rare among primitives not because of innate kindliness, but because it is antipathetic to the development of the type of individual set up as ideal.

2. There is, however, no lack of discipline for children, though it is normally handled through outsiders, including relatives and supernaturals or their impersonators.

3. The primary means of such discipline is praise, reward, ridicule and teasing.

4. Personal names play a very essential role as a stimuli to learning or achieving, and identify who the individuals are, rather than merely how they are identified.

5. Religious training does not take precedence over economic activities, for the two are often combined, as in the "first-fruits" rites, which is perhaps one of the oldest expressions of pedagogical concern.

6. The vision quest and the acquisition of guardian spirits are not aberrations, but the expression of a desire to achieve strong inner convictions of social and economic competency... and has educational applications aside from the religious aspects.

7. Myths and folk-tales are not merely instruments of entertainment, but show internal evidence - in their etiological episodes - of serving as an important means of educational structuring. Episodic biographies and autobiographies are of great importance in this genre.

Professor Pettitt's study is thoroughly documented: running nearly 200 pages, it contains over 1,600 separately cited source notes, and includes material from studies of approximately 130 tribal groups. This important study provides substantial support for many of the arguments made in this paper. Pettitt, however, referred in his study to a number of important areas that he would have liked to
have treated in greater depth, and the general role of traditional - or "primitive: - education as a means of individual character development was one of these. This paper, in part, is an attempt to explore at least a portion of this area, and as such represents a continuation of Professor Pettitt's work.

One of the more perplexing aspects of aboriginal North American culture to the early European observers was the profound sense of independence and individual freedom that the Indian seemed to enjoy, while at the same time exhibiting the strongest of communal bonds, and ties to cultural values. A relationship that appears paradoxical from one point of view, however, may be seen as necessary and consistent from another. The sense of personal freedom so "jealously guarded" by the Indian, for example, was understood from the point of traditional native culture to be essential to social harmony, rather than an obstacle in its path. This relationship was an important aspect of the "social synergy" that Abraham Maslow observed in the Northern Blackfoot communities that he visited, and the lack of this relationship in modern societies may account for some of our more pressing problems. In traditional societies independence required much more than mere decree; independence was a thing to be earned and renewed in each generation, and in the body, mind and spirit of every person.
Independence of spirit, in the educational sense, is related to what is called "emotive bonding." In Erik Erikson's proposed stages of development this is described in terms of the processes of social attachment essential to basic trust. There are four aspects of traditional education of particular interest here: The first of these has to do with certain educational practices started before the child is even born — these usually take the form of quiet talking or singing by the mother to her unborn offspring, or a place of natural beauty and quiet will be sought out for meditation. She may also select some notable member of the community to describe to the child as the kind of person most admired by their people. The next aspect concerns the intricate network of kin-relations, in which the grandparents play important roles, that enclose the child in a "nest" of close human contacts. Among the Pawnee, for example, there was a special relationship between grandfather and grandson described as a kind of "rough-and-tumble," lively familiarity that was thought of as an important link in life's fundamental circle. Later, building on this network, non-kin relationships would be included. Thomas Mailis describes the Sioux Alo'wanpi Hunka ("singing for someone") ceremony, in which a child is formally adopted by a non-kin warrior, to be "separated only by death," as the source of the strongest bonds in that so-
There are similar ceremonies among the Pueblo, where children are described as playing full roles in all events. Finally, there is the importance of the sodalities, or bonding societies, to all aspects of the social lives of the Indians. The emphasis on oratory, the symbols, or "coups" of personal achievement, and virtually all ceremonial activities involved these sodalities in fundamental ways. In building independence of the spirit, the educational aspects of these cultural institutions were of profound importance.

The second area concerns "independence of the mind." The emphasis here is on self-instruction, and the building of confident and competent self-reliance. This is roughly equivalent to Erik Erikson's second stage, that of the processes of self control leading to autonomy. The first aspect here concerns the "total freedom" that characterized the world of the child in the Indian societies. In modern societies children are disciplined ostensibly to help them fit into the world of the adults, but what is widely overlooked in actual practice is the extent to which these restrictions serve primarily to maximize the freedoms and conveniences of the parents, while correspondingly eliminating many of the kinds of experiences whereby the young may practice and acquire the characteristics of maturity and self-management. The lack of corporal punishment or harsh
disciplinary measures in traditional Indian societies, as Pettitt has pointed out, is a necessary condition for the development of the desired kind of person; from the traditional point of view such excessive control or over-protectiveness can be as harmful as neglect. The nearly complete freedom that children enjoy in traditional societies comes not from neglect, but rather from the self-discipline their parents practice in structuring and maintaining a childhood environment in which such freedoms are not only possible, but fruitful.

One very important example of how freedom can be essential to learning can be found in the purpose and meaning of "play," which Brian Sutton-Smith has described as the acquisition of "arousal modulation." Much of this learning must take place in ways analogous to what Michael Polanyi calls "tacit learning," for we cannot focus our conscious attention on every minute detail of intonation, inflection, volume or style. When these processes of acquisition derive spontaneously from individual experience, it is easier to maintain an integrated sense of self, to which outside interference or threat is inimical. This closely follows Erich Fromm's arguments for the importance of spontaneity in early childhood development, and in maintaining the possibility of freedom in later life. This may also provide a more concrete description of the importance
of freedom in Abraham Maslow's concept of "self-actualization." An important aspect of this is the "freedom of inquiry," which a number of leading educators have consistently stressed. In traditional North American Indian societies, where resourcefulness, independence of mind and self-reliance were highly-regarded attributes, there was a corresponding emphasis on self-instruction and freedom on inquiry, and almost an abhorrence of indoctrination, or rote-learning. In this the educational practices of the Indians were closer to the maieutic approach of Socrates than are perhaps any of our modern systems of institutional learning.

The third area concerns the toughness of body and will - what the Japanese call "hara" (literally, "belly") - that is the foundation of courage and determination. The philosopher Soren Kierkegaard would have been appreciated by the Indians, for he best described the outlook, or physical attitude, that the Indians prized - an attitude of "calculated, unremitting, entirely assertive resignation." This, as Pettitt argues, is the fundamental concern behind the virtually total absence of corporal punishment in Indian societies, for punishment as a form of control is very destructive to the processes whereby one learns to endure pain or suffering stoically. Punishment also threatens the strong ties of life that bind the
family together, and provide the webbing of support that is essential to the seeking of strength through ordeals or ritual trials of endurance. The training for such undertakings as the vision-quest, or the sun-dance of the plains Indians, was long and arduous, and strong ties of affection played a central role in supporting these motivations. Independence of body - of physical will - was an important aspect in this process. 12

This process of education is not entirely removed from the western tradition. In the following passage, written by Edmund Burke, there is a fine appreciation of the values the Indians cherished and sought to nurture in their children:

To be bred in a place of estimation; to see nothing low and sordid from one's infancy; to be taught to respect one's self; to be habituated to the censorial inspection of the public eye; to look early to public opinion; to stand upon such elevated ground as to be enabled to take a large view of the widespread and infinitely diversified combinations of men and affairs in a large society; to have leisure to read, to reflect, to converse; to be enabled to draw the court and attention of the wise and learned wherever they are to be found; to be habituated in the pursuit of honour and duty ... such are the elements that compose this unbought grace ... that form what I should call a natural aristocracy, without which there is no nation. 13
No passage in all of western literature, perhaps, so well describes the goals and aspirations that the American Indians sought for their children. For the Indian, society did not "need" an aristocracy - because society was an aristocracy, and when even a few of its members failed to internalize the qualities so eloquently described by Burke, when they no longer "reflected in their eyes the earth and the sky," then that society had a sickness, and that sickness was often fatal. 14

In this concept of cultural health, which proceeds from radically different assumptions than those of Sigmund Freud's view of the world, society does not survive at the cost of individual self-realization, but through its enhancement, and man's relationship with society is not adversarial, but synergetic. Thus the strength of a community was less to be measured in commodities or material resources than in the strength of character of each of its members, and the nurturing or cultivation of this strength, as in the passage from Burke, was of paramount importance in traditional education. 15

The remainder of this chapter consists of seven monographic sub-chapters - each concerned with a specific character strength, and with the factors that shape it. These seven sub-chapters are not intended to represent a
curriculum outline, but are rather an attempt to re-examine certain of the "seldom-questioned" assumptions referred to in the introduction to this paper. As such, these inquiries are concerned more with the foundations upon which any attempt to develop a curriculum must rest than with the structure of the curriculum itself. To paraphrase Wittgenstein, it is not enough to simply state a truth, or even an argument, for if the statement is to be understood, we must first state the error, and from there find our way to the truth. All cultures rest on basic assumptions about human nature, conscious or otherwise, and where there are contradictions in these assumptions there are also insights into the errors from which we must begin. Each of the following sub-chapters, therefore, focuses on such contradictions in modern experience, and attempts to provide a different appreciation of them from the perspective of traditional Indian society. If we are to benefit from a better understanding of the Indian's experience, it is argued here, we must understand this experience in terms of our own.

The seven areas of inquiry, in order, are concerned with the character strengths of self-cooperation, with quiet determination, empathy and generosity of spirit, and with creativity as the elemental force of cultural re-
newal. The seven sub-chapters are:

- Firemaking
- Tracking
- Toolmaking
- Voyaging
- Protecting
- Healing
- Dancing
There are times when I am inclined to dismiss character training as an outmoded educational aim, but every time there comes back to my mind some poignant phrase that I first heard on the lips of an ex-prisoner of the concentration camp of Auschwitz, as I went into Germany in the summer of 1945. He called it "the lesson of the open fire" - and other survivors of Auschwitz have written of it since... "In cold winter nights at Auschwitz each prison block-house where men starved to death in the serried bunks had before its open door a lighted brazier. It was always tempting to rise and be near the fire, but it was fatal. A prisoner might begin by lying some distance from the fire, but in time the fire drew him like a magnet; he would go closer to the flames until finally he would get as near as possible. Then, sooner or later, the contrast between the comfort of the fire at night and the stark coldness of morning roll-call became too much for emaciated bodies and bludgeoned minds to bear. It was then only a matter of time before it killed him. Every prisoner knew this but many were unable to resist the temptation. If a prisoner regularly left his bunk at night to be near the fire, the others knew that he had decided, even if he had not faced the decision himself, that extinction was better than torture without hope. Against this only one thing prevailed - character - cleverness, learning, creativeness all went down - only character prevailed."

With this passage Basil Fletcher, Professor Emeritus at the University of Leeds, England, concluded his 3-year, evaluative study of the Outward Bound programmes. Initially of a "distinctly critical frame of mind," Professor Fletcher found "striking evidence" of success, and concluded that these programmes are even more relevant today
than when they were first started more than forty years ago, by educator Kurt Hahn and shipping magnate John Holt. The most consistent of the personal gains cited were an improved sense of vitality and fitness — and substantial improvements in self-confidence and self-reliance in terms of an ability to face hazards or unexpected problems.

From the evidence of Professor Fletcher's study, Outward Bound would seem to accomplish what it claims for the majority of its students. As the qualities of self-reliance — of independent self-management, resourcefulness, self-discipline and self-respect — are generally central to our concepts of character and character development, it would seem worthwhile to consider the implications of our use of the term "self-reliance:" What does "self-reliance really mean? Why is it important to our present way of life? How can it be most effectively fostered, nurtured or imparted to others, particularly the young?

Extensive studies by the military and other agencies into the subject of survival — as discussed earlier in this paper — have generally concluded that the factors most associated with "survivors" are a well-defined set of values, a strong sense of determination, and a high degree of independence, or self-reliance. The U.S. Air Force field manual on survival (AFM 64-3) defines self-reliance as know-
ing one's self - and trusting, or being able to live with one's self. Most North Americans rate themselves highly in terms of "knowing themselves," but the evidence of research in this area suggests that there are large discrepancies in these assumptions.

Philip Zimbardo has reported on the degree to which peer-pressures can greatly influence what people believe they see or hear - experiments have shown that a high percentage of subjects have tended to be influenced to the point where they actually perceived different line lengths to be the same, or to have heard statements that in fact they did not. 16 Most of these subjects tended to feel that these findings were not possible. Most people, apparently, tend to overrate themselves: In terms of general sociability, 25% of subjects tested humbly claimed to be in the top 1%, fully 60% felt they were in the top 10%, and 100% were certain that they were in the top 50%. In leadership qualities, 70% stated that they were in the top 25%, and only 2% allowed that they might be average - or even below. 17 Of all the research findings in this field, however, perhaps those of Stanley Milgram have been the most disturbing. Milgram initiated a line of research that would eventually see over 2,000 subjects tested in North America, and a large number in other countries as well. In these well-known experiments, each subject was directed to apply "electric
shocks" to another subject strapped in a chair. The current levels, as indicated on the panel of buttons, appeared to run from 15 to 450 volts, at which point the "victim" gave every evidence of severe agony or even death. Of the hundreds of pre-trial subjects interviewed, most declared strongly that they would take no active part in the experiments as described, arguing that their "personal, positive qualities of character" would not allow them to do so. As one hypothetical subject stated: "Having been raised, then, in an old-fashioned, staunchly Lutheran family I have internalized the view that hurting a man is wrong, and no amount of intellectual reasoning can shake this belief." A group of psychiatrists asked to predict behaviour in these experiments felt strongly that less than 30% would ever go above the 10th level (mild complaints), that only about 4% would reach the 20th (screaming), and less than 1 in 1,000 subjects would administer the highest shock — and that these would tend to be "deviants." In the actual tests, as has been widely reported, fully 65% continued to the highest level of shock, and nearly 100% reached the 20th level. Of the hundreds of subjects tested, not one physically went to the aid of the "victim," not one left without "permission." All subjects were carefully screened, and represented a cross-section of the population.
Several years ago a young woman named Kitty Genovese was attacked and brutally murdered in an alleyway in New York City. Although her screams continued for over a quarter of an hour, no one came to help, no one even called the police. When the story appeared in the papers, there was a public outcry demanding that something be done about those who had passed by and done nothing — but it was later discovered that among the people making this demand were the same people who had passed by, or had heard the entire incident from their windows overlooking the alley. How is it that people can have so little understanding of their own actions and inner selves? There is an interesting incident from the Second World War, involving an English youth who had the unusual experience of being a member of the Hitler Youth movement, and later serving in the British Army, that provides a very personal insight into this question.

Willy Trebich, who had enjoyed spending his summers in Germany during the early 1930's, was persuaded by his boyhood friends there to join the Hitler Youth, and so accompany them on outings. At first it seemed pretty much like the Scouts, but one summer Willy found himself being pressured to join the SS with the rest of his Hitler Youth group. Vacillating, Willy allowed himself to be hustled off to Berlin. The next evening, having joined a group of four
older youths to "see the town," Willy found himself marching down a back street, singing and shouting slogans. Then a shabbily dressed family group was spotted sneaking down an alley, and the cry "Juden!" erupted. Willy stood frozen, terrified, nauseated and faint as the old man and woman were beaten to the ground. The younger man resisted, and all four of the brown-shirts attacked him, allowing the old man to escape. As Willy watched the old man heading in his direction he felt panic: "I was shaking as if I had the ague and the sweat was streaming down my brow but something obliged me to act out my role. I seized him by the arm and pushed it behind his back. Through his clothes, which gave off the dry, acrid smell of poverty, the bones of his fore-arm were like dry wood... the sight of his thin, bony face with its mouth open, from which spittle was running, filled me with horror and terror. I shook the old man's arm, and then I shook it again, more violently this time... 'Geh! Geh! Get out you verdammte Jude.' Tears welled in my eyes and poured down my cheeks as I yelled at him... I stood watching him and crying with great shaking sobs."  

Terribly shaken, Willy became violently ill, and then ran off into the night. He later managed to find his way out of Berlin and eventually back to England. He never told anyone of the incident, nor of his membership in the Hitler Youth. Later, in the British Army in North
Africa, Willy was captured by the Germans, and sent to Germany with a trainload of other prisoners. At one point, for some minor offense, a German sergeant ordered him to be summarily executed. "I couldn't believe my ears but my body reacted instantly... adrenalin poured... my heart beat wildly...they pushed me against a tree... aimed rifles at me... my bowels seemed to have turned to water, and as I struggled with their inclination to empty themselves involuntarily, the fact that this was a matter of supreme unimportance in someone who was about to die did not occur to me." As it happened, a German officer, hurrying things along, ordered them all on the train, and Willy lived to spend the rest of the war in a POW camp. 21

Willy Trebich's reactions to these terrifying situations strongly suggest deep and profound patterns of conditioning of which he had little, if any, conscious awareness. These overwhelming concerns with "obedience to authority" and "bowel control" closely follow the patterns of behaviour of "obsessive-compulsive" personality types, 22 and some researchers, including Erich Fromm and Erik Erickson, have suggested that these personality types are fairly common in many modern societies. 23 What is of greatest interest here, however, are the chief character-
istics of this "obsessive-compulsive" personality - doubt, indecision, and ambivalence - for these are the precise opposite of what we call "self-reliance."

The U.S. Air Force Survival Training course at Camp Stead, in the Nevada mountains, emphasizes - as mentioned earlier - the importance of self-knowledge and self-trust. One's greatest enemy, always, is one's own fears. Our reactions to these fears can be emotional, mental or physical: emotional in terms of increased irritability and frustration; mental in terms of an inability to concentrate or decide on a course of action; and physical in terms of apathy, weakness and even illness. These closely follow the doubt, indecision and ambivalent characteristics of the personality disorders described above. 24

The qualities of self-reliance, then, would include optimism (self-trust), decisiveness (self-knowledge), and vitality and self-motivation (self-respect). In attempting to foster these qualities, both the military survival training programmes and the Outward Bound programmes have been criticized primarily on two points: That the training periods are too short - and that the circumstances are "artificial and unrelated" to the real lives of the trainees. 25 These points are well taken, but in consideration of Professor Fletcher's study - and survival research by the
military - it would also appear that creditable achievements do seem to be made in remarkable short periods of time. In the research for this paper two forms of personal experience have been identified as central to these achievements: The experience of solitude; and the importance, or influence, of (odd though it may seem) what has been called "the burden of trivia."

In Chapter 3 of this paper a connection was drawn between Benjamin Franklin's parable of "The Eddystone Light," and incidences along the Telegraph Trail Line of northern B.C. during the gold-rush period. Modern man, it would seem, has little tolerance for his own company for any period of time, while for the Indians of early North America such conditions seemed to present few serious problems. The ability to endure long periods of solitude - "independence" in full dosage - is closely related to the qualities of self-reliance. The following examples of adverse reactions to extended solitude provide insights on this point:

In France, in 1962, 23 yr. old Michael Siffre lived alone in a cave for 62 days. When taken out he was found to be living literally in a heap of garbage, and insisted on taking his pet spider with him. He suffered a massive nervous breakdown shortly thereafter.

In isolation tests at the University of Maryland, Whilden Breen spent five months in a small room. He suffered a complete breakdown forcing an end to the test. Breen had daily contact with the researchers, whom he came to villify and abuse obsessively.
When the U.S. Army Signal Corps ran an isolation test with a number of engineers as subjects - who were to lie still in a dark, sound-proof room - the test had to be terminated after only 1/2 hour.

Canadian Auguste Courtauld, 26, spent a winter alone in a Greenland weather station. When rescued, he was preparing to head off into the wastelands. He reported that the experience had turned to "incredible torture" after 2 weeks, and that after 3 months he could no longer bear it.

Perhaps the best documented "isolation experiment" has been Admiral Richard E. Byrd's 3 1/2 month sojourn alone at an "advance base" hut in Antartica, in 1934. Byrd experienced crying fits, deep depression and extreme lassitude. These excerpts from his diaries provide considerable insight into his experience:

That night the peace did not come that should have come. I was like a clock wound up to strike in an empty house. Everything I was doing seemed unfinished and crude, without relationship to the unfathomable desires in my mind.

Something - I don't know what - is getting me down. I've been strangely irritable all day, and since supper have been depressed... the problem of keeping my mind on an even keel is a serious one...

I have persisted in my efforts to eliminate the after-supper periods of depression... Reason tells me I have no right to be depressed.

Only by ruthlessly exercising the disillusioning and unpleasant thought can I maintain any feeling of real detachment, any sense of being wholly apart from selfish concerns.

The days I don't read I feel like a barbarian brooding over a chunk of meat...
But I find that I crave light as a thirsting man craves water; and just the fact of having this lantern alive in the night hours makes an immense difference. I feel like a rich man.

Even in my most exalted moods I never quite lost the feeling of being poised over an undermined footing, like a man negotiating a precipice who pauses to admire the sunset.

I don't think that a man can do without sounds and smells and voices and touch, any more than he can do without phosphorus and calcium... From the depths of my being would sometimes surge a fierce desire to be projected spectacularly into the living warmths and movements the mind revisited.

For men less well prepared than Admiral Byrd the effects of isolation can be even more devastating - even in circumstances that are considerably less harsh. A recent documentary film produced by Douglas Baily concerned a group of 30 young men working at a construction base in the Canadian North who had all the conveniences of television, telephone, stereos, good food and accommodations. Many of these men nevertheless ended up "bushed," and no longer able to endure the isolation. Admiral Bird, by contrast, was a seasoned polar explorer, and accustomed to military discipline and harsh conditions. When he decided to "go it alone" at Advance Base, it was because there were supplies available to support only 2 of the proposed 3-man team. Byrd, though he had over 100 picked men to choose from at "Little America," felt that the risks of a 2-man crew were too great - that two men alone for so long a time would
almost certainly end in violence - writing in his book that: "Men who have lived in the Canadian bush know well what happens to trappers paired off in this way...

If solitude is a flood that drowns us, it can also be a stream that refreshes. For the Indians of North America solitude, in the form of private spiritual retreats, was a source of renewal for personal identity. Dr. Charles Eastman - "Ohiyesa" - wrote that it was customary among many Indian people to observe morning prayers, or meditations, which were always undertaken alone, and in silence, as a smaller version of the three or four day retreats that might be made several times a year. For the Indian, he points out, prayer consisted of listening to the "holy silence" - the voice of the Great Spirit - while standing, and looking upward, rather than kneeling with bowed head. Solitude as a profound religious experience was also described by Admiral Byrd in this passage written after one of his excursions into the lonely terrain around Advance Base:

Harmony, that was it! That was what came out of the silence - a gentle rhythm, the strain of a perfect chord, the music of the spheres, perhaps. It was enough to catch that rhythm, momentarily to be myself a part of it. In that instant I could feel no doubt of man's oneness with the universe. The conviction came that that rhythm was too orderly, too harmonious, too perfect to be a product of blind chance - that, therefore, there must be a purpose in the whole and that man was a part of that whole, and not an accidental offshoot. It
was a feeling that transcended reason; that went to the heart of man's despair and found it groundless.

This last thought, concerning the foundations of hope, brings us to the second form of experience mentioned earlier, that which outdoor writer Colin Fletcher has called "the burden of trivia." Fletcher writes that each of us carry with us this "tight little world of trivia" - a time-bound, ever-present nagging anxiety wringing its hands over schedules, details, and multitudes of other trivialities:

Anyone who has travelled on foot, especially alone, will recognize the syndrome. I should like to report that experience cures such nonsense. Unfortunately, it doesn't. It helps; it helps a lot. But I still find, especially on long trips with a sharp physical challenge, that I need at least a few days of "shakedown cruise." On a two month journey I made some time ago through Grand Canyon, it took me all of two weeks to break free. Whether you like it or not, the trivia are always there. And never underestimate them; either you subdue them or they subdue you. A single blister can blacken the most shining day. And if you are miles from anywhere, soaked through and shivering and with no confidence in your ability to contrive a warm, dry shelter for the night, you will be deaf to the music of raindrops drumming against your poncho, and blind to the beauty of clouds swirling round sawtooth peaks.
What Fletcher calls "breaking free" suggests a state of mind much like that reflected in the passages from Admiral Byrd's diary quoted earlier. Of his experience of this moment Fletcher wrote:

The trivia were still there... but I had overcome them. Had broken free at last from the 'din and deadline' of the outside world. I don't mean that I discovered at once the things I had come to find. But from then on I moved steadily toward them. Moved closer to rock and sky, to light and shadow, to space and silence. Began to feel their rhythms.

Trivia, in a myriad of forms, permeates modern existence with this "din and deadline." Researchers such as Vance Packard have shed considerable light on the processes whereby our very lives are becoming increasingly trivialized, shallow, and arbitrary. The most devastating influence of trivia, in this regard, seems to be in its power to function along the lines of the concept of "information disease" as a form of mind control (as was discussed in the last chapter.)

During the Korean war, over 7,000 American soldiers became prisoners of war in North Korea. Most of these were subjected to a set of mind-control techniques that the press collectively labelled "brainwashing." Of these techniques, the three most successful were:
1. Enforcing Trivial Demands
2. Demonstrating Authority
3. Occasional Indulgences

Of other methods used, including threats, degradation and isolation, most were simply adjuncts to the three above. Torture was not particularly effective, apparently, and in fact was not much used. Starvation and exposure were also not important factors, though a carefully maintained state of general uncertainty and physical exhaustion were effective to a degree.

Of the U.S. Army P.O.W.'s - over 6,000 men - 38% died in captivity - 1,500 in the first 5 months. 80% were estimated to have engaged in some degree of collaboration with the enemy, and 15% seriously enough to warrant court-martial. Only about 13% made any effort whatever to help others, and less that 5% actively resisted their captors. Of these deaths among U.S. Army P.O.W.'s, not one could be found to be attributable to mistreatment. What these men died of, in nearly all cases, was called "give-up-itis" by the men in the camps. This malady followed a regular etiology - from morose indifference, through gradual withdrawal, and eventually resulting in death from a form of psychogenic shock. If a man could be shaken out of this early enough, the process could be reversed - but when it
reached a certain point no amount of effort could save him. Subsequent studies found no reliable common denominators for these terrible losses (by comparison, the battle for Tarawa, considered the bloodiest of the Pacific war, resulted in 10% casualties - 1/3 of all U.S. Marine casualties in World War II). 36

Of the Turkish soldiers taken prisoner by the North Koreans (few of whom were captured without serious wounds), not one died while a P.O.W.; not one collaborated or cooperated with their North Korean guards. From the conviction that the Turkish soldiers should in fact have been allies of the North Koreans, great expense was gone to in trying to sway them. British socialists, including an admiral's daughter, were "imported" to lecture them - all to no avail. The Turks remained loyal to their own small group, and refused to listen to anything else. Of the U.S. Marine P.O.W.'s, less than 1% died, and only one collaborated (a colonel who had confessed under torture to "germ-warfare.") The contrasts between the numbers of U.S. Army P.O.W. deaths and those for Turkish and U.S. Marine P.O.W.'s is startling. At first it was assumed that different standards of training were the key factors, but early investigations indicated that this was not the case. It was eventually determined that "certain personality differences,"
related to whether a man had volunteered or was drafted, were the important factors. While 75% to 80% of U.S. Army personnel in Korea were draftees, virtually all Marines were volunteers (55 Army soldiers received citations for valour while P.O.W.'s - most were volunteers). Survival in the P.O.W. camps was therefore closely related to each individual's self-expectations, conscious or otherwise. 37

"Give-up-itis" was a direct response to the three mind-control techniques listed earlier (enforcing trivial demands, demonstrating authority, and allowing occasional indulgences). These seem to correspond very closely to the findings of the survival studies described in the first part of this chapter: "Trivial" frustrations and irritability resulting in escalating levels of anxiety; the elimination of even minor decision-making processes through ever-present authoritarian rules; and the apathy and dependence fostered by gradually making small "indulgences" seem disproportionately important. But the reverse of these techniques is also possible. Through experiences that enhance self-knowledge, and which add to the foundations of achievement that support self-trust and self-respect, the complex attribute we call "self-reliance" can be profoundly strengthened. The experiences of "culturally-structured" solitude and the "breaking free" of trivial anxieties and fears that accompany any real challenge are, it is suggested here, extremely important to this process.
In the North American Indian societies these two forms of experience were embodied in two very effective institutions: the individual spiritual retreat, and a closely-related emphasis on self-instruction. Dr. Franz Winkler, of the Myrin Institute in Denver, Colorado, helped bring about a conference of native elders, representing eleven tribal groups, on the topic of traditional child-raising methods. The practice of meditation was discussed, and there was strong agreement that the solitary spiritual retreat played a crucial role in the passage from childhood to the world of the adult - to be a "man" or a "woman" of the tribal nation was not automatic, but had to be earned. Navajo elder Alfred Bowman offered these words on this spiritual journey to the "high lonely mountain:"

That is his school: to teach him to endure all the natural elements that he will encounter during his life. Thus he is taught that he should never depend on anybody. He is an individualist, and he has to act like that and with respect to everybody and everything that he comes in contact with. 38

It was reported recently that Steve Fonyo, on his run across Canada, was invited to be formally adopted into the Blackfoot Indian Nation. During the ceremony it was pointed out that in earlier times it was common for their young men to go on solo journeys as far south as
present-day Arizona or New Mexico. 39 Much shorter retreats would follow throughout each person's life, serving as a well-spring for the renewal and reintegration of one's sense of identity. The Blackfoot chief "Brings-down-the-Mountain" has described in detail his own spiritual retreats of about ten days duration upon joining the "Medicine Pipe Society," and again shortly after the death of his son. 40 Chief John Snow, a distinguished author and elder of the Stoney Indians, has described this spiritual retreat as: "The most sacred search... a special religious journey into the mountains, seeking wisdom and divine guidance." 41 Among many Indian societies it was common for a boy to set out on his first such spiritual quest after having received instructions in a dream. The Nootka high-chief, James Sewid, described such a dream in his autobiography:

"I had a dream one night in which Toby Willey's mother came to me and told me to go up in the woods and bathe in some water. She told me in my dream to find a stream or a little pool of water and take a bath and then rub myself down with hemlock branches. I was to do this four times..." 42

George Manual, the respected Shuswap leader and elder, began similar training under his grandfather's supervision, but broke off training when his grandfather decided that it had become "too dangerous" for him to seek power in the mountains now that the white men had come. 43
Among the Sioux, training as a scout was often associated with the spiritual retreat, or "hanblecheyapi." The Sioux chief Luther Standing Bear has described this training:

One of the most important and indispensable members of Lakota society, and so considered by that society, was one not so often seen or so much talked about - the scout. He was the man who preferred, usually, to work alone, either by night or day, and whose outstanding quality was scrupulous honesty. He ran terrible risks, was not a fighting man, yet knew how to fight when he had to, and was withal the most relied upon man in the tribe. In him reposed the utter dependence and faith of a people for their livelihood... and their safety from danger.

The great Apache warrior Geronimo, perhaps the best-known of all the Indian leaders of the past, spent his last days as a kind of minor celebrity, travelling throughout America and Europe. During this time he also recorded much of his life history, including aspects of his boyhood training. The Apache "novice complex" was one of the most rigorous and careful training programmes of any Indian Society. Each stage required ceremonial recognition, and considerable experience had to be acquired - and skills proven - before a youth could be admitted to the council of warriors. Geronimo - "or Goyahkla," in Apache - was admitted at the unusually early age of 17. One of his earlier training experiences had been to travel for about two weeks "into the distant mountains," carrying only a knife, a
water-skin, and about two pounds of pemmican. He was to travel only at night, be extremely careful not to be seen by anyone, and seek out in the "high places" a pool or stream to bathe in, and a "good place" to meditate, or pray. He was to sleep by day, carefully concealing himself to avoid discovery by enemies, and to fast as much as possible. Geronimo's descriptions of this spiritual retreat are generally similar to the practices of many Indian societies, as numerous sources have cited.

One of the most successful of the Outward Bound experiences, the 3 or 4 night solo, was introduced to Outward Bound by an American Indian named Tap Tapley, who became a chief instructor with the Colorado school. For large numbers of Outward Bound's students the "solo" has proved one of the most vividly remembered and emotionally moving of any part of the programme. "I think I grew ten feet tall during my Solo and I hope I stay that tall," wrote one student in her diary. The New England School drops each student off on a separate island; in New Zealand, the students have to row in to a deserted stretch of beach in small rubber dingies from the parent ship, in the dark. But while the solo has been considerably more successful than originally anticipated, not all of the Outward Bound students seem to benefit from this experience. What seems to determine this is each individual's mental set going into
the experience, and while this "mental set" is crucial, there is little time within the framework of the programme to deal with this factor on an individual basis. Studies of the practice of meditation have provided valuable clues as to why the preparation of one's "mental set" is critically important in this regard.

Medical research at U.C.L.A. has shown that in the "true" meditation state a number of physiological changes take place: the heart rate slows; blood pressure drops; e.e.g's show increased alpha activity; basil metabolism drops as much as 20%; the galvanic skin response (G.S.R.) increases up to 400%; and blood lactate levels drop dramatically. The higher the G.S.R. levels, the greater the degree of relaxation and the lower any forms of anxiety. Lactate, produced by the skeletal muscles, increases under stress, and is in fact the chemical cause of the sensation we experience as anxiety (i.e. very relaxed people, injected with lactate, will experience high levels of anxiety). Sleep reduces lactate levels, but forty minutes of meditation can reduce blood lactates as much as 6 to 8 hours of sleep. Galvanic skin response increases much more during meditation than during sleep, and basil metabolism drops to much lower levels. 48 In Japan, physiologists have reported that Zen
monks, while meditating, maintain full awareness of environmental changes, but with no detectable physiological reactions. 49

What these findings mean, relative to the North American Indian practice of the personal spiritual retreat, is that Indian youth went out not only to practice meditation, but to practice meditation while overcoming his fears of the unknown, unseen "threats" around him - in short, to learn the art of anxiety-reduction in what would otherwise be high-stress situations. It is not the real, immediately visible threat that produces the free-floating anxiety of "give-up-itis," but rather the constant prodding of our fears of possible threats. This is the training experience wherein the Indian could acquire the ability to face even death itself with the self-control and emotional steadiness required to sing his "death song."

Among the Australian Aborigines, where a similar solo spiritual retreat - called the "Walkabout" - is practiced, it is combined with the ceremonies of circumcision and sub-incision. Anthropologist John Greenway has described this experience as a "mnemonic device," or means of recalling one's earned identity, and the related mythic
elements of tradition, under future stress conditions. For the Aborigine, Greenway says, this ordeal embodies the very essence of manhood:

But when it is over, as all things pass, the boy has become a man, A Man. He endured the worst ordeal a male can imagine, without scream, cry or snivel. Nothing can ever frighten him again. He can go into this most hostile of all environments naked as he was born and survive." 50

For the American Indian youth - as for the Aborigine - the solo spiritual retreat also required putting into practice everything that had been learned (or assumed learned) about survival on one's own in the wilderness. This approach to self-instruction required considerable trial and error, and the resulting experiences of "discovery" that were intensified by the real and present motivations that the situation, itself, imposed. As Jean Piaget once observed, everything you instruct a child in, you forever prevent him from discovering himself.

The importance of this emphasis on self-instruction has also been supported by research into learning which has indicated that we retain perhaps only about 10% of what we hear, and 15% of what we see - but 80% or more of what we experience directly, or practice. 51 Educational researcher Benjamin Bloom has determined that 95% of students can master materials at an "A" grade level
if the learning is structured according to their time requirements, and in ways appropriate to their individual learning styles. The greatest "lesson" of this self-instruction is not concerned with the content of what is to be learned, but rather with the experience itself of having successfully achieved on one's own a challenging and important task - and this experience becomes the reality of self-reliance.

"Firemaking" metaphorically symbolizes this experiential process as a whole, and at the same time is one of the concrete skills essential to the solo retreat - which is, in essence, an educational approach to the realization of this process. No other specific skill so identifies the experienced and competent outdoorsman as the ability to build a fire quickly and efficiently, particularly under adverse conditions. At the same time, to learn this skill in isolation - as in a "classroom exercise" - would be to remove it from the larger frame of reference, that is the essential ground of personal experience. In the North American Indian societies, the cultural reality of their spiritual values provided this ground, and thus the solo retreat was maintained as a profound spiritual experience, and not merely "three cold, hungry, miserable days all alone in the middle of nowhere."

* * * *
FIREMAKING as a metaphor, therefore, serves as a kind of "mnemonic-gestalt" symbol for the indirect, synergetic processes of experience (as outlined in this sub-chapter) that provide effective cultural structures for the acquisition of the essential qualities of self-reliance. A synthesis of this structure within an educational programme based on the principles outlined in this paper, and within the context of contemporary society, will be attempted in the last chapter of this paper.
TRACKING

Over the past ten or fifteen years search-and-rescue teams in Canada and the U.S. have on a number of occasions witnessed the remarkable success of expert trackers, on loan from the U.S. Border Patrol, at finding people who have become "hopelessly lost" in vast wilderness areas. This has inspired the initiation of courses in tracking for search-and-rescue (SAR) teams, taught by these same experts, who also have their own personal concerns that this unique craft not be allowed to die out and be lost to human experience.

Joel Hardin, Senior Tracker with the U.S. Border Patrol, has taught courses in tracking to SAR teams throughout British Columbia. In these courses Mr. Hardin demonstrates a mastery of his unusual craft that at first seems almost like some form of E.S.P. — but as the course proceeds the students begin to see that, with practice, they might eventually be able to achieve, inching along on hands and knees, at least a part of what Hardin is capable of at a
dead run. His level of mastery, he explains, requires about 10 years' hard work. Hardin is one of a small handful of men who have kept alive these skills, handed down through a kind of apprenticeship system, from the original Apache, Yaqui, and Navajo trackers hired by the Government in the late 1800's.

The uncanny abilities of the American Indians as trackers have been well documented. In the spring of 1865 a company of Pawnee Indian scouts was organized at Fort Kearny, Nebraska, under the command of Lt. Frank J. North, a former trader who had lived with the Pawnee and spoke their language. Although the Pawnee had generally been regarded as the "most troublesome" of the plains Indian tribes, they had been persuaded to cooperate with the whites through promises that their homes would remain secure, and arguments that peace was their only hope for survival. Lt. North, in his diary, recorded his observations of the skills demonstrated by the Pawnee in tracking and in wilderness travel. On one occasion, traveling at night on the trail of a Cheyenne war-party that had raided a Pawnee camp, he found that he was barely able to keep up with the two Pawnee scouts ranging out ahead on foot. The moonless night was so dark he could barely see the head of his own horse in front of him, yet the Indians never lost the trail, and they were able to surprise the Cheyenne raiders just before dawn.
North had himself tried to study their skills at tracking and had found these nearly impossible to apprehend, even in broad daylight. On one other occasion, guiding a column under General Dodge, North's Pawnee scouts were able to detect and correctly identify horsemen in the distance which the soldiers were unable to even see. General Dodge himself later wrote of his amazement at the uncanny abilities of these Indian trackers. 

Many of the Europeans who had direct contact with the older Indian societies of North America recorded their observations of the acute perceptive abilities of the Indians. In the early 1600's, the Jesuit Father Francesco Bressani, commenting on their impressive memories, wrote that: "...you cannot confuse or lose them even at night in the woods; even young girls captured by enemies have escaped and travelled three or four hundred miles home with no knowledge of terrain." George Catlin, who travelled extensively among the plains Indians during the early 1800's, recorded his admiration for their powers of observation in reading nature - which, as an artist, he particularly appreciated. Captain R.B. Marcy, a cavalry officer during the 1880's, wrote that his Indian guide was able to "...start from any place to which he had gone by a sinuous route through an unknown country, and keep a direct-bearing
back to the place of departure... even during the most cloudy or foggy nights... There are few white men who are endowed with these wonderful faculties, and those few are only rendered proficient by a comparable experience."

Tracking, in fact, seems to be only one application of a particular capacity of the human mind that, generally, seems to be better developed in primal societies than in modern civilization. Other applications of this capacity have been observed in various "primitive" societies around the world:

Marshall McLuhan has commented on research done by Archibald MacKinnon, former Dean of Education at Simon Fraser University, in which members of primal cultures were apparently able to learn not only to fly, but repair "any part of" four-engine aircraft in only about 3 months — with no preparatory training in Western knowledge.

During World War II, at Gander Air Force Base in Newfoundland, Eskimo hunters, originally hired as sweepers, became some of the best aircraft technicians on the base — while casually observing the work, they would suddenly reach in and "fix" something that the trained technician had not yet seen. Nicola Tesla, it is said, had the ability to visualize the detailed functioning of complex machines in his mind, and "test" them for years of wear in a few moments.

Polynesian mariners, by crouching in the bows of their canoes, can determine by the motion of the waves, the precise direction of any island for hundreds of miles around. They learn this as children, through a mnemonic device called a "mattang," that looks like a huge bamboo lattice-work in the shape of an artistically abstract Maltese cross. Haida navigators relied on certain mythic tales to achieve the same ends.
Australian Aborigine children can casually glance for a few seconds at a checker board covered with small, oddly-shaped stones, and accurately replace them after you brush them away. Caucasian children concentrate intently, but are able to replace only 3 or 4. An Australian Aborigine "cowboy" can reportedly tell at a glance if any cattle are missing from herds as large as 600 or more... yet the Aborigine has numerals only from 1 to 3; anything over that is simply "many." 61

African Bushmen, as depicted in the movie "The Gods Must Be Crazy," can identify individuals at distances that whites can perceive only "something." The Bushmen can also return to an unmarked site to dig up a tubor, which he had noticed a year earlier as not yet mature, in the vast expanses of the Kalahari. Richard Leaky, at Olduvai Gorge, has stated that African natives make the best fossil hunters, finding tiny fragments that professionals overlook, even after careful combing. 62

These remarkable skills represent different forms of a capacity of the human mind that, in modern science and philosophy, has been labeled "General Systems Thinking." This "system" embraces a wholistic approach to thinking, the integration of diverse fields of knowledge, an assumption of "unity in nature," and a commitment to humanism as a guiding principle. 63 General Systems Theory has been defined as an way of appreciating complexity, and an attempt at a cure for the fallacies of over-specialization, by Ludwig Von Bertalanffy. 64 Kenneth Boulding has described it as a concern with "laws about laws" - an attempt to perceive the "mere outlines of big things" (an example of
which might be Marshal McLuhan's comment that "the content of any message is about as important as the label on a hydrogen bomb").

The greatest importance of General Systems Theory for contemporary society, a number of its proponents argue, is the degree to which it may be of help to us in avoiding logical fallacies - errors in thinking so large we do not see them. Bertalanffy has stated that this is essentially a matter of being able to separate analogies from logical homilies. 65 Cyberneticist Norbert Weiner has described it as a fundamental error that places too much emphasis on conscious, analytic thought processes, and ignores forms of learning or experiencing that we in fact share with many other animal species. 66 An example of this shared capacity, that has received considerable popular attention in recent years, is that of the Japanese Macaques of Koshima Island, who have not only learned to swim, but to wash vegetables in the ocean, and actually use it as a "sieve" for separating grain from sand. 67 A more remarkable example, perhaps, would be that of the Oyster-catcher, a bird that must "study" for an entire year to learn the art of opening oysters with its beak. Oyster-catchers can, in fact, be divided among three basic "technological" approaches to this problem, for they will only mate with
another bird "of the same guild" (if an egg from one "guild" is placed in another Oyster-catcher's nest, however, it will learn her way). 68

Non-rational, intuitive levels of perception, experience and learning do seem to be increasingly appreciated in the "analysis" ridden west. Brian Josephson, winner of the Nobel Prize in physics in 1973, has described how his involvement in "oriental mysticism" - meditation training - has given him a clearer, more focused mental capacity, not only for social sensitivity and artistic appreciation, but for abstract conceptualizing as well, "...Josephson has also stated that the intuitive levels of metaphor demand different kinds of thinking, and that "...getting beyond the intellect is quite important in this sort of thing." This appreciation of wholistic thinking, of metaphor, analogy and model, does often seem to be at odds with our rational deductions - or "logical homilies." This apparent conflict is actually a case of mistaking an "either-or" situation for what is actually a matter of appropriate roles or relationships. 69

An interesting and important example of this has been provided by David Kahneman, a University of British
Columbia psychologist. While lecturing a class of U.S. Air Force flight instructors on the values of positive reinforcement, Kahneman was challenged by the class that their experience, in fact, was that praising good performance invariably resulted in poorer work, but that criticizing bad performance always led to improvements. Kahneman was immediately struck by the realization that this was an example of what is termed "regression to the mean," a statistical principle first discovered by Sir Francis Galton. This "more complete view" explains the error — or "logical fallacy" — of their assumptions. An exceptionally high score obviously tends to be followed by scores closer to the person's average performance, which improves at a slower rate and can be detected only by longer-term measurements. This is also an example of what general systems theory refers to as the "deterministic fallacy."

Another other kind of error, called the "operational fallacy," can be seen in many aspects of modern life: "Evolution means 'survival of the fittest' — therefore 'bigger' must be 'better';" "Detroit is producing more cars than ever — therefore the economy must be in good shape;" "The body count in Vietnam is up — therefore we must be winning." The problem of the "operational fallacy" seems to be related
to how our predetermined mental-set shapes our appreciation of situations or events. We may "know" that we like steak - hate liver - but we are also capable of rationalizing the most outlandish reasons "why," claiming that "it tastes good" or "it tastes terrible," as though these were inherent properties of the substances themselves. The "why" in this case is, of course, of a different order of experience than is the "that," and this is where the confusion occurs. To avoid these errors in our logical thought processes we need to develop clearer, more effective ways of perceiving and understanding experience. As an educational goal, this coincides with what educator and systems theorist Lionel J. Livesey, Jr., has termed "Systems Education for a Noetic Society."  

The term "noetic" implies not only perception, but the ability to perceive subleties of pattern and relationship, and an intuitive grasp of analogy and implication. General systems theorists Gerald Weinberg and Kenneth Boulding have suggested that there are three specific aspects of the "systems approach" whereby these noetic qualities might best be achieved: To get a "minimal view;" To get a "complete view;" And to get an "independent view."  

It is suggested here that perhaps the most elaborate examinations of these categories may have been undertaken in the guise of three rather remarkable works of pop-
ular literature - remarkable, in part, because each of these works features a main-character that has acquired world-wide fame of virtually mythic proportions; each of these literary characters was in fact inspired by a real-life person (each of whom has remained a "complete unknown"); and each of these individuals possessed a singularly astonishing talent that was the source of the "inspiration," and which the fictitious characters have come to metaphorically symbolize in their uniquely human forms. These three "talents," moreover, correspond precisely with the noetic points-of-view suggested by Weiberg and Boulding.

The first of these mythic figures is that of Sir Arthur Conan-Doyle's "Sherlock Holmes," the main character in a series of stories so popular that they may well be the most widely-read fictional literature on Earth. The London Post Office, for example, maintains a large bin for the steady flow of mail to "221 Baker St;" many notable people, including Winston Churchill and Franklin Delano Roosevelt, have been secret members of "Sherlockian Clubs;" and the Sherlock Holmes stories are required reading in - of all places - the Russian Army. Sherlock Holmes was actually inspired by a Dr. Joseph Bell, who had been Conan-Doyle's teacher in medical school. Nearly every one of Holmes' shrewd deductions was in fact based on actual situations involving Dr. Bell - Robert Louis Stevenson, who had been a
classmate of Conan-Doyle, recognized the good doctor in the first Sherlock Holmes story, and Conan-Doyle later confirmed this. The Sherlock Holmes stories, according to Conan-Doyle's biographers, were actually responsible for the establishment of scientific police-work and forensic investigation. Forensic investigation - "Sherlock Holmes institutionalized" - is in one sense a refined version of "getting a minimal view." Holmes personified the totally focused and intent concentration on minute detail, and the careful fitting together of these details into a larger framework, that gave Holmes - as it gave Dr. Joseph Bell - an almost mystical command of the "greater picture." In this way the sharply-focused "minimal view" serves as an extremely valuable tool in the solving of certain problems related to the larger situation, or "system."

The fictional character "Huckleberry Finn" might seem a bizarre addition to this list, but Mark Twain's "alter-ego" played the central role not only in the story that Ernest Hemingway considered the finest work to date in American fiction, but also in what may be one of the most insightful treatises on education ever written. Huckleberry Finn was not inspired by Mark Twain, however, but by a man named Bixby. As a youth, Mark Twain - then young Sam Clemens - served as a cub-pilot under one of the greatest of
the lofty river-boat pilots of the Mississippi River, William Bixby. The accounts of Mr. Bixby's skills in *Life on the Mississippi*, place him easily in the company of the Polynesian navigators and Pawnee trackers described earlier.

As a cub-pilot, Sam suffered a profound shock when he discovered that he not only had to become "intimately acquainted" with every "sand-bar, dead-head and snag" on the entire river, but that the hundreds of miles of river were completely different going the other way. But what nearly broke him, however, was his next discovery that the river completely "rearranged itself" for every trip. Bixby explained that one simply had to "know" what to do in each and every situation - you would never know why or how you knew, you simply knew, period. Sam Clemens finally did become a river-boat pilot, and he also became Mark Twain - and through these he became Huckleberry Finn as well, for as Sam Clemens learned to "read" the river in order to pilot a river-boat, Huckleberry Finn learned from the river the lessons of life. Bixby's remarkable skill at "knowing" what to do at each critical turn in the river - the absolute reliability of his intuitively read mental map that "updated itself" (like Tesla's machines) to match the real river - represents a very specific application of "getting a complete view." Huckleberry Finn, of course, represents a more general one. In this "view" it is a case of the larger
picture coming to the aid of the specific situation, or detail, of the moment—much as a larger view of the terrain helps in correcting one's course.

The third of these mythical figures is that of "Robinson Crusoe," who sprang from the real-life adventures of Alexander Selkirk, a Scottish seaman who was marooned on a small island about 400 miles off the coast of Chile in the year 1704. Selkirk had been left with barely a fraction of the resources that Defoe kindly provided Robinson Crusoe, and his adaptations to the requirements of survival on his island—barely 13 miles long—were correspondingly remarkable. Selkirk's mastery of the 800' cliffs along the shorelines, which he negotiated as swiftly as the goats, saved him on a number of occasions from the crews of Spanish ships who hunted him for sport (England being at war with Spain at the time). He domesticated goats, as did Crusoe, but he did so by learning to run them down on foot—over 500 of them all told—along the craggy ridges of the island's central highlands. Crusoe had a chest of tools—Selkirk not only made his from scratch, using driftwood, seashells and whatever, but he "invented" most of them as needed. "Robinson Crusoe" has become the world's universal metaphor for the man cast adrift from society, but Alexander Selkirk, if anything, provides a more inspiring symbol for the man who takes a truly "independent view"—who succeeds far beyond
what could ever be believed in a fictional character, simply because he refuses to be guided by "what everybody knows" to be possible. 76

Tracking, as it was learned in North American Indian societies, represents a particularly effective approach to developing the "minimal," "complete," and "independent" views proposed for the general systems "noetic model." Dr. Livesey, who developed this model, has described it as essentially an attempt to help modern man recognize the importance of the natural systems of which he is a part, yet treats as though he merely "owned." "Instead," he writes, "one has those feelings of kinship and respect that colour the culture of the Sioux, the Navajo, and other American Indian nations. In such cultures, the creeping people, the standing people, the flying people, the swimming people, and the forces of air, water, soil, and fire are incorporated into the councils of government. The Indians knew that if man tried to insulate himself from nature, the other systems of nature would be capable of making non-negotiable demands." To become a "noetic society," Dr. Livesey argues, requires systems education, so that we can "overcome our inability to see things whole." Tracking, as a metaphor, represents an entire curriculum for the development of this greater sight. 77
Joel Hardin, in his tracking courses for SAR teams, emphasizes attention to detail as the most difficult aspect of tracking to discipline yourself in. The years of effort are, to a great extent, taken up with this discipline. Martial-artists know of the importance of this mental training, which is a part of the reason why their skill is also referred to as a "ten-year art." There is a Samurai maxim, often seen on the walls of martial arts schools, which states that "a man who has mastered an art reflects it in his every action." Hardin has observed that to master the art of tracking is to be forever changed, to never again be able to see the world the way other people do. "You see too many things," he says, "that other people are never aware of." Frank North, the commander of the Pawnee Scouts, recounted how he once offered to have one of his men go back and retrieve a tobacco pouch that General Dodge had lost "about 5 or 10 miles back." The general bet his collection of silver dollars that no one could possibly find the thing, let alone do so and catch up with the column. The same day one of North's Pawnee scouts rode in and silently handed over the lost pouch.

Hardin has also commented on the uncanny powers of the "complete view" that one's intuitive map can provide. As a matter of course, Hardin has said, he has found himself
following "sign" for hours, never knowing exactly what it was that guided him. Anthropologist and naturalist Vinson Brown, who was raised among the Sioux and later undertook the "hanblecheyapi," or Sioux version of the vision or guardian-spirit quest, has described a unique form of training in which youths would run cross-country at night over the prairie stretches and through wooded copses along the streams. It took a lot of stumbling, running into branches and tripping over snags, but eventually they would learn to "put their faith into the above-one," and be able to run overland in almost total darkness.  

Experiments at the Medical Research Center in Lyons, France, have discovered the existence of "blind sight," in which patients "intuitively" point accurately at a moving point of light which they at the same time argue that they can neither see nor point to. Other experiments, by Dr. Robin Baker, of Manchester University in England, have confirmed that humans definitely have a kind of "magnetic sense" that relates to their environment, so that students can point accurately toward "home" after riding around in a van carefully blindfolded, while controls with no blindfolds tend to be more erratic.

Jamake Highwater, in his book The Primal Mind, has provided an interesting insight into the degree to which Indian people may have conceived of these "minimal" and
"complete" levels of seeing in terms of sophisticated abstractions. Writing on the role of image in different cultural systems, Highwater included these words of a native Indian elder:

You must learn to look at the world twice. First you must bring your eyes together on the grass, so you can see the smoke rising from an anthill in the sunshine. Nothing should escape your notice. But you must learn to look again, with your eyes at the very edge of what is visible. Now you must see dimly if you wish to see things that are dim - visions, mist, and cloud-people... animals which hurry past you in the dark. You must learn to look at the world twice if you wish to see all there is to see."

Of the third and last conceptual perspective in the general systems triad, getting an "independent" view may prove to be the most challenging. E.T. Hall has written that we are so culturally-contexted in our perceptions and assumptions that unless we can find some separate, unconnected vantage point from which to observe our experience, many of the most important aspects of it must remain unconsciously blurred into the neutral background of life. Hall suggests that there are only two ways of achieving this: by placing oneself in another culture long enough for the principles of negative-feedback to bring these aspects of experience into separate focus - or by creating within our own societies a unique vantage-point, a separate cultural "system" from which similar observations are possible.
But Hall has argued that to extract such a system of conscious understanding of these factors "from the living data" represents as great an intellectual challenge as any in man's experience; that it would require a highly sophisticated cultural mechanism capable of transcending our background of experience. As difficult as Hall makes this latter alternative seem, however, precisely just such "mechanisms" appear to have evolved within the cultural systems of the Indians. 84

Virtually all North American Indian societies maintained elaborate and sophisticated ritual ceremonials in which special personages, called "sacred clowns," played centrally important roles. These sacred clowns were essentially the guardians of carefully-structured "reverse-image" ritual parodies of the formal ceremonial events and iconic symbols of the society, and their duties invariably included the desecration, vandalizing and general mockery of all that was holy and sacrosanct in these ceremonies. In this "desecration" there can be seen, perhaps, something of the Zen saying that "if you meet the Buddha on the road—kill him!"—and something of the role of the medieval court jester, who served as a puncturer of ego-inflated rhetoric, and royal folly. But in the Indian societies the sacred clowns had also to do with transformation, and through this, transcendence.
Among the Hopi, for example, the "Katcina" dancers would perform obscene assaults upon those carrying out the seasonal religious rituals, not only shocking the senses, but providing a comic relief that is vastly entertaining—which is probably the best frame of mind for fully appreciating the intuitive meaning of such ceremonies.\(^{85}\) The Katcinas also had important functions of a more serious nature, as Hopi leader Don Talayesva has recounted in his autobiography. In one of the ceremonial rituals of his passage to manhood, Talayesva was taken into a kiva—an underground chamber—where he underwent ritual whippings by the supernatural Katcinas. Afterwards the Katcinas removed their masks, and for the first time he saw that they were actually members of his community. Jamake Highwater has conjectured that Taleyesva's experience was not a destruction of faith, but actually a means of elevating it to a higher level of perception and appreciation.\(^{86}\) Among the Sioux there were the "Heyokas," the mystic sacred clowns that could thrust their hands into boiling water to bring out chunks of meat to swallow whole; like their Cheyenne counterparts, the "Contraries," they would try to do everything backwards: ride backward, sleep outside the tipi (or go inside "for some sun"), bathe in sand, draw pictures in water, or hunt plants with a bow and arrow.\(^{87}\) The Pawnee
sacred clowns, the "Buffalo Clown Warriors," orchestrated month-long elaborate "grand-operas" in which no one, not even the shaman-doctors, were safe. 88

The purpose of all this, Highwater suggests, was essentially spiritual; that: "The clown's behaviour is a vivification of his knowledge of another reality." For the child in such a society the Katchina, Heyoka, or Hamatsa was a tangibly experienced supernatural being (like, perhaps, the department-store Santa Claus in our own). When older, the child would experience different levels of the meaning of "sacredness" through personal, spiritual transformations. What is essential here is that this "other reality" was experienced directly, and not merely "conceptualized." In this sense this "other reality" goes far in satisfying Hall's cultural mechanism of transcendence. Of the experience of this transcendence, the Sioux holy man and prophet Black Elk has written:

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 things as they must live together like one being." 89

In the Indian societies "tracking" was essentially a synergetically integrated use of the complex systems of human perception, conceptualization, and
decision-making. Thus, tracking applied to a number of levels of cultural experience, the most obvious of which involved the physical environment, in hunting and scouting. In this (as expressed earlier in the quote by Ohiyesa), the Indian sought not only to develop great powers of concentration and attention, but to be able to "put his faith in the above one," in acquiring intuitive guidance as well. On another level, that of the social environment, the Indian applied himself to oratory, and to the myths and legends of his people. On this level the Indian learned to "track" not physical clues, but metaphors, analogies, and abstractions. On a third level, that of personal spiritual identity, he or she learned to track the significance of images — in dreams or visions.

The principle of negative feedback applies here, for any "inability" in these forms of tracking indicated a danger to the community. A poorly-developed ability to read nature, for example, indicated an equally poorly-developed adjustment to nature; a lack of oratorical skills likewise implied a poor adjustment to culture, and the absence of vision-experiences suggested a poor adjustment one's inner self — or, "unenlightenment." The great Sioux warrior Crazy Horse referred to these qualities of "adjustment" in recounting his vision of the dark days to come — through which some would survive "who still reflected in..."
their eyes the earth and the sky." Thus in all things, in tracking, in oratory and in prayer, the Indian sought to be a man of vision.

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The implications for the importance of this "vision" - for which TRACKING is used here as a metaphoric symbol - as applied to the modern world recall Prof. Lionel Livesey's adjuration that we must become a "noetic society." In the fields of environmental understanding - ecology and synecology in particular - in communications and the technology of the "information revolution," and in the growing need for better interpersonal and transcultural facilitation skills, the importance of this wholistic, visionary and strategic capacity of human intelligence cannot - it is humbly suggested - be overemphasized.

More specific "curricular" proposals in this area will be covered in Chapter Six.
It is one of the paradoxes of civilization that among the vast multitudes that populate our technologically advanced nations, there seems to be no individual representative so scarce as the technologically sophisticated person. The "average housewife," the "man in the street," is only rarely acquainted with even the most fundamental principles by which the thousands of devices and mechanisms of our artificial environment function. The following "small quiz" is offered as brief illustration of this:

True or False?

___: The Simple Relay is an Olympic event.

___: The Expansion Valve is a stereo component.

___: The Venturi is an Italian racing car.

___: Planetary Gearing makes the word go 'round.

___: Viscosity Curves will attract varsity crews.

___: The Bi-Metal Switch is something weird and pornographic.

___: Colloidal Suspension is recommended for pick-up trucks (especially in California).

___: Ohm's Law is something you learn about in Transcendental Meditation.
Benjamin Franklin described man as the "tool-making animal," but the modern "techno-peasant," as one recent book identifies him, comes off a distant second-best in terms of utilizing the principles and concepts of tool use when compared with his counterpart in "primitive" society. The comments on the Eskimo "technicians" at Gander Air Force Base (see under TRACKING) are one of the more startling evidences of this.

The Eskimo, in particular, have impressed many observers with their remarkable adaptations to their environment. Edmund M. Weyer, Jr., in "Eskimo Ingenuity," has remarked that a full study of their technical innovations would require several volumes. It has been said that modern science could not add even the smallest improvements to the Eskimo's utilization of his environment - within the limits of the resources of that environment. Why this is true is probably related to Thomas Henry Huxley's observation that "Science is nothing more than a systemization of the principles of common sense." That the American Indians, like other primal peoples, relied for their survival on the efficient application of these principles should be obvious. In "The American Indian as Inventor," ethnologist Erland Nordenskold has observed that their fluency in the use of these principles was very well developed, often more acutely so than among the Europeans of that time.
How is it, then, that modern man — unless he is a member of one of the technological professions — has become this "techno-peasant"? Over-specialization is surely at the heart of the matter, but there is also the influence of an educational system that not only over-compartmentalizes, but strongly emphasizes the rote, "one-right-answer" approach to learning, and imposes its own hierarchy of values in terms of what "should" be learned. Thomas Henry Huxley wrote of this system:

I do not disguise my conviction that the whole theory on which our present educational system is based, is wrong from top to bottom; that the subjects that are now put down as essential... are luxuries, so to speak; and that those which are regarded as comparatively unessential and as luxuries are the essentials.

The educational system Huxley describes here overemphasizes the processes of teaching — of authority and control — to the detriment of the processes of learning. In response to suggestions concerning the importance of self-instruction, or of self-directed experiential learning, it is almost hostile. Yet these processes are exceptionally important to learning: "I hear and I forget — I see and I
remember - I do and I understand," goes an old Chinese proverb. "To teach is to learn," a Japanese maxim states. "Whom are you?" he said, for he had been to night school...

In contrast, the Indian's educational system emphasized a "do-it-yourself" reliance on self-instruction, and reinforced this process by contributing directly to the "student's" sense of fascination, interest, and commitment through elaborate ceremonial celebrations of recognition. An important form of these were the "first-fruits rites," which George Pettitt has described as among the oldest of man's educational practices. What the Indian's system produced, therefore, was not the highly-trained professional, but something more on the order of the "gifted amateur."

Lt. Col. Charles Beckwith, who created the anti-terrorist military command "Delta Force," has written of the type of individual needed for the challenges that Delta would have to face. What they were looking for was not the certified "expert," but the person with aptitude and a kind of "abiding interest" - "What we were looking for," Beckwith writes, "was flair." What is important here is how extremely rare they discovered these qualities to actually be. In seeking out individuals "...who could think and operate by themselves... men with resolve who could operate
decisively in the absence of orders... who could get into buildings or planes... (who were) explosives experts, locksmiths, medics, electricians... men who could hot-wire a Ford or Ferrari... climb mountains or buildings... who spoke other languages." What Delta was looking for was not polished skills in these areas, but rather the quality that Beckwith has described as "flair." After all the levels of screening were completed - from the man-in-the-street to the qualified Delta operative - probably no more than one in two or three thousand could be expected to make it all the way. 95

Delta, of course, sought only to find these attributes - not to create them. Even the resources of the U.S. Army have not been able to do this, as the survival studies discussed earlier in this paper have indicated. George Leonard, in his book Education and Ecstasy, has explored some of the reasons why this has been the case. He describes his boyhood fascination with ham radio as virtually an addiction - of the sort Dr. William Glasser calls "positive addiction." 96 When you combine the strong drives that Leonard describes, with appropriate opportunities for self-directed achievement, you have the essence of those educational processes that contribute most effectively to the qualities of personal competence. You also have precisely the approach of the Indian's system of education.
Tools, in this regard, can be of an analytic, or intuitive reality as well as a material one. The character attributes of capability, innovative resourcefulness, dexterity and energetic efficiency can be summed up in the word "competence," and the experiences of living and doing that create these attributes must begin early, and be strongly supported by the resources of the community, if it is to be achieved.

TOOLMAKING, as a metaphorical label, suggests an approach that goes somewhat beyond the simple process of learning through hands-on experience in the manufacture of tools or other artifacts — as in contemporary industrial-arts classes — for it is also an attempt to address the processes whereby "tools-as-ideas" are derived from one's inner resources and achievements. For example, consider Frank Lloyd Wright's account of his exposure to "Froebel-Blocks" while in kindergarten, which he credited as the inspirational source of his "Usonian" concepts of architecture, and his "instantaneous recognition" of the same underlying principles in the Japanese "tatami-mat" layout in home design. Dr. Charles A. Eastman, quoted earlier as "Ohiyesa," has described similar experiences in his own traditional upbringing among the Dakota, under the tutelage of his uncle:
He went a little deeper into the science when I was a little older, that is, about the age of 8 or 9 years. He would say, for instance: "How do you know that there are fish in yonder lake?" "Because they jump out of the water for flies at midday." He would smile at my prompt but superficial reply. "What do you think of the little pebbles grouped together under the shallow water? and what made the pretty curved marks in the sandy bottom and the little sand-banks? Where do you find the fish-eating birds? Have the inlet and the outlet of a lake anything to do with the question?" He did not expect a reply at once to all the voluminous questions that he put to me on these occasions, but he meant to make me observant and a good student of nature.

In this passage can be seen elements of the Socratic "inquiry-method" as well as an emphasis on acuteness of perception, as has been described earlier under TRACKING. For the Indian, of course, the essential relationships were those concerning the natural environment, for all of his material culture derived from nature in close, personal ways. But then, Froebel's blocks themselves had been derived from the patterns of crystallography, which are also a reflection of nature's fundamental form.

* * * *

An example of TOOLMAKING - of the principles outlined here - is provided in Chapter Six, as a part of the proposed programme based on this paper.
Reflective apologists for war at the present day all take it religiously. It is a sort of sacrament. Its profits are to the vanquished as well as to the victor, and, quite apart from any question of profit, it is an absolute good, we are told, for it is human nature at its highest dynamic. Its "horrors" are a cheap price to pay for rescue from the only alternative supposed, of a world of clerks and teachers, of coeducation and zoophilia, of consumer's leagues and associated charities, of industrialism unlimited, and feminism unabashed.

No scorn, no hardness, no valor anymore! Fie upon such a cattleyard of a planet!

So far as the central essence of this feeling goes, no healthy-minded person, it seems to me, can help to some degree partaking of it. Militarism is the great preserver of our ideals of hardihood, and human life with no use for hardihood would be contemptible.

The foregoing quotation, from William James' well-known essay "The Moral Equivalent of War," recognizes a larger application of what, earlier in this paper, was referred to as "Freud's Paradox." Conflict, it seems, is something we cannot survive without, yet in the end will surely destroy us all. War and civilization have long been recognized as virtually synonymous. William James has said: "History is a bloodbath...(even the "golden age" of) Greek history is a panorama of jingoism and imperialism...purely
piratical." In searching for the root causes of war, more than one observer has commented that war, in the strict sense, does not appear to exist in primal societies. Certainly, "primitive" man has been observed to practice forms of what is called "ritual warfare," and to conduct raids and forays against his enemies. But these are undertaken essentially for various forms of "honours," with booty usually only a secondary interest. War, as we know it, exists strictly for the taking and holding of lands and territories, resources and properties; in primal societies such activities are extremely rare. David Livingstone, for example, wrote of the central African tribes that warfare, and even slavery, did not really exist before the coming of the Arabs.\textsuperscript{100} William Graham Sumner, writing of the Australian aborigines observed that they were without even the concepts of such forms of conquest.\textsuperscript{101} And of the American Indians very similar findings have been widely noted. Thomas Mails, a leading authority on the plains Indians, has argued that their "warfare" consisted entirely of small-group raiding attempts, and were primarily ritualistic rather than economic. This relates to the arguments in Part One of this paper that "raiding" can be thought of as a kind of "inoculation" against war, through experiences that forge the values and character-strengths of leadership essential to the maintenance of peace. Consider, in this regard, the
most common characteristics of the Indian practices of raiding:

A community might permit 2 or 3 raids per year - more was generally considered excessive. These would be undertaken by young men - mature men no longer engaged in raiding. Raids would not be made on nearby peoples, and therefore usually required from 2 to 6 months to travel to more distant locales.

The ostensible goals of these raiding-parties were horses (or other properties among non-equestrian tribes) and incidental booty. The Pawnee especially prized weapons snatched from the hands of enemies. To these ends, raids were in most cases "complete failures," for usually only one attempt would be made before fleeing, and only rarely would horses or other property be successfully taken.

The primary obligation of raiding-party leaders was not "the mission," but to return all members safely home. Other than this, "deeds of valor" were the individual objectives. Saving a fellow warrior usually counted highest, next came various forms of "coup," or striking of the enemy. Status emblems and sometimes personal names were given for coup.

These observations on raiding bring us to the main concern of our topic - the important role of warrior societies, or "sodalities," in the life of the Indian and his society. Sodalities were extremely complex forms of social organization that served a wide range of purposes. In his study of the plains Indian societies, Dog-Soldiers, Bear-Men, and Buffalo-Women, Thomas Mails has listed:
- Oral traditions and Heritage embodied in -
- Guarding camps, scouting for game, etc. -
- Organizing hunts, moving camp, etc. -
- Conducting ceremonies and ritual feasts & dances -
- Aiding elders and women in carrying out decisions -
- Organizing and conducting all raids and combats -
- Recognizing honours and achievements in combat -
- Providing structured challenges for youths - especially in training for ordeals or vision quests -
- Providing "creative display centers" for the achievements of men and women -
- Meeting all threats to the community as the "first line of defense -

In his book *Men in Groups* Lionel Tiger has hypothesized that "secret societies" (sodalities) served as an outlet for man's "gregarious propensities," but surely this is insufficient to account for their virtually universal occurrence and remarkable complexity of function. Sodalities represent, among other things, probably the most important educational institutions in primal cultures. They obviously embody Tiger's concept of "male bonding" (as well as its female counterpart), but they also serve longer-range survival requirements. By structuring conditions of challenge far greater than provided by the demands of everyday life, these cultural institutions maintain through their members the abilities to meet those unusual and sometimes overwhelming threats that a community might face only once
in several individual lifetimes. The mechanisms of such maintenance are therefore of immense importance to longer-term survival.

These mechanisms appear to fall into 3 general categories: Leadership Style; Vertical Structure; and Factors of Identity & Membership. The following discussion of these categories will compare their functioning in the following specific situations or groups: "Delta Force," the military organization discussed under TOOLMAKING; similar examples in Japanese business management practices and related common practices in the North American Indian traditional sodalities.

In "leadership style," the one overriding factor connecting these rather disparate examples is the fundamental importance of "loyalty down." Generals MacArthur and Patton wrote of this as the most serious flaw in the American military system; Marine General Louis B. Puller described it as the single most important factor in the superior performance of the Marine Corps. In his book Delta Force, Beckwith also discusses this essential quality, which he first came to appreciate during his experience with the British 22nd Special Air Service, which in fact was the inspiration for Delta Force. "Everything I'd been taught about soldiering, been trained to believe," he writes, "was
turned upside down." Beckwith was referring here to his initial consternation in finding the Special Air Service (S.A.S.) to be both "miles ahead" of any other military organization he'd ever even heard of, and the shabbiest,"...most non-regimented and poorly-disciplined troops" he'd ever seen. What Beckwith had encountered here was the essential difference between the role of the soldier, and that of the warrior.

Unlike the soldier (but like S.A.S. and Delta), the warrior does not fight for "real estate," for the warrior's first obligation is always to his "inner vision" — while the soldier's obligation is complete obedience to his superiors. The warrior is in all things an individual; as Thomas Mails has written of the plains Indians, he submits to authority only for the temporary mission at hand, and only if moved to do so by his "vision," and by the qualities of the potential group-leader. This fierce independence was one of the essential qualities that both Delta and S.A.S. found so difficult to locate. Among the Indians a leader retained his position only so long as this was desired by those choosing to follow him, with the S.A.S. Beckwith found that positions of leadership depended on similar support.
In Japanese business management practices the importance of "loyalty down" is found in their time-honoured institution of "onjo-shugi," a kind of benevolent paternalism marked by deep respect as well as by unspoken but nonetheless high expectations. "Onjo-shugi" functions through a non-verbal, intuitive form of communication which the Japanese call "haragai." Thus orders are never given; instead, a "situation" is described in ways that may suggest a course of action, but the subordinate must volunteer his own solution, and offer his commitment to seeing it through. This approach takes time, and much tea, but it works. The essential Japanese business group, the "quality circle" ("ringi-sei") is much like the small, flexible units of Delta or S.A.S. Japanese business groups suggest to outsiders a strong solidarity that often may seem even servile, but behind this facade functions a strong sense of independence that can bring everything to a stop should honour - "giri no ninjo" - so dictate. This has been described by Mitsuyuki Masatsugu as having descended from the origins of "suki-yaki" (literally "beef grilled on a spade"), when Medieval peasants rebelled against the dictate that they not be allowed beef by hiding in the forests to partake of it as an almost ritualistic observation. Suki-yaki is still today the "national dish" of Japan.
The second category, that of vertical group structure, has much to do with the consumption of alcoholic beverages. Beckwith commented that the strangest of the rituals of 22-S.A.S. was the Saturday-night drinking bout, in which the officers would be invited to the sergeant's mess for all-night sessions in which both officers and men could "...whittle away at traditional form and egotistical illusions." 107 A nearly identical "ritual" drinking session is one of the most important practices in Japanese business life. Referred to as "bar culture," 108 this practice serves the same purposes of breaking down formal barriers and reinforcing personal bonds in the "web of comradeship" that runs all Japanese business. No "discussion" takes place, however, because of the dictates of "haragai." Instead, a sophisticated game of suggestion, innuendo and parable-like analogies is pursued amidst much joking and imbibing. This game functions on many levels and concerns several subjects simultaneously, and always takes place between "sempai" and "kohai" (superiors and subordinates), rather than between peers. 109

This sort of lean, functional, aristocratic hierarchy, with its strong bonds and flexible use of structure, finds a good model in the "secret," or bonding societies of the American Indians. The Crow chief "Plenty-Coups," in writing of his childhood days, recalled the power
and mystique that the ceremonial dances of these sodalities held for the Indian youth:

That night the secret societies held meetings, the Foxes, the War Clubs, the Dog Soldiers... and others. Bright fires blazed and crackled among the pines and drums were going all night long. I wished with all my heart that I might belong to one of these secret societies. I thought most of the Foxes, and I looked with longing eyes at their firelit lodge, where men spoke of things I could not know. But I was yet only a boy.

The Indian warrior-societies were the essential structure of the process to earned manood, and of cultural recognitions of status. In Delta and S.A.S., as in Japanese management practices, reward took the form of promotion. While serving in Vietnam, Beckwith sharply criticized the widespread practice of rewarding subordinates with gifts or leave time. Japanese business leaders have similarly criticized U.S. business for its "win a trip to Hawaii" attitudes toward employee relations. In the Indian's way of life personal names were earned, and treated as valuable status-property. In Delta and S.A.S., and in the Japanese "ringi-sei" groups, nicknames were very important - you didn't rightly belong until you had earned one. The importance of such forms of identity have not clearly been understood in modern society.
But perhaps the most important of the similarities shared by these examples is the synergetic process whereby group-bonding contributes simultaneously to both the high-efficiency performance of a tightly-welded group, and to the strong sense of individualism on the part of the group members. As Masatsagu has written of the Japanese "ringi-sei:" "In most cases, the group ego and the individual ego run along the same track." Of the S.A.S., Beckwith wrote that the ideal group members "...were men who enjoyed being alone, who could think and operate by themselves, men who were strong-willed and resolute." In the warrior sodalities of the North American Indians the ideal, or most respected member was the "scout," as has been described earlier, under TRACKING. The Crow Chief, "Plenty-Coups," quoted above, also described the role of the scout in his recollections of his first raiding expedition:

We rode all night without seeing our wolves. Yet I knew, of course, they were out ahead of us somewhere. I kept looking at every knoll-top until we hid away for the day. Then they came in, looking exactly like wolves.

Like the wolf, the scout was the embodiment of the fiercely independent loner, who at the same time sym-
bolized a sense of loyalty and reliability that was beyond question.

* * * *

VOYAGING is the metaphoric label for the aspect of this educational programme that has been based on the model of the sodality, or bonding-society. The Indians of the Northwest Coast used large, sea-going canoes in their raiding expeditions. Before the coming of the Europeans, with their killing plagues and relentless territorial encroachments, it is believed that these raids were not particularly bloody affairs, but carried out more as ritual ceremonies, as is the common pattern among most tribal societies. These expeditions put to the test every survival skill that their members possessed, and welded these attributes into a unified vision of the common purpose.

There is a process, or mechanism, of human social evolution that can account for this tendency toward less sanguine, more ritualized forms of conflict. This mechanism is called "reciprocity," and in his book The Evolution of Cooperation, Robert Axelrod examines how the processes of reciprocity influence human affairs. An interesting example referred to by Axelrod concerns the widespread
occurrence of unspoken, tacit, and unofficial "truces" during the first world war. Because the fighting was often locked in extended stalemates, certain "cooperative practices" evolved. These developed without any communication between the combatants, but were all the more faithfully adhered to, perhaps, for that very reason. In one incident, during one of the unofficial "truce" periods, a British unit began to receive German artillery fire. Suddenly, a German soldier stood up in full view across the intervening "no man's land," waving his coat over his head and shouting that it wasn't their fault, but that of the "damned Prussian artillery." This man risked his life for the sake of an unspoken and actually "illegal" form of truce between otherwise deadly enemies, Axelrod continues, because of the inherent power of the process of reciprocity within the human psyche.

A better understanding of the role that this process has played in the evolution of human social and cultural institutions could have profound implications for our present concerns for world peace. The American Delta Force and the British S.A.S. rely on stringent screening processes to acquire the kind of individuals they need. With the Japanese, once a person is brought into the business "group," they become a kind of permanent responsibility for the overall organization— to have to "let a person go"
would be an admission of failure and a loss of prestige, or "face," and so initial screening is important. But the American Indian communities could hardly afford such shortcut expediences as "screening" - there was no way whereby the "unqualified" could be sent away, no vast recepticle of mass society into which they could be "discarded." To survive, the Indian societies had to make every member count, and their remarkable success in achieving this pays tribute to their system of education. What this implies is that this educational system, generally, and the warrior-sodalities in particular, were able to effectively help bring forth within each individual member those qualities that Delta Force and S.A.S. found so extremely difficult to even find. Further, the cooperative, high-efficient management practices that the Japanese have excelled at in business, the Indians pursued as a high form of cultural art, with few of the costly side-effects, such as the suicide rates among young competitors for the better schools, that seem increasingly to plague modern-day Japanese society.

The most extraordinary and effective of all the leaders of "unconventional forces" of the second world war, Count Otto Skorzeny, has perhaps best summed-up the secret of the Indian's success: "Ask for volunteers for dangerous work... Train them in fellowship. Then they will develop qualities that no one ever suspected them to pos-
If we focused more on the people behind the leaders, rather than on the hope of finding some miraculous personage to lead us out of our quandries of despair, then we might find ourselves to have rediscovered the "way," the millenium-tested path that has brought mankind all this long journey, to the crossroads of today.
The warrior-sodalities of the North American Indian societies provided the structural framework for the essential learning processes leading to the "earned adult-status" recognized by these societies. Group bonding played a centrally important role in this structure, as did the various forms of recognition for achievement in these experiences. The single greatest objective in all of this, however, was the strengthening of the fundamental relationship between leadership and courage. In the modern context we tend to think of leadership in terms of individuals, whether as world-leaders, national-leaders, or even community-leaders — but for the Indian the question of leadership focused more on the whole of the community, on the total web of relationships that represented the societal consciousness. Each member was essential; every individual represented a potential upon which the fate of the entire community might come to rest at any time. The individual, in a sense, becomes the society. As anthropologists such as Ruth Benedict and Margaret Mead have pointed out, the whole of any society can reflect only those qualities that exist
in its individual members. Of the qualities most essential to survival, courage - mental, physical, and spiritual - represents a dominant and underlying theme.

In the introduction to this chapter it was suggested that the aboriginal North American Indian societies were structured essentially as independent, self-contained aristocracies - that the Indian did not conceive of society as having an aristocracy, but as being one.

The Indian's conceptual approach to the nature of human society, in this regard, has much in common with Edmund Burke's "natural aristocracy." That Burke distinguished this natural aristocracy as inherently different from the hereditary and circumscribed aristocratic classes of his time is clear: "I am no friend to aristocracy," he wrote, adding that he would rather see the government "...resolved into any other form than that austere and insolent domination." In fact, Burke saw his "natural aristocracy" as the only effective defense against this "insolent" abuse of power, the only secure repository for society's fundamental values, whereby the processes of change brings renewal, and not merely haphazard replacement. The essential element of this defense was courage - a courage of "...the greatest degree of vigilance, foresight, and circumspection, in a state of things in which no fault is committed with impunity... no abuse sanctioned." In these sentiments Burke anticipated the views of Lord Acton and
Bertrand Russell, both of whom attacked the "privileged classes," but admired the "manly virtues" that are a part of the aristocratic tradition. There is also an appreciation of the relationship between courage and leadership that John F. Kennedy described in Profiles in Courage, and which Martin Luther King exemplified in his "I have a Dream."

Mahatma Gandhi wrote that "I do believe that where there is only a choice between cowardice and violence, that I would advise violence." 118 In the training of the "satyagrahis," the "front-line troops" of his peaceful revolution through non-cooperative action, Gandhi believed courage and self-discipline to be the key elements necessary for success. Yet courage is a difficult thing to teach. "Non-violence cannot be taught to a person who fears to die," he observed, "and who has no powers of resistance." Gandhi believed that the dignity of the individual took precedence over even life itself. Unless a person could refrain from submitting to anger, but maintain instead a dignified, yet grimly-determined resistance at all times, they should resign from the movement. 119 Many of Gandhi's followers came to appreciate the truth of the corollary that courage is indeed the "bitter part of discretion."

Courage, and the attainment of courage, has long been associated with the "martial virtues" of military traditions. Aristocratic lineages invariably originate with
services of valor under arms. Yet the military mentality has seldom, if ever, been able to appreciate those qualities of autonomy and personal conviction that underlie true courage, and has instead generally sought unquestioned obedience to its own exercise of power and authority. In this it has much in common with the puritanical approach to education that seeks to "break down" the "stoutness of mind arising from natural pride," and to flog away the last vestiges of that "individual independence which is neither reasonable nor Christian, but essentially barbarian." 120 Burke, though an Irish Quaker, would undoubtedly, in this instance, have taken the side of the barbarians. But it is Gandhi, perhaps, who has best exemplified in his own life and actions the sense of human dignity and regard that raises otherwise naked martial force to the level of an art.

Gandhi's concept of "satyagraha" as a technique of action is in essence a "martial-art:" like all of the traditional martial-arts disciplines, at least in their uncorrupted form, it represents a way of keeping peace. The ancient Japanese spirit of "bushido," for example, originated in the term "bu-do," which, literally translated, means "to stop the spear." 121 All martial-arts training is intended to provide an antidote to the destructive violence of anger and fear by overcoming them in one's own experience. Karate, for example, which is perhaps the best-known
of the oriental martial-arts, means "empty hand," a concept adopted from zen. Mas Oyama, perhaps the greatest living karate practitioner, has said:

Karate is not a game. It is not a sport. It is not even a system of self-defense. Karate is half physical exercise and half spiritual. The Karateka who has given the necessary years of exercise and meditation is a tranquil person. He is unafraid. He can be calm in a burning building.

This emphasis on self-mastery, on the courage and self-discipline that Gandhi referred to, is achieved in martial-arts training in terms of three specific objectives: No Expectation; No Reaction; No Intention. These three objectives derive from the three fundamental principles of zen, described as "patience in the trivial things, artful attention to detail, leads to mastery of whole systems."

"No Expectation" means the mind is "nowhere in particular," and thus does not dance to the strings of the world's disruptive illusions of momentary appearance. In a match, the martial-artist expects neither victory nor defeat, but is fully tuned to respond intuitively, to flow with the dictates of the unconscious. Anticipations of any sort can disrupt performance: as Timothy Galwey has described in his book *The Inner Game of Tennis*, even "trying" can reduce effective performance. In all of this, patience is the essential quality that removes us from the
buffeting whims of momentary reality, to that state in which the mind is as still water, and accurately reflects all that is around us.

"No Reaction" means that neither anger nor fear plays any role in one's actions. Even in mortal combat, one's opponent is considered an honoured guest - the only real enemy being within. "In battle," says the samurai maxim, "let the angry may defeat himself." Fear and anger are conquered by finding one's true limits, in attending to the details of life's demands.

"No Intention" is a state of mind in which the conscious perceptions do not override the intuitive. Daisetsu Suzuki, author of The Field of Zen, explains that "Knowledge is not enough. One must transcend technique so that the art becomes an artless art, growing out of the unconscious." Only in this way can mastery be obtained, whether in action, or in meditation.

Eugen Herrigel, in Zen and the Art of Archery, quotes D.T. Suzuki as saying that in the martial-arts, as in Zen, the essential goal is release from the fear of death; that with this release comes a sense of enlightenment (in the eastern metaphoric sense of "being relieved of a heavy burden," rather than in the western "flash of light in the darkness"), and of unlimited potential, or personal power.
Two recent studies have supported these claims that martial-arts training leads to less aggressiveness through self-discipline and enhanced self-confidence. At Carleton University a study by T.A. Nosanchuk found an inverse relationship between aggressiveness and length of martial-arts training. Another study, at Texas A. & M. by M.E. Trulson found that after one year's training — and steadily increasing thereafter — subjects displayed decreased anxiety, an increased sense of responsibility, increased self-esteem, and increased "social intelligence" (such as being less willing to take needless risks, etc.). Especially prominent in those achieving "black-belt" ranking were the qualities of self-discipline, mental concentration, and respect for others.

An interesting parallel between the Japanese and the American Indians, as has been noted by Jamake Highwater, is that in these two cultures alone has the existence of the "death song" been noted. The ability to maintain sufficient mental calm in the fact of impending death to be able to sing such a song is a remarkable capability, and a tribute to these systems of inner discipline.

The warrior-sodalities of the North American Indians were fluid, vertically-structured and interconnected aristocracies. Epitomizing Frank Lloyd Wright's dictum of
"form follows function," these "secret," or "Bording" societies evolved in relationship with the realities of the community. Sodalities came into existence through revelations of "power," usually from a vision or dream that instructed some individual to announce the society's existence. The Blackfoot "Medicine Pipe Society," for example, came into existence from a vision that came to a man who had been struck by lightning, and survived. The "Bear Cult Society," one of the most powerful of the northern plains tribes, originated in the visions of a young boy, in which he had been taken into a cave by a "Medicine Grizzley Spirit," and given power. These visions also determined the purposes of these sodalities, and the society members would go on spiritual retreats to "pray" for these visions. 126

The warrior-sodalities of most of the North American Indian cultures engaged in ongoing, rigorous forms of training which, as was true for Gandhi's satyagrahis, constituted a form of martial-arts training. In fact, the "coup-stick" practices of the plains Indians could be thought of as perhaps the most elegant martial-arts discipline ever devised. The "counting of coup" (from the French "to strike") incorporated those aspects of reality that no "drill" can ever hope to match, and this "reality" was closely related to the survival of the society. The "coup-system" also included oratory, the retelling of legends, and regular ceremonial dances and ritual observations. There
was also a "coup-sash," or "war-sash," of about thirty feet in length, by which a warrior would "stake" himself in a battle or raid, and from which spot he would not retreat. This carried high honours. In the "coup system" it was not victory or even ferocity that mattered, so much as self-mastery. This was true even in the Indian's games, where winning was secondary, and "skill, endurance, daring, and the ability to withstand pain were at the top of the list." 127 Courage, and independence of mind and spirit, were the marks of the "spiritual warrior," and at these the Indians excelled. For the Indian, courage and self-discipline were synonymous. Like the Saxon "ceorl," or free-man, he had the right at any time to challenge even the tribal chieftan to mortal combat, though this rarely happened. There is a story of Tecumseh, retold by Ernest Thompson Seton, who denounced the practices of torturing prisoners that were commonly employed by both the English and the Americans (war of 1812), and petitioned the English General Proctor to have it stopped. When Proctor refused, waving Tecumseh off, the Shawnee Chief challenged the General to personal combat on the spot, whereupon General Proctor backed down and complied with his demands, though with less than good grace. 128

For the Indian, courage was a power that came from without, from forces beyond the "self," and which, if one had received a gift of this power through visions, would
well up from within like the joy we feel when listening to music. Courage and singing were closely tied; during the sundance ceremonies that had spread throughout the plains tribes, youth sang songs of defiance while the skewers were placed through their chest muscles. Songs were also for the solo retreats, or for combating hunger, cold or illness. The way of the spiritual warrior was not only for the men in these societies, but for woman and even children as well. In the summer of 1878 300 Cheyenne, led by Chief Dull Knife, left their Oklahoma reserve—where they had been left to starve—and marched all the way to Montana, in mid-winter, while 13,000 troops attempted to stop them. After a series of running battles, they reached their ancestral lands, where they laid down their arms. The government ordered them locked in unheated barracks, without food or water, until they agreed to return to Oklahoma. On January 9th, 1879, they burst as one body from these barracks in a last bid for freedom. 64 were shot to death; 78 were recaptured, but considered too dangerous to keep together and so were broken up and sent to different reservations. The remainder were never found. 129

* * * *

PROTECTING in the metaphoric sense of the word combines not only courage through action and self-discipline, but courage through patience, and the ability to com-
municate this as well. Gandhi exemplied these qualities, as did Socrates, who as an Athenian warrior marched barefoot through the snow, exhorting the other soldiers to endure, and be strong of heart.

Tepilit Ole Saitoti is a government biologist in Kenya - he is also one of the last of the Maasai Warrior Society members to have passed the "alamaiyo," or ritual lion hunt, to which the government has put an end, for conservation reasons. In an interview Saitoti was asked whether the Maasai had been able to find some "substitute" for the lion hunt ritual. Shaking his head slowly, and with a wistful smile, he replied quietly, "No Ma'am... there is no substitute for lions." 130

Saitoti has written of his earlier recollections as a Maasai warrior that:

I remember from my own experience as a warrior how self-confidence takes over the whole being, along with pride and a feeling of ease, as if you yourself and all those around you were thinking, 'Everything will be all right as long as the warriors are here.' We were supposed to be brave, brilliant, great lovers, fearless, athletic, arrogant, wise, and above all, concerned with the well-being of our comrades, and of the Maasai. 131
These words speak eloquently of the truth that mankind is one - the Maasai warrior, the Shaolin monk, the lone Australian Aborigine share with the American Indian a membership in this natural aristocracy of man. The great Sioux warrior and visionary Crazy Horse, of whom his people are today commissioning a giant statue in the Black Hills of South Dakota, has become a symbol of the quiet, dogged courage that was the glory of the Indians of old. It is said that in a vision Crazy Horse foresaw a time of darkness and great death coming, but that a few, a handful, would "still reflect in their eyes the earth and the sky." Vine Deloria has written that "until we can once again produce people like Crazy Horse all the money and help in the world will not save us." 132
HEALING

The Shaman is often described as a kind of unique specialist among tribal peoples, jealously guarding his or her "special knowledge," and handing it down only through indentured apprentices. What is less widely appreciated is the degree to which every warrior, particularly among the North American Indians, was also a seeker-of-visions, and a healer in his own right. Healing in this context extends beyond the knowledge of herbs and treatments for physical ailments to what is widely known in Indian societies as "spirit sickness." This malady involves, in the majority of cases, a kind of maladjustment to life, or a failure to provide the necessary "spiritual nourishment" that maintains the balance of one's life. Only rarely is it attributed to outside factors, such as "spirit possession," and only rarely is it considered a matter for outside professional intervention. It is essentially a matter of individual responsibility, though within culturally ordained structures, or resources. The two most important of these are (1) the various forms of spirit-dancing and (2) the personal vision quest.
In his book Indian Healing Wolfgang G. Jilek, M.D., has provided substantial evidence indicating that this "spirit sickness" is in fact a form of anomic depression resulting, essentially, from the conflicting values of the Indian's way of life with the values of the dominant mass society. The concept of "anomie," first proposed by Émile Durkheim, implies the breakdown of societal norms through a process of "sociocultural disintegration;" the key factor in this process is identified as "relative deprivation," which is less concerned with material possessions than with one's place in society, and one's internally actualized norms or values. Jilek suggests that the resurgence of North American native-Indian cultural ceremonials such as the Salish Spirit-Dance, the plains-Indian Sundance, and the Peyote and Gourd Dance ceremonies of the Southwest are essentially attempts to deal with "spirit sickness" through traditional methods of restoring one's societal norms or values.  

"Spirit Sickness," thus described, would appear to be a reverse of the processes of self-actualization" as conceived by Abraham Maslow, and elaborated by Erik Erikson and Carl Rogers. In this sense, spirit sickness could be considered a kind of "values sickness." Consider the
similarities between Jilek's description of the more prominent indicators of anomic depression, and Louis Raths' list of behaviours indicating poor values adjustment:

\[
\begin{array}{ll}
\text{(Jilek on anomic depression reaction)} & \text{(Raths on value-needs deprivation reactions)} \\
\text{frustration} & \text{frustration & aggression} \\
\text{discouragement} & \text{withdrawal} \\
\text{defeatism} & \text{submissiveness} \\
\text{lowered self-esteem} & \text{regressive behaviour} \\
\text{moral disorientation} & \text{psychosomatic disturbances} \\
\end{array}
\]

"Values sickness," as a form of anomic depression, can result from either a conflict in value systems, or a failure to internalize the value system of one's own society. As a failure in the process of self-actualization, this concept implies that "values health" is not something that happens automatically, or merely from social experience - as is often commonly assumed in modern societies - but requires active, personal effort. It is a reflection of the saying attributed to Jesus in the Gnostic Gospels of St. Thomas, that: "If you bring forth that which is within you, what you bring forth will save you. If you do not bring forth that which is within you, what you do not bring forth will destroy you."
Central to the Indian's traditional way of creating spiritual health is the institution of the guardian-spirit complex, or vision quest. Dr. Jilek, in *Indian Healing*, has closely detailed the physiological and psychological aspects of the guardian-spirit quest as practiced among the Indians of the Northwest coast. The circumstances of the vision quest, he finds, invariably involve solitude - in some remote wilderness setting - prolonged nocturnal vigilance, monotony, and varying forms of physical, sensory, and psychological stress or deprivation. These conditions tend to induce altered states of consciousness in which hallucinations, visual imagery, hypersuggestability, blurring of the cause-effect distinction, and synaesthesia are commonly experienced.

Dr. Jilek describes these hallucinatory visions as something substantially more important than might appear on the surface, stating that: "Neuropsychological research has, however, long demonstrated the error of equating phenomena, brought about by collective suggestion, with 'pretense and artificiality.'" One of the vision experiences that Dr. Jilek included in his study was described thusly:

Four winters I endured this penance. Then at last my mind and body become really clean. My eyes were opened, and I beheld the
whole universe. I had been dancing and had fallen to the ground exhausted. As I lay there, I heard a medicine-man singing far, far away, and my mind travelled towards the voice... My mind returned to my body and I awoke, but now in my hands and wrists I felt power. I rose up and danced until I fell exhausted again and my mind left me once more. Now I travelled to a huge tree - the father of all trees, invisible to mortal eyes.  

The importance of this "sacred tree" symbol is not well understood. It appears throughout North American Indian societies, from the Northwest Coast (as in the above case), through the plains tribes and even into the deserts of the Southwest. On a general level, such "universal" forms of symbolic imagery are suggestive of Jung's concept of archetypes in a collective unconscious, but their individual potency appears to relate more to the intuitive levels of perception. They may be hallucinations, but they are not "ordinary" hallucinations.

In the vision-quest experience it would appear that induced visions differ from ordinary hallucinations much as "lucid dreaming" differs from ordinary dreaming. In lucid dreaming, for example, subjects are aware that they are dreaming, and aware of having some degree of "choice" in the matter. Further, lucid dreams tend to be responsible to our prior conscious expectations. Stephen LaBerge, a psychophysiologist at Stanford University, has conducted extensive research into the nature of lucid dreaming, and has
suggested that lucid dreams may be a medium for sending messages from the unconscious to the waking world. Changes in eye movements accurately indicate a change from ordinary to lucid dreaming - the point at which the subjects become aware of the fact that what they are experiencing is a dream. Laberge also suggests that there is considerable evidence that the resolution of stressful events in these dreams translates into reduced levels of anxiety while awake. 139

While Laberge's work is tentatively being considered for therapeutical applications, sophisticated forms of dream-therapy practiced in primal societies are receiving renewed interest. Among the Senoi of Malaya, for example, elaborately structured forms of dream and vision interpretation have been practiced for as long as two-thousand years or more. Among the Senoi it is believed that the "wisdom of the body," which operates while we sleep, is capable of recognizing significant patterns within our vast accumulations of experience, and that this unconscious "wisdom" is then capable of making the necessary adjustments in our intuitive, emotional responses to specific external events in our lives. The Senoi also report that they have not experienced a violent crime or conflict in their society for over two or three hundred years. 140
That the imagery experienced in vision or guardian-spirit quests represents this sort of "message" from the unconscious has also received support from other areas of research. Michael Polanyi has described experiments in which subjects have been given mild electric shocks whenever they uttered a certain key word or phrase. Although the subjects would "automatically" stop using the word or phrase after a while, they would not be consciously aware of doing so, or be able to identify the words or phrases they were avoiding. Other research, with "split-brain" patients, (discussed earlier in this paper), has also provided significant evidence of decision-making capacities determined by perceptions of which the individual has no conscious awareness. There is also evidence suggesting that the unconscious mind does indeed retain the totality of our sensory input, even during sleep or unconsciousness. Patients who have undergone surgery have later been emotionally affected by the comments made by members of the operating team while they were under the anaesthetic, and research in hypnosis has found that subjects can be "regressed" to recall any event of their childhood, or even the details of their own births, as medical records later corroborated.
beyond the mere appearances of this world. All of nature is permeated and vitalized by this spiritual power. When some of this is given to a person, it is always in a form appropriate to that person's true nature, and always in an image that the person can take into his or her own inner self. This power can then be recalled when it is needed by that person to achieve some difficult thing for his or her people. This is what the power is for."

* * * *

HEALING, in the metaphoric imagery of the vision-quest, has much to do with values, with "values-health," and with our concepts of the process of self-actualization. The greatest lesson of the vision-quest and vision-power for our contemporary western society is that "values" cannot be imposed, or prescribed by lecture, or taught directly, or even handed out like gifts. Values, if they are to mean anything at all, must be earned, and this means independently, and it means paying the price of effort or sacrifice. The values of one's "social matrix" are always there, and become a part of our way of perceiving the
The "vision-quest" experience may therefore involve applications of these observed phenomena in a process that might be described, at least in part, as:

The totality of one's environment, of one's total life-experience, is apparently retained in the mind, but we cannot "consciously" experience this totally as a simultaneous whole, due to the limited range of focus of our conscious awareness (in fact, "consciousness" might best be thought of as a kind of focus); furthermore, the greater bulk of this totality can be recalled in detail only under special circumstances.

On a "unconscious," intuitive level, however, the mind appears to be capable of this simultaneous, wholistic perception, though diffusely. This unconscious (unfocused) level of the mind also appears capable of apprehending certain kinds of related, or "archetypal" - patterns within this bulk of material.

These patterns, or archetypes, can be synaesthetically "translated" into specific forms of visual imagery (or other form of sensory input) which can be communicated to our conscious experience during "altered states of consciousness" (such as lucid dreaming).

This process also, apparently, affects brain responses involving neurotransmitters (such as endorphins, etc.) that control emotional states or reactions. In this way, certain types of input can trigger conditioned responses causing strong emotional states such as fear, rage, acceptance, or tranquility. These reactions may function in ways similar to the effects of what is termed "psychoneuroimmunological processing."

The Indian might well find all of this excessively wordy or even bewildering, and perhaps offer a somewhat different description: "When, through prayer, the proper mental attitude is attained, a person may receive a vision from the "ane himu" (mighty something) that lies
The vision experiences of the guardian-spirit complex can perhaps be described as a form of pattern-recognition in the unconscious mind, that becomes translated into emotionally symbolic imagery on the conscious level. That such "translation" is conceivable is supported by evidence of the experiential phenomena of "synaesthesia," in which one form of sensory input is experienced as another, such as being able to "taste" music, or "smell" a certain colour. The Russian physiologist A.S. Luria studied a subject with total recall, whose remarkable feats of memory seemed to rely on a form of synaesthetic transfer. Upon hearing a specific piano note, for example, this subject invariably experienced it as a furry, dark-brown stripe with red edges, that tasted and smelled something like cold borscht. That this sort of transfer can be used for communicating certain kinds of data has been suggested by David Suzuki, who, on his television science series, "The Nature of Things," has described how the intricate patterns of Persian carpets are traditionally handed down in the melodic patterns of certain forms of Persian folk-music. Similar findings have been made for the Mayan Indians of South America. L.S.D. also induces synaesthesia, and is known to interfere with brain serotonin levels that in turn affect the hypothalamus, which is thought to be the seat of our emotional responses.
world from the first months of life. But for a person to become these values, to internalize them as driving forces, requires more than just "familiarity."

Expressions of public sentiment in North America have generally included demands that values be taught in the schools and "moral educators" have responded with a variety of rational, well-reasoned programmes. But values are themselves essentially neither rational nor reasoned. Dewey understood this, in his considerations that value-judgments tend to be immediate, intuitive reactions rather than analytical decisions. Such disparate educators as A.S. Neill, Tolstoy, Robert E. Lee, and Socrates understood this, and applied their understanding successfully. The mainstream of contemporary "moral education," however (with a few notable exceptions), has continued in the assumption that we can somehow "teach" standards of moral behaviour that we do not, as a society, actually practice.

In Lawrence Kohlberg's "Cognitive Moral Development" programme there can be found a perhaps classic example of this basic flaw. While Kohberg admits that people are more likely to talk about values than to act on them, he argues that "talking," or "moral reasoning," must be the starting point. Kohberg, who unabashedly identifies himself as one of the two "level six" moral beings
detected among the thousands of subjects that have been categorically tested, offers a typical level six solution to one of his "moral dilemma" exercises:

In "Captain's Dilemma," three men survive an airplane crash at sea to discover that they have only enough provisions to permit two of them to reach safety. Only the Captain can navigate, one man is old and has a broken leg, and the other is young and healthy. While superficial practicality would dictate that the injured man is the least useful, no one is willing to volunteer to go "over the side." It is Kohlberg's considered opinion that the only "highest" moral choice is to draw straws.

Now, were these three men "tribal warriors," whether Indian, Maasai, or otherwise, or if they were satyagrahis, Delta-type operatives, Turkish soldiers or American Marines, it is likely that their response to the situation would be quite different, quite illogical, and totally unreasonable. The likeliest scenario, it is suggested here, would be to reject the dictates of reality, and confidently set off, with all members present, to overcome the "impossible." No one goes over the side - even voluntarily. Reason plays no part in this; what you do, you do because of who you are, and what you are.
This was precisely the course of action followed by Sir Ernest Shackleton and Captain Worsley in a real version of "captain's dilemma," in Antarctica, during the winter of 1916. With 28 men, supplies to last only a few weeks, and escape a virtual impossibility—the closest human contact being a tiny island nearly 1,000 miles away—Shackleton and Worsley were indeed in a dilemma. Less than a quarter of these men, alone, might have survived until spring and a chance of rescue. But Shackleton set out to save them all, and he did. Every account that has been written of his incredible escape, and subsequent rescue of all the rest, has credited Shackleton with overcoming odds that to any reasonable man would have seemed impossible.  

In Kohlberg's "three men in a raft" scenario, even if keeping everyone together meant death for all, that would still, in one sense, be the better choice. The point being that even in this extreme the society as a whole, in terms of long-range survival, would be better served by being composed of individuals of this latter sort, than by the "morally rational," reasonable person. It isn't likely such people would score very highly on Kohlberg's tests, for their responses, in real situations, would be intuitive rather than thoughtfully reasoned. This may in part reflect the ancient oriental maxim that "He who says, does not truly know; he who knows, does not say."
A final comment on the importance of the process of "earning" one's values, or identity - of which HEALING is used here as a metaphoric symbol, will be included in Chapter Six.
Of all the arts it is surely the dance that should be the first to receive attention, for it was first intrinsically in the nature of man. It is the art out of which all others grow, and it touches the issues of life itself as none of them is equipped to do. Its philosophical implications are profound and practical, for it reveals the vision of the wholeness of man and provides a simple means for making that vision real.

John Martin, art critic

I do everything I know how in a dance.

Twyla Tharp, dancer

Of all human societies, those of western civilization, and particularly those of northern European origin, have been the most "culturally deprived" insofar as dance is concerned. European dancing follows only one tempo, for example, while African dancing commonly uses four drums - one for each part of the body. Some tribes, such as the Dogen, follow as many as seven different simultaneous rhythmic patterns in their dances. The novelist Doris Lessing, who spent her childhood in Zimbabwe-Rhodesia, has
written of an Ndebele story that describes the native people's impressions of the first Europeans to penetrate central Africa - the "pioneer column" of Cecil Rhodes.\footnote{148}

The Europeans came heavily armed and expecting trouble, as the fighting reputations of the Ndebele Zulu were known far to the South. As the column passed by Africans along the way, the Europeans thought they saw in their faces a kind of over-awed submissiveness, which they attributed to the presence of their rifles, Gatling guns, and field howitzer. But the story that Doris Lessing retells describes a different reaction - one of astonishment, pity, and a kind of horrified fascination at the stiff, board-like way these strange white people walked and moved. It seemed as though all of their bones or joints had been broken, or that they had been afflicted with some strange nervous disease, the way they jerkily staggered about.

Such cases of "failure to communicate" have occurred more than once during the periods of European colonial expansion and economic adventuring; and, of course, the misunderstandings worked both ways. But it was the European who, despite his feelings of total superiority over the "savages," most often found the untutored native to be the better judge of character, the more skilled at detecting the true feelings or intentions behind the facades of words.
and promises. The "language" involved in this form of communication is the language of synchrony, whose parts of speech are movement and gesture, and whose grammar, syntax, and style is, to a great extent, in dance. Edward T. Hall, in *Beyond Culture*, has described a number of examples of the way that synchrony influences behaviour. Films of children playing in playgrounds, for example, when shown at different speeds, show all of the children moving in "synch" with one another. Research conducted by William Condon during the 1960's confirms that virtually all human behaviour follows patterns of synchrony that vary as people interact with one another. Synchrony, Hall explains, is "rooted in biology, and modified by culture." Patterns of synchrony vary, in fact, more strongly from culture to culture than from individual to individual.

As was suggested in Part One of this paper, all human movement constitutes a language that functions as a kind of "communications net," transmitting vast quantities of information not only simultaneously, but at levels below our conscious attention. Operating on the principle of negative feedback, one becomes "aware" of the data only when it indicates that something has gone wrong. Thus, in the Japanese concept of "haragai," the use of honorifics will only be dropped when the interpersonal "set" of the group communicates that such would be appropriate. Dancing, aside
from its other aspects, is a form of training in this in-
tuitive language of movement. The importance of this in-
tuitive language for human society has been demonstrated in
a series of experiments developed by Dr. Paul Kegan, a
U.C.L.A. psychologist.

Dr. Kegan has developed a very simple board
game in which children are allowed one move each of a single
marker, until it can be brought to one side of the board or
the other. Whoever manages to get the marker to their side
of the board wins a prize, or token. With native-Indian
children, in remote Mexican villages, Dr. Kegan found that
they would typically sit quietly until one, usually the
older, would reach out and move the marker one space in his
or her own direction. The other child would then move the
marker another space in the same direction, until the other
player had won — then they cooperated to move the marker to
the other side, thus taking turns winning all the tokens.
The interesting thing about Kegan's work is that when this
game is used with children (of the same age) in Los Angeles,
the game invariably ends in a stalemate, often with the
board knocked from the table. 151

There is a form of synchrony which, in phys-
ics, is called "rhythm entrainment." In a room full of
violins, for example, if you pluck one string, the same
string on all the violins will vibrate measurably. Likewise, in a roomfull of grandfather clocks, all of the pendulums will eventually "entrain" to swing in tandem. There are biological parallels to entrainment, such as the fact that groups of women who live closely together will find that their menstrual cycles will begin to coincide. In children, this entrainment, or synchrony, may help explain how they come to form many basic and foundational values during the first months of life.  

During infancy the cerebral cortex barely functions, and all behaviour is dictated by the brainstem structures. Research at the National Institute of Mental Health has found definite expressions of empathy in very young children. Empathy, in a sense, might even be considered a form of synchrony in which the child relates to his or her environment through emotional and intuitive interactions with that environment. In the cultural aspects of this environment, the most important structure for this empathetic synchrony appears to function within the system of myths and folktales of the culture.  

Earlier in this chapter reference was made to the influence of "emotive-mnemonics" on such human reactions as fear and weakness, or confident and tranquil feelings of inner power. These conditioned responses require specific forms of learning or "memory patterns" through which to function, and these patterns appear most often, it seems, as
"eidetic imagery." Psychologist Gordon Allport has found that eidetic imagery tends to be extremely persistent, and clearer and even more detailed than normal ("real") imagery. Such imagery, in fact, appears to be central to the functioning of mnemonic devices, which in turn are most effective when they meet a specific criteria of image-related qualities, including:

- **Uniqueness** - unusual, fantasy images
- **Exaggeration** - bizarre, weird
- **Sensory** - predominantly visual
- **Interactive** - with the familiar
- **Simplicity** - child-like qualities
- **Creative** - strange and fascinating
- **Sexual** - "vulgarity" very powerful
- **Involvement** - Intense attention

Probably no cultural phenomenon so thoroughly incorporates these qualities as myths and folktales. That the myths and folktales of Indian, African, and other tribal cultures often seem bizarre and incomprehensible may be a clue that they communicate more meaningfully on other levels than those of rational consciousness. Myths and folktales, in this sense, communicate through words rather than of words; words thus create the imagery that triggers emotional, intuitive responses. Carl Jung, who was deeply intrigued by the "trickster" cycle commonly found throughout
North American Indian mythologies, wrote of this combination of clown and culture-hero that "he" was: "... in his earliest manifestations, a faithful copy of an absolutely undifferentiated human consciousness, corresponding to a psyche that has hardly left the animal level. He is a forerunner of the saviour, and like him, God, man and animal at once. He is both subhuman and superhuman, a bestial and divine being."  

Native informants have generally agreed that a person's basic values are learned in one's earliest years through hearing the myths and stories of the culture. As Paul Radin has noted, western attempts to "analyze" these mythological systems have never succeeded; we take them apart to see how they work, and they don't. Myths and folk-tales work indirectly; no "part" makes logical sense on its own, and the "whole" lies beyond what rational comprehension can grasp as a singularity. This is an important aspect of general systems thinking, following Stephen C. Pepper's concept of "metaphoric gestalts," which represent analogic "reductions" whereby these greater things can fit within the limitations of consciousness. And this is a perfect description of myth - as William Irwin Thompson has said, "to think mythically, all you have to do is think big." Perhaps, one might add, as big as you can.
That myths may relate to basic values more profoundly than "reasoned arguments" can perhaps be perceived in the observed paradox of individuals who make strong protestations concerning the importance of such "universal" values as human dignity, yet practice little, if any, charity in their immediate communities. C.K. Chesterton perceived this in his comments on philanthropy, when he stated that "A philanthropist may be said to be a lover of anthropoids." Thus, true generosity is never a calculation, but always an emotional and immediate response.

This relates back to the statements made earlier in this paper that Indian values were not universals, but always culturally contextual. The Indian personality exemplified such profound independence, and yet at the same time reflected such strong cultural uniformity, that many observers have mistaken this synergetic phenomenon for a kind of cultural paradox. L. Bryce Boyer, M.D., in his book *Childhood and Folklore: An Psychoanalytic Study of Apache Personality*, has pointed out the remarkable degree to which this cultural conformity results in a kind of creative, highly individuated harmony. Myths, and the world of nature, combined to provide the essential foundations of this. For the Indian, values, beliefs, legends and stories were all gifts, and treated as such. Chief Dan George, when asked whether he "really believed" the mythic legends he had been retelling, replied:
He said, almost sternly, "I love and respect every story that is told to me... every legend that is passed on... even if it does sound funny. When I read some of the books that come from the old country... the Bible and others... these are hard to believe. But I respect them because they were given to me." 158

The Indian was guided essentially by nature. The patterns formed by the geese flying south in the fall, wolves taking turns breaking trail in the winter snows, and lines of marching ants carrying fragments of leaves along a fallen log were all forms of information concerning the way of the world. Nature herself was both dancer and the dance, for who can tell where the one ends and the other begins. As Black Elk said, "All life is a circle." The Indians invariably danced in circles, and to their dances they brought the movements of the animals in ways that went beyond mimicry, and became transformation. Some Indian dancers even today can "suggest" the movements of a bear or wolf so effectively that one is startled for a second, and then wonders how it was done, the costume being so rudimentary.

In this uncanny ability, perhaps, lies some part of the Indian's secret of creative expression. "All art has its roots in the primitive," said sculptor Henry Moore, "else it becomes decadent." 159 Similar sentiments have been expressed by Picasso, and by Jackson Pollock. 160 In the phenomenon of creative expression there is a con-
nection with the underlying principles of nature whereby the
"wildness" of nature, the random and uncontrolled elements,
infuse vitality into man's existence. The role of myth in
this creative process is profound. Consider these words by
Chief John Snow, on the Stoney Indian manifestation of the
trickster called "Iktumni:

"When I speak to whitemen of Iktumni I find I run into one of the great problems of
dealing with another social system: language. Different cultures produce different values
systems, which in turn produce diverse vocabularies. Sometimes I find it almost impossible
to translate certain Stoney words into English and keep the true meaning or give the correct
connotation.

The name Iktumni offers such a problem. Literally the word in the Stoney language
means one who is out of his mind or crazy; but this English translation doesn't really convey
the proper meaning. However, Iktumni has two names, and when both interpretations are com-
bined they may better describe his character in English. This other name was Thicha-Yuski,
meaning one who outwits others or a person with deep understanding and extraordinary wisdom.

Iktumni was wise because he was able to talk and commune with both the natural and
spiritual world.... Iktumni was perhaps the most famous of all Stoneys in finding truth in na-
ture, but he was by no means the only such seeker or even the only successful one."

William Makepeace Thackery once said that:
"The two most engaging powers of an author are to make new
things familiar and familiar things new." In a programme
developed at Cambridge University - called "Synectics" -
William J.J. Gordon has attempted to employ this principle in training people to work together creatively. A strong sense of independence of mind was an important factor in creating the group synergy required. Dr. Gordon has remarked that in Synectics "... it was better to have all chiefs and no Indians." Perhaps he was aware of the fact that this saying originated with the frustrations of government officials who invariably found that every Indian did indeed seem to be his own chief. Synectics training begins with books on trauma and ambulance work, and with substantial exposure to poetry and literature. Synectics research discovered early what Gordon has described as a "shocking paucity" of a capacity for metaphor and analogy, which constitutes a "common language" for combined creative effort. The books on trauma, even vicariously, seemed to promote group-bonding: combining this with the poetry, etc., apparently works to tie cognitive and affective processes more closely. 161

* * * *

The Indian, especially on the trail, could communicate not only verbally, but with his hands, with the movements of his horse or his own body, with smoke, with mirrors, or even with the songs of birds and animals. As Gene Weltfish wrote of the Pawnee, the Indian was also a
master of the language of movement—of simply living. Among the Pawnee no orders were ever issued, no words spoken; people did what needed to be done. Life itself was a form of creative art. Those who have lived for any time in an Indian community have sometimes come to realize something of this creative transformation of nature. Some Indian communities somehow actually seem to reflect the patterns of tree branches, of trails crossing an open meadow, or the intricate traceries in the first ice on a winter pond. For the Indians it was essentially the elders who created this artful grace; that, perhaps, takes an artist to appreciate. As the painter Frederick Remington expressed it, "There is a dignity about the social intercourse of old Indians that reminds me of a stroll through a winter forest."
"Make Men of Them"

Faith in education and the transfer of that faith to our schools have contributed to an enormous expansion of our system of schooling, which in turn has taken on functions once performed by other institutions... The juncture to which we seem to have come raises the critical question as to whether our system of schooling has outlived its usefulness as an institution for both social reform and educational advancement. Critics may scoff at the way I have worded the previous sentence. Some would maintain that both claims are myths. I would have to nod in some agreement with those who say that schools tend to perpetuate many of the inequities of the surrounding society, that schools are weak agents of social reform, and that direct social reform and reconstruction of the schools must go hand in hand. And I would also have to nod in some agreement with those who say that our system of schooling has corrupted education...

John I. Goodlad,
from: *What Schools Are For*

The questions raised in the above commentary are essentially those of the introduction to this paper: Considering the extent to which our educational system has been unable to meet the range of demands made of it - should we concentrate on reforming the system or should we attempt
to replace it with something else? If it is the very nature of schooling itself, however, that creates a large part of the problem, then radical reconstruction would seem no more fruitful an alternative than doing away with schools entirely. As Goodlad infers, institutionalized schooling by its very nature is designed to serve what is actually a rather narrow aspect of our total educational requirements. If this is true, then perhaps what is needed is not one institution, but a network of diverse institutions designed to serve many ends—yet integrated sufficiently to reflect the need for unity, or coherence, among these ends. In such a network schooling would remain an important institution, but far from a dominant one.

In considering the possibilities of such a network of institutions, it is necessary first to be clear as to the ends this approach would serve, and to avoid confusing these ends with the means for achieving them. The confusion of knowledge and understanding, for example, has led to many of the problems in education today. The distinction between what a person knows and what a person is—in the sense of what a person's character is—has been a central theme in this paper, and this distinction marks the first clear division in understanding the nature of the ends that education represents. The 19th Century educational philosopher Johann Friedrich Herbart wrote of this problem that:
The test of a perfect instruction is exactly this - that the store of knowledge and concepts which it has raised by clearness, association, system and method to the highest flexibility of thought is, by virtue of the complete interpenetration of all its parts, at the same time capable as an organization of interests of compelling the will with its utmost energy. Because this is wanting, culture is often the grave of character.

There is in Herbart's words an appreciation of Heraclitus' dictum that "the learning of many things does not develop one's understanding;" and the important relationship this has to character development. Contrast Herbart's commentary, for example, with the following quotations:

Where student interest is already focused is the natural point at which to be in the elucidation of other problems and interests. The educational task is not only to provide basic tools of perception but also to develop judgement and discrimination with ordinary social experience.

Marshall McLuhan, from "Classrooms without Walls"

In the old days, in our villages, small bands of children would be wandering about, sometimes playing and sometimes drawn to one or another of the daily activities of village life. They might try to help out, or they might just stand and watch; they were guided more by their imaginations than by outside demands. Nothing held their interest for very long, of course, but over the years, as they circulated through the life of the village, they would learn everything there was to know. This was our education.

Bill Reid, Haida carver
This last passage is of particular interest here, for it seems to indicate a fulfillment of Herbart's requirement for "compelling the will with its utmost energy." Here is an educational system without formal schooling which nonetheless appears to meet the demands made of it — in terms of both knowledge and character — and yet seems to function almost invisibly through the framework of culture. Goodlad has written of our own culture that: "The notion of a contemporary society without schools is not feasible, because we are not sufficiently advanced to educate through the whole culture, by 'paedeia.' We have not yet harnessed other institutions or created the necessary new ones and charged them with educational responsibility." The problem is not, however, simply one of "advancement," for all of the modern world has in fact evolved from tribal societies such as the Haida represent. The problem is rather one of overdevelopment in particular directions, and a confusion, or blindness, as to the importance of others.

An important part of this problem is that we tend to confuse the different uses we have for the term "education." Many people, for example, think of being educated simply in terms of literacy — yet also understand the sense of what we call a "practical" education, a social
education, or even such statements as "he had his education from the mountains and the wilderness." Professional educators use this broader sense when they say that: "... the goal of education is to produce a certain kind of person;" 7 or: "... the aim of education is not merely to make citizens, or workers, or fathers, or mothers, but ultimately to make human beings who will live life to the fullest." 8 In this usage education is a metaphor for the whole of one's experience, which is of itself acceptable, but which should not be confused with more definitive applications, for this leads to serious problems in understanding.

While this broader use of the term education is inclusive of its relationship to other areas of concern—such as training, socialization and moral development—there is a stricter, more definitive usage that serves rather to distinguish education from these other experiences or areas of concern. In this latter sense education is restricted more to the quality and discipline of our understanding. "To be educated," writes educational philosopher Tasos Kazepides, "... is to have one's mind and character disciplined by the logic and standards of excellence immanent in the various disciplines of thought and action as we know them today." 9 If this is a primary concern of education, then perhaps Goodlad's admonition that schooling has "cor-
ruptured education" can be perceived more clearly, for the pressures and demands on schools in terms of schedules, agendas and even quotas are very often in direct conflict with the kinds of activities or experiences that promote the "higher qualities" of understanding. To avoid such confusions, it is important to clearly distinguish between what we mean by such concepts as education, training, socialization, and moral development:

EDUCATION: To distinguish education proper from these other "educational" areas is to limit our use of the term to its essential "bed-rock" concerns. As stated earlier, one of the primary concerns in education is not simply to acquire knowledge, but to improve the quality of our understanding of that knowledge. This to a great extent relies on:

- Respect for Evidence.
- Consistency and Clarity.
- Freedom of Thought.
- Standards of Verification and Classification.

The best means of providing for this kind of education, if we heed Socrates, is not mass instruction, but the free and congenial exercise of what he termed "maieutic inquiry," in which the teacher functions as a kind of "mid-
wife" at the birth of understanding and insight. In a sense, this is a kind of "learning how to learn" - the acquisition of what Rousseau described as "... the first and foremost part of education... which all the world neglects."

The kinds of institutions most suited to the ends described here are those that are free of coercive influences, but not of standards; for this reason such institutions, far from being compulsory, are often difficult to even enter. Tolstoi understood the importance of this sense of freedom of thought, and it permeated his educational writings: "The difference between education (schooling, that is) and culture lies only in compulsion, which education deems itself in the right to exert. Education is culture under restraint. Culture is free." 11

**TRAINING**: Direct instruction and heuristic practice is the one objective that schooling has widely demonstrated itself capable of meeting. Where "maieutic inquiry" provides for a knowledge about knowledge, training provides for a knowledge about things - about facts, information, techniques and skills. Training is particularly important in the development of:

- Motor Skills and Coordination.
- Communication and Language Skills.
- Algorithmic and Metaphoric Usages.
Training, however, is usually thought of as more within the domain of technical institutes or apprenticeship programmes than with public schools proper. There is considerable confusion between the purposes of these institutions, and perhaps the greatest "educational atrocity" that schools commit is to force all forms of learning to fit the procrustean bed of instructional training. Training in this sense is not merely vocational, but exists as an important aspect of virtually all school subjects. Training is therefore distinguishable from education, but not entirely separable from it.

**SOCIALIZATION:** Our knowledge about others and about our own culture constitute what we call socialization. A great deal of this knowledge is of the kind Michael Polanyi has termed "tacit knowledge," or knowledge that we are not always consciously aware of. In fact, as Edward T. Hall has described in considerable detail, much of this knowledge is particularly difficult to perceive from within one's cultural setting. Some of the central concerns of this area of knowledge include:

- Arousal and Modal Modulation.  
- Cultural Conditioning and Social Norms.  
- Comity and Empathic Responses.  
- Styles of Language Use and of Learning.
Arousal modulation, for example, concerns how we learn to walk, to adjust the volume, inflection and cadence of our speech, to "enjoy," and to pace ourselves relative to the way our culture uses time, space, and specific events. Modal modulation has more to do with our own personality, and with how it serves as a vehicle of social interaction. When we demand that schools provide for the acquisition of these social traits we misperceive the realities of what schools are; as John Dewey pointed out, schools are themselves a form of social life, and not a preparation for one. The moral dimensions of this social experience, moreover, cannot be separated from it, or introduced from the outside through either command or "bribery." Moral commitments, Dewey argued, develop "... only as the individual appreciates for himself the ends for which he is working and does his work in a spirit of interest and devotion to these ends."  

MORAL DEVELOPMENT: Where socialization is fundamentally a knowledge about others, moral development comes about essentially through the knowledge we have of ourselves. To acquire self-knowledge requires direct and personal experiences that bring us face to face with our true inner limitations and weaknesses, as well as our capacities and strengths. For these experiences to be meaningful, they
must involve some real sense of accomplishment or contribution, whether as an individual or as a member of a group. Fundamental to these experiences are:

- A Driving or Motivating Value System.
- Courage; Independence of Mind; Self-Control.
- Cooperation; Loyalty; Dependability.
- Perceptive Intelligence and Creative Insight.

These are the qualities or strengths of character that have been the central concern of this paper. They are not, of course, "moral development" in and of themselves, but are rather the important foundations within human character necessary to the building of any real commitment or integrity where moral values are concerned. The strengths of character listed above are developed as individuals make decisions and choices in situations that are demanding, meaningful, and real—real, that is, in the sense that they test our true commitments, and not merely our expressed explanations. In tribal societies most of the formal educational institutions were primarily concerned with the maturation of these character strengths, and this emphasis may well be the quality most lacking in modern education.

* * *
To distinguish between the various educational ends represented in the above four categories is essential to any understanding of how they might best be provided for; it is also essential if we are to avoid the confusions between educational means and educational ends discussed earlier. But in distinguishing between these various categories of objectives it is also important to remember, as Dewey argued of socialization, that these various educational ends cannot be separated in terms of actual experience, or practice. Therefore, in our strategies for attaining these ends, we must provide for each of them appropriately, but through means that must by their natures proceed as a unity - much in the sense of Herbart's "complete interpenetration of all its parts." This interpenetration, however, may represent a more complex challenge than our present capacities for organized planning are prepared to deal with.

Each of these four categories of educational ends is almost completely dependent on the support and influence of each of the others in achieving its ends. Metaphorically speaking, the different means of achieving these various sets of objectives must be woven together as the four strands of a braided climber's rope are woven; each strand is important, but so is the pattern and the accuracy of the weave. The objectives listed under "Education," for
example, could hardly be achieved without some reasonably sound base of character strengths, for to conceive of "respect for evidence" devoid of values or independence of mind is not merely ludicrous, but suggests a "respect" that is merely conditional, and exercised only when it is profitable to do so.

Within the framework of traditional Indian education there were important functions provided by a variety of cultural institutions - these institutions functioned together in patterns which - as in the metaphor of the woven climber's rope - themselves constituted the educational system. Twelve of these kinds of institutions, as they relate to three essential levels of development, will be discussed here:

THE PRIMAL SELF: On page 119 of this paper two scales of human development are contrasted, or rather mirrored, to reflect in turn a number of important considerations in early childhood development - and some of the consequences of their neglect. The negative aspects of this scale, as cited by Louis Raths, closely follow practices or beliefs that are endemic in modern western society. The negative effects of these practices are widely known, yet our society by and large clings to them, and the more telling is the
evidence presented against them, the more fiercely are they defended. Primal societies, on the other hand, have generally been found to avoid these practices with equal conviction, or "prejudice." The lack of corporal punishment in tribal cultures, contrasted with the argued "importance" of such forms of discipline in western society, is one example of the differences in these practices.

In North American Indian society there were important formal institutions that served to promote what is well represented by the scale on page 119 taken from Erik Erickson's "psychosocial development model." Among the most important of these were:

- Myths, Legends and Folktales.
- Cultural Ceremonials.
- Ceremonial Adoptions.
- First-Fruits Rites.

These institutions served essentially to bond the individual to the culture and "life-way" of the community. Values such as generosity and sharing, non-interference and respect for traditional wisdom were of particular concern here. These deeply-felt convictions, like Wittgenstein's "river-bed propositions," were not so much chosen, in the rational sense, as they were acquired - much as we acquire our perceptions of time, our more fundamental
concepts of deportment, or our tastes in foods. A community of people as deeply committed to generosity and sharing as modern man seems committed to acquisitiveness, will surely form a markedly different society from that which modern man enjoys.

THE CONCEPTUAL SELF: This level of development focuses more on the place that each individual sees as his or her own unique position in the community or society. In primal cultures, where communities of people tend to be more stable and more tightly knit, one's place is determined essentially in relation to all of the other members of the community. In modern society, particularly in urban life, this is much less the case; we tend to identify more with property, with position and with influential "connections" - which are far from the same thing as mutual loyalties. In American Indian societies the important formal institutions at this level tended to focus on early adolescence, and included:

- Prestige Names.
- Sodality Training.
- Sodality Initiation.
- Warrior, or Adult Status.

Native elders say that "if you know your name, you know your place." It was common, in Indian societies, for a person to take or receive a new name when important
life changes occurred. As is true in perhaps all human societies, a person's place in primal cultures was closely related to his or her economic activities or roles. Sodalities - the various "secret," warrior, or spiritual societies that were important aspects of traditional communities - were the institutions that gave shape and purpose to one's place in the community, economically and otherwise. Initiation into these sodalities was an important aspect of identity. All of these helped to determine one's adult status - for most men, and for a surprising number of women, this took the form of warrior status.

THE TRANSCENDING SELF: In traditional Indian society one's identity within the community was secondary to one's identity at the level of a personal, spiritual relationship to the Great Spirit, which to the Indian symbolized "the great circle of all creation." This sense of personal, independent identity was an essential part of the values of courage, inner calm and equanimity that the Indians so admired. Among the cultural institutions that served to develop this inner identity were:

- The Rites of Passage.
- Solo Spiritual Retreats or Journeys.
- The Vision Quest.
- Oratory and Leadership.
These institutions represented powerful and forbidding passages or trials that challenged an individual's full inner strengths and resources. These ordeals were never compulsory; in fact, one had to meet demanding standards of preparation before being allowed to attempt them. The vision quest, or guardian-spirit complex, is a particularly interesting institution because it seems to place an individual in direct touch with the deepest senses of being; a level of the self that makes itself known only through visionary symbols or episodes. Oratory, the expression of Indian culture that so greatly impressed Franklin and Jefferson, was a spontaneous, intuitive statement that revealed important aspects of a person's character not only to others, but often to themselves as well. The essential process whereby adulthood is earned — and then formally recognized by the community — is one of the most widespread of cultural practices in primal societies. To have so thoroughly abandoned these practices in our transition to civilization may represent one of the greatest losses that human societies have ever had to overcome; we may discover too late just how necessary the fruits of these practices may be to the survival of society itself.

* * *
Jamake Highwater, in his book *The Primal Mind*, comments on the subject of tribal being: "Vine Deloria, Jr. (1973) provided a keen insight into the most fundamental aspect of tribalism among Native Americans when he wrote that 'there is no salvation in tribal religions apart from the continuance of the tribe itself'". This insight recognizes the importance of what might be called "spiritual identity" to the long-term survival of a culture. Cultural survival, as is argued in Chapter Two, depends in the long run on "margins of tolerance" that cannot always be understood as important in the shorter run of individual life-experience. The character strengths of self-reliance, perceptive intelligence, competence, cooperation, dependability, determination and creative insight function as margins of tolerance in the sense that communities of individuals in which these strengths are well developed have an advantage when faced with the unexpected and overwhelming circumstances that life may place before us.

As such, this "advantage" represents a kind of long-term strategy for survival that is indirect, and thereby often broadly anticipative of unforseen possibilities. This sense of an indirect approach has in many respects a synergetic influence, as can be perceived in this passage by one of the most highly-regarded military analysts of our time, Sir Basil Liddell-Hart:
With deepening reflection, however, I began to realize that the indirect approach has a much wider application - that it was a way of life in all spheres; a truth of philosophy. Its fulfillment was seen to be the key to practical achievement in dealing with any problem where the human factor predominates, and a conflict of wills tends to spring from an underlying concern for interests. In all such cases, the direct assault of new ideas provokes a stubborn resistance, thus intensifying the difficulty of producing a change of outlook... Avoid a frontal attack on a long established position; instead, seek to turn it by flank movement, so that a more penetrable side is exposed to the thrust of truth. But, in any such indirect approach, take care not to diverge from the truth - for nothing is more fatal...

It is to our great loss that the insights of Liddell-Hart's conception of "grand strategy" have not been more widely appreciated in the affairs of modern states. Direct control, coercion or the threat of coercion play dominant roles in virtually all of the spheres in which we relate to one another - politically, economically and socially. One of the most important aspects of the indirect approach, particularly as it applies to social activities such as child-rearing, teaching, and personnel management are the alternatives that it suggests to coercion and force.

In western society we have come to define freedom almost entirely in terms of a freedom from such forms of interference, but in primal societies personal freedom is conceived of as much more than simply the absence of such negative influences - perhaps in the way that peace might be thought of as much more than merely the absence of war. In North
American Indian societies, for example, personal freedom was something to be created within one's identity, and was re- alized as a positive force capable of overcoming one's inner fears, as well as those from the outside.

An educational system that was consistent with this approach would therefore not be content with the rem-oval of coercive influences, but would seek to develop and preserve values and character strengths that would contribute to personal freedom as a positive force. Abraham Mas- low's concept of "eupsychian management," which was dis- cussed in Chapter One, reflects one example of an "indirect approach." To these ends, Maslow developed a list of 36 basic assumptions in his proposal - the first 6 of which contrast sharply with Western experience:

1. Assume everyone can be trusted.
2. Assume everyone is to be provided with as much pertinent information as possible.
3. Assume in all of your people the impulse to achieve.
4. Assume there is no dominance-subordination hierarchy.
5. Assume everyone shares general management objectives.
6. Eupsychian management must assume good-will among members - synergy is also assumed.
A society—or an educational system—consistent with these principles would have to be very different from our own. Maslow argued that these principles did, in fact, operate within the Northern Blackfoot Indian community in which he lived, and which he described as "close to an ideal society." The cultural value of generosity and sharing, for instance, was maintained in Indian societies by institutions that often took the form of elaborate ceremonials, of which the potlatch of the northwest coast tribes is perhaps the best known example. The Blackfoot also had such an institution, which Maslow described as a perfect example of Ruth Benedict's concept of social synergy. "Among my Blackfoot Indians," Maslow wrote, "the 'givaway' was such a synergetic institution, the way in which the Blackfoot could attain prestige, respect, status, love..." 18 Maslow also argued that synergy, in human affairs, was in fact closely linked with trust, as well as sharing.

Social Institutions, the structures that Loren Eiseley described as the "bones of culture," almost always have important educational functions. In traditional Indian education, as outlined earlier, there were complex networks of institutions that informed and gave substance to each stage of an individual's development. In stating that this educational system worked to "produce" a certain kind of
person, however, can be misleading. Our use of the word "produce" implies the forming or shaping of something from inert or passive raw materials. In traditional education, however, the educational system functioned more as the raw materials, or rather the tools, with which the individual created his or her own unique person, or self. That the people who lived in these traditional societies were aware of the important educational functions of these institutions is reasonably certain. Books such as Ohiyesa's Indian Boyhood, quoted earlier, provide insights into the Indian's sensitivity to educational matters. Language also provides insights in terms of what people are concerned with, such as the often-cited example of the many different words for snow in Eskimo. In the Cree language there are 24 words used to identify the important life-stages - 18 of them concerning childhood and adolescence. Education in traditional Indian societies was often informal, and tended to function mostly through cultural institutions that had multifold purposes, but the concepts of education itself in these societies were sophisticated and insightful, and played an important part in achieving their educational ends.

On the following two pages there are charts that attempt to provide some sense of a framework for the values and practices in traditional Indian education. The first relates the values and character strengths discussed
earlier in this paper with specific practices, and the second contrasts the Cree life-stages with four contemporary models from psychology and education:
<table>
<thead>
<tr>
<th>The Doctrine of Non-Interference</th>
<th>The Sacred Principle of the Circle</th>
<th>The Traditions of Generosity - and Sharing</th>
<th>The Inner Path of Courage</th>
<th>Respect for Traditional Wisdom</th>
<th>The Way of One Spirit</th>
</tr>
</thead>
<tbody>
<tr>
<td>To rely on one's own resources - with no need to coerce others, or to seek for the sanction of authority.</td>
<td>To be sensitive to the connectedness of things; to see and understand the relationships that are often hidden to others.</td>
<td>To appreciate the important relationship between competence and generosity, and to find in this a sense of worth.</td>
<td>To share with others in both abundance and in adversity, and to forge, in this sharing, a renewed sense of common purpose.</td>
<td>To combine moral and physical courage to the degree whereby one comes to see even one's enemies as honored guests.</td>
<td>To be able to see beyond the superficial appearances of diversity to appreciate also the ways in which all things share unity.</td>
</tr>
<tr>
<td>Independence &amp; Perceptive Intelligence</td>
<td>Productive Competence</td>
<td>Loyalty &amp; Cooperation</td>
<td>Sense of Calm Determination</td>
<td>Faithful - Dependable</td>
<td>Sensitivity &amp; Creativity</td>
</tr>
<tr>
<td>Self-instruction, independent, heuristic practice; challenges that require a high degree of self-management and resourcefulness.</td>
<td>To learn to read nature in all of its manifestations and processes - especially in human character and integrity. To be a tracker.</td>
<td>An apprenticeship type of training in a variety of basic skill areas, both in relation to one's family and to other social groups.</td>
<td>Training with others under demanding and stressfull conditions that call on a wide range of personal strengths and abilities. To share in leadership.</td>
<td>Ceremonial preparations for adulthood that provide insight into one's true nature and character, and that strengthen it.</td>
<td>The mastery of the literature of one's culture in all its forms so that one gains an appreciation of truth in the many forms that it may assume.</td>
</tr>
<tr>
<td>The Solo Spiritual Retreat or Journey.</td>
<td>The Solo Spiritual Retreat or Journey.</td>
<td>Sodality Training.</td>
<td>Sodality Training.</td>
<td>The Vision-Quest, or Guardian Spirit Complex.</td>
<td>Myths, Legends and Folktales - also the various Artistic Expressions of the Culture.</td>
</tr>
<tr>
<td>The Rites of Passage to Adulthood.</td>
<td>The Rites of Passage to Adulthood.</td>
<td>First-Fruits Rites.</td>
<td>Sodality Training and leadership Experience.</td>
<td>Prestige Names.</td>
<td>Cultural Ceremonials.</td>
</tr>
<tr>
<td>The Vision-Quest, or Guardian Spirit Complex.</td>
<td>The Vision-Quest, or Guardian Spirit Complex.</td>
<td>The Solo Spiritual Retreat or Journey.</td>
<td>Oratory.</td>
<td>Warrior, or Adult Status.</td>
<td>The Rites of Passage to Adulthood.</td>
</tr>
</tbody>
</table>
CONTRASTING AN INDIAN MODEL OF LIFE-DEVELOPMENT STAGES WITH FOUR CONTEMPORARY MODELS

CREE INDIAN TRADITIONAL LIFE-STAGE IDENTIFIERS:

Oskawasis (infant)
Oskinik' w'gin's (boy of 10)
Oskinik'skwesis (girl of 10)
Oskwek' w (boy about 14)
Oskinik' w (girl about 14)
Oskinik'skwew (youth)
Kéhteskinik' w (youth of 20)
Kéhteskinikiskwew (maiden)
Kéhteyato' w (young mrd. man)
Kéhtey' w'w (young mrd. woman)
Kéceyimu (older man)
Notokwea (older woman)
Kawikehkaw (elderly person)
Nipahéhkan (someone dying)

LIFE-SPAN DEVELOPMENT MODEL:
(Lipsett & Reese)

INFANCY
physical development and locomotion

EARLY CHILDHOOD
language acquisition

LATE CHILDHOOD
cognitive processes

ADOLESCENCE
puberty - leave parents

EARLY ADULTHOOD
career & family

MIDDLE AGE
life-peak; retirement

OLD AGE

DEATH

PSYCHOSOCIAL DEVELOPMENT MODEL:
(Erik Erikson)

INFANCY
basic trust, social attachment, maturation of motor functions

EARLY CHILDHOOD
autonomy, self-control, fantasy & play, language

LATE CHILDHOOD
identity, formal operations, peer membership, internalized morality

ADOLESCENCE

EARLY ADULTHOOD
family & work

ADULTHOOD
career & children

MATURE
acceptance of life, developing a point of view about death

TRANSCEENDENCE
creativity, resistance to enculturation, peak experiences

HIERARCHY OF NEEDS:
SELF-ACTUALIZATION MODEL (A. Maslow)

EARLY PHYSIOLOGICAL NEEDS:

PRE-OPTERATIONAL STAGE
dsensory recognition of external world

CONCRETE OPERATIONAL STAGE
cognitive organization

FORMAL OPERATIONAL STAGE
independent reasoning and inference

COGNITIVE DEVELOPMENT MODEL:
(Jean Piaget)

SENSORIMOTOR STAGE
automatic reflexes

SENSATION
spontaneity

LOVE
self-acceptance

BELONGING
relationships

ESTEEM
appreciation of life, of solitude, of ends - sense of humour

ADOLESCENT SELF-ACTUALIZATION

field-independence, deeper social interests, democratic point of view

TRANSCENDENCE (Postconventional stage proposed by L. Kohlberg)

ethical or moral "awakening"
If native Indian communities in North America today are going to be able to preserve and renew their traditional cultural institutions they will first have to regain control of the essential services and decision-making structures in their communities. This self-government issue has become increasingly important throughout North America in recent years. From the Indian's point of view this represents neither a separatist nor isolationist position, but rather an issue of cultural survival, and a conviction that aboriginal culture has an important place in modern society. What is being asked of modern society, essentially, is that it:

- Recognize the values - and value - of traditional culture.
- Make some commitment to their renewal and preservation.
- Develop a greater appreciation of cultural diversity.

Toward these ends, insofar as education is concerned, it is proposed here that a new partnership be formed between the aboriginal and modern cultures of North American society. This new partnership would be an attempt to recapture something of the spirit of those relationships between Indian and non-Indian communities in the past in which each profited from the best qualities of the other. That such relationships have been all too rare in our history serves only to emphasize their importance to our pres-
ent circumstances. The relations between the Quakers and the Indian peoples of the east during the 17th Century, as discussed briefly in the introduction, is a particularly significant example of such a partnership, and of the benefits to be gained. In Canada, the early French voyageurs lived amicably with the Indians, and the Meti society of the west was created in a fusion of these two cultures. In British Columbia, one of the last areas of major settlement, the transition from early to later relations proceeded far differently, and reflects more the kinds of changes that most of the Indian societies of North America had to face.

During the era of the fur trade Indian and non-Indian relations in British Columbia were by and large amicable. James Douglas, first Governor of Vancouver Island and later of British Columbia, described the Indians as "hospitable, and exceedingly punctilious in their mutual intercourse - grateful for acts of kindness, and never fail to revenge an injury." 19 Douglas dealt with the Indians on their own terms, often adopting their ways of settling problems or disputes. His policies relied entirely on mutual trust and fair dealings, for the Indians were themselves sharp traders, and held the upper hand militarily at that time. Douglas' policies worked because they were beneficial
to both sides, but also because they were based on respect. But as British Columbia was opened increasingly to settlement, this mutually beneficial relationship changed. 20

Although most of the native communities of British Columbia suffered great losses to smallpox and other diseases during the 19th Century, native societies retained their cultural integrity to a surprising extent, and by the end of the 19th Century native people were making important contributions to British Columbia's economic and social identity. As Rolf Knight has pointed out in his history of these contributions, Indians at Work, 21 native people were widely employed in the general economy from the 1880's into the 20th Century. Native people owned and operated farms, orchards, mills, sailing ships and small industries such as blacksmithing and haywire production. The common view of the Indians as trappers, fishermen and makers of curios is only a small part of the picture, and an exceeding misleading one. Indian involvement in farming, which peaked just after the turn of the century, represented at one time over one-half of the agricultural output of the entire province. 22 By 1931, however, the Indian population had dropped to only 3% of the provincial total - from an estimated 80% in 1870. 22 These pressures, combined with the economic depression of the 1930's, forced a great many of these agricultural holdings and small industries out of the
hands of native ownership. The Indian population was gradually but inexorably forced onto reserves, and dependent on federal welfare programmes for their survival.

When the eventual economic recoveries brought by the second world war reached British Columbia the opportunities went virtually entirely to non-Indians. By the 1950's the welfare life-style on reserves had become thoroughly entrenched. This life-style was governed or at least controlled by two groups of people - government agents, and the missionaries. The government controlled the economy on reserves, but even more important they controlled the natural resources that had been the aboriginal economic base. The missionaries, on the other hand, controlled or rather attempted to replace, the cultural institutions that comprised the Indian's way of life, which they generally regarded with religious abhorrence. 23 To their ends the missionaries relied much less on the church, however, than they did on the system of residential schools that served - with the help of the law - to separate native people from their culture at a very early age. 24 As Knight observed, "these forces... haltingly, but irresistably, drove many Indian people into the ranks of the semi-permanently unemployed during the last two decades (1950's - 70's)." 25 During this same period the control of education shifted gradually from church to state. It is no tribute to our
educational system that the height of the Indian's success in the economy of British Columbia occurred before it had made any serious impact on their way of life - and that it has grown in influence only proportional to the continued denigration of their culture and general standards of living.

The less-than-promising economic realities of British Columbia in the 1980's has placed native people in an economic position comparable to that of the 1930's. None of the major resource industries - logging, mining and commercial fishing - are expected to experience any real growth for the next two decades, and may in fact face reductions. In most of these resource industries, moreover, there have been widespread reports of mismanagement, and studies here have shown that there is a pressing need for fairly massive efforts at resource conservation and preservation. By the end of this century, the provincial government has stated, the number one economic activity in B. C. will be tourism - not because that area is expected to grow, but because the others will have significantly dwindled.

What opportunities the future might hold for native people, then, could be expected to be greatest in the fields of tourism, resource and environmental management, and in social services. In terms of tourism, of course,
native people have an important opportunity for cultural and artistic development that has great potential — yet this area has received little support from government or other funding agencies. The native Indian pavilion that was to have been one of the major attractions at British Columbia's "Expo 86" trade fair, for example, was scrapped when the federal and provincial governments suddenly and inexplicably withdrew all of the previously allocated funding — though even larger amounts were given to Cuba, Kenya and other countries. Native efforts to conserve some of the few remaining unlogged areas in the province — some of which are considered as sacred ancestral lands — have met with punitive reprisals from industry and government. The Nishga Indian people of the Nass River area have fought for years to halt what they consider the mismanagement of logging operations on their lands, as have the Haida, the Nootka, and a number of other tribal groups. Insofar as social services are concerned, a great many native communities have experienced the introduction or growth of social ills over the last two or three decades that only seem to gather new momentum as the funding for social services is increased. The promise of assimilation — which was never the choice of native societies in any event — has instead become the threat of greater poverty and social decay. Surely our existing "partnership," to call it that, could bear improvement.
A new partnership between the aboriginal and modern cultures and social institutions of British Columbia — or of North America — would to a very great extent have to be a partnership in education, for in education, more than any other part of society, rests our hopes for the future. As a first step toward such a partnership in education, it is proposed here that: first, educators join in the demands being made for a Royal Commission into Education in the Province of British Columbia; second, that native-Indian societies be recognized as cultural citizens, with the right to self-preservation within modern society; and, third, that this commission be an open forum where other social institutions would have the opportunity to join with professional educators in addressing the full purpose of education in its many forms and ends. To this last, it is also proposed that three broad categories of institutions be sought out:

1. Institutions concerned with citizenship, character development and personal direction: Cadet Organizations, Scouting, Outward Bound, Search and Rescue Groups, Boy's Clubs, Police Auxiliaries, Youth Programmes (as Kitimavik), the Forest Service, Conservation Groups, and local service clubs.

2. Institutions concerned with religious guidance, and mental and spiritual well-being; church groups, spiritual study groups, meditation and related
training organizations, psychiatric and psychological therapy services, community councils, family support groups and charitable organizations.

3. Institutions concerned with community integrity, cultural flourishing, and family life: community service organizations, P.T.A.'s, arts organizations, veterans organizations, family counselling services, community centers, major cultural events (organizers), scouting and recreational organizations.

Native-Indian participation in each of these three categories of institutions would be most valuable. Scouting, as an organization, makes the claim that they are one of the few social institutions committed to building character in the young. The origins of scouting and its programmes, as discussed in Chapter One, you will recall, came essentially from the American Indians, and from the Ndebele Zulu of central Africa. In the second category, native-Indian participation could help contribute to that higher plane of spiritual reflection where, as Chief John Snow has said, "the Great Spirit reveals his love for diversity." Such was the teaching of Ghandi, and of Martin Luther King. In British Columbia, with its burgeoning ethnic diversity, there is no small need of such direction. In the last group, those institutions concerned with community, cultural, and family integrity, native people also have much to offer. Imagine our cities without breadlines or unem-
ployment; without drunk-tanks or juvenile suicide statistics. That such accomplishment might seem "utopian" is merely another indication of the sickness of modern society; such things are not impossible, in fact, they are necessary.

As Herbart observed, in the quotation cited earlier, because such things are lacking in our educational experience, "culture is often the grave of character." When this is true, character will in the end also become the grave of culture.

The new partnership in education proposed earlier would therefore be much more than a new relationship between the aboriginal and modern culture, for it would also have to build a new relationship between the groups of social institutions discussed above. As in the metaphor of the climber's rope, none of these "strands" can function properly apart from the others—each may serve a different emphasis, but the pattern and "tightness of weave" are also essential to these ends, which can only be achieved, in the practical sense, within the unity of each individual. Native Indian culture could make important contributions in all of the areas of concern outlined earlier in this chapter:
EDUCATIONAL ENDS: Schools have long been in a quandary where educational ends are concerned because they have had to incorporate forms of accountability that are really appropriate only to training, and which are actually detrimental to the ends of education proper. To merely eliminate these forms of accountability, however, leaves only a vacuum where there is in fact a great need for some form of structure. In traditional education this necessary structure was embodied within the various sodalities or cultural organizations; sodality membership - when it is itself highly prized - provides not only a powerful motivating influence, but when combined with sodality (or warrior - or adult) status, also provides a reliable and efficient form of accountability. Lt. Col. James Channon, the former member of the U.S. Army's "Delta Task-Force" think-tank quoted in the last chapter, has commented that the painted shield of an Indian warrior was in fact a more reliable guide to character and ability than a modern soldier's personnel file. The educational ends referred to earlier were, in some ways, an important aspect of the kinds of "accountability" that sodality structures represented. Thus, organizations such as scouting or cadet groups could provide an important indirect role in education. In this sense also, the traditional tribal sodalities of native-Indian communities - many of which still survive in vestigal form - could once again be renewed to fulfill their necessary social and educational
functions.

TRAINING ENDS: Instruction and heuristic practice are the two fundamental and complimentary means of achieving the ends of training. The importance of heuristic practice recognizes that all instruction must, to some degree, rely on self-instruction, for without this vital element there can be no real depth of understanding. Self-instruction, however, requires considerably more than merely the absence of formal teaching, for self-instruction is entirely dependent upon the capacity and the will of the individual to benefit from it. Although educators have long recognized the importance of "learning how to learn," this remains one of the weakest areas in modern education. In traditional societies, where self-reliance was considered to be of paramount importance, there were a number of educational experiences that contributed to these important ends. Among these, the solo spiritual retreat, the vision-quest and the rites-of-passage to adulthood were prominent examples. The achievements of the Outward Bound programmes, discussed in Chapter 5, represent one contemporary kind of structured experience concerned with these ends. In native communities today, the resurgence of these institutions - structured in terms of modern realities - could provide an important source of community strength, and could provide valuable models to inform the whole of modern education as well.
SOCIALIZING ENDS: A number of social critics have tried to make us more aware of the processes that seem to be leading us into an increasingly isolated, shallow and "temporary" kind of society, devoid of the sense of community - and even of family - that have long been regarded as the foundations of culture. Schooling has always been recognized as an important form of social experience, and schools have also been influenced by the negative influences described above. The major cultural or community organizations of modern society could contribute a great deal toward the creation of a new partnership in education - a partnership in which culture would be understood to have an important role. In traditional societies this role was generally assumed by a complex range of ceremonial and informal practices in which the cultural arts of the community found expression. Of greatest importance to education were the institutions involving ceremonial adoptions, the giving of names, first-fruits rites and similar forms of recognition. It is particularly unfortunate, in British Columbia, that over the last century cross-cultural participation in traditional native-Indian celebrations has steadily diminished, for in no other area, perhaps, can intercultural bonds be so readily and strongly forged. The potential of these cultural events for the future well-being of this province should not be overlooked.
MORAL DEVELOPMENT ENDS: The inappropriateness of the "instructional approach" to providing for moral development has been stated no more forcefully than in the research findings of the moral-education programmes themselves. Their overwhelming irrelevance has led, in fact, to a general rejection of this role within formal education by a growing number of educational leaders. Yet this area of concern increasingly seems to overshadow all others, particularly when some event draws our attention to the often horrifying costs—in terms of human suffering and the waste of human potential—that the moral failures of modern society bring about. The best way for society to protect itself from these evils, it is argued here, is not merely to attack them directly, but to stop creating them in the first place. Otherwise, all other preventions become increasingly a part of the problem—and an additional impediment to its resolution. Many psychologists, including Drs. Wolfgang Jilek, John F. Bryde, Abraham Maslow, and Erik Erickson, among others quoted in this paper, have recognized the importance of the educational strategies of the Indians and other primordial peoples toward the development of individuals who are assets to their culture, rather than liabilities. Of greatest importance, perhaps, is that this can be achieved not in spite of—and certainly not by eliminating—individual expression, but rather to synergetically utilize the very strengths of individualism itself. This was achieved
through the functioning of nearly every one of the cultural institutions of traditional society, but perhaps most of all through the ceremonial initiations, sodality training and such experiences as the vision-quest and other forms of extramundane intercession. If we could somehow recapture some of the spirit of these institutions, we might find this the greatest of the benefits that a new partnership in education might bring.

As a final commentary, and to re-emphasize the importance of the combined or cooperative interplay of these various approaches to education in its broadest sense, a passage from the journals of arctic explorer Knud Rasmussen provides an especially fitting end to this paper. This passage, in a sense, provided the inspiration for the "new partnership" proposed above, for it brings one back sharply and powerfully to the fact that between the oldest and the newest of human societies there are bonds of common experience that override all differences, all assumed superiorities, and all illusions of greater and lesser paths. It is offered here in the same spirit that it was received - as a gift from the past to the education of the future:

For several evenings we had discussed rules of life and taboo customs, without getting beyond a long circumstantial statement of all that was permitted and all that was forbidden. Everyone knew precisely what had to be done in any given situation, but whenever I put my query: "Why?", they could give no answer. They regarded
it, and very rightly, as unreasonable that I should require not only an account, but a justification of their religious principles. They had of course no idea that all my questions, now that I had obtained what I wished for, were only intended to make them react in such a manner that they should, excited by my inquisitiveness, be able to give an inspired explanation. Aua had as usual been the spokesman, and as he was still unable to answer my questions, he rose to his feet, and as if seized by a sudden impulse, invited me to go outside with him.

It had been an unusually rough day, and as we had plenty of meat after the successful hunting of the past few days, I had asked my host to stay at home so that we could get some work done together. The brief daylight had given place to the half-light of the afternoon, but as the moon was up, one could still see some distance. Ragged white clouds raced across the sky, and when a gust of wind came tearing over the ground, our eyes and mouths were filled with snow. Aua looked me full in the face, and pointing out over the ice, where the snow was being lashed about in waves by the wind, he said:

In order to hunt well and live happily, man must have calm weather. Why this constant succession of blizzards and all this needless hardship for men seeking food for themselves and those they care for? Why? Why?

We had come out just at that time when the men were returning from their watching at the blow-holes on the ice; they came in little groups, bowed forward, toiling against the wind, which actually forced them now and again to stop, so fierce were the gusts. Not one of them had a seal in tow; their whole day of painful effort and endurance had been in vain.

I could give no answer to Aua's "Why?", but shook my head in silence. He then led me into Kublo's house, which was close beside our own. The small blubber lamp burned, but with the faintest flame, giving out no heat whatever; a couple of children crouched, shivering, under a skin rug on the bench.

Aua looked at me again, and said: "Why should it be cold and comfortless in here? Kublo has been out hunting all day, and if he had got a seal, as
he deserved, his wife would now be sitting laugh-
ing beside her lamp, letting it burn full, without
fear of having no blubber left for tomorrow. The
place would be warm and bright and cheerful, the
children would come out from under their rugs and
enjoy life. Why should it not be so? Why?"

I made no answer, and he led me out of the house,
into a little snow hut where his sister Natseq
lived all by herself because she was ill. She
looked thin and worn, and was not even interested
in our coming. For several days she had suffered
a malignant cough that seemed to some from far
down in the lungs, and it looked as if she not
long to live.

A third time Aua looked at me and said: "Why must
people be ill and suffer pain? We are all afraid
of illness. Here is this old sister of mine; as
far as anyone can see she had done no evil; she
has lived through a long life and given birth to
healthy children, and now she must suffer before
her days end. Why? Why?"

This ended his demonstration, and we returned to
our house, to resume with the others the inter-
rupted discussion.

"You see," said Aua, "you are equally unable to
give any reason when we ask why life is as it is.
And so it must be. All our customs come from life
and turn towards life; we explain nothing, we
believe nothing, but in what I have just shown you
lies our answer to all you ask."

* * *
A number of outdoor training programmes, including "Outward Bound," the "National Outdoor Leadership Schools," and the "Boy Scouts," have been referred to in various arguments in this paper. These organizations are probably the most influential of the "educational" institutions that are not an integral part of our institutionalized system of public education. An essential quality of all such informal educational programmes is that they exist only insofar as people seek them. Margaret Mead has observed that this is perhaps the most essential difference between the educational systems of primal peoples, and those of civilization.

"What is wanted," wrote George Bernard Shaw, "is to see the student in pursuit of education, and not the other way around." Many contemporary critics of education have written hopefully of some future state of affairs in which teachers could be freed of their "sergeant/foremen" duties, and begin to do what they originally intended - which was to make a positive difference in the lives of their students. To these ends, in fact, educators
have struggled to overcome the negative influences of "the system" with a veritable legion of programmes, courses and curriculums. The programme outlined in this paper does not represent a rejection of schooling, but rather a rejection of schooling misused or improperly applied. The graphs and charts in Chapter Six, for example, outline a number of areas in which academic content is of basic importance. By structuring existing curriculum materials in suitably packaged units, or "offerings," a very broad array of excellent resources could be developed. The present state of computer technology, moreover, makes such an approach highly feasible.

On the following pages 44 contemporary educational programme models are listed. These models are then related to the specific aspects of the programme outlined in this paper to which they most appropriately apply. This does not imply that these curriculum models should serve as "sub-units" of this programme, but rather that they could substantially, and valuably, inform the various component areas of it:
1. (Asbell, B.), Reading Through Writing Model for Computer Study
2. (Ausubel, D.), Advanced Organizer Model
3. (Brown, G.), Confluent Education Model
4. (Bruner, J.), Concept Attainment Model
5. (Clark, J.), General Systems Global Education Model
6. (de Bono, E.), Teaching for Thinking approach
7. (Dennison, G.), "First Street" Independent School Model
8. (Dewey, J.), Projects in Education Approach Model
9. (Fuller, R. B.), Independent Education Automation/"Critical Path" Model
10. (Furman, H.), Thinking and Games-Approach Model
11. (Gazda, G.), Human Relations Development Model
12. (Gibbons, M.), "Walkabout Programme" Model
13. " Universa! Curriculum Model
14. (Glasser, W.), Classroom Meeting Model
15. (Goodlad, J.), The Mankind School Model
16. (Gordon, T.), "Leader-Effectiveness Training" Model
17. (Gordon, W.), Synectics Model
18. (Grinder, R.), Neurolinguistic Programming Model (wi: Va. Satir/M. Erickson)
19. (Hollingsworth, B.), Hunter College Programme for the Gifted
20. (Hunt, D.), Conceptual Systems Model
21. (Keller, F.), Personalized System of Instruction Model
22. (Kohlberg, L.), Moral Reasoning Model
23. (Kolb, D.), Experiential Learning Model
24. (Leonard, G.), High-Motivation Model
25. (Livesey, L.), Noetic Education Model for General Systems Education
26. (Maslow, A.), Eupsychian Education Model
27. (Massialas, J.), Social Inquiry Model
28. (National Training Laboratory) Laboratory Method Model
29. (Neill, A.S.), "Summerhill" Model
30. (Oliver & Shaner), Jurisprudential Model
31. (Piaget, J.), Piagetian Developmental Model (wi: Sigel & Sullivan)
32. (Postman, N.), Socratic Inquiry Model
33. (Raths, L.), Values Clarification Model
34. (Robinson, E.), Life-Skills & Group Cooperation Model
35. (Rogers, C.), Non-Directive Teaching Model
36. (Schutz & Perls), Awareness Training Model
37. (Schwab, J.), Science Inquiry Model
38. (Skinner, B.F.), Operant Conditioning Model
39. (Stern, A.), Total Immersion Model
40. (Suchman, R.), Inquiry Training Model
41. (Taba, H.), Inductive Teaching Model
42. (Thelen & Dewey), Group Investigation Model
43. (Torrence, R.), Creativity Training Model
44. (Wasserman, S.), Teaching for Thinking Model

Models with implications relevant to entire programme include:
   # 11, 12, 19, 26, 39.

Models with implications for FIREMAKING: # 7, 21, 23, 29, 35.

Models with implications for TRACKING: # 1, 2, 4, 5, 6, 9, 20, 22, 25, 31, 32, 36, 40, 41, 44.

Models with implications for TOOLMAKING: # 8, 24, 28, 37, 38.

Models with implications for VOYAGING: # 10, 14, 17, 27, 34, 42.

Models with implications for PROTECTING: # 15, 16, 18, 30, 36.

Models with implications for HEALING: # 3, 11, 18, 27, 33, 35.

Models with implications for DANCING: # 17, 26, 36, 43.
The "new partnership in education" between the aboriginal and modern societies of North America that was proposed in chapter six is, in one sense, a manifesto of full cultural citizenship for the Indian's traditional way of life within our present forms of national government. This is a very different approach than either the policies of government wardship or of assimilation, for it carries with it the necessary implication that aboriginal society, as a "cultural citizen" of the modern world, has the potential to meet the responsibilities that such cultural citizenship would demand. It has, of course, been a major argument throughout this work that the traditional culture of the American Indians cannot only satisfy these demands, but go beyond them to provide or strengthen certain qualities which, in modern society, seem to be fading or crumbling away. This brings us full circle to the introductory quotation of this work (page "v"), from the noted theologian and historian Thomas E. Mails. His words are not a eulogy.
for the dead and gone, but a plea for the preservation of a vital and living expression of human existence, and one of great importance for our time.

Where Appendix "A" sought to relate contemporary programmes to certain aspects emphasized in the traditional approach, Appendix "B" attempts to outline traditional practices within a modern framework. On the two charts at the end of this text there are brief outlines of the character strengths that traditional Indian education regarded as ideals, and an equally brief outline for one possible contemporary programme designed to serve these specific ends. This programme outline is provided here not as a model, but rather as a generalized example - any attempt at an actual model, from the traditional perspective, would have to be based on the existing structure of a specific culture and community. As in all living systems, there is no abstract blueprint - no procustean "cookie-cutter" - but rather a built-in system of determinants which, like the genetic code itself, is capable of infinite fine-tuning.

Self-reliance, for example, is not fully served by any one kind of experience, but by complex and related sets of experiences. The vision-quest, solo spiritual journey, and the important forms of preparatory train-
ing for them can, of course, easily be seen as central to the development of self-reliance in particular, but one's personal sense of identity is of equal importance here, and this identity may owe its realization to very different sources than these. Traditional education is not, therefore, a system that "manufactures" individual identities from some inert potential, but functions rather to provide a matrix of experiential "raw materials" from which the individual creates his or her unique and inner-determined self. It is the same with perception, competence, courage and the other qualities described; the system begins with a basic trust in the individual, and does not attempt to over-ride or over-control the processes of growth and development, but nevertheless works very hard to provide the appropriately structured experiences that are essential to this growth. Modern society, in failing to do this, has had to rely increasingly on forms of coercion or force to maintain order, and at steadily diminishing returns on the investment.

If the chart on page 289 is taken as descriptive of certain ends, and the chart on page 290 of one possible means to these ends, then this work as a whole has essentially been, perhaps, an attempt to puzzle out something of the relationship between the two:
**AN OUTLINE OF THE ESSENTIAL AREAS OF CHARACTER DEVELOPMENT**

**OF CONCERN TO TRADITIONAL INDIAN EDUCATION,**

**AS SEEN IN THE CONTEXT OF THE SEVEN PATHS IN THIS PROGRAMME**

<table>
<thead>
<tr>
<th>FIREMAKING</th>
<th>TRACKING</th>
<th>TOOLMAKING</th>
<th>VOYAGING</th>
<th>PROTECTING</th>
<th>HEALING</th>
<th>DANCING</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self-Reliance:</td>
<td>Perceptive Intelligence:</td>
<td>Competence:</td>
<td>Cooperation:</td>
<td>Determination:</td>
<td>Dependability:</td>
<td>Creativity:</td>
</tr>
<tr>
<td>Independent self-management and decision making.</td>
<td>Observant and insightful; able to see what others often overlook.</td>
<td>A resourceful and conscientious vitality; works well with hands as well as mind.</td>
<td>Able to work well with others. has some sense of the value of group loyalty and of shared commitment.</td>
<td>Maintains self-control and equanimity under pressure; is not easily intimidated or led by others.</td>
<td>Displays a genuine concern for others, and a sense of personal moral commitment.</td>
<td>Retains a sense of youthful spontaneity and originality; an inventive and artful imagination.</td>
</tr>
<tr>
<td>Basic trust in self; trust in own judgement.</td>
<td>Good concentration. Sets own standards.</td>
<td>Experienced in a variety of group undertakings, including extended expeditions, construction projects, and service programmes. Sense of own commitments.</td>
<td>Good interpersonal helping and counselling skills, able to resolve conflicts or deal with emergencies.</td>
<td>Good knowledge of emergency response procedures: first-aid, SAR, disaster control and public health standards.</td>
<td>Basic experience with public service projects.</td>
<td>Has had some involvement with a variety of forms of creative expression. Has a degree of fluency in more than one media. Able to appreciate symbolism.</td>
</tr>
<tr>
<td>Well-rounded in basic knowledge and experience; outdoor recreational leadership skills, able to communicate well, and able to rely on own abilities.</td>
<td>Basic understanding of tools and fabrication processes, and of the nature of materials and basic design. Good coordination and flexibility. Sense of accuracy.</td>
<td>Good coordination and flexibility. Sense of accuracy.</td>
<td>Experienced in a variety of group undertakings, including extended expeditions, construction projects, and service programmes. Sense of own commitments.</td>
<td>Good interpersonal helping and counselling skills, able to resolve conflicts or deal with emergencies.</td>
<td>Good knowledge of emergency response procedures: first-aid, SAR, disaster control and public health standards.</td>
<td>Basic experience with public service projects.</td>
</tr>
<tr>
<td>To know that one's inner resources are strong enough to survive hardship and adversity, and find comforts where others see none. Able to inspire something of this sense of independence in others, especially the young.</td>
<td>A tolerance for ambiguity; able to appreciate metaphor and analogy, and other subtleties in meaning. Good judge of character and intention, and a good judge of one's own inner motives.</td>
<td>Able to appreciate the subtle relationship between craftsmanship, or skill, and generosity, particularly in the sense of achieving personal fulfillment. Able to appreciate subtleties in design, or style.</td>
<td>Able to communicate a sense of comradeship or solidarity that tends to minimize hardships or adversity, and to strengthen the common resolve.</td>
<td>Inspires confidence in others through a calm, unassuming determination. Reflects leadership qualities without seeking to dominate or lead others. Motivated by inner convictions.</td>
<td>Responds to others non-judgmentally, with tolerance and empathy. Reflects in actions as well as words a respect for the basic values of other cultures as well as this in every action or expression, and in so doing, helps unexpected dangers.</td>
<td>Through the process of self-creation, has come to embody a uniquely personal way the fundamental values of own culture, and reflects in every action or expression, and in so doing, helps unexpected dangers.</td>
</tr>
</tbody>
</table>
TRADITIONAL INDIAN EDUCATION SOCIETY:
STRUCTURAL OUTLINE FOR PROGRAMME MODEL

SODALITY CENTER
For meetings, gatherings and other activities - also for ceremonials

PADDLING CREW (SHED)
Racing and/or expedition canoe & gear

COMPUTER LAB & PLANNING OFFICE
Controlled access to different levels of computers

TOOL SHOP & CANOE SHED
Under control of senior-carvers & instructors

RADIO & COMMUNICATIONS OFFICE
Radio relay to SAR unit; may be combined with Band

CLASSROOMS & LIBRARY
Use of existing school facilities at night, etc.

SAR UNIT (BOAT)
Marine Rescue Unit - long-range equipped

COMMUNITY CEREMONIALS AND EVENTS -

ELDERS & SPIRITUAL LEADERS -

Solo Retreat -

Vision or Guardian-Spirit Quest -

Myths, Legends, Traditional Storytelling -

Rites of Passage -

Expedition Training:
- Navigation
- Logistics
- Martial-Arts

Extended Expeditions -

Sodality Training -

Communications -
- Individual
- Group & Service
- Projects -

Sodality Initiations -

SAR Training:
- Rescue -
- Tracking -
- First-Aid -

Earned Names & Status -

Public Oratory -

Ceremonial Recognitions -

First-Fruits Rites -

This looks like United World Colleges agenda!
CHAPTER ONE


5. LaViolette, F.E. (1973), *The Struggle for Survival*, University of Toronto Press. p. 33-34.

6. Most general histories have made some reference to the losses sustained from scurvy - often as high as one fourth or one third of crews actually dying on voyages as far as The Cape of Good Hope or beyond, so that it was common practice to have crews large enough to make up for such losses. With the advent of the clipper-ship the degree of seamanship required was considerably greater than for earlier ships, and the usual pressings from dockside taverns or jails began to give way to more ambitious men, as the lot of the ordinary ship's hand began to improve. While hardly a cozy sinecure, the life did attract men such as Melville and Dana. In later ships, with fore-and-aft rigging, the crews of ships as large as 120' or more were sometimes reduced to as few as 3 or 4 men. See H.B. Looms' *Seamanship*, 1975, by Time-Life Books.


10. Ibid. p. 5-6; 227-232.


13. Ibid. p. 164.


15. Ibid. p. 228, 229.
17. A number of examples will be found throughout this paper - of particular note relative to this point are: Wilson (1972); Bryde (1971); Maslow (1965); and Nakare (1970).
18. This is the major premise of Edward T. Hall's *Beyond Culture*, 1976, by Doubleday, Inc., which is cited elsewhere in this paper. In reference to Maslow's work the inference here is that cultural characteristics or traits may be seen as inherently a part of human nature rather than from social learning, unless one has the opportunity to experience contrasting forms of behaviour in another culture.
21. Ibid. p. 16. Von Hagan notes that of the artistic treasures hauled off to Spain not a single example exists today, and that the civilizations of America were so thoroughly ransacked that early scholars came to interpret surviving reports of their arts as highly exaggerated, and even refused to credit the Indians with having built their own cities until Prescott's landmark history in 1840.
22. Ibid. p. 14-16; 579-583.
23. Ibid.

**CHAPTER TWO**

   Also: Television programme "Origins," Channel 9, based on Richard Leaky's book of the same title. Stated here that "Man's material culture is at least 6 million years old."
4. For example: DDT, PCP, PCB's, 2-4-6-T, Lost Plutonium, MIRV's, Programmed Obsolescence, Subliminal Advertising, 3,500 Food Additives now in use, Strip Mining, Prefrontal Lobotomies, and Wine in Plastic Bags.


6. See Benjamin Franklin's "Our laborious manner of life, compared with theirs, they esteem slavish and base..." in the essay quoted from at the beginning of Chapter Three, this paper. Also See: Conner, Paul W. (1965), *Poor Richard's Politiks*, Oxford Univ. Press. p. 76: Benjamin Franklin quoted as saying: "No European who has tasted Savage Life, can afterwards bear to live in our Societies..."


13. Melman, Seymour (1983), *Profits Without Production*, McGraw-Hill, Inc. p. 49: Author quotes Akio Morita, President of the Sony Corporation, as stating the the biggest mistake made in U.S. business is that the manager class consistently ignores any considerations of long-term goals or effects, and concentrates on exploiting short-term opportunities. On page 217 Author cites example of of the Army's new XM1 tank, which was so over-engineered to maximize profits that this 54-ton monstrosity requires over 2 hours of shop time for every hour operational, and gets about 450 yards per gallon on the highway (EPA est.).
14. An example of this from government planning is the regular destruction of literally tons of blankets, typewriters, mops and brooms, paper towels, cooking utensils and nearly every other consumable product that would be required by the inhabitants of a small town — for that is what the 5,000 man crew of the U.S.S. Kitty Hawk, Constellation, or other attack aircraft carrier (CVA) would represent — that takes place at the Hunter’s Point Naval Station in San Francisco, California. Every time one of these ships puts in for refitting all of the consumable inventory is taken out under heavy guard and either burned or smashed. The problem was that the residents of the adjacent Hunter’s Point "ghetto" area began to protest with rocks and bottles. The solution to the problem was to build a brick wall about 30’ high so that the "work" could be carried out without harrassment. And the reason for this destruction? It merely followed an old World War II regulation that had been intended to prevent shore stations from grabbing all the new war materials and sending old inventory to the ships at sea, or classifying it as surplus and selling it to local buyers. The last I heard, the Marines guarding the work details were complaining that they could no longer see who was lobbing the bricks and bottles over the wall...

15. Schumacher, E.F. (1973), Small is Beautiful: Economics as if People Mattered, Harper & Row. p. 35: Schumacher states that from a practical point of view industrial society must fail because of Population, Pollution, Depleted Energy & Resources, Social Degeneration, and the resulting Violence & War that are endemic with these.

16. It is possible that the domestication of the horse-like nuclear science was first exploited for war or raiding; surely those first sedentary farmers to look up from their fields to see a line of horse-men apparitions outlined along the crest of a hill suffered as profound a shock as any human ever has. The Biblical image of the Four Horsemen is probably of greater antiquity than even the Old Testament, but is no less appropriate for our own time. See Also: Farb, Peter (1980), Humankind, Bantam Books. p. 106: According to Farb, dogs, sheep, goats, pigs and cattle were all domesticated between 7,000 BC and 9,000 BC in Eurasia, while the horse was not domesticated until about 4,000 BC. One might speculate that this later use of horses coincided with the establishing of the first communities that would have provided "targets of opportunity."


22. Ibid. 183-185.

23. Ibid. 184.

24. See later comments in this paper on the subjects of "dance," and "metaphoric imagery." This concept of a "Communications Net" operating at a generally subliminal level was developed essentially from major premises in the following two works: Hall (1977), Op. cit. Pearce (1961), Op. cit.


34. Ibid. See Also:
38. Ibid.
40. Ibid.
42. Ibid.
44. Bramson, Leon (Ed.), (1964), *War*, Basic Books, Inc. p. 22: quotes William James' "History is a bath of blood...Greek history is a panorama of jingoism and imperialism...purely piratical..." Author also confirms that the Greeks believed war to be the "natural state" of men and gods. See Also: "The Province," (newspaper), Fri. Feb. 15, 1985, p. 14: "Armed conflicts since the Second World War are killing people at a rate between 33,000 and 45,000 a month." Quotes U.N. report that in 1983 4 million soldiers fighting in 75 countries.
45. Ibid.
47. Ibid. Also See:
48. Ibid.
50. Ibid. p. 13.
52. Ibid.
53. Maslow (1965), p. 123-125. See Also:
   Mails (1972); And: Seton (1963).
54. Ibid.
55. The Motion Picture "Koyanisqaatsi."
56. Wannenburgh (1979); See Also: van der Post (1977); And: Leakey(1979). Also: On the television programme "Origins," from Richard Leakey's book of the same title, Richard leakey commented on the exceptional capabilities of native personnel as fossil hunters - despite a lack of any training or knowledge regarding paleontology, these individuals were capable of finds that trained staff very often missed.
Highwater (1981), Op. cit. p. 67: Author quotes the Sioux Shaman (from the works of Joseph Epes Brown and others) Black Elk: "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 shape of all shapes as they must live together like one being." Also: p. 3-16: On the concept of the "intellectual savage."

In the introduction to his Civilization, Kenneth Clark made a comparison between the "Appollo of the Belvedere," once thought the most "sublime" of all Greek statuary art, and a primitive African mask that had been given to him by a friend. It was Clark's observation that most persons would tend to feel that the crudely carved wooden mask was the superior piece of work in terms of art, if not in skill. Jamake Highwater, in his book The Primal Mind, makes a strong case for primal society as a source of inspiration for art to an often otherwise jaded and depleted civilization. This fits with Clark's argument that no human society has ever held a franchise on creative expression — least of all civilization. It is also Clark's understanding of history that art is the one unique thing that we leave to posterity, that all else steadily fades in value, for all that it had provided some necessary step along the way.


Ibid. p. 250-267.

Studies of contemporary hunter-gatherer societies have tended to question older assumptions of life expectancies in these groups. Individuals of more than 50 or 60 years play important traditional roles in these societies. See: Wannenburgh (1979), Op. cit. And: Turnbull, Colin (1983), The Human Cycle, Simon & Schuster. p. 225-262.

The figures cited were arrived at by ranging 25 individual members at an average birth-spacing of approximately 2½ years, which would mean 6 persons between the ages of 1 (or under) and 12, 14 persons between the ages of 13 and 49, and 5 persons between the ages of 50 and 60. In the band of !Kung San Bushmen that Wannenburgh (1979), and his compatriots lived for a time among, there were in fact 4 elders of whom the oldest was 70 years of age.


Ibid. See Also Note #24.


69. Ibid. p. 266.

CHAPTER THREE


3. Ibid. p. 1154.

4. From personal research conducted while working on a research project related to the "Collins Overland Telegraph," the Telegraph Trail, and commentaries by local residents who were descendants of the people who had built and worked on the telegraph line to the Stikine River. This involved a student research project for the Hazelton Historical Society.

5. Also from personal research while living in northern B.C. Personal interview with Tommy Thompson (Smithers) on the Spatsizi Park territory and the early residents of that area. Personal interview with a Mr. Chuck Polard, former trapper and long-time bush-pilot (now working in Vancouver & Bella-Coola; available if necessary). In addition to these sources, a number of native Indian elders at Fort Babine provided data on trapping and winter conditions referred to in paper. Both these sources (and Mr. Polard) stated that Indians seemed to have little or no difficulty dealing with the isolation and hardships of winter trapping in the north, while white men almost always suffered considerably. See Also: Byrd, Richard E. (1938), Alone, Ace Books, Inc. Introduction: "Admiral Byrd's fascinating story points to way toward an inner strength and fortitude the world needs now more than ever before." Admiral Byrd had spent 5 months in total isolation (except for occasional radio communications) at the tiny "Advance Base" in Antarctica - the strain of his ordeal is the essential theme of the book. Extended solitude, from most accounts, is not something that modern man - with few exceptions - appears to have much of a capacity for.

6. Ibid.

p. 2-3. Author relates historical data from the Pequot Indian Wars of early New England in which there are accounts of Dutch women playing kickball with the heads of Indians slain in raids, and of the torture of one Indian ("...the main attraction of a New Amsterdam holiday.") by the Pilgrims: "The Indian was publicly skinned in strips and fed with his own flesh while he tried to sing his death song, until, skinned from hands to knees, castrated, and dragged through the dusty streets by his neck, still alive and singing, he was placed on a millstone and his head crushed to pulp."

8. Seton (1963), Op. cit. p. 41. Quote Dr. Edgar L. Hewitt, author of Ancient Life in the American Southwest, as stating: "There can be no doubt that the Redman had evolved a better civilization than our own...in aesthetics, ethical and social culture, the Indians surpassed their conquerors." Further, quotes Professor C.A. Nichols, of Southwestern University, Georgetown, Texas as stating: "I am afraid we have stamped out a system that was producing men who, taken all round, were better than ourselves."

9. From the Playboy interview with John Wayne, and from similar comments made during a television interview in 1968 in California.

10. Tuchman, Barbara (1978), A Distant Mirror, Knopf, Inc.


    See Also:
    Reid, Bill (1958), "Art of the B.C. Indian," in the July printing of the Capilano Indian Centennial, Humiltchsen Park Capilano Centennial Project.


16. Ibid. p. 134-140.

17. Ibid. p. 121-133.

18. Ibid.

19. Ibid. p. 129.

20. Ibid.


23. See Notes: 15 to 20.

24. Brown, Dee (1971), Bury My Heart at Wounded Knee, Holt, Rinehart (cont)
and Co., Inc. p. 23-28. Also See:

25. Ibid.
26. Ibid.
28. See later chapters in this paper concerned with U.S. Army studies of prisoner's of war in Korea; also notes 4,5 & 6, this chapter. Of particular note here are a number of recent articles on U.S. preparations for surviving a nuclear war; these include refurbishing the detainment camps used to incarcerate Japanese-American citizens during World War II, and increased training of military personnel in riot control and the handling of civil disturbances. See:
Zuckerman, Ed. (1982), "If You Survive the coming Nuclear War...Don't Worry. Our Leaders Have a Swell Plan." in the March 1982 Esquire.

29. Nesbitt, Paul H., PhD., (1959), The Survival Book, D. Van Nostrand & Co. p. 3-4; 302-309. See Also:
Troebst, Cord C. The Art of Survival, (1963), Doubleday & Co. p. 300-309. And:

Hildreth, Brian (1976), How to Survive, Puffin Books. p. 8-11. And:

36. Ibid.
37. Fletcher (1976), Op. cit. Also See:
38. Ibid.
39. In Science, March 1985, p. 84.
41. Ibid.
42. Ibid.
43. Trade guilds, for example, have traditionally relied on the master-apprentice relationship as opposed to more "efficient" classroom methods using professional instructors. On the essential aspects of this relationship is the process whereby the apprentice "proves himself" to the master, much in the spirit of the stories of Zen acolytes undergoing trials of the spirit to prove their "worthiness." The approval of the master, in this regard, is essentially intuitive - what is of concern is not the acquisition of basic skills, for that is well known by this time, but rather some sense of the apprentice's (or acolyte's) "readiness" to represent the guild or group as a practitioner. This is essentially a matter of integrity.

44. See later chapters on work of Stanley Milgram, Phillip Zimbardo, Erich Fromm and David Kipnis.


46. Ibid. esp. p. 235-236.


52. Ibid. p. 151.


54. Ibid. p. 18.


56. Ibid.


58. Interview with Arnold Mandell, in March 1980 issue of "Omni" magazine. p. 83.


60. Ibid.

61. Ibid.


63. Ibid.
65. Ibid. p. 170.
69. Ibid. See also:
   Also:
72. Ibid. p. 51-52, 144.
75. Radio Station CJOR (Vancouver, B.C.) interview of Dr. Stanley Greenspan, author of First Feeling, May 14, 1985. References also to the work of Erik Erikson, Abraham Maslow, and Arthur Janov. See Also:
   Also:
74. Ibid.
9. See references cited in #76; Also:

CHAPTER FOUR

This is essentially the theme that Erich Fromm puts forward in *Escape From Freedom*, and which Louis Raths elaborates on in *Meeting the Needs of Children*. The case of Willy Trebich, discussed in Chapter Five, is another example where values conflicts are demonstrated to be subject to conversion to such physical reactions as "frozen in panic," severe gastro-intestinal disorders, blank episodes or lapses in memory, unconsciousness and, in long-term cases, such as those cited with concentration camp guards, personality degradation and even death. See Also:

Trebich, Willy (1973), *The Broken Swastika*, Leo Cooper, Ltd. Passim.


Ibid.


Ibid.

Personal Interview, August 1984 at the Wholistic Center, Vancouver, B.C.


29. This is a major theme in Richard Leaky's *Origins* and other works. A number of anthropologists have also commented on the importance of sharing in tribal societies.


37. Ibid. p. 39.

38. Ibid. p. 40.


41. Union of B.C. Indian Chiefs position paper on Education.

42. Ibid.

43. Ibid.


51. Ibid.


54. Ibid.

CHAPTER FIVE


6. As defined by Brian Sutton-Smith, following the work of Thomas R. Shulz describing play as a way of training our "built-in thermostat" for controlling various states of arousal, response, intensity, etc. This also relates to E.T. Hall's concept of synchrony. See: Sutton-Smith, Brian (1979), Play and Learning, Gardner Press, Inc. p. 7-8. Also: Garvey, Catherine (1977), Play, Harvard Univ. Press, p. 4-5.


11. Ibid. p. 58, 96, 102, 109. See also: Mails, Thomas E. (1972), The Mystic Warriors of the Plains, Doubleday.


10. Trebib, Willy (1973), The Broken Swastika, Leo Cooper, Publisher, Ltd. p. 13-16, 24, 40-42.
1. Ibid. p. 116-120.
4. Troebst, Carl (1963), The Art of Survival, Doubleday, Inc. p. 302-309. Also:
   Also:
8. Ibid. p. 19.
12. Ibid. p. 86-87.
16. Ibid. p. 162-172. Also:
   Huxley, Aldous (1958), Brave New World Revisited, Bantam Books. Chapter on "Brainwashing."


Ibid. p. 112-13.


Ibid. p. 22.

Personal communication. The author, while a member of the Hazelton Area Mountain Rescue Unit, completed a course in tracking taught by Mr. Hardin at "Baldy Hughes" Canadian Forces Base, near Prince George, B.C.


Television programme "The Brain," May 7, 1985, Ch. 9 (Seattle Public Television). Report of work done by Dr. Judy Kearns, Univ. of Western
Australia. Some of this material was also commented on in the recent film from Australia titled "Where the Green Ants Dream." See also: Greenway, J. (1972), Op. cit. passim.

   Also:


   Also:


7. Television programme "Wildlife," April 17, Ch. 9, Seattle Public Television. Also:

3. Ibid. (T.V. Programme above).


5. Twain, Mark (1968), Life on the Mississippi, Lancer Books, Inc. Passim.


8. All of the zen-related arts in Japan have been referred to as "ten-year arts," including the martial-arts, flower arranging, and pottery. See:


Contrast Russell’s finding regarding mnemonics with Highwater’s comments in reference cited above, and both of these with the observations of Hall in the above citing. The implications would strongly suggest that learning depends on emotional aspects as much, and in some ways more, than the purely logical processes.

Rough estimate based on rejection rates for induction physicals, percentage of recruits entering basic training who graduate, numbers who volunteer & graduate from airborne and Ranger training, percentage who graduate from Special Forces training, and, finally, percentage of these people who then qualify for Delta Force assignment. Probably no more than 3 out of 10,000 complete this entire process. The essential point here is that of those who make it all the way through Special Forces training, 75% to 80% are rejected by Delta. This accounted for much of the inter-service animosity that grew between Delta and other Army commands, including the Special Forces and Ranger training schools.

Glasser, Dr. William (1976), Positive Addiction, Harper & Row. Dr. Glasser lists among the most popular "positive addictions:" running, meditation, and martial-arts training.

Sergeant, John (1975), Frank Lloyd Wright's Usonian Houses, Whitney Library of Design.


Also:
Also:
General MacArthur was critical of the heavy losses suffered by the Navy and Marine forces under Admiral Nimitz command, but in contrast to U.S. Army losses, while Marine losses were often higher in terms of daily battle casualty statistics, Marine losses were in fact below those of the Army when calculated in terms of objectives or territories taken. General Fuller ascribed this record not in terms of training, but more as a result of the Marine officer's regard, respect, and high-expectations for the men under his command. This "regard" is in sharp contrast to the Army officer's comparative disdainful attitude toward those under his command.
30. Television documentary on the Maasai, date uncertain. See reference cited below:
34. Ibid. p. 52.
38. Ibid. p. 32.
44. Referred to in a paper on Columbian carpet weaving by Janet MacQuarrie, University of British Columbia. Personal communication.
50. From discussion group in "The Novels of Doris Lessing," General-Studies Course at SFU (Prof. Basil McDermott, Instr.)
51. An example of this would be the observations of General R. Reid Daly,
commander of the defense forces of the Republic of Transkei (which is an independent state with a black government). General Daly served with the British S.A.S. in Malaya and Borneo, where he observed the vital role that native trackers had played in operations there. As the senior military officer in the Transkei, Daly has worked hard to build strong inter-racial relationships in the ranks. The selection and training methods which he uses to achieve this "compatibility" are in many ways similar to the practices of traditional education. It is also interesting to note that Daly considers native Africans to be consummate judges of character — that they cannot be "fooled" by false promises or representations. Personal communication from a former member of the Selous Scouts (Zimbabwe-Rhodesia), who had served with Daly. Also discussed by Lt./Col. James Channon, former member of the U.S. Delta Force Task Group, during a seminar at U.B.C. sponsored by the Wholistic Education Society of B.C. (fall, 1983).


Ibid. p. 72.


Ibid.

Ibid.


CHAPTER SIX


See Also: McLuhan, Marshall, and Fiore, Quentin, (1968), War and Peace in the Global Village, Bantam Books, Chapter on "Education as War," for comments on native-Indian values and education.

Personal Communication, during interview at Granville Island shop, summer of 1985.

In fact, as a number of native elders have argued, the vision-quest experience was intended essentially to these ends. See especially:


Ibid. p. 156.


Ibid.


Fisher, Robin (1977), Contact and Conflict, University of British Columbia Press, p. 57.

Ibid. Chapter 3.

Knight, Rolf (1982), Indians at Work, Hancock House, Publ.

Ibid.


Ibid.


See the Vancouver Sun, July 5, 1985, p. 5. Marjorie Nichols column. See Also:

Vancouver Province, July 10, 1985, p. 13. Charles Lynch column on "Native 'apartheid' in our own backyard?" Among other things, Mr. Lynch comments on the fact that native people in the far north often receive less than half the rates of pay that white employees from southern areas are paid for the same jobs. Lynch argues that in many ways the "invisible apartheid" of Canada places native-Indians actually behind South African blacks in many ways as far as progress toward full citizenship is concerned.

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