

*TRANSFORMATION OF COMMON BELIEF:  
THE IMPACT OF NATIVE AMERICANS ON EURO-AMERICAN MEDICINE.*

*A NEW APPLICATION FOR CULTURAL MEDICAL GEOGRAPHY*

Brian L. Altonen

GEOG 521

11/18/96

## **TRANSFORMATION OF COMMON BELIEF**

### ***Introduction***

Since the late 1960s, medical geography has focussed on epidemiological and sociological issues.<sup>1</sup> The medical geographer-epidemiologist pays close attention to pathogens,<sup>2</sup> natural or man-made environmental toxins,<sup>3</sup> and the increasing incidence of occupational diseases.<sup>4</sup> The medical geographer-sociologist researches the availability and efficacy of health care with the goal of improving these services.<sup>5</sup> This interest has existed for more than a decade as medical anthropologists and sociologists supported the intentions and well-being of indigenous cultures, noting along the way that in some cases, these procedures have produced a more effective, less expensive health care program. As medical geographers direct their attention to traditional medicines and the potential for applying these to current health care service programs, numerous others have criticized the regular medical field for its lack of support for the practice alternative healing faiths in the United States or within the zone of Western European influence.<sup>6</sup> Similar goals need to be into the Native American Geography discipline as part of the ongoing quest for tribal sovereignty.<sup>7</sup>

In a recent evaluation of this field of study, authors noted numerous ways in which geographic studies serve to improve environmental, sociological, anthropological, and historical knowledge borne by Native Americans.<sup>8</sup> Although well focussed, these studies seem to exclude mention of the meaning and value of traditional medicine to tribal members. By merging medical and Native American geography studies, such goals become possible and the improved understanding of ethnological, anthropological, and medical histories can be related back to the primary purpose for these studies-- sovereignty. This writing is designed to add to existing knowledge of natural product utilization by those influenced by indigenous cultures, with the hope of designing the means for a betterment of the current health care programs.

## **TRANSFORMATION OF COMMON BELIEF**

### ***Stewardships and Medicine***

To better understand Native American healing faiths, we must first compare its history and practices with those of systems more familiar with most people. Many aboriginal groups believe that all places bear remedies for the illness borne by that region. We may interpret this today as the reason to research Africa for the medicine for Ebola, with hopes of finding that cure in the forests of Zaire where Ebola was born. This premise also teaches the notion that, in accordance with the philosophy of Nature or the Creator that a plant living in harmony with nature will as a result evolve a toxin capable of defeating a local virus. This belief is used to support the strongly stated opinion that natives indigenous to their lands are in tune with the land just as much as the land and its nature are in tune with them and their needs involving these lands.

The earliest settlers and Natives made use of these philosophies to re-affirm each of their goals as children and servants of the Earth. Still, the practice of stewardship by these groups differed greatly from one another. These historic differences are due in part to the discrepancies that exist in the underlying religious- and politically-oriented belief systems underlying these changes, in both past and present societies. During the Colonial years, European intention was to dominate other lands in order to discover and make use of valuable natural resources. Although matching criticisms have been directed towards Natives in recent years, Natives are now, forever, and have been trying to live in harmony with these lands to ensure their proper use by later generations.

Interestingly, even in Europe not all of the people adhered strongly to certain parts of the Christian ideology. The Dutch of the Lowlands near Holland developed a number of Protestant cults which relished Nature as God's gift, respecting Nature for Her symbols and the Garden of Eden-

## ***TRANSFORMATION OF COMMON BELIEF***

like relationship that then developed with the earth. During the late sixteenth century, as hundreds of leaders of these sects and their factions were massacred, followers of these martyrs made their way to the New World. In short time, a number of these New World settlements developed a close relationship with the local tribes already settled in "New Netherlands" In this way, Native American beliefs became an important part of Dutch tradition. In relatively short time, this led to the incorporation of Dutch tradition into Native culture and vice versa. In this way, a Metis form of medicine was born and practiced throughout the poor areas of New Netherland, which provides us with a vivid example of how acculturation is in fact a two-way process and is better off viewed as a cultural evolution of multiculturalism for each of the formerly isolated populations. This early history of Euro-American medicine was never more present than in New Netherlands/New York, where, along the Hudson River, sovereignty and/or stewardship came together within the Euro-Americans culture to form "Indian Doctoring."

### **Metis Medicine**

Following the Revolutionary War, the newly-formed United States began to re-define itself. As the post-war economic depression ensued, the growth of scientific and medical knowledge slowed, leaving at most two medical schools active in the United States prior to 1814. Many of those who became doctors during this time were either trained by textbook reading, by serving as apprentices, or, in rare cases, by making their way overseas to learn at a European school. Also during this single generation of American medical history, Indian Doctoring became popular within the Dutch-raised borderland communities of New York, as well as in parts of New England and the Midwest where regular British medicine was lacking.

## **TRANSFORMATION OF COMMON BELIEF**

By the late 1790s, this led to the establishment and public acceptance of a healing known as "Indian Doctoring" or "Indian Root Doctoring." This popular culture healing fad developed due to the experience many people had with doctors who were typically rural, poor, and more pragmatic. Some were Sanative, which is to say they believed in Nature and/or Divine cure, and others less metaphysical about the overall healing process and instead accepting of the physical medicines derived from local plants. Examples of these healers include the Metis, Trapper, Adventurers, and Mountaineers who usually resided in low-populated parts of Canada, New England, New York, Ohio, the Midwest, and at times the Mid-Atlantic states. Many also often had connections with the former French-Canadian communes established in New France (especially residents of land which soon after became part of the Louisiana Purchase.)

Both the early Indian Root Doctor and Metis Doctor lived impoverished lives. They practiced Native American Medicine not only due to their cultural upbringing and teachings, but also due to their matching needs for adequate health care service and medicine. Therefore, one of the most important roles Native Americans have played in this part of early American history directly relates to the uses of Native knowledge regarding the uses of herbs to heal.

By the end of the Colonial period, Native American herbal knowledge provided physicians with numerous potential remedies, accounts of which are noted in numerous journals and diaries. In some cases, these entries demonstrate the different attitudes which existed between French and English writers. Whereas the French explorers quite often accepted the healing powers of native herbs, the English usually counter-charged any claims made about their efficacy.<sup>9</sup> For example, the French trappers and communal doctors preferred the local Dogwood (*Cornus florida* and other species) and Wafer Ash (*Ptelea trifoliata* L.) as substitutes for Peruvian Bark or Cinchona, and Bastard Ipecac (*Triosteum perfoliatum*

## **TRANSFORMATION OF COMMON BELIEF**

L.), Spurge (esp. *Euphorbia corollata* L.), and Moosewood or Leatherbark (*Dirca palustris* L.) served as substitute for the popular English emetic Ipecac (*Ipecacuanha* spp.) from Central and South America.

### ***Phytognomonics and Native Tradition***

An important part of Native American tradition is the way in which it substantiates the uses of local herbs by Natives. The theosophy underlying this belief system matched in some ways the metaphysical belief systems adhered to by earlier Dutch and French settlers. Natives, Metis, and Indian Doctors believed in *Gici-Manitou*, or the Great Spirit and Mystery of Nature which dominates in the physical world and expresses himself or herself in multiple ways. As an example of this display of the *Manitou*, the means by which "snake bite remedies" are recognized and used by Natives has been documented time and time again throughout American history. Noted since early Colonial years, this metaphysical interpretation of the environment teaches one the impact which the *Gici-Manitou* belief can have on European culture and philosophy.

European settlers accept Native metaphysics and reinterpret it using their own metaphysical, theosophical doctrines. One of the outcomes of this is the re-definition of Native Culture. As a result, the post- and pre-hunt animal ritual is taught as being akin to bloodletting. The best example of this misrepresentation of the healing faith took place in the early descriptions of lancing seen by early Midwestern explorers. On one occasion, it is noted that a native is being bled by piercing himself with a thorn or piece of flint, to then suck out an invading animal spirit by the tribal medicine man or shaman. This tale of healing was in turn rewritten by explorers. The notion of releasing the animal spirit which enters a victim's body following a bite was converted to the popular European

## **TRANSFORMATION OF COMMON BELIEF**

belief that the bleeding served to dispel the evil phlegm which penetrated the patient being bitten by the snake.<sup>10</sup>

In similar ways, the use of a particular herb by Natives is re-told in European terms and philosophy. As another early example of this kind of transformation, consider the Seneca Snakeroot (*Polygala senega*). When the first explorers saw this snakebite remedy of New England put to use, they came to interpret this use as a treatment similar to their own for disorders of blood and phlegm, which in turn were based on the four Galenic humours.<sup>11</sup> Later it was decided the philosophy which Natives was putting to use was metaphysical, and not physically matching that of the Europeans and Euro-Americans. Although stories of Senega Snakeroot's use as such a remedy continued into the early nineteenth century, its popularity as a snakebite cure declined, turning it into a nerve tonic instead. Similar histories of transformation exist for many of the herbal medicines researched and then studied by contemporary medical doctors.

Again the reason for this misinterpretations stems from a misunderstanding of philosophies. Like the Europeans, Natives do make use of symbolism to interpret their herbal medicines, but they differ in the interpretation of those symbols. In Native thinking, the *Polygala* tells us of its potential use by its jointed rhizome, which resembles that of the rattle of the snake. European explorers at first accepted this treatment for the plant, proposing its use as an example of their humoral- and physically-derived doctrine of signatures. After all, the rhizome of this plant was white, the same color as phlegm and the venom. In addition, when viewed phytognomonically, this plant's rhizome appeared jointed like the rattlesnake's tail, a belief matching the *phytognomonics* (doctrine of signatures) teachings of Giambattista Porta during the mid-sixteenth century.

## **TRANSFORMATION OF COMMON BELIEF**

It is even more interesting to note how much time had to pass in Colonial and post-colonial history before Settlers realized this philosophy for Rattlesnake Root use did not match their own. As a result, by 1820, new uses for *Polygala senega* were written in the published herbals, often based on Heroic accounts of their use by European and Euro-American doctors. In short time, European authors rewrote the uses for *Polygala* and other herbs and the related physical reasons for these uses, based primarily upon their studies in medicine, physiology, and pharmacology. In the case of the Black Snake Root (*Caulophyllum thalictroides*) for example, the calming (anti-convulsing) effect of its root on a snake-bitten patient was re-written and applied instead to the treatment of women with muscular tension or cramping-related pain<sup>s</sup> that were associated with menstruation and child delivery.

This re-writing of tradition appears throughout historical herbal books and even many of the modern day herbal medicine authors. Thus the original uses for Native Medicines have been re-written, enough to even convince Native herbalists of scientific, non-traditional ways in which such herbs might work. The existence of this combination of Native, Euro-American and Euro-Native history demonstrates the chief purpose for developing a better understanding of Native American philosophies, at least when citing herb usage or historical writings about the same as reasons for one's scientific study of herbal remedies.<sup>12</sup>

Throughout the history of herbalism, *transformations of common belief* has taken place. These transformations recur time and time again, as the stories and myths are retold and re-written, until it is re-told by writers bearing a totally different philosophy. It was these transformation which led to the discovery and re-defined use of plant medicines, the transformation of sanative medical practices to sanitative medical practices, and, in some cases, the transformation of Native Americans into Christian Indians who practiced



## **TRANSFORMATION OF COMMON BELIEF**

Sanative Metis medicine and who helped revitalize and seed the Spiritual Reform movements of the early nineteenth century United States.

### ***Missions, Natives, and Spiritual Revivals***

It was during this time of recalling the Native American tales of Great Spirit and their herbal cures that Methodists began setting up facilities for their "camp meetings" or revivals along the Hudson River.<sup>13</sup> As they preached their religion and spirituality, their followers learned to view life as something to be spent in harmony with God and nature. The strong devotion to stewardship led to the further development of the social and political atmosphere needed to facilitate a spiritual revival.

The growing recognition and acceptance of Native American medicines by missionaries and families dedicated to the "home missions" movement helped further the re-telling of Native American philosophy in the Euro-American setting. This history impacted both Old and New World cultures soon after the first French and Dutch settlements during the early seventeenth century. It again erupted during the revival period experienced by the Dutch in New Netherland-New York around 1730. When the post-Revolutionary people suffered their economic depression, spiritual revivals turn Native medical thinking into Christianized Metis and/or Indian Doctoring. Due to the failure of doctors to eliminate the recurring yellow fever epidemics from 1790s to 1830, a number of transcendental medical movements began in the New England-New York area. One of these was the development of Trapper, Metis, and Indian Root Doctor medical sects. Another was the strengthening of certain Christian movements, namely the 1820s Spiritual Revivalism of the United States.

During the late eighteenth and early twentieth centuries, revivalist meetings became an important part of

## **TRANSFORMATION OF COMMON BELIEF**

the day to day lifestyle for certain native groups. The missions most able to convert natives were the Moravian missions. Due to their earlier teachings in Europe, the Moravians were like the Lowland Dutch people devoted to nature as an expression of God. The Moravians settled in the New Netherlands by 1738 and by 1745 began successfully converting a commune of Wappings residing between Shekomeko, Dover Plains and the Hudson River. Together, the Moravians and Wappings were devoted to Nature. The Moravians believed in the Garden of Eden and the Sanative healing power of nature. They spoke of the Creator and Spirit in Native terms, and turned many of these Wappings into Christians, who then removed and resettled finally near Ohio before becoming extinct.

During their stay in Ohio, this group of Christian Indians began holding outside prayer sessions, which in turn gained in popularity. In due time, the Delaware began attending these annual outdoor sessions as well. Soon, some of the Euro-American Christian groups began learning of the success of these outdoor sessions. By the early 1800s, this same practice was carried out in the Mid-Atlantic region by Baptists. By 1820, it came to New York as part of the Methodist teachings. Again the Native sense of oneness with the Creator and Spirit of nature was indoctrinated and redefined as a part of the Christian outdoor healing tradition.

Unlike other parts of the United States,<sup>14</sup> the Methodists and other missionary settings along the Hudson shared with the Natives some of their spiritual beliefs. The belief in Sanative healing, in which the healer and patient decide to accept the disease as a test of spirit and good faith by allowing it to take its natural course, became an important part shared by both Native and Missionary medicine.<sup>15</sup> Together, these two healing faiths also shared the condemnation of allopaths, many of whom felt Sanative medicine had to be replaced by Sanitative medicine.

## **TRANSFORMATION OF COMMON BELIEF**

Examples of Sanative healing methods include prayer, the laying of hands, fasting or dietary change, and administering only those drugs which cause symptoms to develop or show more quickly, each process is performed in order to hopefully facilitate the body's naturally directed recovery.<sup>16</sup> Sanitative methods involve measures which prevent the disease from taking its due course.

As this Spiritual Revival continued along the Hudson Valley between 1795 and 1810, many of the preacher's statements were often akin to the Native American belief in *Gici-Manitou*, which naturalists began calling the spirit of nature. Revivalists, rephrasing these claims, included with them the mention of various natural events being depicted as God's messages, such as gale force winds, horrendous downpours, thunderstorms, and lightning, only to be followed by the *miasma* which rode over the lakes, rivers, and swamps as these newly fallen waters evaporated.<sup>17</sup> Since the major epidemics of yellow fever were often associated with such natural events during the early 1800s, yellow fever was renamed the triennial fever and interpreted as a sign of Trinity and God's natural reaction to peoples' sins.

To the missionary, if this were not enough to convince his followers, he may perhaps then recollect a case of a drowning or suspended animation victim, claiming this dead soul to be the skeptic in this region. Those who believed in Him, in turn, underwent a miraculous recovery. This is an example of an early theosophical explanation for what was then called "suspended animation" due to drowning. In contemporary terms, the effective treatment and recovery is due to resuscitation.<sup>18</sup>

These convincing spiritual reforms and transformations took place due to accepted changes in the analysis of health and well-being. The roles played by nature, spirit, physical matter and metaphysics came together time and time again throughout the early nineteenth century to give birth to the various forms of alternative medicine taking place as

## ***TRANSFORMATION OF COMMON BELIEF***

substitutes to regular medicine or allopathy. The Thomsonian, homeopath, eclectic herbalist, physiomedical doctor, religious physician, and transcendentalist had their own unique view of how the body maintained a state of well being and retained its longevity. At times, these differing points of view clashed, resulting in the production of acculturated or multicultural interpretations of medicine. This history is never more true than with herbal medicine, in which allopathy or modern day biomedicine is used to explain metaphysically-defined treatment modalities for given herbal medicines.

Each researcher and interpreter of cultural medicine tries to explain foreign medicine according to his or her own point of view. In this way, Native American beliefs are argued, and then accepted and transformed using explanations which biomedical researchers feel more comfortable with. In this way, reasons for methods of healing are changed and structured to fit the modern medical knowledge platform. Thus acupuncture is explained as a neurpeptide event, and the efficacy of homeopathy as a psychomedical phenomenon. Yet, biomedical physicians have yet to prove the full truth of all their healing methods. And like the therapeutic effectiveness of human psychology and at times psychiatry, we are left to reason out within ourselves what makes our body remain well or become physically and emotionally disturbed. Throughout history, by transforming the common beliefs of another culture to fit personal and local needs, one creates new medicine and new drugs. In this way, the Native American herbal medicines often undergo transformation of common belief to produce modern day chemically-based remedies.

## TRANSFORMATION OF COMMON BELIEF

### *The Transformation Period*

During the early 1800s, as political pressure between the United States and England began to heighten, the support which once came to the United States from English physicians and drug merchants slowly receded. Synchronous with the heightened need for medicines due to the numerous epidemics of Yellow Fever which passed through local towns,<sup>19</sup> came the local plants being marketed as early as the 1790s, one of which was Carolina Pink (*Spigelia marilandica* L.), a common herb then used primarily as a worm remedy.<sup>20</sup> Another example of the indoctrination of these beliefs into American culture was noted fairly late in the history of this practice by Maximilian, Prince of Weid, during the mid-1800s. In his *Travels in the Interior of North America*. Maximilian visited an old Dutchman by the name of Dutot who told him of the traditional Native American cure for Snakebites--*Aristolochia serpentaria*:<sup>21</sup>

"Old Dutot related a number of successful cures which he had performed with this root. The plant had a tall flower stem with many flowers and large arrow-shaped leaves; its root is pretty tuberous, partly long, pretty large, and branching, of a reddish-yellow color, and contains a milky juice. It is boiled with new milk, and two table-spoonfuls are taken as a dose. The swelling caused by the bite of the reptile, is said speedily to disappear, after chewing the root. The Delaware Indians, who formally inhabited all Pennsylvania, made this remedy known to an old man, from whom it was inherited by the family of Dutot. The latter had himself been among the Indians, and gave me some information respecting them."

Further evidence for changes in regular medicine due to Native American influences appears in a recipe written in

## TRANSFORMATION OF COMMON BELIEF

the Family Bible of John Lawson,<sup>22</sup> a resident of the Hudson Valley during its late eighteenth and early nineteenth century Revivalist periods.<sup>23</sup> Lawson's "Cure for the Dropsy" incorporated "Wild cherry tree bark, prickle ash bark, white wood bark, sweet appletree bark of the north side of the tree as nigh the root as possible," along with "Pasley root," "angelerca root," mustard seed, and peppergrass seed. The significance of this recipe is its demonstration of the merging of Native American and English healing faiths which was then taking place. The most definitive sign of the Native philosophy in this recipe is the use of directions when instructing the collection and use of appletree bark; by making use of the "north side of the tree" an important issue. In Native tradition, one has selected the side closest to north, and, therefore, in Christian thinking, the side closest to heaven, where the sun and the moon were born in Native philosophy, and therefore is also where you in turn gather the bark found closest to earth.<sup>24</sup> This side of the tree also bears bark which is the darkest or blackest, a symbolism retold in contemporary thinking through use of the medicine wheel and its spiritual remedies.<sup>25</sup> The European counterpart in this recipe appears as the instructions for the use of Parsley, a European herb, and Angelica, which could be either the European or Native Angelica.<sup>26</sup> In sum, this recipe is viewed as a *Metis* recipe, then a common trait of many of the people in certain parts of the early post-Colonial United States.

The *Metis* culture which settled the lands of New Sweden, New Netherland, and especially New France, brought these beliefs in Native American healing practices into Euro-American and in some cases European medicine. At times these philosophies have been modified so as to fulfill the needs of European and Euro-American cultures. In the case of Snakebite remedies, this modification was of the actual type of healing taking place with the herb (i.e. the

## **TRANSFORMATION OF COMMON BELIEF**

spiritual Native American use versus the more physically-derived American uses for this herb.) As for the substitutes of *Ipecac* and *Cinchona*, the herb in part may work although the chemistry is quite different. (The Dogwood lacks Quinine, the chief medicine at work against the Malaria fever which *Cinchona* was later used to treat.) A plant chemist might argue that the chemistry of Apple bark on the north side is different due to the reduced effects of the sunlight. The Missionary or Tribal doctor will tell you the medicine works for metaphysical reasons other than these. The chief question these examples should shed light on are those regarding the transformation of common belief which takes place when Native remedies are documented and retold by the early explorers, settlers and missionaries.

## **TRANSFORMATION OF COMMON BELIEF**

### **Conclusion**

These bits and pieces of American medical history and Native American culture teach us a possible role of Native American tradition in both Native and Euro-American medicine. This reasoning can be applied to any future changes being made in Native health care programs, as well as the need to review Native American medical history and geography in a Native American sense.

Much of modern day regular and alternative medicine have ideologies matching those of the traditional Native American Sanative healing faiths. Missionary Joshua Marsden wrote in 1811 about his encounter with a rattlesnake near Croton on the Hudson River "providence has provided an antidote for their bite; this is called Rattlesnake Root; the Indians first discovered its efficacy, and to them the white people owe this invaluable antidote, which they chew, swallowing the spittle, and applying some to the wound."<sup>27</sup> This same belief would later be published in instruction books for settlers who wished to migrate to the Midwest.<sup>28</sup>

The continued practice of medicine based on Native American healing faiths is seen throughout nineteenth century medicine, with some of the effects of it still present in modern day medicines, both allopathic and alternative. Therefore the issue becomes not deciding whether to incorporate Native American traditions into regular medicine or the alternatives like naturopathic medicine, but rather, it becomes a question of whether or not to allow these beliefs to be practiced as part of the traditional health care system typical of native American cultures. This question pertains to the issue of sovereignty. Native American cultures have retained much of their traditional knowledge at considerable expense. In some cases, tribes are in the midst of recovering their much older, nearly lost information on medicine. In other less fortunate circumstances, some of this knowledge has been



## **TRANSFORMATION OF COMMON BELIEF**

lost completely due to political and economic differences between two distinct cultures.

Therefore, the potential applications of this type of work to future medical geography studies are numerous. They are outweighed only by the values of this work brings to future generations. To satisfy both cultures, the knowledge of traditional medicines must be of interest to both cultures. Modern pharmaceutical industries continuously in search for new medicines to cure various parasitic and bacterial diseases, cancer, and AIDS must pay heed to the wants and needs of *Indigena* as much to themselves. This same "traditional knowledge" known as "folklore" could also assist researchers of medical history who try to understand the origin of healing faiths. The study of Metis medicine, for example, teaches us the reasons for the decline in allopathic (regular medicine) popularity and the rise in acceptance and often subsequent decline of "alternative medicine." To the Native American, this work has direct applications to a health care system which relies most heavily on Native healing practices, either unassisted or while under the direction of highly critical health care agencies. Traditional healing as an adjunct or *Complementary Medicine* would be one the best ways to better the outcome of each of the worlds.

In some ways, similar changes have are already beginning to take place in allopathy. The most recent trend amongst regular doctors has been to view each patient as a consumer who needs to be better informed of his or her "product" (health care). Some of these same health care professionals have come to view the alternatives with the serious intent to incorporate them into their regular health care programs.<sup>29</sup> In order to merge these two health care disciplines together, both sets of providers must have a better understanding of medicines used by other cultures, which in turn will assist practitioners in developing a

***TRANSFORMATION OF COMMON BELIEF***

better understanding of these philosophies and the purpose each health care provider can potentially serve.

## TRANSFORMATION OF COMMON BELIEF

<sup>1</sup>L. Dudley Stamp. *Some Aspects of Medical Geography*. New York: Oxford University Press, 1964; L. Dudley Stamp. *The Geography of Life and Death*. New York: Cornell University Press, 1964.

<sup>2</sup>Textbooks on Medical Geography devoted totally to epidemiology include: 1) A.D. Cliff, P. Haggett, J.K. Ord, and G.R. Versey. *Spatial Diffusion. An Historical Geography of Epidemics in an Island Community*. New York: Cambridge University Press, 1981. The following focus on sociological health care issues as well: 1) N.D. McGlashan (ed.) *Medical Geography. Techniques and Field Studies*. London: Methuen & Co., Ltd., 1972; 2) Michael Pacione (ed.) *Medical Geography. Progress and Prospect*. Wolfeboro, New Hampshire: Croom Helm, 1986; 3) Melinda S. Meade, John W. Florin, and Wilbert M. Gesler. *Medical Geography*. New York: The Guilford Press, 1988;

<sup>3</sup>Jacob Freedman (ed.). *Trace Element Geochemistry in Health and Disease*. The Geological Society of America. Special Paper 155. 1975; Douglas Schultz. "A Brief Bibliography of Medical Geology." *Journal of Geological Education* vol. 27 (1979), pp. 193-194.

<sup>4</sup>G. Melvyn Howe (ed.) *A World Geography of Human Diseases*. San Francisco: Academic Press, 1977; Jacques M. May. "Medical Geography: Its Methods and Objectives." *Social Science and Medicine*, vol. 11, (1977), pp. 715-730.

<sup>5</sup>Melinda S. Meade, John W. Florin and Wilbur M. Gesler. *Medical Geography*. (New York: The Guilford Press, 1988), p. 3; John Eyles and Kevin J. Woods. *The Social Geography of Medicine and Health*. New York: St. Martin's Press, 1983.

<sup>6</sup>Rosemary Firth. "Social Anthropology and Medicine--A Personal Perspective." *Social Science and Medicine*, vol. 12B, (1979), pp. 237-245; David M. McQueen. "The History of Science and Medicine as Theoretical Sources for the Comparative Study of Contemporary Systems." *Social Science and Medicine*, vol. 12, (1979), pp. 69-74; Horacio Fabrega, Jr. and Peter K. Manning. "Illness Episodes, Illness Severity and Treatment Options in a Pluralistic Setting." *Social Science and Medicine*, vol. 13B (1979), pp. 41-51; Charles Anyinam. "Alternative Medicine in Western Industrialized Countries: An Agenda for Medical Geography." *The Canadian Geographer*, vol. 34, no. 1 (1990), pp. 69-76; Nancy Scheper-Hughes. "Three Promotions for a Critically Applied Medical Anthropology." *Social Science and Medicine*, vol. 30, no. 2 (1990), pp. 189-197.

<sup>7</sup>Dick G. Winchell, James M. Goodman, Stephen C. Jett, and Martha L. Henderson. "Geographical Research on Native Americans." In Gary L. Gaile and Cort J. Willmott. *Geography in America*. (Columbus: Merrill Publishing Company, 1989); J. Wreford Watson. *North America. Its Countries and Regions*. (New York: Frederick A. Prager, Publishers, 1967)

<sup>8</sup>Opcit. Winchell, et al., p.

## TRANSFORMATION OF COMMON BELIEF

<sup>9</sup>Proof of the doubt which strongly devoted European-trained doctors had in Native American healing philosophy was penned by Benjamin Rush for his *Oration, delivered February 4, 1774, before the American Philosophical Society...*

"We have no discoveries in the materia medica, to hope for from the Indians in North-America. It would be a reproach to our schools of physic, if modern physicians were not more successful than the Indians, even in the treatment of their own diseases."

Even the philosophy which Native Americans based their remedies on was argued by Benjamin Rush:

"We sometimes sooth our ignorance by reproaching our idleness in not investigating the remedies peculiar to this country. We are taught to believe that every herb that grows in our woods, is possessed of some medicinal virtue, and that heaven would be wanting in benignity if our country did not produce remedies, for all the different diseases of its inhabitants. It would be arrogating too much to suppose, that man was the only creature in our world for whom vegetables grow. The beasts, birds and insects, derive their sustenance either directly, or indirectly from them; while many of them were probably intended from their variety in figure, foliage and colour, only to serve as ornaments for our globe. It would seem strange that the author of nature should furnish every spot on the ground, with medicines adapted to the diseases of its inhabitants, and at the same time deny it the more necessary articles of food and clothing. I know not whether heaven has provided every country with antidotes even to the natural diseases of its inhabitants."

In the footnote for this paragraph, Rush adds:

"In describing the goodness of Providence in providing against natural evils, we are too apt to forget that he has endowed man with reasonable and social qualities. To suppose that God

## TRANSFORMATION OF COMMON BELIEF

has provided a natural remedy for all the artificial diseases, produced by the vice and sloth of mankind, would be so absurd as to suppose, that the final cause of diseases was to afford sustenance to physicians." [p. 58]

Benjamin Rush. *An Oration, delivered February 4, 1774, before the American Philosophical Society, held at Philadelphia, Containing and Enquiry into the Natural History of Medicine among the Indians in North-America, and A comparative View of their Diseases and remedies, with those of civilized Nations...* (Philadelphia: Joseph Crukshank, (1774), p. 60.

As final evidence for this continued Anglican practice, in his *Domestic Medicine*, published in London for numerous years between 1798 and 1840, William Buchan penned a prejudicial note about Bear's Foot on page 264: "The Great Bastard Black Hellebore." Bastard herbs are those used as substitutes for herbs that are commonly hard to come by due to demand and source.. In some cases, "Bastard" herbs may have been used as an adulterant. In this case, it appears the inference made by this name deals with the use of Bear's Foot as a substitute for European Hellebore. Since Buchan (or the editor of his later books in the 1800s) comes from the post-colonial regular medicine period in London, this name is probably derogatory and has a commentary attached to it.

<sup>10</sup>During his early travels to North America, Pierre Francois Xavier de Charlevoix noted the absence of bleeding on behalf of the healers residing in the Algonkian Nation. (See Pierre Francois Xavier de Charlevoix. *Journal of a Voyage to North America*. Louis Phelps Kellogg, Ed. (Chicago: The Caxton Club, 1923) Vol 1, p. 162); Baron de Lahontan, in his *New Voyages to North-America*, wrote:

"they are yet more astonish'd at our custom of Bleeding; For, say they, the Blood being the Taper of Life, we have more occasion to pour it in that to take it out, considering that Life sinks when its Principle Cause is mov'd off; from whence 'tis a Natural Consequence, that after loss of Blood Nature acts but feebly and heavily, the Intrails are over-heated, and the Parts are dry'd, which gives rise to all Diseases that afflict the Europeans."

Baron de Lahontan. *New Voyages to North America*. Reuben Gold Thwaites, Ed. (Chicago: A.C. McClurg Co., 1905),

## TRANSFORMATION OF COMMON BELIEF

Vol. 2, p. 469; In in his *Oration* about Native American healing philosophies and practices in 1774, Benjamin Rush stated:

"They confine bleeding entirely to the part affected. To know that opening a vein in the arm, or foot, would relieve a pain in the head, or side, supposes some knowledge of the animal oeconomy, and therefore marks an advanced period in the history of medicine. Sharp stones and thorns, are the instruments they use, to procure a discharge of blood."

Opcit. Rush.

<sup>11</sup>The other three humours are: phlegm (water), yellow bile, and black bile. Note, since Natives lacked the definition of humours in their philosophy, this interpretation of the use of Polygala is in error. English and even French writers during the 1600s to early 1700s often mistakenly re-tell Native ceremonial abdominal incision practices as blood-lettings; this mistaken interpretation continues even to this day. By ca. 1700, bleedings appear in the New France writings as being practiced first by the women, much later perhaps by some of the men, but certainly never by the elders. The Metis communities, and other accepting Frenchmen, merged Native healings with their own and produced a hybrid protocol based on both cultures' disciplines. For more on this, see the various bloodletting entries which appear throughout Reuben Gold Thwaites's translations in *The Jesuit Relations and Allied Documents. Travels and Explorations of the Jesuit Missionaries in New France. 1610-1791*. Cleveland: The Burrows Brothers Company, 71 Volumes, var. years.

<sup>12</sup>The most common mistake in modern herbalism involves this same sort of mis-reading for the definition of "cancer" by those in pursuit of cancer remedies. Until the development of the Roentgen Tube in 1895, cancer and canker were often treated as though they were the same. This is especially true during the 1840s when numerous herbals were being published in North America. We see canker cures, or remedies for abscesses, cited in later writings as cancer cures. The Rhubarb is a very common internal treatment for cancer in modern day herbalism, yet its use for cancer stems from its caustic effect used to get rid of swelling on the surface of the body, like cancer, cankers and abscesses.

<sup>13</sup>Joshua Marsden. *The Narrative of a Mission to Nova Scotia, New Brunswick, and the Somers Island; with a Tour to Lake Ontario. To which is added, the Mission, an Original*

## TRANSFORMATION OF COMMON BELIEF

*Poem, with copius notes. Also a brief account of missionary societies...* Liverpool: London Dock, 1816. Reprinted by S.R. Publishers Limited, 1966. See especially "Detention in New York, Visit to Lake Ontario and return to England." pp. 171-214.

<sup>14</sup>Most important, Andrew Jackson and his following had an influence due to his claim of Cherokee land, which forced their removal for the gold mines discovered there.

<sup>15</sup>Sanative: from Latin *Sanare*, "to heal." Not to be confused with terms born from *Sanitas*, for health, which form the root of Sanitary and Sanitation relating to the "Animalcule" (ca. 1835-1870) and Germ (1875 discovery; 1890-present practiced) theories of disease.

<sup>16</sup>Examples of these healing methods include the use of black pepper (*Piper nigrum*) to treat cases of fever, and the administration of a poultice designed to cause infections to erupt, i.e. Plantain (*Plantago major*) and White Ash bark (*Chionanthus virginica* L.).

<sup>17</sup>*Miasma*: (Greek. 'I contaminate') synonymous with contagion, emanations of dead or decaying bodies and vegetable matter, swamp gas, etc. The *Gici-Manitou* or *Chi-Manitou* is almost symbolic with Great Spirit, and is represented by the energy borne by that which is all around in nature, earth, sky, etc. The *Matchi-Manitou* is the antipathy of this, although not necessarily demonic or evil as suggested by past historians.

<sup>18</sup>For an overview on Religious Geography, see Wilbur Zelinsky. "An Approach to the Religious Geography of the United States: Patterns of Church Membership in 1952." *Annals of the Association of American Geographers* Vol. 51, no. 2 (June 1961), pp. 139-193. For general historical reviews, see: 1) Rev. Robert Baird. *Religion in the United States of America. Or an Account of the Origin, Progress, Relations to the State, and Present Condition of the Evangelical Churches in the United States.* London: Duncan and Malcolm, 1894; 2) "Chapter X. Religion," 229-264, in Silvio Zavala. *Program of the History of the New World II. The Colonial Period in the History of the New World.* Abridgement in English by Max Savelle. Publication No. 239 Instituto Panamericana de Geografia e Historia Comision de Hostira. Mexico, D.F., 1962.

<sup>19</sup>Dengue or Yellow fever, introduced to the region by a Mosquito, usually shipped in from Central or South America.

<sup>20</sup>Without an explanation for disease, the "Worm theory" became a common image portrayed in advertisements and popular family medical books. The image of disease onset due to a worm in the intestines, or the brain, became as reasonable an explanation as the humoral and miasma theories of the late Colonial era, and the newly popular climatic theory of disease due to which the beliefs in mineral springs was born.

<sup>21</sup>Maximilian, Prince of Wied. *Travels in the Interior of North America.* Translated from the German by Hannibal Evans Lloyd. In Volume 22, of *Early Western Travels. 1848-1846.*

## TRANSFORMATION OF COMMON BELIEF

Rueben Gold Thwaites, Ed. *Part I of Maximilian, Prince of Wied's, Travels in the Interior of North America, 1832-1834*, pp. 95-96. Notice that Maximilian reversed his recounts of the notes he took on descriptions given to him by Dutot of Lion's Heart (*Prenanthes rubra*) and Snakeroot, referring instead to the Lion's Heart as "a sovereign remedy against the bite of serpents" and *Aristolochia* as a herb used to "immediately staunch the most violent bleeding of any animal."

<sup>22</sup>"Cure for the Dropsy. From the Family Bible of John Lawson (1759-1831)." *Yearbook. Dutchess County Historical Society*. 1937. p. 53. Full recipe: "Wild cherry tree bark, prickle ash bark, white wood / bark, sweet appletree bark of the north side of the / tree as nigh the root as possible. Pasley root, / angelerca root an equal quantity of the roots / better than half a gill of mustard seed half a gill of peppergrass seed / a large handful of each kind of bark / put the whole in a gallon and half of good/ cider in an earthen or stone vessel covered tite / after drinking out a quart add another / half a gallon of cider take a small glass / as often as drink is nessary / a small handful of angeleca root and a / large handful of pasly root[.]"

<sup>23</sup>For a detailed account of the 1797-1812 New England Revivals, see: Bennett Tyler, D.D. *New England Revivals, as they existed at the Close of the Eighteenth, and Beginning of the Nineteenth Centuries. Compiled Principally from Narratives First Published in the Conn[ecticut] Evangelical Magazine*. Prepared for the Massachusetts Sabbath School Society, an Revised by the Committee of Publication, Boston. Reprinted by Richard Owen Roberts Publishers, Wheaton, Ill, 1980.

<sup>24</sup>Similar philosophies have appeared in European writings, although most in later times. The sixteenth century alchemist, Paracelsus, employed direction when gathering medicines, although they had little resemblance to Native American traditions. In his "The Philosophy Addressed to Athenians, he covers the "Great Mystery" with notes on the Creator's symbolism. Text XV and XVI cover the four elements theory and its symbolism in nature. See pp. 263-276, of Arthur Edward Waite's *The Hermetic and Alchemical Writings of Aureolus Phillipus Theophrastus Bombast, of Hohnenheim, called Paracelsus the Great*. London: James Elliot & Co., 1894. Reprinted by Shamabal Publications, Inc., Berkeley, 1979.

<sup>25</sup>The ingredients according to the Native American philosophy of Four Directions: Wild cherry tree bark [Red], prickle ash bark [Yellow], white wood bark [White], sweet appletree bark [Black]. These are given in the four directions of North, East, South, West, with the western color implying the north and thus constituting the total circle.

<sup>26</sup>The European Angelica is *Angelica archangelica* L.; the American Angelica is *A. atropurpurea* L, seen growing in the middle and northeast coastal states. See A.B. Lyons. *Plant*



## TRANSFORMATION OF COMMON BELIEF

*Names Scientific and Popular*. (Detroit: Nelson, Baker & Co., 1900), p. 35, entry "135. Angelica, L. 1753..."

<sup>27</sup>Opcit. p. 193.

<sup>28</sup>William Oliver. *Eight Months in Illinois; with Information to Emigrants*. Newcastle Upon Tyne: William Andrew Mitchell, 1843. pp. 77-78:

"The bite of a rattlesnake is sometimes fatal, though by no means invariably so, and with proper remedies may be got over at the expense of some fever and inflammation of the adjacent parts. The Indians have several snake-weeds, some of which they use, by poulticing, to allay the inflammation (it may be by neutralizing the poison), and of others make decoctions, to be drank by the patient. The hunter's cure is not a bad one; as soon as possible after being bitten, he pours from his horn some gunpowder, which he ignites upon the wound; should the first application fail to raise a blister, he repeats the operation till a blister is raised. By puncturing the blister, and applying poultices of snake-weed, much of the poison is extracted from the wound."

For comparison with Oregon Trail diaries see Randolph B. Marcy. *The Prairie Traveller. A Handbook for Overland Expeditions*. Originally published by Harper & Brothers. Publishers, New York. 1859. Reprinted by Corner House Publishers, Williamstown, Mass., 1968.

<sup>29</sup>Charles M. Good. "Traditional Medicine: An Agenda for Medical Geography." *Social Science and Medicine*, vol. 11, (1977), pp. 705-713; Pertti J. Pelto and Gretel H. Pelto. "Developing Applied Medical Anthropology in Third World Countries: Problems and Actions." *Social Science and Medicine*, vol. 35, no. 11 (1979), pp. 1389-1395; Merrill Singer. "Reinventing Medical Anthropology: Toward a Critical Realignment." *Social Science and Medicine*, vol. 30, no. 2 (1990), pp. 179-187; Maggie Brady. "Culture in Treatment, Culture as Treatment. A Critical Appraisal of Developments in Addictions Programs for Indigenous North Americans and Australians." *Social Science and Medicine*, vol. 41, no. 11 (1995), pp. 1487-1498; James P. Henry. "The Relation of Social to Biological Processes in Disease." *Social Science and Medicine*, vol. 16 (1982), pp. 369-380.