

Post Colonial Ghost Dancing

The Incompatibility Between the Holistic Concept of Indigenous Medicines and Eastern Bio-Colonizing - Biotechnology and Biopiracy

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This essay is an exploration of Indigenous thought, belief, psychology, physiology, philosophy and spirituality to create an interface if a link is to be made between bioscience and Mother Earth. I will discuss the relationship between Indigenous medicine, biotechnology and biopiracy.

I found it difficult to analyze the literature to create a dialogue into the realm of genetic engineering and DNA – based life-ways of the biosphere. Molecular biology is a colonizing discipline within universities and the corporate world through patents as well as governments in a tripartite apparatus mechanism in the ultimate alteration of all life on the planet for profit and is absent of any sacredness when it comes to the realms that makes a sacred interconnectedness to all life that is interwoven on Mother Earth.

The methodology used was a literature review primarily from non-Indigenous authors and one Indigenous author with an oral teaching from a translator from the Hopi Nation.

When we walk in a field, DNA and the cell-based life it codes for are everywhere: inside our own bodies, but also in the puddles, the mud, the cow pies, the grass on which we walk, the air we breathe, the birds, the trees, and everything that lives. This global network of DNA-based life, this biosphere, encircles the entire earth. (Narby, 1999)

Although this comes from a non-Aboriginal author, Indigenous peoples already knew about the interconnections that all life has within Mother Earth. It is within that realm that one can argue that the sacredness of Indigenous belief knowledge systems is the crux of the basis for the Ghost Dance that was, historically, one of the Ogala people's sacred visionary rituals. Currently, though, the shifts that have taken shape between capitalistic systems, mainly centered in the industrialized societies and Indigenous societies have established an unbalanced paradigm that has transcended for about 500 years since Columbus was the first major precedence for mass exploitation.

The radically different restructuring between the relations of the colonized and colonizer has simultaneously altered the delicate web of interconnectedness between the totality of the natural world. These alterations have taken the form of an arbitrary spurious and random transplantation of the spiritually inviolate tissues of the structural integrity of the natural world. Whether this transplantation that emerges most devastatingly in the form of biotechnology, and biopiracy much more is undertaken for the “purity” of scientific research or by unchecked corporate profiteering represents one of the gravest experimentations ever undertaken in history. That is, if the mega-conglomerate of corporate interests continues to plunder Indigenous medicines, genetic materials, and germplasms, the natural immune system of nature will surely react upon the global population in inconceivable ways, quite possibly even fulfilling Mayan prophecies, which predicted the end of the world on Dec 22, 2012. Hence, this is a potentially world-destroying incompatibility between the Western and Indigenous paradigms for managing the natural world, the Western paradigm of a deracinating transplantation, and the Indigenous paradigm of a spiritual holism.

Indigenous Worldview (Endures Colonization)

Interpreted Indigenous Physical Life Ways and Sacred Geography:

To begin I will address some typical Western misinterpretations about the ancient vision of

the Ogala[1] and reinterpret Ghost Dancing in light of the biomedical era in which we live.

The Ghost Dance is one of the Ogala people's sacred visionary rituals. It is believed to be capable of restoring dead relatives, animals and lands. It is the basis of an argument for restoring sacredness, and many other aspects that makes the Earth one with humanity. (Wearne, 1996)² Sayer refers to the Ghost Dance as a cultural war against the Ogala. While the U.S. cavalry saw the dance as a return to armed resistance, prior to the Wounded Knee massacre, Sitting Bull reinforced the religious nature of the ritual. (Sayer,1997)³ The Ghost Dance is an interplay between the physical, spiritual, and spirit world. (Brown,1972).⁴

For First Nations, in most parts of the world, collective cultural activity is interwoven into all aspects of their lives. These collective cultural activities are cyclical in accordance with the natural rhythms of the seasons. Ancestral links with spiritual aspects of the after-life are the basis for many cycles. The cycles could be described as living connections that each First Nation has with its own particular life-world. It is this sacred geography and the interchange with the after-life that is the living interconnection that each First Nation has with its own sacred geographies. To understand the intricacies of this interconnection takes many years of sacrifice, fasting, ceremonies – sun dances, sweat lodge ceremonies – and an ethical commitment to the Earth and its connections to the rest of the universe.

Beginning of the Breakdown for Physical Life-ways:

Even according to European historians, the achievements of fifteenth century Indigenous and European science and technology were similar. Both were using five primary tools: the wedge, the inclined plane, the screw, the pulley and the level (Wearne,1996)⁵ Notwithstanding, the European ethnocentric attitude towards their advancements in technology, there is evidence that even the “crudest” or most “primitive” tools demonstrated a high degree of technological sophistication. These sophisticated tools were in the hands of Indigenous people long before their European counterparts as Vine Deloria explains:

In the 1960's highly sophisticated stone tools rivaling the best work of Cro-Magnon man in Europe were unEarthed by Juan Armenta Camacho and Cynthia Irwin-Williams at Hueyatlaco, near Valsequillo, 75 miles southeast of Mexico City. Stone tools of a somewhat crude nature were found at the nearby site of El Horno. At both the Hueyatlaco and El Horno sites, the stratigraphic location of the implements does not seem in doubt. However, these artifacts do have a very controversial feature: a team of geologists working for the U.S. Geographical Survey gave them dates of about 250,000 b.p. (Deloria,1995)⁶.

De-culturalization and dehumanization of the spirituality of Indigenous beliefs:

To achieve economic progress, government policies, specifically with regard to Indigenous peoples, has been to throw millions onto the human scrap-heap. In so doing the dominant cultures have dismantled and degraded Indigenous communal and reciprocal life ways. This was done by denigrating and devaluing their cultures and self-identities and regarding people simply as (slave) labor.

Ethical Relationships with the Unseen:

Indigenous beliefs were much more respectful of natural resources. For example, Indigenous hunters only harvested what they needed and used everything from what was harvested. Never was more taken than what was needed. The story of the buffalo is an excellent example in which all elements of the animal were used in some fashion for peoples' cultural survival, for example: the skins were used in the winter to keep people warm, meat for food and skulls and bones for ceremonial and other purposes.

Special healing abilities emanated from the head but also from the buffalo spirit—abilities that could be used to cure different sicknesses. These special healing abilities are understood, also, to be manifested in certain geographical locations. It is at recognized

sacred sites that, revered teachings of natural laws are conducted by medicine people, who carry on the responsibilities for the ancient teachings. The southern Alberta location of the medicine wheels is a prime example. "The original teachings came directly from the Creator" (Kaiser,1991)⁷.

In conflict to Indigenous peoples' beliefs, mainstream business and government leaders continue to pursue an approach to life that is contrary to an ecological approach to living. There can be no question that the continued consumption-oriented, anti-ecological approach to life will lead us down the path of ecocide.

Re-emergence of the Cultural Rejuvenation within a Cyclical Earth:

As one of many, the Ghost Dance was a sacred dance envisioned by Sitting Bull for the Ogala people, for a return to ancient ways. It also had another meaning and that was an inter-play between the physical, spiritual, and spirit world. Thus, a sacred song was sung with the dance (Brown,1972)⁸.

In what has become a classic quote, Chief Seattle, says,

"This we know - the Earth does not belong to man, man belongs to the Earth. All things are connected like the blood, which unites one family. Whatever befalls the Earth befalls the sons of the Earth. Man did not weave the web of life; he is merely a strand in it. Whatever he does to the web, he does to himself." (Shiva,1989)⁹

The pursuit of capitalism by the so-called "industrialized nations" has been and continues to be a disruption of the web. That could help to explain why so many Indigenous and commons societies are disinterested in being involved in these systems. For many who live in Andean societies, the largest grouping of Indigenous communities in South America,(Grillo,1998)sacred laws continue to govern the universe of many. People resist both business and state capitalist enterprises—neither mining companies nor the Shining Path (Peru) or the FARC (Columbia) care about the sacred. Indigenous peoples see both as attempts to wear down and alter universal cosmological laws (Apfel,Marglin:1998)¹⁰.

The interchange that we have with Mother Earth has much to do with how we interact with ourselves. Following WWII and the bombing of Nagasaki and Hiroshima, and prompted by instructions to follow if a "gourd of ashes" fall from the sky, the Hopi elders sent out different translators to talk to people of the world about coming changes. They described themselves as people coming from the Fourth World and talked about the powers within each and every person. The Hopi discussed the postwar state of our world, and a representative of the Blue Bird Clan told an assembly gathered on the reservation that if he saw this event ("gourd of ashes") that he should publicly proclaim the hitherto secret teachings, prophecies, and traditions of the Hopi nation. (Kasier,1991)¹¹

The Hopi elders and translators possess a deep wisdom much the same as the Andean *chacra*. It is not easy to come to an understanding of the nurturing of the heterogeneity of life in the *chacra* solely through course. How to convey the profound feeling of affection and respect that the peasant feels for 'Mother Earth' (*la Pachamama*), or the joy and gratitude towards his or her mountain protectors (*Achachilas*' or *'Apus*') the peasant experiences on the birth of an 'alpaca' who is treated like a 'new daughter', is a truly difficult challenge. (Apffel-Marglin,1998)¹²

Hopi translator, Thomas Banyacya of Oraibi, Arizona, speaks about the time when the eagle lands on our Grandmother, many changes will occur to our Mother (the Earth). The eagle, he explained, was the eagle of the crest of the United States of America—the government symbol on the landing capsule when it touched down on the moon. The rocks that were taken from the moon and brought back to Earth for scientific study represent the start of the partial ecological crisis that the world is facing today and has to do with Earth changes. The sacredness that existed between the Earth and the moon in the ancient ways had forever been broken and it was a violation of natural cosmological laws.*[13] .It's almost as though the accidental "discovery" of the Americas was once again forever changed, but only this time it was the whole Earth, with the end being imminent. Similarly, the biological pollution that occurred between the Earth and the Moon as a result of space exploration continues to have repercussions on the Earth today. As promised by Thomas Banyacya, the repercussions continue to intensify in what appears to be natural ecological occurrences, e.g.: volcanoes,

earthquakes, tidal waves, landslides, and floods.

We can reach back to the Mayans to find similar predictions about the fate of the Earth. For thousands upon thousands of years, the Mayans studied the cosmos and made predictions based on their astronomical observations. The western world is just beginning to understand and appreciate the knowledge of the Mayans. Maurice Cotterell states that there would be a shifting of the magnetic pole giving rise to wide-scale disruption. Much of this seems to be cyclical in nature, in that throughout the Earth's history there have been topographical changes and movements. However, never before has the world been so densely populated. If Cotterell's predictions come true, this will be the biggest catastrophe for humanity that we have ever known (Gilbert and Cotterell, 1995)¹³. According to Cotterell the end is predicted for December 22, 2012.

European Worldview and Impacts:

A high-tech society is by and large present minded, just as its machines are—a computer's "memory", after all, is only regurgitation, not the recreation of experience, and it exists only in the present, when it is transmitted. A high-tech society is ever-changing and unsettled, always caught in that rush of improvement and innovation that generally goes by the name of progress regardless of which direction it is hurtling in. (Sale, 1996)¹⁴.

Biotechnology and Ethical Issues from the Indigenous Perspective:

Through the ages, diseases have been more lethal for Indigenous peoples than military attack. (Wearne, 1996)¹⁵ Historically, very little has been done to find cures for the diseases affecting Indigenous people. Numerous epidemics have wiped out millions of Indigenous peoples. Today, A.I.D.S. (Acquired Immune Deficiency Syndrome) is but one of many diseases through which Indigenous peoples encounter death on a daily basis. As with other diseases there is no cure on the horizon.

While these diseases kill Indigenous peoples, research is being undertaken, in biotechnology laboratories, to create new organisms, at the most minute level, through a horizontal gene transfer. Although this may seem like an exciting development for biotechnologists, to Indigenous peoples it represents a bio-colonizing mechanism to alter life-ways forever. As an example:

“Based on the current uses of genetic materials collected for the Human Genome Project, there is much to worry about. With the discovery of genetic “defects” and “superior” genes, doctors can already proceed with screening “defective” and “superior” embryos and fetuses. The next foreseen step is to abort “defective” fetuses and to clone “superior” ones. Who will determine what bad genes and good genes are?” (Takor, 2001)¹⁶

While real cures for diseases such as A.I.D.S. are many years away, Indigenous people have to contend with the prospect of their genes being cloned for profit just as their peoples, cultures, languages and resources have been colonized for profit in the past.

There is no reversal in sight and that represents a complete detachment from ancestral interconnectedness. Gene alteration and potential transplantation represent a fundamental shift in human relations to say the least (Wan Ho-Mae, 2000)¹⁷. For Indigenous peoples, it represents a new form of colonization—bio-colonization. No respect is given nor does reciprocity take place when humans remove a part of an animal or plant from its original sacred context. Similarly, like historical disease scenarios while Indigenous people did not seek the fate of disease, they had no choice in the results—including annihilation. There is a far greater concern than biology behind Indigenous opposition to genetic engineering. Once again, the deep belief lies in the sacred teachings, prophecies and laws that govern the universe. Ultimately, genetic engineering is fundamentally opposed to the original instructions of the Creator, and therefore, against traditional and sacred culture. With those concerns in mind, the Hopi prophecy of the end being near becomes all the more real.” (Kasier, 1991)¹⁸

Biopiracy and the Laws:

Respect for biodiversity is absent in the laws that govern patents to the genetic materials within certain species. If Indigenous cosmology were respected, then it would create dimensions within the natural biosphere that is infinite. That is, all of creation would have a continuation of life forces built into the cosmological web of life and all resources would remain and continue the life-ways of the planet as it was intended to.

Biopiracy is the embodiment, in genetic territory, of the piracy and destruction of what was traditional knowledge. And in the same way that the cultural has been stolen (pirated) so too is the biological being pirated, when any part of a plant can simply be used for a purpose and, its origins not acknowledged. The theft of Indigenous intellectual property is just that — biopiracy. (Shiva,1997)19.

By merely "shifting genes" some scientists have been permitted to patent DNA sequences and even whole organisms. As a result, the blood used no longer belongs to the person from whom the blood was taken. Examples abound, such as the cell lines of the Hagahai of Papua New Guinea and the Guami of Panama that were patented by the U.S. commerce secretary. (Takor,2001) These examples are akin to what transpired, historically, in 1492 and after and another form of a colonizing process in which little protection is granted to Indigenous peoples, but bio-colonizing is taking place because it is the genetic material that the biotechnology companies are seeking, today. Takor criticizes reductionism as a way of colonization in terms of ethics as such:

"It is a worrisome trend the scientists are embarking upon. ... How can sexual orientation and behaviour be explained by saying that there is homosexuality or a violence gene? What could be the possible implications of such conclusion? If there is a propensity to be a criminal is held to lie with a violence gene, does it follow that this person can be cured through gene therapy? If homosexuality is considered to be produced by a gene and this is regarded as an aberration or a disease, will a time come when gene therapy is applied to "normalize" gays (Takor,2001)20

The commodification of Indigenous traditions servers the connection between those traditions and the creation stories encompassing the whole of Mother Earth (including her sacred geography): This separation truns it into a completely different sphere of the biosciences. In all of this one key element is missing and that is spirituality.

The traditional interpretations are given a completely different non-traditional context. The medicinal properties of plants taken out of their traditional context have no further connection to the sacred geography and to the prayers said for them at their source. Thus—the absence of spiritual interconnectedness makes the plant's healing properties benign. The continuity of that life form will have thus ceased and made a transgenic leap into another dimension that may or may not have ecological consequences. What is certain is that little is known about the overall health and well being of human consumption of food made with plants that are dissociated from their traditional origins.(Easter:2000)21.

Basically, the GATT and Intellectual Property Rights debacle becomes a mechanism to exercise power of corporate rights versus peoples' rights. The corporate agenda is rooted within U.S driven corporate rules with each trading country having to agree to terms and conditions before entering into the world-trading club (Dawkins,1997)22. Furthermore, the legitimacy of biopiracy has become the imposition of values and interests by primarily U.S.-based transnational corporations on the diverse societies and cultures of the world. Manipulation and monopolization are the central aims of biopiracy as the second coming of Columbus unfolds that on the surface have the same kinds of implications as five hundred years ago. The "missionary quest" has entered its last stages.

Biotechnology is today's dominant cultural instrument for carving out the boundary between nature and culture through intellectual property rights, and defining women's and farmers' knowledge and work as nature. These patriarchal constructs are projected as natural, although there is nothing natural about them. Claudia Von Werlhof ... has pointed out, from the dominant standpoint, nature is everything that should be available free or as cheaply as possible. This includes the products of social labor. The labor of women and the Third World farmers is said to be non-labor, mere biology, a natural resource; their products are thus akin to natural deposits. The production boundary and the creation boundary are the very powerful constructs which transforms value into disvalue, labor into non-labor, knowledge into non-knowledge (Shiva,1997)23.

Conclusion

The interchange between the capitalist system, colonizer, and the natural world are not compatible. The Earth cannot sustain the insatiable capitalist system because of the finite reality of natural resources. Biopiracy, and biotechnology exists for the manipulation of the environment and human beings. In that sense these explorations are a continuation of the earliest invasions into the Western Hemisphere and other Indigenous territories by the Europeans. The Mayan and Hopi prophecies continue to bear fruit. Since science and technology has made it possible for humans to set foot on another part of the solar system the planet has started to experience a new round of intensified major climatic changes. We know that deforestation is already resulting in increased illnesses due to a reduction in the amount of available breathable air. The ultimate sacrificing of Mother Earth is finally affecting the very survival of the Indigenous peoples, their life-ways and systems of biosphere.

However, the diversity of the human family encompasses a mass of divergent ways to encapsulate interconnectedness, but Indigenous peoples have remained steadfast in their own knowledge belief systems, even though the colonizers have prevented them from doing so at every conceivable turn since the invasion. If biotechnology and biopiracy continue to proceed at the current rate, the very survival of the planet will be at stake. The living Mother Earth will ultimately resist. All of the natural world will be destroyed for human existence. The Creator's Indigenous prophecies will prevail. The ghost dancing between the physical, spiritual, and spirit worlds is the ultimate interconnection. As the date of the Mayan prophecy nears and the dominant physical world overtakes the spiritual the "spirit world" may be the only world that survives.

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