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Diviners and Diagnosticians in The Gambia:
Psychological Functions and Traditional Healers
PEER REVIEWED

### **DR. LAMIN SIDIBEH**

American International University – The Gambia

King Haglar, Catawba Indian Chief, Honored with Statue

### **BECKEE GARRIS**

Catawba Indian Reservation

Restoring Individual and Community Health: Northwest Native Plants and Foods Collective ELISE KROHN, MS ET.AL

Reflecting on the 2015 Native American and Indigenous Studies Association Annual Meeting DINA GILIO-WHITAKER

5	Dependence Limits Strategy  JAY TABER  CWIS Associate Scholar	2
13	The Anáhuac Knowledge System: A Dialogue Between Toltecs and Descartes RUDOLPH RŸSER	3
	Book Review: The Ainu Wolf Carving	4

Book Review: Plant Life of a Desert Archipelago

AMY EISENBERG, PH.D.

21 CWIS Associate Scholar

17

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### Contents

Lukanka, Rudolph Rÿser	1
Diviners and Diagnosticians in The Gambia: Psychological Functions and Traditional Healers PEER REVIEWED Dr. Lamin Sidibeh American International University – The Gambia	5
King Haglar, Catawba Indian Chief, Honored with Statue Beckee Garris Catawba Indian Reservation	13
Restoring Individual and Community Health: Northwest Native Plants and Foods Collective Elise Krohn, MS et.al ** CWIS Fellow for Ethnobotany	17
Reflecting on the 2015 Native American and Indigenous Studies Association Annual Meeting Dina Gilio-Whitaker	21
Dependence Limits Strategy Jay Taber CWIS Associate Scholar	25
The Anáhuac Knowledge System: A Dialogue Between Toltecs and Descartes  Rudolph Rÿser  CWIS	31
Book Review: The Ainu Wolf Carving FWJ Editors	49
Book Review: Plant Life of a Desert Archipelago Amy Eisenberg, Ph.D. CWIS Associate Scholar	51
<b>ON THE COVER:</b> The Anáhuac Calendar used by Mexíca (Aztec) and Mayan societies for more than 2,500 years. This sample is now on display at the Museo Nacional de Antropología in Mexico City.	

# Lukanka

Lukanka is a Miskito word for "thoughts"



RUDOLPH C. RŸSER Editor in Chief Fourth World Journal



The knowledge of Fourth World peoples receives close attention in this issue of the Fourth World Journal. Our readers have frequently asked when we will publish more detailed examples of Fourth World knowledge or knowledge systems, so we have taken a big step in that direction. Fourth World knowledge systems, like other knowledge systems, emerge from the human mind in response to human needs. The origin of knowledge systems is to some thinkers from the Descartes school of thought a great mystery. Confusion abounds when the possibility of recognizing, respecting, and using ideas, perspectives, and concepts from a Fourth World knowledge system are offered to help explain phenomena in the material and immaterial realities. When Fourth World diplomats suggest that the UN Convention on Biodiversity or the developing United Nations Treaty on Climate Change should include language that requires states' governments and their policy-makers to recognize and respect "indigenous" knowledge, negotiators dutifully respond in a cautious affirmative fashion. But when the time comes to actually commit on paper the language about such recognition, respect disappears. The truth is that interlocutors from the Fourth World and from UN Member States do not actually know what they mean by "indigenous" knowledge or "traditional" knowledge.

The most conventional way of describing "traditional," "indigenous," or "Fourth World" knowledge is to say, "it is local knowledge." It turns out that this suggestion contains only a tiny piece of truth. It is true that virtually all great knowledge systems form in small localities and within small groups of people. But it is also true that over time sharing between localities, regions, cultures, and then eventually whole continents, human needs on a large scale produce a knowledge system that draws on a myriad of local, regional, and cultural contexts. That is the case of India/Afganistan's Vedic knowledge and Sanskrit knowledge, Europe's Cartesian knowledge, Africa's Bwanga knowledge, and America's Anáhuac knowledge—all diverse systems rooted in culture and local influences. The Center for World Indigenous Studies embarked on a multi-year study to document and characterize the epistemological and ontological framework of Fourth World knowledge systems in an effort to advance the possibility that confusion will no longer reign when the question arises, "How can we recognize and respect "indigenous" or "traditional" knowledge? The study of knowledge and its limits and the study of things that exist are common to all systems of knowledge.

In this issue of the Fourth World Journal we offer several concrete discussions of the epistemological and ontological character of Fourth World knowledge systems—one of which has been the

specific focus of the Center's work for the last twenty-three years: the Anáhuac Knowledge System. Applications of this and other Fourth World knowledge systems are reflected in story and history, the healing arts and sciences, community nutrition, plant foods, medicines, and aesthetics.

The authors contributing to this issue are eclectic in their origins and points of view.

In his peer reviewed article " Diviners and Diagnosticians in The Gambia: Psychological Functions and Traditional Healers" Dr. Lamin Sidibeh of the American International University in The Gambia examines the role of traditional healers delivering health services as a "first option" in Mandinka, Fula, Wolof, Jola, and other smaller communities. He comments on the wider dependence on traditional healing practices throughout Sub-Saharan Africa--ranging as high as 80%--while also pointing to one traditional healer of 300 people in rural Gambia. Dr. Sidibeh explains the psychological effects of traditional healers in The Gambia employing a "theoretical explanation" of the benefits of indigenous cultural values, beliefs, customs, and practices; and methods used by traditional healers.

Beckee Garris is from the Ye Watera Iswa Tαk (Catawba Nation) and offers a brief story in "King Haglar, Catawba Indian chief, Honored with Statue" that describes the relatively recent history of the Ye Watera Iswa Tak from the 17th century after the English and Spanish entered their territory. Telling the story of King Haglar who in his time extended Catawba support to the English in an alliance during the French and English war (1754-1763 popularly called the French and Indian War) for control over the Ohio Valley and Thomas Spratt II (given the name Kanawha by the Catawba) who was among the earliest settlers in what is now Mecklenburg County, South Carolina. Haglar was the leading spokesperson

and war Sachem for the Catawba in the period from 1749 until 1763 when he was ambushed and killed in a battle with a Shawnee warrior party.

Twelve colleagues conducting the Northwest Native Plants and Foods Collective in the article entitled, "Restoring Individual and Community Health: Northwest Native Plants and Foods Collective" join Elise Krohn, CWIS Fellow for Ethnonutrition. The mission of the project is based in the belief that "indigenous plants and foods practices have the power to cultivate individual health, community-wide resilience, and to inspire a cultural relationship with the land." For a year, the Collective will serve Fourth World Communities in the Pacific Northwest of the United States.

The Native American and Indigenous Studies Association held its 7th Annual Meeting with more than 1000 scholars presenting papers reporting the results of their research on a wide range of topics from Sami (Sweden) and Chamorro (Guam) studies to American Indian studies on racism, genocide, gender and sexuality, ecology, science, and literature. Associate Scholar and author Dina Gilio-Whitaker describes in "Reflecting on the 2015 Native American and Indigenous Studies Association Annual Meeting" her experience in this important North American conference. She discusses the variety of topics and different panels that interested her. In addition, she describes her presentation of a paper extracted from "Fourth World Theory and Methods of Inquiry" (co-authored by Dina Gilio-Whitaker, Heidi Bruce, and Dr. Rudolph Rÿser) during a panel on pedagogy. She further comments on her experience as the chair for a panel session titled "Resisting Boundaries"—which focused on North American native peoples' resistance to the colonial borders surrounding them.

FWJ Contributing Editor Jay Taber offers

an editorial that ranges across several topics. He writes about the World Conference on Indigenous Peoples (September 2014), the growth of psychological warfare, print and digital media and the corporate agenda, the theater of war, what he describes as counterpower in a network society, other musings involving funding foundations and indigenous peoples, and his central concern, "Dependency Limits Strategies."

After thirteen years of research and a two-year inquiry under a Fulbright Research Scholarship Rudolph Rÿser issues his first findings and analysis of the Anáhuac Knowledge System Project. The study began initially in 1992 to answer the question, "What are the epistemological and ontological characteristics of Mayan knowledge that underpin the capacity of the Maya peoples to develop a complex civilization over more than three thousand years. The study became more tightly focused on central and southern Mexico after the author spent several years working with indigenous diplomats to develop language for the UN Climate Change Treaty that would ensure incorporation of terms including respect for traditional knowledge in scientific inquiries aimed at reducing the adverse effects of changing climate. The result of these years of study is "The Anáhuac Knowledge Sytem: a Dialogue Between Toltecs and Descartes." This essav considers approaches to bridging the gap between Cartesian science and Anáhuac science to address complex human problems.

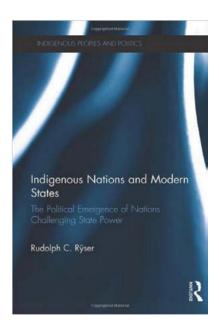
The "Plant Life of a Desert Archipelago: Flora of the Sonoran Islands in the Gulf of Mexico" is a collective "work of art and botanical science" reflecting the scientific knowledge of the Comcaác people (also known as the Seri)—with narrative and colorful photographs. CWIS Associate Scholar Dr. Amy Eisenberg lovingly describes the book that constitutes illustrations of the Comcaác

knowledge of important plants on the island. Eisenberg tells the story of this collection and dramatically describes the islands of the Gulf of California—reflecting on their original natural state—undisturbed by invasive outside plants. As an ethnoecologicst, Eisenberg is well positioned to report on the significance of this work of Comaác knowledge.

The Fourth World Journal receives books from virtually all corners of the world and occasionally we come upon one that is so gracefully simple and honest in its artistic presentation that we cannot miss letting our readers know about it. **The Ainu Wolf Carving** is one such book. I have been editing the Fourth World Journal since 1984 and can say it is a rare experience to read and absorb the beauty offered by this book. We give you my review in this issue of the Journal.

This issue constitutes the beginning of a global dialogue that the FWJ hopes to encourage scholars to engage in. The central issue being: What is the epistemological and ontological character of Fourth World knowledge systems from each of the continents? Human beings share similar conceptual structures, but they also bring a rich variety of knowledge construction, methods of inquiry, and dissemination that must become part of the dialogue to expand human understanding of how questions can be asked and needs met.

Rudolph C. Rÿser Editor in Chief



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# Now available on Amazon

# Indigenous Nations and Modern States by Rudolph C. Rÿser

Indigenous peoples throughout the world tenaciously defend their lands, cultures, and their lives with resilience and determination. They have done so generation after generation. These are peoples who make up bedrock nations throughout the world in whose territories the United Nations says 80 percent of the world's life sustaining biodiversity remains. Once through of as remnants of a human past that would soon disappear in the fog of history, indigenous peoples-as we now refer to them-have in the last generation emerged as new political actors in global, regional, and local debates. As countries struggle with economic collapse, terrorism, and global warming, indigenous peoples demand a place at the table to decide policy about energy, boundaries, traditional knowledge, climate change, intellectual property, land, environment, clean water, education, war, terrorism, health, and the role of democracy in society.

In this volume, Rudolph C. Ryser describes how indigenous peoples transformed themselves from anthropological curiousities into politically influential voices in domestic and international deliberations affecting everyone on the planet. He reveals in documentary detail how, since the 1970s, indigenous peoples politically formed governing authorities over peoples, territories, and resources raising important questions and offering new solutions to profound challenges to human life.

# Diviners and Diagnosticians in The Gambia: Psychological Functions and Traditional Healers

Dr. Lamin Sidibeh, PhD

### **Abstract**

The role and functions of traditional healers in Africa are often misconceived in the modern world. Even in literature, it is not uncommon to find expressions such as "irrational mystery," "miracle," or "lack of scientific validation." Evidently there are misconceptions attributable to a lack of understanding of the context in which local healers apply traditional medicine in service of the physical and psychological needs of communities.

Therefore, this article provides some basic explanation to this apparent lack of understanding. The vital role of traditional healing is an indispensable and complementary component of modern health care system in The Gambia (Africa). It argues that traditional healing is part and parcel of The Gambia's (and Africa more broadly) development resource but not adequately appropriated. Research and documentation in traditional medicine and healing approaches will enhance understanding and the recognition that it deserves.

#### Introduction

Traditional or local healing practices in The Gambia comprises a combination of knowledge, beliefs, and customs to achieve the desired outcome for the diagnoses, prevention or elimination of imbalances in the physical, psychological or social well-being of people. The healing practice is based on the indigenous knowledge of various communities in The Gambia, as well as their experiences in the context of the respective local culture and environment. The healers can be divided in two categories: 1) the diviner—diagnosticians who provide diagnosis usually through spiritual means, and 2) the herbalists or healers who identify and apply relevant remedies, usually herbs. In this article emphasis is placed on the latter.

The Jolles brothers (2000) wrote that various pieces of legislation such as the witchcraft suppression Act of 1957 and the witchcraft suppression amendment of 1970 explicitly prohibited the Diviners from practicing their professions. With the advent of conventional

health care systems in The Gambia, the roles of the diviners and herbalists have become rather blurred but still something to reckon with in many local communities in the country as demonstrated in the article.

The World Health Organisation (WHO) estimates that up to 80 percent of the population in Africa makes use of traditional medicine in Sub–Saharan Africa; the ratio of traditional healers to the population is approximately 1:500, while medical practitioners have a ratio of 1:40,000. This reveals the influential role of traditional healing in Sub–Saharan Africa and its potential to serve as a critical component of a comprehensive health care strategy in Africa.

The relative ratio of traditional healers and western–trained doctors in relation to the population in Sub–Saharan Africa is as true for The Gambia as it is for many parts of Africa as a whole. There is at least one traditional healer for almost 300 people in the rural areas in The Gambia. Most people in The Gambia have much greater access to traditional healers than to conventional medical care. Moreover,

traditional healers are integral parts of the local culture and are considered very vital and durable sources of indigenous knowledge and healing ability. As cited above, the vast majority of Gambians rely on traditional treatment because western—trained medical personnel are both limited and not really accepted by many local people. In contrast traditional healers are easily accessible, easily consulted and living in the same communities. The high cost of conventional medicine and accessibility of modern health care facilities in most areas of the country are also major contributors to the heavy reliance on traditional treatment of both physical and psychological problems.

Unfortunately though, traditional healing knowledge is typically preserved mainly through oral tradition and practical demonstration rather than through systematic documentation. This means that quite an amount of knowledge and wisdom gets lost or is distorted from generation to generation. There is therefore need to encourage local communities to record in writing and publicize traditional healing knowledge and skills.

### Methodology

Seven traditional healers have been observed and interviewed from the West Coast and North Bank regions of The Gambia, five male and two female. All these healers live and function professionally within their communities. Three of the male healers also perform prayers for people and carry out fortune telling as well.

The main thrust of this article is to explain the psychological functions or effects of traditional healers in The Gambia, based on their indigenous knowledge and practices. The approach adopted is basically a theoretical explanation of the relationship between indigenous cultural values, beliefs, customs, and practices and the traditional healing method of local healers. While the proposed relationships are viewed within a cultural system, they may also be linked to social contexts and are therefore changing within social settings through time.

# Efforts of the Government of The Gambia in Promoting Traditional Healing Practices

The Ministry of Health and Social Welfare of The Gambia has recognized the role and importance of traditional healing in the country and it has developed regulations for integrating it into the primary health care system. The official legislative and regulatory clause governing the practice of traditional medicine includes a licensing requirement.

These are contained in the National Traditional Medicine Policy of The Gambia. adopted in November 2008 by the Department of State for Health and Social Welfare. The main objectives in this policy document are: to increase collaboration between traditional medicine and the formal health sector, to legislate the practice of traditional medicine in the country for effective regulation and for the protection of indigenous knowledge, and to develop traditional medicine to effectively complement the basic care program. The National Traditional Medicine program is under the Ministry of Health and Social Welfare of The Gambia. The increased appreciation of the relevance of traditional treatment has inspired the formation of an Association of Gambian Traditional Healers with a view to collaboration and standardization.

## Functions of Traditional Healers in The Gambia

Whereas traditional healers can carry out many roles in their communities, this article is focused mainly on their psychological influence on both the individual and their communities. Traditional healers are a source of physical and mental health care. They have an

Plant	Used to Treat
Kalkato roots with jambakatang leaves	Chest Infections
Seno and Wonko Tree barks	Skin rashes
Seno tree bark powder	Pruritus Vulvae
Kasala leaves	Smooth child birth clean and healthy mother baby
Seno tree leaves and root powder	Abdominal pain
Jala tree bark	To enhance male sexual function
Sinjang roots	Abdominal pain
Jalafato bark + neim tree + kasala leaves + papaya tree leaves	Malaria

imperative role and abundant resources in the health sector, particularly in the rural communities. Despite the spread of modern medicine, local healers are still popular in many communities in Africa in general. The majority of Gambians depend on traditional healing as their only source of health care, particularly in the provinces where access to health facilities is extremely difficult due to poor conditions of roads and relative lack of transportation. Between 2002 and 2004, a national survey was conducted with 3,651 adults in The Gambia using the WHO Composite International Diagnostic Interview (CIDI) method. The results shows that over 50 percent of respondents consulted obtained treatment from traditional healers. Modern health care facilities and resources are of little value to many rural communities, illustrating how the local healers provide vital physical and psychological health care to people of remote communities and even to their livestock.1

The local healers mainly depend on medicinal herbs for the treatment of their clients.

These herbs are quite readily available and affordable with minimum side effects. A few examples of commonly used natural products for indigenous healing of specific health problems are listed above.

A notable observation made during the field trips was that some young boys and girls of 5–7 years showed impressive botanical knowledge. They were able to identify various medicinal plants around their compounds and on the farms. With systematic teachings on how to prepare and apply plant medicines and how to diagnose the diseases, traditional knowledge can be transferred from generation to generation more efficiently.

Environmental degradation, population growth, and over-exploitation of the medicinal plant resources are also very serious threats to the medicinal herbs. These herbs offer substantial spiritual and psychological satisfaction to the local healer, the community at large and to individual inhabitants. On the other hand, it is increasing demand for remedial herbs from the developed countries and this places an increasing pressure on these herbs in developing countries. Consequently, many of these countries experience a loss of the genetic

<sup>1</sup> The focal point for the National Traditional Medicine program is at the Ministry of Health of The Gambia Email: bubakarsillah@gmail.com

resources as sources of health care, especially for the rural communities. Some plant species used in traditional healing which are disappearing or almost extinct include: The Busukay plant root<sup>2</sup> which cures seven diseases such as constipation, joint pain, and impotence; the Ketijangkumo plant leaf and roots for wounds and body itching; the Salaanombo plant root to cure waist pain and urinary tract problems. This is a situation which calls for urgent measures in the integration of traditional and modern medicine systems—to build, promote, and conserve the traditional healing heritage as well as to ensure conservation of biodiversity.

To prevent extinction of the traditional healing knowledge itself, concerted documentation efforts must be undertaken. Preservation and conservation could be ensured through written records and publication. In conventional knowledge, efforts are made to protect intellectual property rights (IRPS) of produced properties. Traditional knowledge holders (particularly in the health sector) prefer to share their knowledge within their immediate families, and The Gambia is no exception. As a result, they tend to produce only marginal improvements of knowledge and practices. The World Intellectual Property Organization (WIPO) is concerned about this challenge for traditional knowledge holders. WIPO collaborates with the United Nations agencies. governments, and NGOs to address the issue through training activities for instance.

Traditional medicine, also described as indigenous or folk medicine, comprises knowledge systems that developed over many generations, within various African societies before the modern medicine era. The WHO defines traditional medicine as "the health practice, approaches, knowledge and beliefs incorporating plant animal and mineral-based

medicine, spiritual therapies, manual techniques and exercises applied singularly or in combination to treat, diagnose and prevent illness or maintain well-being." WHO further noted that "inappropriate use of traditional medicine or practices can have negative or dangerous effects and that further research is needed to ascertain the efficacy and safety of several of the practices and medicinal plants used by traditional medicine systems." These statements may be true in some respects but the same facts may apply to certain chemical products and practices in modern medicine as well, for example, in respect to diagnosis, treatment, clinical practices, medication and its side effects.

In comparison to western medicine, WHO describes traditional medicine or healing as the sum total of knowledge and practices, explicable or not, used in diagnoses, prevention and elimination of physical, mental or societal imbalances and relying exclusively on practical experience and observations transferred from generation to generation, mainly verbally and less in writing. Western or modern medicine, on the other hand, is based on the principles of science, technology, knowledge, and clinical analysis.

It worth noting, however, that evidence has shown throughout Africa that mental disorders for instance, are among the conditions for which modern medical help are least likely to be sought. Generally, African people including Gambians, seek indigenous forms of treatment in mental health. Studies have revealed that difficult psychotherapeutic approaches have proven effective in treating mental disorders when embedded within respective social and cultural contexts. This underpins the critical importance of sensitivity to social and cultural knowledge and norms.

Experiences from Sierra Leone demonstrates that war–related psychological trauma

<sup>2 &</sup>quot;Busukay" kelijangkuma" and salaanombo" are local plant names

for both adults and children is associated with the power and anger of the spirits of the dead. In times of war it is impossible to perform burials properly; therefore the spirits of the dead are believed to be angry and can be harmful to their killers. Child soldiers involved in that war and killing people were later healed through indigenous healing rituals where the traditional healer performed ritual purification ceremonies. These rituals were effective in desensitizing the children by dealing with their psychological and emotional disturbances. The rituals were also important in building family and community solidarity and cohesion.

Normally traditional healers in The Gambia come into agreement with the client sometimes described as "outcome contingent." This implies that the client pays the healer more if he or she is cured than if he or she is not. In many cases, no payment is expected without cure. It gives the healer good reason to put in effort in the treatment of clients. As outcomes (and not inputs) matter more, a traditional healer would care more than a conventional doctor about the actions that the clients themselves take in the treatment process. Conventional doctors may also provide high quality effort in treatment but do not normally work as well with the clients in situations where client effort is important to the result of the treatment.

In an outcome contingent agreement, the local healers are highly motivated to provide quality care. This relationship encourages the clients to make great efforts as well during treatment. The difference in relationship between the effort of the client and the effort of the healer plays a very vital role in treatment. Furthermore, the clients believe that healers know whether they are cured or not, and if they fail to pay when they are cured they could

be cursed<sup>3</sup> by the healer. Many clients try to avoid such a situation because they also believe in the curse concept.

In general, the behavior of the healer towards the client and the response of the client towards the healer are crucial in the healing process, suggesting why many clients of traditional healers appear to be much more relaxed, attached, and cooperative in the process. This suggests that the trust and harmony in the client-healer relationship could very well be a significant contributory factor to the treatment outcome or at least the psychological satisfaction of the client. During the author's interactions with the seven traditional healers mentioned earlier, these characteristics were observed in their dealing with clients. For example, the author observed the following treatment procedure as well in the West Coast Region (Foni): A girl from a neighboring village, believed to have been bewitched because she suddenly screamed at night, was brought to a healer by her relatives in Foni. The healer together with the girl's relative took her to a place of their ancestral spirits. The healer addressed the spirits saying that the family was concerned about the girl's condition. This was followed by some rituals for the girl. During the ritual process, the girl herself participated by chanting certain words after the healer who placed his hand on her head. The girl looked at ease and relieved. The effectiveness of the client-healer relationship was evident. A chicken was then sacrificed for the spirits and the blood sprinkled on the ritual spot. The healing process also brought about symbolic meanings for the girl and her family.

<sup>3 &</sup>quot;Curse" can mean harmful things happening to the client who fails to pay when cured unless he or she is forgiven by the healer.

# Indigenous Cultural Values and Beliefs In Relation to Traditional Healing

There has long been a controversy on the relation between culture and treatment in health in general (physical and mental). Writers such as Jafar Kareem, Roland Littlewoods, and Derek Steinberg grant importance to culture in therapy, while others may believe more in the biomedical approach which stresses that symptoms of disorders are caused by biological or genetic factors. Therefore treatment is often based mainly on medication. The evidence for cultural influence in the diagnosis and treatment of mental disorders in particular has been reviewed by several authors in Kareem and Littlewoods (2000).

Cross-cultural studies are sometimes rejected for methodological deficiencies. The question that arises however is that rigorous scientific study standards have been applied using other approaches with relatively low confidence. For example, careful examination of genetic and biochemical research on schizophrenia reveal little confidence in these methods compared to cross-cultural studies. The problem is that people who very strongly emphasize the genetic or biochemical factors would believe that cultural environmental factors (including the physical and social environment, indigenous knowledge, life style, customs, traditions, practices, and belief systems) are of no consequence in treatment. What is becoming increasingly critical though is that the cultural hypothesis and genetic or biochemical hypothesis are complementary. The following example illustrates the role of culture in assisting people with certain disorders. In indigenous communities in The Gambia, the support and help offered to, for instance, a depressed person by friends, family, local leaders, and local institutions are great protective and relieving measures that help the individual. Obviously, culture is not the only

influence which must be taken into account in diagnosis and treatment but can indeed affect the phenomenon of treatment in a variety of ways. This suggests once again that the modern and indigenous methods combined can produce very good health intervention outcomes.

As stated in Barbu (1971), "[t]he personality of the individual is a product of his society when conformity to social norms and goals is for him a matter of self–assertion, self–fulfillment and often of self–survival." Further in Barbou, Ruth Benedict states "culture is an integrated system of behavioral traits, shared ideas and standards." This statement is evident in rural Gambia communities even today.

### Conclusion

The principal argument in this article is that the Gambian (African) traditional healers have a great role and abundant resources in the health sector, especially in rural areas. They are usually the first options available to Gambian communities at large, particularly in primary health Care. Both demand and increased urbanization and social change call for the support and development of traditional medicine and practices to respond to needs in the context of cultural values, indigenous knowledge, and the environment. This requires a legal framework to reinforce indigenous knowledge to prevent the exploitation and extinction of natural herbs and the extinction of natural indigenous knowledge and resources. Also there is need to document traditional knowledge and to provide training to government and communities at a grassroots level in the understanding of documentation and the role of IPRS in the protection of traditional knowledge. A harmonious integration of western and traditional methods without marginalizing traditional treatment is imperative. The integration process should be cognizant of the

need to transfer traditional healing knowledge and skills to younger generations in a broader sense. There is also need to train all knowledge holders and supporters in documentation methods and the role of IPRS in protecting traditional knowledge.

More research can lead to better understanding and recognition of African indigenous knowledge, especially in the treatment of health problems. Traditional herb—based methods and other remedial methods in primary health care programs in The Gambia and elsewhere will be greatly enhanced through studies that establish credibility and demonstrate their safety. Specific studies that could be conducted in the Gambia include:

- 1) Studies on medicinal plants to investigate efficacy, toxicity, medicinal value, long term effects etc.
- 2) Research on written recording and documentation.
- Exploitation and conservation of vegetation and marine resources at grassroots levels.
- Preservation and revitalization of the threatened indigenous knowledge and.
- 5) Viable and sustainable mechanisms for the integration of traditional medicine into the Primary Health Care Program.

Potential research funding sources:

- a) World Bank, Africa Region.
- South African Regional Network on Indigenous Knowledge Systems (SARINKS).
- c) Research and Development (R&D).

- d) World International Property Organisation (WIPO)
- e) UNESCo, UNDP, and WHO Africa Region

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King Haglar, Catawba Indian chief, Honored with Statue

by Beckee Garris, Catawba Indian

n December 06, 2014—a cold and wet day-over 200 people were in attendance to watch the unveiling of bronze statues honoring Catawba Indian leader King Haiglar<sup>1</sup> and the English settler, Thomas Spratt II, that were erected on the campus of the University of North Carolina-Charlotte. This was to commemorate the early history of the Charlotte, North Carolina region during the 1700's. But the event also represents the respect both men from different cultures and background had for each other during this time in history.

Haglar had become the leading spokesperson and war Sachem for the Catawbas when he was in his early 30s in the period from 1749 until 1763 when he was ambushed and killed in a battled with a Shawnee warrior party during the war between France and England for control over the Ohio Valley (also known as the French and Indian War from 1753-1763). He allied himself and the Catawba with the English Crown, the Cherokee, and the Caughnawaga Mohawk against the French and her allies the Wabanaki Confederacy, Algonquin, Lenape, Ottawa Shawnee, and Wyandot. When the Americans began to battle England for independence and as they began to assume a more dominant influence along the Atlantic Coast the Catawba allied themselves with the Americans against the English.

Spratt, an Scottish settler, befriended the Catawbas and especially Haglar after he inherited plantation land from his father in 1757. The land he acquired through inheritance was part of Catawba territory and despite the land having been purchased from North Carolina Spratt and his descendants leased the land

1 Other sources spell the name "Haiglar."



Kirk Johnson, Park Ranger for Andrew Jackson State Park, Lancaster, SC gets credit for taking the photo of me [Beckee Harris] during of the King Haglar/Thomas Spratt II ceremony.

from the Catawbas in recognition of their original ownership. Nicknamed "Kanawa" from the name of a river in West Virginia where he and Haglar with Catawba warriors battled the Shawnee to their defeat.

Several Catawba Indians were a part of the commemorative event. Beckee Garris did a smudging ceremony to cleanse and bless

the ground where the statues stand. Ronnie Beck sang an honor song while beating a hand drum. Wenonah G. Haire, DMD, the director of the Catawba Cultural Preservation Project, spoke about the legacy of King Haglar and his major role in helping not only his people but the early settlers, such as Thomas Spratt, II.

To know how important this event was you also have to know some of the history of the Catawba Indians. The Catawba Indian Nation now is located in north central South Carolina in the center of an area which once comprised Catawba territory, about 8 miles east of Rock Hill, South Carolina. Over 2,800 Catawba are listed on the official tribal role. Of these 2,800 persons, the majority lives either on or within 20 miles of the reservation. Although the Catawba have no word in their own language for the meaning of "Catawba," it has been thought for many years to be a Yuchee Indian word. It has been established that the Yuchee did indeed have a phrase "Catawba Ge Na Ge Ha," which translates to strong people standing together. The Catawba called themselves "Ye Waterą Iswą Tak," People of the Washed Away River Bank. It wasn't until European contact that they became known as the Catawba.

The earliest mentions of the Catawba in written accounts were made by Spanish explorers of the mid-sixteenth century. A member of the Juan Pardo expedition recorded a number of names of villages and peoples of the area as they traveled up the Edisto and Santee River complexes. "Katapa" or "Kataba" and "Yssa" or "Esaw" are among the names easily recognized as designating Catawba peoples. It is likely that the Catawba were a loosely associated confederation of villages speaking related dialects of language or languages distantly related to Siouan. There were also speakers of Algonquian, Iroquoian, Yuchee, and Muskogean languages present in the area, people

with whom they had contact. John Lawson who visited them in 1701 wrote the most complete early description of the Catawba.

At one point in Lawson's writings he listed the number of Catawba at 10,000. It highly speculated he did not visit all of the villages and some wonder if he only counted the warriors of fighting age, as was the custom during his time. According to Hudson (1701), the early Catawba occupied an area where two cultural traditions met—the tribes of the piedmont and those of the southern chiefdoms of the lowlands. Their mode of subsistence was typical of the piedmont area. The Catawba were known as warriors and, except during the Yamassee War of 1715, were allies of the British, against both the Spanish and the French. They also feuded with and made retaliatory attacks against the Cherokee and the Shawnee, Delaware, and Iroquois to the north. Situated at the intersection of trade routes, they occupied a prominent position as middlemen in the trade with the British mostly for furs, and for which both Virginia and South Carolina competed. In the end, most of the Catawba's dealings were with the South Carolina government, which also needed them as a buffer politically and militarily. Their numbers were decimated by the French and Indian War and by a smallpox epidemic, and although they sided with the states during the American Revolution, they were no longer a strong military force by that time. And despite that fact, fifty Catawba served during the Revolutionary War. (During the unveiling of the statues it was pointed out the clothing King Haglar is wearing were articles he requested. And the list was written and signed by none other than a Coronel George Washington who later became the first president of the newly formed United States of America.)

It was another American president, Dwight D. Eisenhower, in the 1960's who had a major

impact on the Catawba and another 109 federally recognized tribes when he signed the Termination Act, which took federal recognition from these nations. The government forced many of these tribes to take them to court to regain this recognition. According to Claudia Y. Heinemann-Priest, Instructor of Catawba and Native American Literature, University of South Carolina, Lancaster (1999), after lengthy court battles the Catawba were among the few who successfully had their federal recognition reinstated through a new treaty settlement with the state of South Carolina and the Federal Government.

Today while the Catawba Indian Nation is vastly smaller in their numbers and in the size of original ancestral lands they are still a people who continue to take pride in who they are and their part in history of this country. We are still Catawba Ga Na Ge Ha.

### About the author



Beckee Garris was born and raised on the Catawba Indian Reservation in Rock Hill, SC. She is the granddaughter of former Catawba Indian Chief Albert H. Sanders and the great-granddaughter of former Chief Samuel T.

Blue. She works part-time for the Tribal Historic Preservation Office for the Catawba Indian Nation and part-time for the Native American Studies Center in Lancaster. She is also a part-time student at USC Lancaster Region campus working towards for her BLS in Native American Studies. She was selected to be among 21 Native American storytellers to be part of the book "Trickster, A Native American Trickster Tales". In 2012 this book earned the Aesop Award for Children's Literature.

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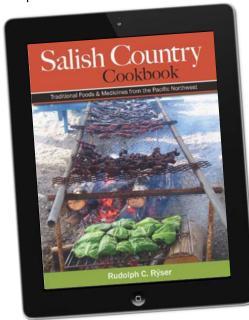


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and OS X 10.9 or later.

### Restoring Individual and Community Health: Northwest Native Plants and Foods Collective

Elise Krohn, Rose James, Valerie Segrest, Tracy Rector, Annie Brule, Brett Ramey, Elizabeth Campbell, Mariana Harvey, Miguel Hernandez, Vanessa Cooper, Susan Given Seymour, Roger Fernandes, Elaine Grinnell.

### **ABSTRACT**

A team of native foods educators, nutritionists, herbalists, Native youth organizers, social media experts, tribal elders and story tellers has worked in collaboration with CWIS Fellow for Ethnobotany Elise Krohn, M.Ed to launch a year-long program of innovative indigenous plants and foods education classes, symposia, and American Indian and Alaskan Native train-the-trainer classes. The foundational concept of this program is the conviction that indigenous plants and foods practices have the power to strengthen individual and community health resilience, and to inspire Native youth to reclaim the power of health from a cultural relationship with the land.

The Northwest Native Plants and Foods Collective (NNPFC), funded for a year program by The First Nations Development Institute in Colorado, USA, aims to catalyze the indigenous foods and medicines revolution by raising awareness, mobilizing communities, and revitalizing traditional knowledge systems. The 13-member team includes experienced native foods educators, nutritionists, herbalists, Native youth organizers, social media experts, successful directors of tribal youth non-profit organizations, respected Elders and storytellers, university faculty, and a collaborative network of tribal leaders and ecosystem specialists dedicated to creating a safe and sustainable future for Native youth through indigenous knowledge and sustainable food systems. Collective members bring together over 60 years combined experience in developing and delivering innovative classes, symposia, and train-the-trainers work-



shops in American Indian and Alaska Native urban and rural communities.

Central to the Collective's mission is the belief that indigenous plants and foods practices have the power to cultivate individual health, community-wide resilience, and to inspire a cultural relationship with the land. Through actively serving indigenous people and communities in the Northwest States of Washington, Oregon, and Idaho, the NNPFC team has formed to build self-awareness, shared knowledge, intergenerational learning, sustainable practices, and functional food systems that empower Native youth and indigenous communities to create a holistic path to wellness. They honor the knowledge and wisdom

carried through the generations, and innovate based on the best technologies at hand. As one workshop participant commented:

"local people are highlighted as experts in the areas of traditional foods, food harvesting and preparation, and plant medicine for illness and wellness...which leaves a powerful example of the ongoing need for collaboration beyond the walls of medical hierarchy."

The NNPFC project aligns with mission of Center for World Indigenous Studies, making CWIS an ideal partner. Both recognize the critical role youth must play in envisioning and implementing transformative ideas. The project launches a threefold approach to establish a long-term, diversified resource base for engaging tribal youth in innovating culturally-grounded food systems, developing food security approaches in times of global climate change, and achieving goals of community-wide holistic wellness for future generations.





Specifically, the NNPFC plans to:

1. Implement three one-day workshops that will be used to launch a diversified resource base for youth-focused and intergenerational programming.

Empowering Youth Teachers: Medicine Making and First Aid for Canoe Journey will provide Native youth ages 13-19 experiential training with plant identification and making first aid plant medicine kits to share with families and youth groups in preparation for the annual intertribal canoe journey. Connecting youth to first aid and herbal medicine in conjunction with traditional canoe journey teachings supports positive cultural identity with their ancestral land and respect for plant relatives. The Muckleshoot and Squaxin Island Tribes will host these workshop and youth educators will highlight their skills and products at the Youth Canoe Journey in August of 2015.

Youth in the Garden will be a multi-tribal gathering where youth exchange ideas, engage knowledge keepers and share skills in handson organic, locally grown food cultivation projects. Nisqually Community Garden will host this event in the summer of 2015 and tribal garden workers and Nisqually youth will showcase their innovative and community driven project.



Members of Northwest Native Plants and Foods Collective (NNPFC)

Cultivating Food Forests: What is Agroforestry? is a one-day immersive workshop that draws upon local tribal forestry, fisheries, and natural resource management experts to cultivate planning for food security through triballydriven programs. The Muckleshoot Tribe will host this workshop in the autumn of 2015.

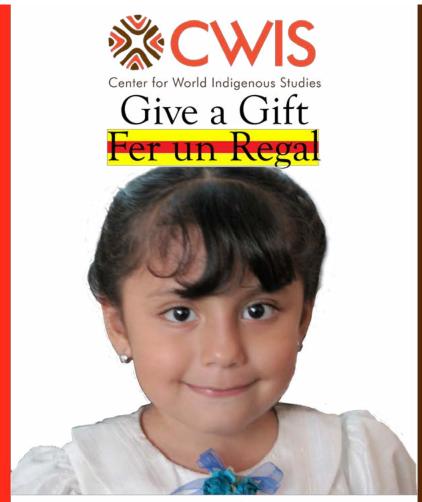
- 2. Convene NNPFC and key partners in tribal government, tribal youth leaders, and local and national indigenous philanthropy for two daylong retreats to establish strategic long-term programmatic and resource plans around serving indigenous communities with a focus on Native youth. Outcomes of these meetings will provide NNPFC with clear steps for creating platforms for educational services, building a community where people share best practices, develop an appropriate dissemination plan including a presentation at the First Nation's L.E.A.D conference, and advocate for tribal food sovereignty and sustainable food systems.
- 3. Organize a social media campaign and an annual publication highlighting Northwest urban and rural tribal efforts to secure

food systems, address food sovereignty issues, and restore indigenous health. The social media campaign will serve youth audiences through popular networks including Facebook and Twitter. The annual publication will serve as a resource for both local tribes and the international community around building indigenous food systems. The three youth focused workshops will be featured in the first publication.

Restoring an emphasis on cultural uses of the land, medicinal plants, and native foods for individual and community health has the potential to build healthful communities throughout North America.

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# Reflecting on the 2015 Native American and Indigenous Studies Association Annual Meeting

Dina Gilio-Whitaker

rom June 4-6, 2015 the Native American and Indigenous Studies Association (NAISA) held its seventh annual conference in Washington D.C., hosted at the Hyatt Regency Hotel on Capitol Hill. As academic conferences go, this one is probably small compared to other more mainstream academic disciplines (around 1,000 attendees), but despite the relative youth of the organization the meeting could be said to be well attended. This was the third NAISA conference I've attended—the first being in 2008, which was the second meeting (in Athens, Georgia), where the name of the organization was voted on by the membership. I also attended the conference last year in Austin, Texas. It is obvious to me that the organization is gaining traction and is being taken seriously by scholars outside the United States and Canada.

The location of the meeting offered interesting side events. For example, the day before the conference started, special tours were given at the National Museum of Natural History and the National Museum of the American Indian (NMAI). I was not able to attend either of the tours, but I was present for the opening reception, which was held at NMAI. On hand to give opening statements were museum director Kevin Gover (former Assistant Secretary of Indian Affairs) and Kevin Washburn, current Assistant Secretary. Both expressed a sense of pride, not only for being able to have the meeting on their "turf" as it were, but the important work being done by Native scholars and upon which officials in the beltway depend for making the kinds of important decisions that affect all of Indian country. Referring to recent anti-Indian rhetoric by Rep. Don Young (R-Alaska), Gover noted the resurgence "of ideas that, frankly, we haven't seen in a very long time." He talked about a lack of understanding about the "Indian thing" among many in Congress, and emphasized the battles currently being waged by the National Congress of American Indians and Kevin Washburn on behalf of Indian country.

While holding the meeting in the power center of the United States (I think of it as the belly of the beast), symbolic of imperialism and histories of domination, the opening of the conference at the NMAI was the logical space to gather Native people and reinforced a sense of Native pride and survival, even if as Gover noted, the battles are still being fought. These aspects of Native life were also evident in virtually all of the research being presented throughout the three days of the conference. As an association member since almost the very beginning, I've observed ways the organization has grown and watched certain trends emerge in terms of the kinds of scholarship being produced. As an example, there seems to be growing attention paid to gender studies within the context of Native studies. Each year the conference features a special presidential session in which the association president can choose any form she/he would like the session to take. This year it was a simple plenary entitled "Feminism, Gender, Queerness, Sexuality: Keywords for Indigenous Studies?" Each of the four panelists—all known for their work in these areas—were queried in advance with a series of questions which they addressed with a prepared statement.

As its name suggests, NAISA tends to privilege research in Native American studies but is enthusiastically inclusive of research from indigenous peoples outside the American and Canadian contexts. Panels included several from Hawaiian studies; also present were panels from Aotearoa (New Zealand Maori), a few Spanish language panels and presentations in Mexican and Latin American studies, one panel on Taiwanese indigenous studies, one on Japanese Ainu, one on Chamorro studies (Guam), a few on Sami studies, and one on Israeli settler colonialism. Topics encompassed all areas of Native studies including education, healthcare, transnational and comparative indigenous studies, racism, genocide, gender and sexuality, ecology and science, literature, performance and visual art, just to name a few.

Of particular note was a roundtable discussion entitled "Postmortem on the UN Declaration on the Rights of Indigenous Peoples and UN World Conference on Indigenous Peoples [WCIP]," featuring Steve Newcomb, Glen Morris, Debra Harry, and Reed Zephier. Most of the panelists were involved in the North American Caucus preparatory process for the 2014 WCIP, which was stymied when these members vociferously called for the withdrawal of the caucus's participation. The panel topic—implying a death of the UNDRIP and WCIP process—thus represented a rather skewed view of the WCIP (which in actuality was attended by all the other of the seven global regional indigenous groups) since there was no representation from the majority of those who did participate, or those who were in disagreement with this particular cohort. There were many people from the North American region and beyond who did not agree with the withdrawal, and the dissemination of information about the WCIP would have been more well-rounded if some of those perspectives were represented.

I was at the conference to present a paper co-authored by myself and my colleagues at the Center for World Indigenous Studies, Dr.

Rudolph Rÿser and Heidi Bruce. The title of the research project is "Fourth World Theory and Methods of Inquiry;" and was recently selected for inclusion in a forthcoming volume titled Handbook on Indigenous Knowledge and Research Methodologies in Developing Nations edited by Patrick Ngulube (Ph.D.), professor at the School of Interdisciplinary Research and Postgraduate Studies (SIRGS) and the University of South Africa. The paper began as an idea after I returned from last year's NAISA meeting in Austin, Texas. Struck by the lack of engagement with Fourth World Theory by Native scholars, I was convinced that the discipline could benefit greatly by being exposed to this important concept and saw the NAISA conference as a good place to begin sharing it. The project was originally proposed (and accepted) as a debate-style roundtable, which all three of us would attend, but plans changed and it was rerouted at the last minute into a panel on Indigenous Pedagogies as an individual paper presentation. The panel might not have been the best fit for our particular paper, but we were fortunate that we could be fit in somewhere else. At the same time, it was not completely inappropriate since Fourth World Theory has pedagogical applications, which we highlighted in the presentation.

All of the other presentations on the pedagogies panel featured case studies about how Native American studies was being taught in various settings, including a K-12 program with Native kids in Canada, a college program in Oregon, and even in a university program in Korea. Not surprisingly, the common thread among all the presentations on the panel was the fact that these programs are being taught from Native perspectives. Even in Korea where the students are both Korean and international, the Korean professor privileges a Native perspective when presenting topics that are

very complex in a foreign context, such as stereotypical media representations. At the end of the panel the chairperson commented that my presentation tied them all together by emphasizing and defining indigenous epistemologies (which all the presenters articulated in similar ways); teaching Native studies necessarily means privileging Native worldviews as we work to decolonize education and reclaim our indigenous knowledge systems.

On the last day of the conference I chaired a session titled "Resisting Boundaries." As the title implies, presentations focused on ways Native peoples in North America simultaneously negotiate and resist imposed colonial borders of the states that surround them. The presentations pointed out that for indigenous peoples resistance occurs not just to geographically delineated ways of understanding nationhood (as is predominant in the modern state system) but also in Native ways of conceiving of the world: bodies of narratives that describe traditional use of lands, what it means to cross artificially-created borders that bifurcate traditional homelands, and how Native peoples interfered with processes of imperialism and colonialism. Resistance implies the assertion of sovereignty, even in practices such as beadwork and walking the land that counter the colonial politics of recognition. The session concluded with a lively discussion from the audience about the nature of nationhood and statehood, with particular critiques about Benedict Anderson's concept of the nation as imagined community.

The conference was exhilarating and intellectually stimulating. The NAISA organization is growing in some very productive and creative ways; next year the meeting is set to be held in Honolulu at the University of Hawaii. It will undoubtedly deepen the bond between the disciplines of Native American studies with Pacific studies, Maori studies, and

Aborigine studies, expanding NAISA's reach into indigenous communities beyond North America

### About the author



Dina Gilio-Whitaker (Colville Confederated Tribes) is a writer and researcher in indigenous studies, having earned a bachelor's degree in Native American Studies and a master's degree in American Studies from the

University of New Mexico. Her work focuses on issues related to indigenous nationalism, self-determination and environmental justice. She is a frequent contributor to Indian Country Today Media Network, Native Peoples Magazine and was the first topic writer for About. com's Native American History page. Prior to her writing career, Dina was an award-winning Native American artist (specializing in leather and beadwork and textile art). She has a background in traditional and alternative healing practices and is a certified massage practitioner. She has a special love for surfing and Polynesian dance. Dina is a Research Associate at the Center for World Indigenous Studies. She is currently working on a book project that compares Native American and Hawaiian indigeneity through the lens of American surf culture. More of her work can be viewed at www.dinagwhitaker.wordpress.com.

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## Dependence Limits Strategy

Jay Taber

This editorial was originally published in Counter-Punch [counterpunch.org] in July 2014 and has been edited and updated for publication in the Fourth World Journal.

n the run-up to the September 2014
World Conference on Indigenous Peoples at UN headquarters in New York, propaganda inundated the infosphere, lending an atmosphere of pandemonium, and leaving many hopeless about the prospects for conflict resolution between Fourth World nations and modern states. For a few, though, widespread hopelessness within the Indigenous Peoples Movement, the human rights movement and the environmental movement is good.

### **Principles of Psywar**

With the advent of the 2007 UN Declaration on the Rights of Indigenous Peoples, the Indigenous Peoples Movement required the linking of national, regional, and local movement resources through a process of dialogue and integration. The involvement of moral authorities and civil society organizations helped to assure the proper movement emphasis on moral sanction, central to constructing new relationships between nations and states. But moral sanction alone is insufficient to constrain reactionary political violence and official repression. That will require continuous research, analysis, and investigation — the civil society equivalent of wartime intelligence operations — in order to weather the psychological warfare associated with the disease of dominion.

Psychological warfare, according to Paul Linebarger of the School of Advanced International Studies, is a continuous process not controlled by laws, usages, and customs of war — covert, often disguised as the voice of

institutions and media — a non-violent persuasion waged before, during, and after war.

Most countries, notes Linebarger, suffer from ideological confusion—an instability of basic beliefs. "In states anxious to promote a fixed mentality, the entire population lives under conditions approximating the psychological side of war. Allegiance in war," says Linebarger, "is a matter of ideology, not of opinion." Coordinated propaganda machines, he observes, include psywar, public relations, general news, and public education. "Psywar," he warns, "has in private media facilities, in an open society, a constantly refreshed source of new material that, when selectively censored, can prevent non-governmental materials from circulating."

# Mainstream Media and the Corporate Agenda

Mainstream media, when it mentions conflicts between indigenous nations and modern states, portrays these conflicts as challenges to be resolved by assimilating indigenous cultures into market systems. Extinguishing Fourth World sovereignty, annihilating Fourth World resources, and coercing Fourth World leaders; this is the corporate agenda mainstream media support.

When these conflicts cannot be ignored, mainstream media looks for compromised NGOs to speak for indigenous peoples, thereby marginalizing indigenous intellectuals, diplomats, and governing authorities—a mass communications tactic examined under the concept of Netwar. While mainstream media informs, it does not make information comprehensible; what it leaves out is essential to knowledge that allows readers to form their own judgment, rather than consume corporate distortions and state propaganda.

### A Free Authentic Life

As Kalle Lasn, publisher of Adbusters Magazine said when interviewed in the July 2001 issue of The Sun, "It's impossible to live a free authentic life in America today ... Our emotions, personalities, and core values have become programmed." Lasn, a former advertising executive for thirty years, understands the power of propaganda as advertising. He also understands the keys to undermining this corrupting influence—persistent ridicule, and appeals to conscience.

Antonio Gramsci, writing in Prison Notebooks, observes that, "Civil society operates without 'sanctions' or compulsory 'obligations', but nevertheless exerts a collective pressure and obtains objective results in the form of an evolution of customs, ways of thinking and acting, and morality. The eclipse of a way of living and thinking cannot take place without a crisis." Civil society today, I would argue, exists in a perpetual state of crisis — some fabricated and some real — that, with the advent of alternative media, desktop publishing, and Internet communication, offers an unprecedented opportunity to begin this eclipse.

As Gramsci observed from prison in 1930s Fascist Italy, "If the ruling class has lost its consensus, i.e. is no longer leading but only dominant, exercising coercive force alone, this means the great masses have become detached from their traditional ideologies and no longer believe what they used to [thus] the exercise of force to prevent new ideologies from imposing themselves leads to skepticism and a new arrangement—a new culture." If the Indigenous Peoples Movement is to succeed in creating a new culture based on mutual respect, the ways of thinking of the old culture must be strategically challenged.

### Theater of War

In doing graduate research for the thesis

included in my second book, I developed a curricular proposal that incorporated the study of psychological warfare as a key component of effective social activism. The more I observe discussion online about social conflict now taking place on the Internet and public airwaves, the more I realize how widespread and entrenched the misunderstanding of the nature of this conflict is, and in turn how important it is for those engaged in this process to acquaint themselves with at least the basic principles if not tactics of psywar. For those unable to access the classic texts on this topic — Psychological Warfare by Paul Linebarger, and The Science of Coercion by Christopher Simpson — I'll try to outline them here.

For starters, there are two things to keep in mind: the target audience, and the purpose of the message. In a theater of war — physical or psychological — there are combatants and non-combatants and at least two sides, as well as many interests. In communicating social transformation, psywar will be employed at different times and in different ways depending on the audience targeted and what the message transmitter is attempting to affect.

In recruiting the uninvolved or uncommitted, the message might convey an urgent threat, a righteous cause, a juicy opportunity, or a chance for revenge. In retaining the involved, a message would likely include an appeal to pride and expectations of victory. In undermining the resolve of the opposition, messages generally try to create doubts about all the above

### **Counter-Power in the Network Society**

One area often overlooked by novices to psychological warfare, however, is the use of messages crafted and delivered for the purpose of preventing opponents from effectively mobilizing audiences potentially supportive of their views, goals, and objectives. These strategically developed messages — sometimes overt, sometimes covert — are those most-commonly associated with gray and black ops, white being forthright, gray misleading, and black counterfeit.

Understanding these techniques of mass communication — deployed in abundance in politics, campaigns, and advertising today — is essential for those who care about where the world is heading, even if in the end they decide to avoid the field of social conflict themselves. Once educated on the topic, they can at least refrain from unwittingly undermining those with whom they agree. Manuel Castells, in his paper "Communication, Power and Counterpower in the Network Society," has a lot more to say on this.

The first principle of psywar is never repeat the talking points of your opposition. The second principle is to deny them a platform to misinform. To offer a platform, out of some misguided sense of evenhandedness, is to further the credibility and legitimacy of those who undermine such movements.

### **Controlling Consciousness**

Wall Street's vertical integration of controlling consciousness is based on five components: ownership of media, fabrication of news, integration of advertising with state propaganda, financing of foundations and brokerages, and co-option of NGOs and grassroots groups. While many well-meaning people are channeled into the latter by the concerted collaboration of all the former, the corporate agenda that determines the policies, practices, and projects of these NGOs is anything but benign.

Indeed, the distractions, distortions, and deceit promoted by the scoundrels, malefactors, and curs — working on behalf of Wall Street — to mesmerize the naive in order to lead them astray, pose a lethal threat to Fourth

World peoples and their attempts at self-determination. Pretending otherwise, in order to coddle the credulous, accomplishes nothing noble. Indeed, it only perpetuates misperceptions that urgently need to be shattered.

September 20-26, 2014, in New York City, the Wall Street/NGO convergence around climate change, indigenous peoples' human rights, and corporate derivative philanthropy, promised to be one of the super spectacles of the decade. Shining a light on that shadowy affair is something that simply has to be done.

### Fording the River

The omnipresent Ford Foundation is an ideological supporter of the World Bank (a mega co-developer of dams, mining, and plantations in indigenous territories), and a UN Millennium Development Goals supporter — along with Bill Gates and Bill Clinton — who do the same. Co-opting Fourth World peoples is a key objective of their neoliberal privatization project. Taking money from the Ford Foundation is thus equivalent to taking money from Shell Oil, Rio Tinto, or Monsanto.

The Ford Foundation is known for funding NGOs promoting civil rights, while simultaneously supporting the state and corporate neglect of indigenous human rights. Civil rights do not conflict with capitalism, while human rights do.

Anti-Indian organizations in the US believe tribal governments should be abolished, and work toward that end. Their main argument is that civil rights guarantee equality under domestic law, ignoring the fact that international law recognizes the human rights of indigenous nations to make their own laws.

Protecting their territories and properties requires indigenous nations to invoke international law and treaties that supersede domestic civil law. By undermining the implementation of indigenous human rights law, the Ford

Foundation arguably abets racism and religious bigotry against Fourth World peoples.

As indigenous nations and modern states prepared for the UN World Conference on Indigenous Peoples, corporations like Shell Oil and foundations like Ford spread money around to co-opt indigenous activists and NGOs. While this bribery ensured indigenous NGOs would be in attendance at the UN event, these partnerships and dependencies also ensured they would not challenge the capitalist system in anything but moral theatrics.

Indeed, some of the recipients of Ford Foundation money had already demonstrated a willingness to attack Fourth World governing authorities in order to protect their state-approved, foundation-funded privileges at the UN. Ford Foundation-funded brokerages include International Funders for Indigenous Peoples, and the Seventh Generation Fund.

Because the Ford Foundation funds academic institutions, NGOs, and conferences does not mean that anyone actually working at these entities supports neoliberal philosophy. What Ford tries to do is shape public opinion in favor of neoliberalism; supporting capitalist-oriented humanitarianism is essential to that psychological warfare.

### **Dependence Limits Strategies**

George Manuel, chief of the National Indian Brotherhood (known today as the Assembly of First Nations), once remarked, "Assimilation is annihilation." As president of the World Council of Indigenous Peoples from 1975-1981, Manuel's work was foundational to the Indigenous Peoples Movement we see today.

Creating financial and psychological dependence facilitates assimilation of indigenous peoples by corporations, church, and state. Chief Manuel's partner in forming the Center for World Indigenous Studies in 1984, Rudolph C. Ryser, once noted, "Dependence limits strategies."

Indeed, dependence on corporations and billionaire philanthropies has corrupted Fourth World leaders, and compromised indigenous activism, something Public Good Project has exposed in its coverage of the indigenous non-profit industrial complex.

### Here Come the COPPs

Indigenous lobbyists at the UN have grown so accustomed to the prestige of hobnobbing with UN bureaucrats and diplomats that they have lost sight of what is at stake in the UN process. While indigenous governing authorities struggle to democratize the UN — which has marginalized them, simultaneously with providing a playpen for indigenous NGOs at the Permanent Forum on Indigenous Issues — the UN bureaucracy has been busy creating the illusion of inclusion.

To wit, the secretariat for the Permanent Forum in Spring 2013 announced the UNPFII Twelfth Session, May 20-31 in New York, would include a "dialogue" with the World Bank. As perhaps the most hostile of UN agencies to the Indigenous Peoples Movement and the implementation of Fourth World sovereignty under the UN Declaration on the Rights of Indigenous Peoples, the World Bank generated bags of bromides to use in press releases to impress their foundation funders. How to posture around this topic and others consumed the Indigenous Global Caucus (a.k.a. COPPs-charlatans, opportunists and pious poseurs) that met May 18 and 19 at UN Plaza.

The only potential bright spot in the secretariat announcement was the May 22 meeting with indigenous journalists to "strategize" on the 2014 World Conference on Indigenous Peoples, also held at UN Headquarters in New York. Somehow, though, I don't think the UN

staff had independent grassroots journalists in mind

### Implementing Indigenous Human Rights

There are several aspects of the UN human rights agenda that contribute to the invisibility of indigenous rights enshrined in the 2007 UN Declaration. First and foremost of the obstacles to implementing the rights of indigenous peoples, has been the refusal of the UN to recognize Fourth World nations as political entities worthy of participation in UN decision-making. If the governing authorities of Fourth World nations remain excluded from UN diplomatic processes, indigenous peoples will remain marginalized from discussions on world issues. As noted at Intercontinental Cry Magazine, this exclusionary obstacle at the UN has been challenged by 72 American Indian tribes, its removal deemed essential to resolving grievances and eliminating violence against indigenous nations.

Democratizing the international community cannot be limited to the international institutions created by modern states. As indigenous nations assert their human rights of self-determination and self-governance, new institutions are required. This is something Rudolph C. Ryser addresses in his 2012 book, Indigenous Nations and Modern States.

The UN was formed by (and functions to serve the interests of) modern states, not Fourth World nations. Looking at Israel — a state created by the UN — and its ongoing human rights abuses toward the indigenous peoples of Palestine, we can see how the UN has actually been an obstacle to peaceful political development. By acceding to U.S. demands for crippling economic sanctions against Palestine, the UN has undermined their ability to manage their own affairs, in turn creating the desperation and humanitarian crisis to which cynical NGOs often cater. In another example,

the UN — at U.S. urging — approved the Indonesian annexation of West Papua over the protest of Papuan Indigenous peoples, leading to the current human rights abuses there. As Dr. Ryser remarked, by reinforcing the illusion that the UN can or will relieve the pain from the violence of colonialism, "The UN Human Rights Council stands as one of the significant obstacles to dynamic political development in the Fourth World."

Given the U.S. influence as a permanent UN Security Council member, and as one of four UN Member States to oppose the 2007 UN Declaration on the Rights of Indigenous Peoples, it is fanciful to think the UN will ever be able to deliver on full human rights implementation for Fourth World nations. That can only happen in a neutral setting, where the diplomatic missions of indigenous nations and modern states come together on an equal footing, to resolve grievances and to negotiate a more democratic, inclusive future.

Since the UN General Assembly declaration in 2007, the UN bureaucracy — in order to provide cover for the REDD Ponzi scheme of carbon-market trading by transnational corporations and investment banks — actively excluded indigenous nations delegates from participating in climate change talks. In Poznan, Copenhagen, and Cancun, the UN repeatedly found new ways to silence indigenous peoples. Dispelling the notion of the UN as an honest broker is critical to understanding the need for new institutions that aren't controlled by states and markets. Dr. Ryser asserts, "The UN promises to permanently lock these nations into a cage of political subjugation."

With the World Conference on Indigenous Peoples concluded in September 2014, mainstream media fell all over itself to help the UN and its Member States continue excluding indigenous nations from meaningful participation in world affairs. Breaking the chains of

their subjugation requires ending the silence.

### **About the Author**



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# The Anáhuac Knowledge System: a Dialogue Between Toltecs and Descartes

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(This essay was originally developed with the support of a Fulbright Research Scholar Grant and the Center for World Indigenous Studies in 2011 and delivered at the Universidad del Valle de Atemajac-Vallarta [UNIVA]. The manuscript has been since updated as a result of continuing research by the author.)

### **ABSTRACT:**

Indigenous political leaders and indigenous peoples' diplomatic representatives urge states' government and international organization representatives to sit at the negotiating table to ensure that traditional knowledge becomes incorporated in local, regional, and international agreements aimed at mitigating and organizing adaption strategies to remedy the adverse effects of climate change. How can traditional knowledge be employed along with conventional sciences? When indigenous peoples' advocates call for scholars, representatives of states' governments, and international institutions to recognize and respect "traditional knowledge," what features of traditional knowledge should they recognize and respect? How will they know the difference between conventional knowledge and traditional knowledge—are there differences and what are they? Can traditional knowledge inform modern climate change food security adaptation strategies, and if so what form does the application of traditional knowledge take? In this essay I offer an answer to these questions by explaining a Fourth World scientific method for deciphering the knowledge system of proto-historic West Mexico (600 CE to 1540 CE) and blending that method with conventional scientific methods. I discuss a method of multi-variant domain retrodiction and the transposition of elements of the ancient Anáhuac scientific system into a contemporary structure blended with aspects of conventional scientific methods, thus providing details about the construction, internal coherence, and conceptual foundations of a knowledge system that extends throughout the western hemisphere. The conceptual framework presented can be incorporated into agreements between indigenous peoples' representatives and their counterparts in states' governments as they seek approaches to mutually understanding strategies for tackling vexing complex problems. Discussing a method for "blending" the Anáhuac knowledge system with the Cartesian knowledge system that arose in 17th century Europe may be possible if the two systems are used "in parallel" to facilitate collaboration between indigenous scientists and conventional scientists permitting them to formulate adaptation strategies that help all populations. The method of decipherment and transposition may have wider application when the need exists to blend ancient knowledge systems from various parts of the world with conventional knowledge systems used to address complex challenges in many parts of the world.

### Keywords:

analogic reasoning, retrodiction, relational reasoning, knowledge systems

onventional wisdom among many scholars and policy makers asserts that → the utility of "Western knowledge" when applied to complex modern-day social, economic, political, and cultural problems may be enhanced if useful aspects of "traditional knowledge" can be identified and integrated. Indeed the International Council for Science<sup>1</sup> illustrated this consensus when its published report<sup>2</sup> from the World Conference on Science (Budapest, Hungary 1999) concluded that to use scientific knowledge responsibly for the benefit of human kind collaborations between "science and society" is needed. The ICSU Report (Fenstad, Hoyningen et al. 2002) called for a "proper interaction between science and local cultures" where traditional and local knowledge can make "a valuable contribution to science and technology."3 Meanwhile, Fourth World scholars and policy advocates call upon academic institutions, governments, corporations, and multi-lateral organizations<sup>4</sup> to decolonize "indigenous research," and actively recognize and respect "traditional knowledge" in treaties, conventions, and domestic state legislation and institutional policies. As these assertions ring out in wider circles of policy debate, academic institutions<sup>5</sup>

have begun to encourage research and policy analysis and states' governments have begun to consider recognizing and respecting traditional knowledge in multi-lateral agreements.<sup>6</sup> Yet. despite the vigorous advocacy of respect and recognition for "traditional knowledge" few if any of these advocates can answer the questions: What is the nature and content of the knowledge that must be the object of respect? How will academic institutions, governments, and all the rest recognize traditional knowledge? Is there one "traditional knowledge" or are there many—how are they the same or different? How are the various systems of knowledge constructed, communicated, and applied? In other words, those who call for recognition and respect must also define what will be recognized and respected. What are the possible concepts and terms of reference that may contribute to bridging the apparent gap between the Cartesian based knowledge system and the Anáhuac Knowledge System?

The present study recognizes this problem and attempts to answer the many questions about "traditional knowledge" by drawing on the results of a multi-year inquiry into the nature, content, structure, and concepts that define the Anáhuac Knowledge System, which has been the focus of the author's research for more than twenty years. This system of

<sup>1</sup> The International Council of Science is an international organization comprised of 120 multi-disciplinary National Scientific Members, Associates and Observers representing 140 countries and 31 international, disciplinary Scientific Unions. ICSU also has 22 Scientific Associates. Its mission is to "strengthen international science" through International Research Collaboration, Science for Policy, and Universality of Science. The organization is based in Paris, France and in 2015 included a staff of 15 with Heidie Hackman serving as Executive Director. http://www.icsu.org/about-icsu/about-us/funding

<sup>&</sup>lt;sup>2</sup> Fenstad, J. E., Hoyningen-Huene, Hu, Q., Kokwaro, Q., Salick, J., Shrum, W., & Subbarayappa, B. (2002). *Report from the ICSU Study Group on Science and Traditional Knowledge. Knowledge Creation Diffusion Utilization.* 

<sup>3</sup> Ibid, 1.

<sup>4</sup> E.g. United Nations, International Labor Organization, Organization of American States.

<sup>5</sup> Notably, for example: University of South Africa (UNISA)

Graduate School of Interdisciplinary Studies; University of Kwazulu-Natal, University of Illinois; University of Mainz, Center for Native and Comparative Indigenous Studies; University of Central Florida; Australian National University, National Center for Indigenous Studies

<sup>6</sup> Negotiations leading to the Convention on Biodiversity contained language (paragraph 8j) recognizing traditional knowledge, negotiations of the UN treaty on Climate Change continues to involve discussions about the role of traditional knowledge, the UN Declaration on the Rights of Indigenous Peoples includes language calling for recognition and respect for indigenous knowledge, and the United Nations World Conference on Indigenous Peoples Outcome Document incorporated language calling for the recognition and respect of indigenous knowledge.

### The Anáhuac Knowledge System

knowledge, I suggest, includes local, regional, and hemispheric-wide influences and applications long overlooked by scholars dedicated to seeing "traditional knowledge" as solely a local manifestation of human experiences. Indeed, as will be discussed in greater detail below, there is no doubt that the Anáhuac Knowledge System is present locally; but through cultural exchange and diffusion combined with rigorous intentional construction and definition the wider system of knowledge came to prevail throughout the hemisphere over the last three thousand years.

Indigenous knowledge systems and Fourth World Theory<sup>7</sup> at the root of research and analysis of topics of concern to Fourth World

5. History, memory, and thought processes are understood in time as simultaneous and multi-dimensional— where instead of two-dimensional thought (linear past progressing to the future, fatalistic, cyclical, or providential) thought is in reality seven dimensional requiring the understanding of multi-level and multi-factorial aspects of a problem.

The seven dimensional method for evaluating material and immaterial relationships as a truth in time can be aided by the four directions metaphor. The four directions metaphor is symbolically rendered as horizontal and vertical lines intersecting at their midpoints demarcate space pointing to the planet's polar north and south, and the rising sun and, moon, and the "tree of life" (the stars making up the Milky Way Galaxy). The vertical, polar line is in dynamic motion moving slightly back and forth, mirroring the earth's wobbles in space. The horizontal line not only points to the east and west, but it too moves up and down on its axes reflecting the seasonal changes owing to the earth's changing angle relative to the Sun as it follows its orbit around the Sun.

Ancient cultures may symbolize the four directions for example as a medicine wheel, calendar, four distinct symbols, and prayer ceremonies in the four directions toward the rising sun, setting moon, and the polar north and the south.

- 6. Fourth World Theory views a people as self-defining. Nietschmann, B. Q. (1994). "The Fourth World: Nations Versus States. Reordering the World," *Geopolitical Perspectives on the Twenty-first Century*. D. J. D. a. W. B. Wood. San Francisco, Oxford, Westview Press: 226 242.writes, "A people is distinguished by a common history, a common geographical location and homeland, cultural or linguistic links, religious or ideological links, racial or ethnic ties, a common economic base, and an adequate number of individuals asserting common identity."
- 7. Fourth World theory in the geopolitical context provides an alternative, comprehensive examination of the complexities of international and inter-state relations—and places great emphasis on the dynamic interplay between humans and place,Bruce, H. (2012). "Northern Lights: Fourth World Nations and the Geopolitical Dance in the Arctic." To adequately account for the realities of indigenous peoples—with deep historical ties to a particular place—one must make reference to Fourth World Theory, as it seeks to enact social change by addressing the fundamental imbalance of power that has been

<sup>7</sup> The Basic Concepts of Fourth World Theory are rooted in on-the-ground-experiences, concepts and constructs articulated by theorists Rudolph C. Ryser, Bernard Q. Nietschmann, Richard Griggs, David Hyndman, John H. Bodley, Grand Chief George Manuel, Marc A. Sills, Ward Churchill, Dina Gilio-Whitaker, Heidi G. Bruce, William T. Hipwell, Kathy Seton, Victoria Tauli-Corpuz, Glenn T. Morris, and Danielle Elford:

There are different types of knowledge, and these types of knowledge function differently when "owned" by an individual, a family, or a community, or within a trans-community environment.

<sup>2.</sup> Fourth World Theory essentially states that the concepts of comparison, relational reasoning, balance between contending forces, and an equality of kind (that human beings are part of all living things and not the dominant living thing) will—when applied in life and thought—ensure comity between peoples, between peoples and living nature, and with the forces of the cosmos Ryser, R. (1998). Observations on 'Self' and 'Knowing'. Tribal Epistemologies. H. Wautischer. Ashgate, Aldershot: 17-29, Ives, C. A. (2011). The Effects of Segregated Development Ideologies on the Achievement of Sustainable Development. Masters of Arts, Institute of the North.

<sup>3.</sup> Fourth World Theory also asserts that human cultures— as with the cultures of other animals, plants, rivers, mountains, and the lands—are defined by the evolving and dynamic relationship between people (animals, plants), the land, and the cosmos existing in the past, present and future simultaneously.

<sup>4.</sup> Another important concept of FWT therefore is that culture (that which defines human reality) is understood as the dynamic and evolving relationship between a people and their ancestral kin, the land, and the cosmos.

peoples and to humanity generally must, according to Dr. Marc Sills, "undergo greater rigor recognizing the need for theory to be "presented with clear definitions of units of analysis (e.g. 'nations'), acknowledgement of assumptions, operationalized hypotheses, and an agenda for research that could (and must) be reasonably followed by other independent scholars who come from other particular identities (e.g. 'non-indigenous' as different cultural contexts around the world) and ideological points of departure. Furthermore, that theory should evolve from a clear line of foregoing thought and literature, and that it be anchored in preceding formulations of reality, and that it be constantly subjected to critical examination and competing ideas. We simply have failed to make any of this happen in fact. Mere assertion does not constitute theory, wishful thinking notwithstanding."8

Such thought leaders demand new ideas and methods to produce solutions to meet the challenges of increasingly complex environmental problems, debates about human-caused global climate change, challenging food security problems, the increasing breakdown of states unable to maintain universal legal regimes, and problems associated with global economic integration resulting in economic disparities between small numbers of wealthy and great numbers of impoverished people. It

created as a result of the international state system and hypercapitalism (Hipwell, W. T. (2009). "An asset-based approach to indigenous development in Taiwan." Asia Pacific Viewpoint 50(3): 289-306. By examining the distinction between nations and states, Fourth World Theory provides a geopolitical perspective from which one can paint a ground-up portrait of the centrality of people and their bio-cultural realities (Elford, D. 2002). "Conservation by Self-Determination in Central America." Fourth World Journal 5(1): 98 - 149 in addressing the world's challenges and solutions.

is apparent that despite the common goals that "Western knowledge" advocates and practitioners, and "traditional knowledge" advocates and practitioners discuss in cross talk neither truly engages the other. The "Western knowledge" holders imagine that Western science is the sole and unchallenged originator and innovator of knowledge that has "been of great benefit to humankind." Traditional knowledge holders imagine that their indigenous knowledge is under siege, but must be recognized, preserved, protected, and respected. While the ICSU Report (and many studies and reports since 2002) contemplates receiving contributions of knowledge from Fourth World knowledge sources to enhance "Western knowledge,"9 it also calls for governments to support cooperation between traditional knowledge holders and scientists to "explore the relationships between different knowledge systems and to foster inter-linkages of mutual benefit." This last point offers the prospect of mutual and collaborative engagement that could bear new and fruitful knowledge for all of humankind.

There are a few important problems that plague both "Western knowledge" holders and "traditional knowledge" holders: 1) Developing a clear understanding of knowledge systems, while, 2) forming a common vocabulary that can support effective communications between scholars and policy makers; and 3) addressing the significant obstacle of practitioner bias and prejudices.

Despite these obstacles there are some conceivable steps that will improve the possibility and range of dialogue between the systems of knowledge. Perhaps the first step is to recognize the extent to which "Cartesian science" has, as it has evolved, been informed

<sup>8</sup> Private communication from Dr. Marc Sills during an online international discussion of Fourth World Theory and International Relations Theory involving 28 scholars from around the globe in June, July 2015.

<sup>9</sup> UNESCO and the Nairobi Work Program as just two examples have established digital databases to collect such knowledge.

by Fourth World sciences in such areas as, "taxonomy, medicine, agriculture, natural resource management, and conservation" (ICSU 2002). While these areas are typically cited we cannot fail to further note the many knowledge systems that have contributed to architecture, hydrology, weapons technology, boats and ship construction, navigation, artificial intelligence, astronomy, mathematics, geometry, and food production.

Fourth World knowledge holders and Western knowledge holders must become actively engaged in sustaining traditional knowledge systems by supporting societies that construct, develop, disseminate, and apply knowledge by:

- Institutionally and within communities promoting learning to equip young scholars to carry out research on culture-specific knowledge systems,
- Organizing financial and institutional support for research to understand and document various Fourth World knowledge systems, and
- Organizing sub-regional, regional, and international symposia on Cartesian knowledge systems and specific Fourth World knowledge systems in parallel or in collaboration.

The settled reality is that Cartesian knowledge systems and Fourth World knowledge systems are different in kind, but still they are products of dynamic and evolving human relationships between peoples, the lands, and the cosmos. That fact offers scholars and policy advocates the opportunity for a dialogue between practitioners of knowledge systems for the benefit of all human societies.

I chose to work in western Mexico's indigenous cultural contexts since limited research has been conducted on the social, cultural, and economic conditions and the intellectual and political life of the region is not well understood. That is not to say there aren't remarkable researchers who have conducted important research in western Mexico, but the work has centered on archaeological and ethnographic studies conducted by late 19th century and 20th century scholars such as Carl Lumholtz, Adela Breton, and 20th – 21st century scholars such as Joseph Mountjoy, Phillip Weigand, Robert Zingg, Helen Perstein-Pollard, and Dorothy Hosler. Much of the work of these scholars contributes to this study in fundamental ways—as the substrate on which I build a narrative describing life and knowledge during the 1,250-year period that is the basis for this study. What has been missing from much of the work so far conducted in western Mexico is a multi-dimensional understanding of the civilizational knowledge system and its influence on local knowledge as well as epistemological characteristics similar to other knowledge systems.

The many microclimates, rather distinct populations, and rich natural food traditions in western Mexico suggested the possibility of developing a method for deciphering and transposing a knowledge system and perhaps local knowledge variants that demonstrate successful application of food certainty<sup>10</sup> adaptation strategies to adverse climatic changes that may have modern applications in the same geographic area.

This essay presents what can only be considered an experimental consideration of Fourth World knowledge decipherment and transposition that may be useful forming collaborations with other knowledge systems.

<sup>10</sup> I choose to use the expression "food certainty" instead of "food security" since the latter expression basically refers to access to commercial foods. "Food certainty" more closely describes the goal of ordinary people either able to produce their own food or produce food for communities.

Since Fourth World peoples have developed many different knowledge systems and even more examples of local knowledge rooted in a knowledge system, the present essay can only suggest the possibility that the method employed in this study will benefit peoples elsewhere.

#### **Anáhuac Cem Foundations**

The Anáhuac Cem civilization emerged about 4,000 years before the present in what is now called México and it survives to this day in the indigenous peoples throughout the country and neighboring countries (Batalla 1996). Rivaling the emergence of the Chin (Chinese) civilization beginning in 5,300 BP, the Tat-Seti (Nubia) civilization that emerged about 6,800 BP, and the Ghana civilization that arose 2,200 BP, the Anáhuac Cem civilization evolved a complex knowledge system that has influenced the thinking of peoples throughout the western hemisphere and in the last five hundred years. Central influences to the larger civilization are the Purépeche, Maya, Zapotec, Méxica, Mixé, Wixárika, Otomis, and Huastec cultures located mainly in the central and southern country of Mexico (Pollard 1987, Malmström 1995, Stone 2004). I choose to use Anahuac Cem as the designation for the civilization made up of these and many other cultures to reclaim the perspective of the original peoples of the subcontinent and to emphasize the importance of that perspective as I attempt to decipher this ancient system of knowledge for contemporary application.

Using "Anáhuac" as a descriptor of this western hemispheric civilization is controversial among anthropologists, archaeologists, and other social scientists. They commonly make the general decision to ignore the pre-Hispanic Nahuatl word usage for "the land" or "land surrounded by water"—the earth. I join a small group of researchers who agree it is



Figure 1. Anåhuac Cem

appropriate in scholarship to use the historical name "Anáhuac Cem" in part to reclaim the conscious relationship between the people and the land on which the people live.<sup>11</sup>

Like others of the world's great civilizations the Anáhuac Cem knowledge system has long provided systematic, empirically based descriptions and explanations shaping the material and immaterial realities. Anáhuac knowledge has contributed to other knowledge systems, systematically expanded on knowledge, and evolved innovations to construct new knowledge. These attributes qualify the concepts, principles, and structures of Anáhuac thought as a hemispheric and perhaps a global body of knowledge. This is a mature system of knowledge that has facilitated adaptation strategies to changing climatic, environmen-

<sup>11</sup> Several researchers have chosen to incorporate the usage of the original Nahuatl name "Anahuac" for the land invaded by Cortez. Thomas Ward [Ward, T. (2001). "Expanding Ethnicity in Sixteenth-Century Anahuac: Ideologies of Ethnicity and Gender in the Nation-Building Process." MLN, 116.] uses the expression to refer to the "Aztecs" as a people, while Judith Lynne Hanna [Hanna, J. L. (1975) "Dances of Anáhuac-- for God or Man? An Alternative Way of Thinking about Prehistory." Dance Research Journal, 7, 13-27] writes that "Anahuac" is "the Nahuatl name for what is now the Basin of Mexico." Anáhuac Cem is the proper Nahuatl term for the "whole."

tal, social, political, economic, and cultural conditions permitting cultures to succeed and flourish.

"Toltec" is the word used in Nahuatl to refer to people of wisdom. Though many social researchers have been mystified at the disappearance of the Toltecs as a people (Whorf 1929) the reality is that individuals who practice toltecayotl (toltecayotl)—the construction, study, understanding, and dissemination of empirical and intuitive knowledge—are the learned people who held and hold now the position of scholar and sources of wisdom. They were before and are now individual scholars, not a nation of people. They dispersed throughout México teaching and are today located throughout the hemisphere. The Anáhuac Cem system of knowledge remains extant in Anáhuac practiced by modern day Toltecs who as individuals may come from different cultures. As scholars practicing toltecayotl 12 they continue to inform learned and popular explanations and understanding of natural phenomena and the human condition, as well as the practical utilitarian human needs for food production, social organization, the making of tools, and construction of public spaces and structures (Marin 2000, Stone 2004). The Purépeche, who are mainly located in the modern day Mexican states of Michoacán and Jalisco (though a large number migrated to the United States state of California), refer to their holders of knowledge as petámuti ("one who pronounces")(Stone 2004). The Waxiriki refer to some of their knowledge holders as Kawitéro (wise elder) and Maxa Kwaxí (Deer Tail, shaman chief and ancestor deity) (Schaefer and Furst 1996). Though given different names according to the local language, their function remains the same as the Toltecs.

Anáhuac's long-term social and cultural

investment in toltecayotl has a special significance in the 21st century since peoples, their countries, and international organizations seek to answer quandaries such as how to devise effective adaptation strategies to meet the many challenges caused by the looming adverse effects of climate change. The problems associated with climate changes throughout the world are so complex that researchers, academic institutions, governments, and multi-lateral intergovernmental organizations search for new sources of knowledge to blend with conventional scientific knowledge—hoping to form effective problem-solving strategies. Indigenous knowledge systems such as the Anáhuac Cem system of knowledge seem logical sources for this "blended" knowledge-knowledge systems that incorporate rational and intuitive concepts and methods. I chose to undertake a study of the Anáhuac knowledge system with a focus in the Central-West region (including the modern states of Jalisco, Nayarit, Colima, and Michoacán) at the height of its development, emphasizing the time during 600 CE to 1540 CE in an effort to decipher the structure of this system and transpose some of its main features that are complimentary to the conventional system of scientific knowledge. Accomplishing this goal may permit us to understand how the Anáhuac system of knowledge can be directly applied as a more appropriate system to meet the complex challenges of climate change, food security, and stabilizing environmental conditions to support life. It may be that the conventional system of knowledge can more directly compliment the Anáhuac Knowledge System as well. By transposing this system I expect to demonstrate the application of this knowledge to the development of present day food security adaptation strategies that effectively respond to the adverse effects of climate change—in particular drought and floods.

<sup>12</sup> *Toltecayotl* is a Nahuatl term to describe one who studies and transmits culture, an artisan.

#### **Knowledge Systems**

Most governmental, academic, business, and even religious institutions world-wide subscribe to a system of knowledge in the 21st century that began to take form in mid-17th century Europe, introduced by René Descartes  $(1596 - 1650)^{-13}$  The principle of reason skeptically applied to empirical evidence so widely acclaimed is rooted in Descartes' formulation: "I think, therefore I am." Descartes found in this approach that God is the decisive guarantor of the truth of reason. So deeply embedded in social, economic, political, and cultural institutions is this system of knowledge that all other systems of knowledge are considered "mystical," associated with "cosmology," considered an extension of religion, or simply fairy-tales without practical use. Descartes' method is described as "science" based in logic and reasoning while virtually all other systems of knowledge are set in opposition as systems of "non-science."

- Descartes' formulation rejects substantial forms and their associated final causes in physics.
- Cartesian science denies the thesis that all knowledge must come from sensation, since as Descartes argues the senses sometimes deceive, and thus they cannot be a reliable source for knowledge.

- Descartes' analysis replaces what he considers the uncertain premises derived from sensation with the absolute certainty of the clear and distinct ideas perceived by the mind alone.
- Descartes concludes that all beliefs based on sensation will have been called into doubt, since it might all be a dream.

These basic concepts undergird "positivist science" and present a strong argument for narrowing knowledge to specified objects of inquiry employing empirical methods concentrating on causes and effects. The approach to knowledge construction, study, understanding, and dissemination became formalized in the 19th century and 20th century. The assertion of this system of science is that one must prefer "logos" or logic over "mythos" (though both forms of reasoning can provide truth).

Toltecayotl is the knowledge heritage of Anáhuac Cem that employs forms of both logos and mythos (rationalism and intuition) (Ramírez 2012) from which Tlatolmatinime is the emergence of knowledge from the Toltecayotl—poets, sages, and speakers. 16

<sup>13</sup> A French philosopher, Descartes is credited for popularizing a philosophical breakaway from Roman Catholic liturgy rooted in Aristotelian philosophical ideas that dominated western European thinking. He went on to advocate mechanistic approaches to the sciences. His argument that "skepticism" is fundamental to rejecting propositions if those propositions are based on sensation such as impression, intuition or feelings. While matters such as "faith" remained a powerful influence on his thought, he was among those who began to raise questions about the validity of asserting a fact on the basis of a "feeling." For Descartes the proposition "I exist" is uncontestable since God does not lie. "I exist" is proof of a truth.

<sup>14</sup> Originally meaning in the Greek, "an opinion," speech, and later as "reasoned discourse." It has come to mean ordering of knowledge.

<sup>15</sup> Originally rooted in middle French and Greek meaning, convey belonging, shared and religious experience, behavioral models, and moral and practical lessons.

<sup>16</sup> The Toltecayotl is balance between the material and the immaterial or the intuitive and the rational. It is the term used to identify what is in modern times in the English the "four directions" as reported by Mixteca scholar Tizaá Lino Rene Ramírez. Tizaá provides further details as follows:

The first section, from the waist to the head, symbolizes heaven. This part, in turn, is represented by the Quetzal, the bird with the most beautiful plumage. These symbols are associated with the Spirit.

The second section, from the waist to the feet, symbolizes the Earth. This part, in turn, is represented by the serpent that slithers over Mother Earth, which is referred to as Cóatl in the Nahuatl tongue.



Figure 2. Toltecayotl

Numbers, shapes, colors, movement, relationships, sounds, and ceremony all play important roles in knowledge construction, study, development, understanding, and dissemination. An important metaphoric instrument for applying Tlatolmatinime is the "Four Directions" symbol.

#### **Four Directions**

The four directions symbolically rendered

As a whole, both symbols are associated with matter. From them the philosophical principle of the *Quetzal-cóatl* emerges, which represents the idea of balance between the spiritual and material aspects of the world and life. This equilibrium manifests as clear understanding, which is embodied through the "Battle of Flowers." It is the internal struggle of the Warrior to find balance and harmony in life.

At the same time, the human body is divided into two vertical halves:

- The third section, the right half, which is called *Tonal*, is associated with the solar, masculine, active, dry, visible part, and above all with the use of *reason* to perceive the world.
- The fourth, the left half, which is called Nahual, is associated with the lunar, passive, humid, invisible part, and above all with the use of intuition.
- See more at: http://www.mastay.info/en/2012/09/toltecayotl/#sthash.zbGOzwDD.dpuf

Local interpretations of the Four Directions vary due to local cultural and environmental circumstances, but tend to follow the same general ideas.



Figure 3. Four Directions petroglyph from Timberline lodge

as horizontal and vertical lines intersecting at their midpoints demarcate space pointing to the planets' polar north and south, the rising sun and moon, and the "tree of life" (the stars making up the Milky Way Galaxy). The vertical, polar line is in dynamic motion moving slightly back and forth, mirroring the earth's wobbles in space. The horizontal line not only points to the east and west, but it too moves up and down on its axes reflecting the seasonal changes owing to the earth's changing angle relative to the Sun as it follows its orbit around the Sun.

Ancient cultures symbolize the four directions, for example, as a medicine wheel, calendar, four distinct symbols, and prayer ceremonies in the four directions toward the rising sun, setting moon, and the polar north and the south.

This petroglyph etched on a stone centuries ago (now used to make a wall) illustrates a dynamic movement that is also incorporated into the Aztec (Mexíca) calendar that originated with the Toltecs.

The Calendar is actually three different "wheels" moving to mark the days, months, and years.



Figure 4. Aztec calendar

The four directions dynamic symbol not only operates on a single two dimensional plain, but it is further amplified by three additional directions demonstrated by passing a line through the middle axis of both lines extending toward the center of the Earth, the middle of the intersecting lines, and outward toward the center of the galaxy. This remarkable metaphor in its simplest form reflects the relationships between fixed physical points in space on the surface of the planet as well as with the galactic points that are in motion inside and outside the planet. In the Mayan nations' view Four Elements, Four Colors of Corn, and Four Races of Humans on the Earth are attributes of the Four Directions. The Maya believe that human beings came from the stars and that humans are made of corn. Daykeepers (the Toltecs of Maya) prophesized that when the four colors of the human race, just like the four colors of corn: red, yellow, black, and white, blend together like Indian corn on one cob, humanity will have reached the desired state of one consciousness.

A Mayan Daykeeper (modern day Toltec) marks the fire pit with the four directions sym-



Figure 5. Four Directions fire ceremony 07-12-2015

bol and then places coals around the symbol that will be lit for the fire ceremony.

Just as the Toltecs assigned Four Texcatlipocas (principles) to the four directions, they then assigned every aspect of life to all of the four directions where human beings live—the surface of the planet and in relation to the cosmos. Toltecs assigned metaphysical attributes of life to the direction below (the underworld or center of the Earth), to the center axis around which all things exist, and the direction above where all things originate. While all seven directions essentially define and position the human experience, and indeed the experience of all living reality, the four directions provide the most tangible guidance for human beings standing on the ground. Each of the four directions have a color, a sound, a plant, an animal, a dance, medicine, a shape, a climate, environment, a soil, water, and a name suited to each direction.

Fourth World Theory is rooted in the knowledge systems of indigenous peoples around the world who share this "four directions" metaphor. Rendered in its totality one must come to grips with the actual use of knowledge to understand the knowledge systems in terms of use, accumulation, and

#### The Anáhuac Knowledge System

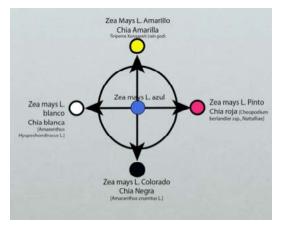


Figure 6. Anáhuac Cem Epistemology Four Directions



Figure 7. Anishinabe medicine wheel

construction (Yeo, Zaman et al. 2013). Below are four examples of four directions-based knowledge systems: Anáhuac, Anishinabe, Mayan, and Lakota. These examples from the Americas—despite their varied origins—reflect similar global themes and structures as well as differentiated micro-systems reflecting the adapted, "on-the-ground" realities of the different peoples. Each system directly informs Fourth World Theory and thus links the theory



Figure 8. Mayan calendar



Figure 9. Medicine Wheel Lakota

to methods for inquiry and application.

Two instruments, the Four Directions and the Calendar, are essential tools for determining the application of knowledge on the physical plane by connecting to the cosmos. Both instruments reach to a period more than 2,500 years ago when the great circle symbol in the Mayan calendar and the two intersecting bars forming a "tee" served as metaphors for time and space in dynamic motion. That

all "four directions" local systems are rooted in the broader Anáhuac knowledge system (the Anáhuac system having its own "local" characteristics) there can be no doubt. There is growing evidence that trade from the Yucatan through the Mississippi River system was the pathway for diffusion of Anáhuac knowledge. This influence is evident from the structure of the Four Directions metaphor and the presence of corn, beans, squash, huauzontle<sup>7</sup> and the hairless dog Xoloitzcuintle (zoh-loh-eetskweent-lee) in the great lakes region by 900 AD. A similar pattern of influence extended into the Andes region influencing the cultural development of the Quechua and neighboring peoples extending as far back as 3,000 years BP. It is highly prob-able given these influences resulting from trade and food distribution that Anáhuac Knowl-edge System is the mother knowledge system influencing many other developing systems throughout the western hemisphere.

## Anáhuac Knowledge System—Toltec

Anáhuac in the Méxica language describes "the place surrounded by water," used here to designate the knowledge system in Fourth World America upon which all other western hemispheric systems of knowledge appear to be based. It is apparent that numerous Fourth World knowledge systems around the globe are in many ways constructed similarly, suggesting extensive cross cultural sharing and influence both within and between hemispheres. It is evident that the Anáhuac Knowledge System

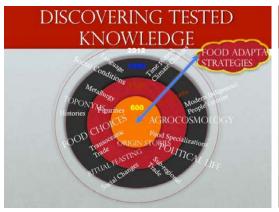
that originated in the Toltec of Tollan, the cradle-culture of scholars and seers in México reaching back more than 1,800 years, influenced the Anishinabe, Quéchua, Mapuché, Dené, and many other nations across the western hemisphere. Central to this knowledge system is the concept of La Ech. It is the principle of love and respect for fellow human beings. It humanizes humankind by eliminating the ego. It unites as opposed to disuniting; it humanizes as opposed to dehumanization and fragmentation. It is the ultimate principle of spiritual love" (Ryser 1998). A second concept is Panche Be or "to seek the root of the truth and justice." The third concept is Hunab Ku, one supreme maker of all things, or the "dynamic energy of the cosmos and the unity and totality" (Rodriguez 2010). Within the broader system are the Four Texcatlipocas that provide the structural framework symbolized by the four directions:

- Texcatlipoca: the smoking mirror—a concept meaning memory as well as self-reflection.
- Quezalcoatl: the serpent symbolic of knowledge—precious and beautiful knowledge.
- Huizilopochtli: hummingbird to the left—will to act; ability to maintain balance and stability; it sits to the left referring to the location of the human heart and the sun rise in the wintertime—people-positive, progressive, and creative.
- Xipetotec: shedding the skin and achieving transformation; leaving behind that which hinders us; accepting the new, embracing.

#### Methodology for the Present Study

Though one cannot know precisely what manner of life people actually lived 1,400 years

<sup>17</sup> Huausontle (pronounced WA-zont-lay) is a green vegetable (Chenopodium nuttalliae) originating in Mexico similar to broccoli in flavor. Before maize was a major food source in Mexico, huauzontle was a prime source of nutrition both in the green vegetable form and in the ground mature seed form. Huauzontle was found in Virginia USA carbon dated to 5000 years before the present.



ARCHAEOLOGIC CULTURES
IN WEST MÉXICO

PERIOD JALISCO\* COLMA\* NAMARIT\* BICHACACA\*

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Figure 10. Retrodictation method

before the present it may be possible to reconstruct the knowledge system by examining the social, economic, political, and environmental conditions by retrodicting research domains that relate to a topic as the following illustration indicates.

Employing relational reasoning and analogic reasoning<sup>18</sup> the researcher establishes relations between domains moving back in time to the expected period in history. The sources of memory may fall into virtually any domain. Associating pictograms (in this case from the 16th century restoration of books by Mexica, Purépeche, and Wirraitari (pronounced "Weer-i-teery") peoples. Identifying and exploring patterns of relationship supplemented by domain source information where

Figure 11. Research Epoch

analogic reasoning is then employed gives the researcher a great deal of research space to understand how these relationships came into being over long periods of time—in the case of this inquiry, the period illustrated in the diagram below. When patterns emerge the researcher notes what domains are related and explores the possibility that other domains may also relate. Where a pattern fails to emerge or simply stops demonstrating further relationships as one moves back in time, the train of pattern is set aside with the possibility that the researcher can return given the possibility of a new pattern. If there is no relationship, the researcher abandons the domain or shifts it to another set of relationships.

The period of this study worked back in time to about 600 AD, the time of the Teuchitlan beginning era in Jalisco and the Jarácuaro period in Michocán (See figure 11) with the emergence of the Huacasacha from the Balsa River region on the coast.

I conducted retrodictions 19 on metallurgi-

<sup>18</sup> Analogical reasoning is a complex process involving retrieval of structured knowledge from long-term memory, representing and manipulating role-filler bindings in working memory, identifying elements that play corresponding roles, generating new inferences, and learning abstract schemas. For empirical analogies, analogical inference is guided by causal knowledge about how the source analog operates. Simpler types of relation-based transfer can be produced by relational priming. *The Oxford Handbook of Thinking and Reasoning*, Edited by Keith J. Holyoak and Robert G. Morrison, 2012. ISBN 9780199734689.

<sup>19</sup> An explanation or interpretation of past actions or events inferred from the laws that are assumed to have governed them....as in an

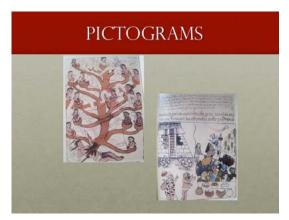


Figure 12. Purépecha Pictograms relationship

cal, agro-cosmological, indigenous political science, historical, language, toponyms, archaeological assessments, and initial pictogram evaluations focusing on relationships between such domains as social conditions, language, origin stories, ritual feasting, sub-regional trade, and food choices. These all pointed to a common region-wide scientific framework, the common features of which are the practices of dreaming, remembering, story metaphors, pictorial representations combined with oral expression, simultaneity, seven dimensional thinking (four-directions horizontally plus vertical elevation, descending, and time) and noticing relationships between multiple material and immaterial elements.

The pictograms above depict relationships between generations of influential spokespersons among the Purépecha. These are not familial relations, but rather power and influence relations.

These are structural elements of the fourdirection epistemology that involved a simple process of localized notation amplified by cosmologic and temporal influences. It appears

argument based on *retrodiction* (using current information or ideas to infer or explain a past event or state of affairs).

that the pre-Hispanic intellectual classes were able to conceive of very complex, multi-layered problems such as responding to changing climatic conditions in the immediate context (changes that are quite miniscule when considered in the short-term) and thus their thinking contributed to whole societies adjusting to a changing environment over an extended period of time. Adjusting to abrupt environmental changes (volcanoes, earthquakes, floods, etc.) proved to be much more difficult, though when such events did occur the transmission of historical knowledge would be so exact that it would be possible for later generations to make adjustments or accommodations at the slightest hint of a cataclysmic event. Noticing changes in animal behaviors and plant behaviors also served as early warning mechanisms for those skilled at noticing relationships. The more complex the communities (populations rising above 5,000) in various localities proved an important obstacle to adaptation since hierarchical systems of decision-making with horizontal power structures would combine to reduce adaptive flexibility. In other words, small groups—peopled by families—were in a much more efficacious position to change with the environment, whereas large and complex societies proved to be much too unwieldy owing to the complex array of competing interests that required sophisticated mediation or in some instances violent conflict.

#### Collaboration

Fourth World Theory incorporating Anáhuac concepts and principles served as the foundation of a Collaborative Partners Formative Evaluation study that was conducted over a year's time in 2012-2013 by the Center for World Indigenous Studies for the Oregon Museum of Science and Industry. The study focused on measuring the reciprocal collaboration success or failure by seven organizational

#### The Anáhuac Knowledge System

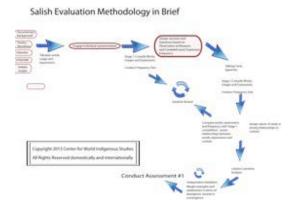


Figure 13. Salish Evaluation Method

partners engaged in an effort to design museum displays that reflected the theme "Generations of Knowledge." The degree of success or failure was important since three of the seven organizations relied wholly on the Cartesian knowledge framework and four indigenous organizational partners relied on various forms of traditional knowledge as a basis for their participation. The evaluation modalities were reliant on the Coastal Salish Knowledge System supplemented by conventional qualitative action research and narrative analysis techniques. This approach followed closely the conceptual and methodological approach of Toltecayotl.

The researchers adapted the relational reasoning, pattern finding, and analogical reasoning approach to test the method in a contemporary evaluation of relationships between organizations working toward a common goal. The process conducted over a year involving seven organizations and a single project followed this approach as illustrated in Figure 13 "Salish Evaluation Methodology<sup>20</sup> in brief.



Figure 14. Indigenous Collaboration Relationships in Evaluation

The results of this approach illustrated a pattern showing the relationship between different collaboration attributes depicted in the following diagram. In the diagram it is easy to see where there is a convergence between the organizations (outer web line shows greatest convergence) whereas the points inside the web demonstrate reduced levels of collaboration or complete divergence between the organizations. This result was possible by systematically understanding the internal relationships of each organization from the organic instruments, histories, people, organizational experience and mission, and the frequency of commitment to the collective project.

The research techniques were inspired by Toltecayotl and were conducted in the fields of climate change, organizational collaboration, education, economics, and social and political change. The methods of retrodiction, relational reasoning, and analogical reasoning fit well with Toltecayotl of the Anáhuac Knowledge System and the Cartesian Knowledge System to expand understanding and provide insights

<sup>20</sup> This is the name given to the evaluation method used in the Generations of Knowledge evaluation study conducted on behalf of the Oregon Museum of Science and Industry in 2013. The method rested on Fourth World Theory and the

theoretical framework produced by Richard (Umeek) Atleo in his book Tsawalk that emphasized blending rationalist and intuitive methods.

into complex social, economic, political, cultural and strategic problems.

#### CONCLUSION

In the past, I have looked to Fourth World Theory to investigate the boundaries and constructs of Fourth World research, including specific health arenas such as the benefits of essential fatty acid sources to various native populations and the role of touch therapy in the treatment of dementia patient caregivers; the design of a tribal communications approach to organizing support for nuclear waste disposal; designing a tribally sourced education program for high school aged students; design of an environmental impact study; and design of a multi-variate tribal economic design.

The Anáhuac Knowledge System with its Toltecayotl emphasis on rationality and intuition proves the benefit of Fourth World Theory as a theoretical foundation demonstrating how the apparent gap between Cartesian knowledge and a Fourth World knowledge system can be closed by practicing a blending of knowledge. The systems are not contradictory, but different owing to cultural origins. In reality they share similar conceptual structures that allow researchers to obtain significant insights and understandings of complex problems in a complementary way.

From the Fourth World Geopolitical perspective we at the Center for World Indigenous Studies designed and implemented a three stage strategy based in Fourth World Theory for triangulating indigenous governmental, state governmental, and multi-lateral state organization to formulate a mutually acceptable policy for key language in the World Conference on Indigenous Peoples Outcome Statement. Similarly Fourth World geopolitical analysis was used by CWIS to develop initial agreement between the Russian Federation, Germany, Japan and the United States

with ten indigenous governments to develop a Congress of Nations and States (1992). Admittedly the Congress of Nations and States was ultimately quashed by the George H.W. Bush government at the last moment during negotiations at the Russian Embassy in Washington D.C. This strategy employed Toltecayotl from the Anáhuac Knowledge System as well as the basic principles of Cartesian science to structure complex relations between political entities that conceived of themselves as quite different from each other. Evidence has been obtained in these research experiences to demonstrate that whether one begins approaching a problem employing the Anáhuac Knowledge System, a Coastal Salish Knowledge System, or Kwazulu Knowledge system (the dominant system in south western Africa), complex social, economic, political, cultural and strategic research strategies can be developed drawing on Cartesian sciences as well as Fourth World sciences. They can be closed instead of widened by continuing claims of separation. Human sciences do have different cultural roots, but they draw on similar human experiences and needs.

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#### About the author



Dr. Rÿser is the Chairman of the Center for World Indigenous Studies. He served as Senior Advisor to the President George Manuel of the World Council of Indigenous Peoples, as former Acting Executive Director

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# Book Review: The Ainu Wolf Carving

Kayano Shigeru, First published by Komine Shoten Co., Ltd. Republished by Project Uepeker on February 6, 2015 ISBN:978-4-903924-77-9

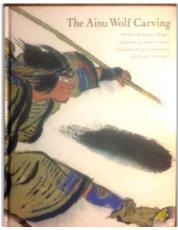
Reviewed by Rudolph Rÿser, PhD Center for World Indigenous Studies

Translated by Justin Bowmann and Owaki Noriyoshi
© 1975 Kayano Shigeru (Text)
© 1975 Kayano Saito Hirojuki (Illustrations)
8-3, 6-Chome Honcho, Nanae, Kameda-gun, Hokkaido, Japan 041-1111

roject Uepeker in Hokkaido, Japan chaired by Peter Howlett—consists of a group of ten English language instructors, transla-

tors, the president of the Ainu Association, and illustrators dedicated to translating Ainu folktales into English. By so doing the Project members seek to introduce Ainu perspectives on life to English speakers around the world to "bring about the intent of uepeker (in Ainu u means "other," e means "by which," and peker means "purify"); that is, the hearts of both the storyteller and the listener will be cleansed and contribute to the realization of a world in which all life can live together in dignity."

Kayano Shigeru (1926-2006) is the first Ainu in Japanese history to be elected to the state parliament (1994). He made a lifelong commitment early in his life to the preservation and revival of the Ainu language and culture resulting in the publication of many books of which five were translated into English. His books won him the coveted Kikuchi Kan Literary Award (1975), the Yoshikawa Eiji Literary Award (1989), and the Hokkaido Cultural



Award (1993). He founded the Kayano Shigeru Ainu Memorial Museum and served as its director for 34 years.

Famed illustrator Saito Hiroyuki (1919-1987) from Manchuria, moved to Tokyo in 1910 and entered The Imperial Art School—now the Musashino Art University—and studied Western painting. He collaborated with Shigeru illustrating two Ainu picture books (The Adventures of Okikumi and The Ainu Wind Goddess and

Okikurmi, published by Komine Shoten Co., Ltd.).

Shigeru and Hirojuki collaborated on the development of The Ainu Wolf Carving, resulting in its publication in 1975. Between Shigeru's flowing and descriptive prose and Hirojuki's dramatic illustrations the story of The Ainu Wolf Carving comes alive. The story unfolds in first person as the main character describes his early life living on the Ishikari River and the pride he held in his heart for his father's hunting skills. Paddling up the Ishikari River our storyteller describes catching salmon and eventually rowing his canoe to a village where he meets an old woman who invites him to her house. He also meets a white-bearded man who seemed sad, as something terrible must have happened. The old woman cooked the salmon and the three of them ate without speaking. That night the storyteller describes

his restlessness as he tries to sleep, and finally deciding he could not sleep by the morning he leaves the house with his bow and arrows and a walking stick. He finds that he is walking faster and faster along the river and he starts to run. He runs "wildly" to a mountain "like a deer." It is the mountain that draws him in at a frantic pace until he reaches "the heart of the mountain."

The story proceeds with the storyteller's discovery at the heart of the mountain—a small house inside of which sits a beautiful young woman holding a little baby. She has lost her way and cannot make it back to her home by the river. She describes how her father-in-law asked her to go with him to the mountain to gather firewood. She did join him, but once they were at the mountain the father-in-law "disappeared" without a trace. Her baby was born shortly after and was eventually confronted by a bear. Wearing a "tiny wolf carving" around her neck, the young woman saw that the bear tried to sneak into the house, but a "dog appeared" and fought the bear—chasing it away. She looks down and realizes her wolf carving had disappeared only to return after the bear was chased away. Then she realized that it wasn't a dog after all that chased the bear, but rather a wolf.

The storyteller agrees to help the young woman with her baby return to the river below and they fall asleep that night. The storyteller is awakened by a rumble and swooshing sound whereupon he sees through the window that a large dog rushed to attack the bear. Gathering up his bow and arrows the storyteller moved to chase the bear away, but a battle between the dog and the bear was so furious the storyteller dared not get close. The battle went on all night and the storyteller tracked the bear finding the dog and the bear still engaged in a bloody tangle. The storyteller shoots an arrow deep into the bear and it falls dead, and

the dog disappeared. Returning to the little house the storyteller finds the small wooden wolf carving on the ground outside the house entrance. Storyteller helps the young woman return to her family on the river and the bear's body is retrieved for food. All were happy and satisfied thanks to the return of the young woman. Even a tiny wooden wolf carving can save human lives, the storyteller concludes, and that always one must treasure and hold dear a carving made by an Ainu, "no matter how small."

Inquiries about this book and the Project Uepeker should be directed to Peter Howlett at holettthesloth@yahoo.co.jp

#### Cite this article as:

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# Book Review: Plant Life of a Desert Archipelago: Flora of the Sonoran Islands in the Gulf of California

Richard Stephen Felger and Benjamin Theodore Wilder in collaboration with Humberto Romero-Morales. The University of Arizona Press. (cloth) ISBN 978-0-8165-0243-1

Reviewed by Amy Eisenberg, Ph.D.

Plant Life of a Desert Archipelago: Flora of the Sonoran Islands in the Gulf of California is a richly collaborative work of art and botanical science with the expertise of the Comcaác people Seri. Benjamin Theodore Wilder's strikingly beautiful front jacket color photo of Isla Cholludo with its cardón, Pachycereus pringlei (S.Watson) Britton & Rose Cactaceae, organ pipe cacti, Stenocereus thurberi (Elgelm.) Buxbaum Cactaceae, and Isla Tiburón in the background to the north, is stunning. The handsome back jacket color photo is of the morning fog enshrouding dwarf cardón on Isla San Pedro Mártir.

The floristically unique and diverse desert archipelagos in the Gulf of California are among the world's most well preserved ecosystems supporting more than 400 plant species. *Plant Life of a Desert Archipelago* is the primary descriptive culmination of many decades of exploration by botanist Richard Felger, recent investigator Benjamin Wilder, and Comcaac plant expert, Humberto Romero-Morales. This collective ethnoecological work features plants, people, culture, and environment. Thousands of plants were examined, collected, and accurately described and displayed in this volume of more than 400 exquisitely rendered botanical illustrations and color photographs.

The indigenous coastal-desert Comcaác people, who have subsisted on marine and terrestrial life for centuries, shared their extensive knowledge of plants, communities, and language within their ethnosphere. Author Richard Felger, Ph.D., is a research scientist with

the University of Arizona Herbarium and the Sky Island Alliance in Tucson, Arizona. Benjamin Wilder is a Ph.D. student of Botany and Plant Sciences at the University of California, Riverside, and Humberto Romero-Morales is a conservationist of Isla Tiburón, where he is actively engaged in leading eradication efforts of non-native, invasive species. From an early age, Humberto's mother taught him of the Comcaac cultural significance and knowledge of their desert plants.

The Foreword by Exequiel Ezcurra opens with a passage from The Voyage of the Beagle (1860) by Charles Darwin on page xi, "The archipelago is a little world within itself, or rather a satellite attached to America..." One of the most unspoiled archipelagos in our world is in the Gulf of California. Island biogeography—and specifically these Gulf Islands—were at the root of the emerging scientific field of conservation biology. Richard Felger recognized the importance of indigenous influences in the gulf and worked with the Comcaac people to understand their profoundly reciprocal human-island resource interactions. In 1985, Felger and Mary Beck Moser published the extraordinary ethnobotanical treatise entitled, People of the Desert and Sea: Ethnobotany of the Seri Indians.

Felger meticulously reviewed all existing herbarium records and collections in the preparation of this work. This flora is of fundamental importance for researchers conducting investigations in the region. Mexico is in desperate need of these studies in order

to better manage and preserve its natural and cultural heritage. "The mystery of mysteries" are Darwin's words that describe the fascinating evolutionary history of island ecosytems. Indeed, the team was thoroughly captivated with a great sense of awe and wonder during their explorations of the plants of these magnificent desert islands. Their efforts were enhanced by generous funding provided by several institutions but principally that of the Lucille and David Packard Foundation and the Comisión Nacional para el Conocimiento y Uso de la Biodiversidad (CONABIO). Wonderfully skilled botanical illustrators and photographers are acknowledged and cited in this superb work as well as archives, herbaria and institutions that contributed their plant specimens and scientific knowledge.

The introduction presents the Midriff Islands of the Gulf of California. The isolated desert islands in the central part of the Gulf of California between latitudes 28°20' and 29°40' exhibit a high level of endemism in the mammalian and reptilian fauna while the flora of each respective island is unique. The Comcaac and their ancestors established an existence from our world's best-preserved archipelago and the Sonoran mainland for thousands of years. The present work is focused on the Sonoran Islands from which the researchers built upon the rich local knowledge of the Comcaac and more than a century of scientific investigations to better understand its ecology and botanical diversity. In the chapter "Geological History and Island Physiography" both elements are described with the use of excellent accompanying satellite imagery and maps.

"Vegetation communities" describes the distinctive morphology of the vegetation as a "sarcocaulescent desert" because of the many succulents and semi-succulents with exaggerated stem diameters. The region displays a complex topography and array of microenvironments with diverse biotic communities.

The major island communities are discussed in great depth: Seagrass meadow, Sea cliffs, Guano areas, Beach dunes, Littoral scrub including Mangrove scrub, and Salt scrub. Desertscrub encompasses Coast scrub, Creosote scrub, Mixed desertscrub, Cactus scrub, Xeroriparian desertscrub, and Riparian tinajas (a local term for waterholes). In this markedly arid region, tinajas support rare freshwater wetland communities and, however small, these perennial water sources have been traditionally essential to the survival of the Comcaac. Desertscrubthornscrub ecotone comprises canyons and exposed slopes and ridges.

"Historical Human Use and Influence" (within the introduction) discusses the long histories of human presence in the region. The meager supply of freshwater strongly influenced the number of people able to live in any given locality. The Comcaac people ranged over an expanse of desert lands from Guaymas northward along the Sonoran coast to the archipelago as cross-Gulf of California voyages were made to the Baja Peninsula and adjacent islands. The Comcaac recognize six major groups that speak three distinct Comcaac dialects. These groups lived primarily as hunter-gatherers and seafarers as permanent settlements were generally not feasible due to the extreme aridity and scarcity of freshwater. Comcaac people developed diverse uses and sustenance from the local flora and fauna, and have retained this profound knowledge and understanding.

Spanish colonization was a long and bloody history that perpetuated into the early part of the twentieth century. For the Comcaac, who were targets of centuries of abuse by Spanish colonial forces and then Mexican military violence, Isla Tiburón served as a refuge. Its isolation and scarcity of freshwater hindered invading military pursuit with horses. Against all odds, the Comcaac persisted due to their resiliency as a people. Since the middle

#### Book Review: Plant Life of a Desert Archipelago: Flora of the Sonoran Islands in the Gulf of California

of the twentieth century, they have settled in villages on the mainland and their population has steadily increased while maintaining a strong interest in their plants and the natural and cultural heritage of their region.

In the section "Non-Native and Invasive Species" the authors note that the islands in the Gulf of California contain some of the most undisturbed regions of the Sonoran Desert and the low number of non-native species is a testament to this fact. However, no non-native species poses a greater threat to the island ecosystems than oot iconee, or buffelgrass (Cenchrus ciliaris L. Poaceae). The massive conversion of native Sonoran desertscrub and thornscrub to dominance by this highly invasive member of the Poaceae (grass family), which was originally introduced as cattle forage has transformed vast areas into an African grassland-like landscape. Seeds of this perennial grass are enclosed within a bur-like fascicle that may lodge into fur and feathers. Humans are also unwitting vectors of this prolific monocultural species of great concern in many arid lands across the world as it thrives after fire and outcompetes native plants. Comcaac youth under the direction of Humberto Romero-Morales and Benjamin Theodore Wilder have worked diligently eradicating one of the world's most notorious invasive species on Isla Tiburón; however, continued monitoring is essential.

Isla Tiburón has always been part of the Comcaac traditional territory, yet only in 1975 did the President of Mexico decree it as the communal property of the Comcaac, and declared the coastal waters of the island for their exclusive use. The Gulf of California islands were declared an Area de Protección de Flora y Fauna in 1978, and in 1995 all were designated by UNESCO as a Biosphere Reserve and registered in the Man and the Biosphere Programme. In 2005, the Gulf of California and its islands were granted World Heritage status by UNESCO as an acknowledgement of their unique biodiversity. Today, Isla Tiburón and its surrounding sea officially remains the territory of the Comcaac people.

I am truly delighted to review with praise this wonderfully extensive work that features chapter and sections titled "The Islands and Their Vegetation," "Island Diversity," "Botanical Explorations on the Sonoran Islands: Collectors, Associates, and Selected Personalities," with a careful and botanically accurate assessment of "The Flora," and concluding with Part IV "Gazetteer" and its appendices: "Checklist of the Flora of the Sonoran Islands," "Species Mutually Absent from Isla Tiburón and Mainland Sonora," and "Botanical Name Changes." May the authors and the Comcaac people go from strength to strength!



# About the author

Amy Eisenberg is an ethnoecologist, botanist, scientific artist, and organic sustainable agriculturist and agroforestor who conducts collaborative research with indigenous photo by John Amato peoples of Asia, the

Pacific, South America, and North America. "Aymara Indian Perspectives on Development in the Andes" is her new book; a collaborative

project with the Aymara people. She became an Associate Scholar with the Center for World Indigenous Studies in 2006 while serving as an International Expert at Jishou University's Research Institute of Anthropology and Ethnology in Xiangxi Autonomous Prefecture in Hunan with ethnic minority graduate students of China. She conducted participatory research with the Kam people of China through the UN Permanent Forum on Indigenous Issues and UNESCO - Local and Indigenous Knowledge Systems. Photos of her work by professional photographer John Amato, RN can be viewed at: www.pbase.com/jamato8

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