Article

Indigenous Everyday Life in Chatman's Small World Theories

Loriene Roy and Kristina Shiroma

ABSTRACT

Indigenous communities are connected through their worldview or commonly held way of seeing everyday life. In this article, we will describe the intersection, match, and mismatch of Chatman's theories of information poverty and life in the round, and how these theories might be incorporated—or not—in understanding contemporary Indigenous living. Within the theory of information poverty, we will consider Chatman's four notions defining an impoverished lifeworld: secrecy, deception, risk taking, and situational relevance. Secrecy and deception might be interpreted as negatives by outsiders when boundaries are maintained around access to traditional cultural knowledge and its expression. Within the community, though, such behaviors are observances of protocol or expected behavior. Risk taking may be welcomed and applauded but might also result in the individual Native risk taker stepping into the interface frame of being an outsider, or someone who is now separated from their tribal community. Relevance is contextual and is interpreted by Indigenous peoples in terms of its ability to support tribal sovereignty.

Chatman's theory of life in the round presents how individuals find fulfillment in their lives as understood through the concepts of worldview, societal norms, small worlds or settings, and the roles or social types to which people are assigned. These concepts can be seen in Indigenous life as the connection to the land and clan kinship models. Our article will close with a reading of Chatman's work through the framework of Cajete's model of a fulfilled Indigenous life as one where someone can find their true face, heart, and foundation.

In this article, we refer to the first or original peoples of the land as Native or Indigenous. We refer to first peoples living within the borders of the United States as American Indian or Indian. Indian Country is where Native people live and includes Indigenous homeland areas including lands referred to as reservations. That said, Native people consider all land Indigenous land. Together, our writing is based on decades of direct interaction with and observation of Indigenous peoples from numerous tribal communities, our personal writing and review of the literature, as well as our own cultural affiliations and life backgrounds.

INTRODUCTION

Indigenous communities are connected through their worldview or commonly held way of seeing everyday life. In this article, we explore the intersections, matches, and mismatches of Elfreda Chatman's theories of life in the round and information poverty with Indigenous everyday life.

In Part I, we introduce Chatman's theory of life in the round where individuals find fulfillment through their worldview, societal norms, small worlds or settings, and the roles or social types to which people are assigned. These concepts are seen in Indigenous life as the connection to the land and clan kinship models.

In Part II, we briefly introduce five existing theories upon which Chatman relied in her early research, including diffusion theory, opinion leadership theory, alienation theory, gratification theory, and social network theory. Each theory is interpreted to see how it may or may not apply to Indigenous living. Diffusion of information among Native peoples is through tradition, structured, and social networking channels. Tribal leadership models have changed over time but still include traditional as well as Western models. To outsiders, alienation theory might seem to explain a tribal community's information seeking when in reality, tribal communities function heavily on social networks. Similarly, Indigenous information-seeking may be less explained through gratification theory due to Indigenous views of time and self-promotion. We comment on the potential usefulness of each theory in understanding the information-seeking behavior of Indigenous peoples, using examples from various tribal nations.

Next, in Part III, we will consider Chatman's theory of information poverty, and its four notions defining an impoverished lifeworld: secrecy, deception, risk taking, and situational relevance, and how they can relate to Indigenous life. While they may be rich in cultural connections, Indigenous communities might also experience poverty. Secrecy and deception might be interpreted as negatives by outsiders when boundaries are maintained around access to traditional cultural knowledge and its expression. Within the community, though, such behaviors are observances of protocol or expected behavior. Risk taking may be welcomed and applauded but might also result in the individual Native risk taker stepping into the interface frame of being an outsider, or someone who is now separated from their tribal community. Relevance is contextual and is interpreted by Indigenous peoples in terms of its ability to support tribal sovereignty.

Our article concludes with Part IV, where we situate Chatman's work within the framework of Cajete's model of a fulfilled Indigenous life, one where someone can find their true face, heart, and foundation. That discussion will help us provide a summary of how Chatman's theories intersect with Indigenous lived life.

TERMINOLOGY AND POSITIONALITY

Any writing that refers to Indigenous peoples often includes an attempt to define this audience. Quite often the focus on terminology and defining come from outside of the Native communities: "those asking this question [who is Indigenous?] tend not to be Indigenous and seem to seek simple, ready answers that they believe to be universally held by native peoples."[1] Gray et al. further describe the origin of the need to define who Indigenous people are: "It is primarily Western theorizing that would like to assume that Indigenous Peoples should be described (that is, ascribed with) uniformity."[2] That said, in conforming with the general Western orientation of academic writing, we offer that in this article, we refer to the first or original peoples of the land as Native or Indigenous. We refer to first peoples living within the borders of the United States as American Indian or Indian. Indian Country is where Native people live and includes Indigenous homeland areas including lands referred to as reservations. We acknowledge Native people consider all land Indigenous land.

Indigenous everyday life is how Indigenous people live through their actions, beliefs, and protocols or codes of ethics. Everyday life is personally and communally experienced and framed by Indigenous worldview. Worldview is first "how a person sees herself or himself," and then "is tied to genealogy and the physical links that humans are born to and born from, and it is expressed and shared communally in terms of notions of time and the connections between the present, past, and future."[3] Indigenous everyday life is rooted and tied to a land or territory.

We will examine how Chatman's theories might be incorporated—or not—in understanding contemporary Indigenous living through the context of Indigenous cultures. Our interpretations are intentionally not based on Western methodologies. Instead, we have sought a "space of engagement," similar to Grande's "red pedagogy," where "the gaze is always shifting inward, outward, and throughout the spaces-in-between, with the idea itself holding ground as the independent variable."[4] Our approach was influenced by Smith's *Decolonizing Methodologies* (1999). In this landmark work centering an Indigenous view of research, Smith identified case studies that employed

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[1] Loriene Roy, "Who is Indigenous?" in Camille Callison, Loriene Roy, and Gretchen Alice LeCheminant, eds., *Indigenous Notions of Ownership and Libraries, Archives and Museums* (Berlin, Germany: De Gruyter Saur, 2016), 7.

[2] Mel Gray, John Coates, Michael Yellow Bird, and Tiani Hetherington, "Introduction: Scoping the Terrain of Decolonization, in Gray, Coates, Yellow Bird, and Hetherington, eds., *Decolonizing Social Work* (Farnham, England: Ashgate, 2013), 2.

[3] Loriene Roy, "Advancing an Indigenous Ecology within LIS Education," *Library Trends* 64, no. 2 (2015), 390.

[4] Sandy Grande, "Red Pedagogy: The Un-Methodology," in Norman K. Denzin, Yvonna S. Lincoln, and Linda Tuhiwai Smith, eds., *Handbook of Critical and Indigenous Methods* (Los Angeles, CA: Sage, 2008), 233-234.

twenty-five Indigenous actions, from claiming and testimonies to discovering and sharing.[5] Our method combines Smith's actions of connecting, reading, and reframing through close reading, textual analysis, and personal reflection. Our insider knowledge is based on our lived experiences of decades of direct interaction with and observation of Indigenous peoples from numerous tribal communities around the globe including American Indian communities within the United States, First Nations peoples of Canada, Native Alaskan peoples, Kānaka Maoli or Native Hawai'ian, Māori, Aboriginal Australian, and Saami people of Scandinavia, as well as our own cultural affiliations and life backgrounds. We affirm that "Indigenous communities know who their people are" and, even though we are members of specific Indigenous communities, our knowledge of our communities is a life-long pursuit for which we are but humble witnesses and participants.[6]

PART I: CHATMAN'S SMALL WORLD THEORY OF LIFE IN THE ROUND AS IT RELATES TO INDIGENEITY

Theory of Life in the Round

Of Chatman's many contributions to understanding the information behavior of others, it is her theory of life in the round that has the most resonance with the lives of Indigenous peoples. We see this through Indigenous connection to the philosophy of the circle of life, the connection to land, the structure of traditional homes and contemporary workspaces, and the presence of the drum in music of the past and today.

According to Solomon, Chatman's "life in the round is about making life manageable."[7] "Round," in this sense, is reflective of the circular life concept of Indigenous peoples. Glenn, a Crow architect, explained the influence of being in the round or the circle in Indigenous life: "the circle itself is both a metaphorical symbol, about the circle of life, the earth, and the movement of the stars … but it is also a social idea. A circular gathering is a democratic, nonhierarchical gathering which is consensus oriented."[8]

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[5] Linda Tuhiwai Smith, *Decolonizing Methodologies: Research and Indigenous Peoples*. London: Zed Books; Dunedin, New Zealand: University of Otago Press, 1999.

[6] Roy, "Who is Indigenous?", 23.

[7] Paul Soloman, "Rounding and Dissonant Grounds," in Karen E. Fisher, Sanda Erdelez, and Lynne McKechnie, eds., *Theories of Information Behavior* (Medford, NJ: Information Today, Inc., 2005), 309.

[8] Joy Monice Malnar and Frank Vodvarka, *New Architecture on Indigenous Lands* (Minneapolis: University of Minnesota Press, 2013), 20.

One views the world in a circular fashion in the center of the four cardinal directions. Each direction is associated with a strength and aspect of knowledge. This land-centering is often expressed through orienting oneself to geographic coordinates or directions—north, south, east, west, the center, and the world(s) above and below. So strong is this geographic orientation the tribal communities associate knowledge of various kinds emanating from a specific direction. Creativity and balance come from the center, and understanding from above.[9] Cajete further explained how the directions are associated with learning. The east is the place of new beginnings, or where learning starts. The north is the place of searching, while creative expression comes from the west. The south brings understanding.[10] This orientation is the start of what might be an Indigenous ecology within information studies.[11]

Conklin, a Ponca-Osage leader, further explained the importance of the circle among Indigenous peoples in their dwellings:

> All Indian ceremonies are held in a sacred circle—our cycle of life is a sacred circle from infancy to old age. The tipis, mud lodges, and hogans were round; the sacred objects in nature (sun, earth, moon, for example)—and even such natural objects as bird nests—are round. We believe in the sacredness of this hoop of life."[12]

The footprint of built structures may represent the four directions, even in contemporary architecture. For example, "the most common kind of Ojibwe house was the round-domed *waaginogaan*,[13] a dwelling made of long poles of a strong, flexible wood, such as ironwood or tamarack, bent over and tied to form a dome shape."[14] Circular dwellings were portable and were preferred by some Native peoples for their "greater coolness, better circulation of air and greater cleanness."[15] Their shape also reflected Native philosophy and beliefs. Northern Arapahoe architect, Rhodes, explains the importance of the circular tipi to his tribe's life: "the tipi taught the tribal members to recycle a space for

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[9] Gregory A. Cajete, *Igniting the Sparkle: An Indigenous Science Education Model* (Skyland, NC: Kivaki Press, 1999), 16-19.

[10] Gregory Cajete, *Look to the Mountain: An Ecology of Indigenous Education* (Skyland, NC: Kivaki Press, 1994), 159.

[11] Loriene Roy, "Advancing an Indigenous Ecology within LIS Education," 384-414.

[12] National Museum of the American Indian, *All Roads are Good: Native Voices on Life and Culture* (Washington, DC: Smithsonian Institution Press, 1994), 128.

[13] Also known as the *wigwam*.

[14] Bruce White, *We Are at Home: Pictures of the Ojibwe People* (St. Paul, MN: Minnesota Historical Society Press, 2007), 67-68.

[15] White, *We Are at Home,* 69.

many uses, and the communal space of the tipi helped develop the tribe's interpersonal relationship rooms."[16]

During a visit to a tribal school, we were taught to enter a *hogan*, or traditional dome-shaped Navajo/Diné dwelling, through the eastern facing door, then to walk inside the *hogan* to the left and then in a clockwise circle. In that ritual, "the Navajo see as a circular path beginning in the east, moving south, west, and north before returning to the starting point. This simple ceremony breathes life into the *hogan* and protects the occupants against danger and illness."[17] The presence of the circle in contemporary architecture is seen in structures including tribal, museums, cultural centers, colleges, government offices, and childcare centers.[18]

The circle in Indigenous life is also seen in the drum, heard today at *powwows*. Vennum spoke of the prevalence of the drum in Native communities: "Nearly all North American Indian cultures possess at least one type of drum as part of their song instrumentarium or collection of ceremonial objects."[19] Bercier, a member of the Turtle Mountain Band of Chippewa, summarized the connection of the drum to the circle imagery and to the land:

> The drum is circular and so it also represents the cycle of life—being reborn, coming around through your teens and adulthood, your elderly position in life, and then back to the ground. For the most part, the drum is considered female, and so the circle also represents the womb. The sound of the drum is the heartbeat of tribal people all over the world.[20]

Each of the four concepts for Chatman's theory of life in the round are introduced in the following sections, with commentary describing how they fit within Indigenous life. While these four concepts are supported within Indigenous living, the continual maneuvering of individual Native people between their cultural world and that of dominant culture negates two of Chatman's propositions of this theory. That is, Native peoples do not necessarily operate under the proposition that members of small worlds do not cross the boundaries of their world in information-seeking. Instead, to be successful, many Native peoples seek information from multiple sources, including those outside their community. This is especially true when Native people must leave their communities to

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[16] Malnar and Vodvarka, *New Architecture on Indigenous Lands,* 109.

[17] Scott Thybony, *The Hogan: The Traditional Navajo Home* (Tucson: Western National Parks Association, 1999), 13.

[18] Malnar and Vodvarka, *New Architecture on Indigenous Lands*.

[19] Thomas Vennum, *The Ojibwe Dance Drum: Its History and Construction* (St. Paul, MN: Minnesota Historical Society Press, 2009), 12.

[20] Andrea Modica, *Real Indians: Portraits of Contemporary Native Americans and America's Tribal Colleges* (New York: Melcher Media, 2003), 28.

seek higher education. For example, Risling, who was tribally affiliated with the Hoopa Valley, Karuk and Yurok tribes, describes the conversation he had with his father about going away to college:

> He said we may have to live in the dominant society, but we are still Indian people…and he told me, don't bother to come home if you forget who you are. You can live in both worlds.[21]

Chatman described the scenario when crossing boundaries is acceptable, when "the information is perceived as critical…relevant…[and when] the life lived in the round is no longer functioning."[22] Individuals within Native communities have long served the role of intermediary, translator, or even scout. The small Indigenous world is sometimes enhanced by those seeking information outside of the tribal community. Life in the round has its own sense of time: "it's a life with an enormous degree of imprecision and, surprisingly, accepted levels of uncertainty. It's a world of approximation."[23]

Small Worlds

Small worlds extend beyond physical spaces and the groups that inhabit those spaces to any setting, including virtual spaces, where groups coalesce; the foundation of a small world is its context.[24] As Savolainen describes Chatman's view of a small world, "The horizons of this world are determined by social norms, and the source of these norms is social control."[25] It is a "public form of life which…certain things are implicitly understood."[26] And, as Fulton states, "members of this world are concerned with their own small world, the creation and support of roles in that world, and information that can be used there."[27]

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[21] Modica, *Real Indians,* 18.

[22] Elfreda A. Chatman, "Theory of Life in the Round," *Journal of the American Society for Information Science* 50, no. 3 (1999): 207-2017; Chatman, "Framing Social Life in Theory and Research," *New Review of Information Behavior Research* 1 (2000): 3-17.

[23] Chatman, "Theory of Life in the Round," 211.

[24] Gary Burnett, Michele Besant, and Elfreda A. Chatman, "Small Worlds: Normative Behavior in Virtual Communities and Feminist Bookselling," *Journal of the American Society for Information Science and Technology* 52, no. 7 (2001), 536.

[25] Reijo Savolainen, "Small World and Information Groups as Contexts of Information Seeking and Sharing," *Library & Information Science Research* 31 (2009), 42.

[26] Chatman, "Theory of Life in the Round," 212.

[27] Crystal Fulton, "An Ordinary Life in the Round: Elfreda Annmary Chatman," *Libraries & the Cultural Record* 45, no. 2 (2010), 249.

For many people, the concept of a small world is a humbling thought. Chatman [quoted in Fulton 2010] reminded us that "at some point all of us live in a small world."[28] Still, she added, "small world lives are not insignificant."[29] In Yup'ik communities in Alaska, the power of the small world is described as having one mind, as one elder explained: "Even though the residents of the village are few, if they have one mind everything they do will be lucky. Villages where people do not have the same mind might have many residents, but what they do would not be strong because they are ignoring each other."[30] Native worldviews are what hold Indigenous communities together, and affirm what information is important, useful, and trustworthy. Those in small worlds seek information that benefits the group and sustains the community.

Information circulates within and around the small world, but the ebb and flow of information infiltrating from other small worlds must also be considered. As Burrow et al. suggest, "the degree to which life in the round persists in a state of information poverty is dependent upon the degree of acceptability of that state and whether members have the ability to leave that small world or access outside information."[31] Outside information is not always beneficial to a small world. When discussing information behaviors within an Indigenous small world, one must consider the unique historical experience of Indigenous people regarding influence and adoption of outside information. Tribal communities reach toward the example of the impact of outside education models as Smith wrote of the impact of Western schooling on Māori communities: "Education and schooling have damaged the validity and practice of Māori language, knowledge, and culture."[32] In order to preserve small worlds rich in cultural knowledge/traditions, Indigenous people might feel an obligation to keep outside influence to a minimum.

Social Norms

If social norms "refer to accepted behavior in a small world"[33] or "a sense of rightness and wrongness,"[34] these behaviors have a parallel in Indian country. That parallel is even more

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[28] Fulton, "An Ordinary Life in the Round," 241.

[29] Fulton, "An Ordinary Life in the Round," 241.

[30] Ann Fienup-Riordan, *Wise Words of the Yup'ik People: We Talk to You because We Love You* (Lincoln, NE: University of Nebraska Press, 2005), 50.

[31] Burrow, Cook, and Gilmour, "Life in the Round," 21-30.

[32] Graham Hingangaroa Smith, "Kaupapa Māori Theory: Indigenous Transforming of Education," in Hoskins and Jones, eds., *Critical Conversations in Kaupapa Māori* (Wellington, NZ: Huia Publishers, 2017), 82.

[33] Fulton, "An Ordinary Life in the Round," 249.

[34] Gary Burnett and Paul T. Jaeger, "Small Worlds, Lifeworlds, and Information: The Ramifications of the Information Behaviour of Social Groups in Public Policy and the Public Sphere," *Information Research* 13, no. 2 (June 2008), p. 6

obvious when Chatman described social norms as "sacred standards."[35] In Indian Country, social norms are referred to as protocol.

Within a small world, routine is expected and welcome, and valued information is found within the community. This has a strong connection with learning and the transfer of knowledge in Indigenous communities. Understanding comes from the relaying of story and history to present day life, framed by protocol or expected behaviors. Tribal nations have many ways of expressing this. For the Navajo this is the concept of *hózhǫ*, "that sense of balance, beauty, and harmony."[36] House gave an example of the need of museum staff to observe Native social norms when storing cultural objects:

> At the museum, I saw a number of sacred masks covered up with plastic. In our way, this is wrong. The masks have got to breathe because there's energy in them—in the Navajo way, they're alive. You can't suffocate them or they'll be angry in time to come. You always bring them out to breathe."[37]

One can consider social norms as that which defines, and also limits, acceptable behavior in a small world.

While social norms are considered community-held acceptances, they also apply to the expectations the group holds and expects of the individual. This is also seen in the Māori concept of *mana*, or "the place of the individual in the social group."[38] *Mana*, or personal power or authority, may be one channel that moves information in Indigenous communities. While ascribed to the individual, the impact of *mana* is felt within the community: "The leader with *mana* builds the *mana* of others."[39] A Māori friend recently told one of the authors that *mana* grows over time, and with age, one's responsibility to use their *mana* grows.

Social Types

Social typing is the process of distributing assignments within a small world based on the roles that individuals are expected to perform. Social typing also explains individual

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[35] Pendleton and Chatman, "Small World Lives," 742.

[36] Peter Iverson, *Diné: A History of the Navajos* (Albuquerque, NM: University of New Mexico Press, 2002), 176.

[37] National Museum of the American Indian, *All Roads are Good: Native Voices on Life and Culture*, 95.

[38] Hirini Moko Mead, *Tikanga Māori: Living by Māori Values*, rev. ed. (Wellington, NZ: Huia Publishers, 2016), 33.

[39] Chellie Spiller, Hoturoa Barclay-Kerr, and John Panoho, *Wayfinding Leadership: Groundbreaking Wisdom for Developing Leaders* (Wellington, New Zealand: Hui Publishers, 2015), 22.

motivation to seek information. A social type is a "label or classification determined by social norms created and supported in a small world, signifying an individual's ability to acquire and use information."[40] "The process of definition, or identity creation, is related to social types."[41]

The concept of social types can explain tribal community networks, including tribal national affiliation and clan systems within tribes, as well as gender roles and roles acquired and assigned due to age. Traditionally determined to ensure that community needs were met, clan systems continue to be recognized to affirm genealogical connections and to also teach community members how to live according to social norms. Thus, clans of the Ojibwe nation are represented by animal guardians or *dodems*. The seven traditional *dodems* were crane, loon, bear, deer, fish, marten, and bird.[42] Tribal members were born into clans and knew from birth what they were and what their responsibilities were. Thus, members of crane and loon clans were leaders, known for their distinctive voices. Bear clan members were mediators and performed contemporary roles as police officers and justices of the peace. Deer clan, or cloven hoof clan members were writers. The fish clan members were educators, swimming deeply and quietly. Today, tribal members still introduce themselves by their tribal affiliation and clan membership. Navajo/ Diné people use the protocol of "born to/born for" to identify their maternal and paternal clans.[43]

Worldview

In this section we will discuss any overlaps between Chatman's concept of worldview— as seen in her studies and the theories upon which she based her analyses—and Indigenous worldview or thoughts and interactions with the world around them. Pendleton and Chatman state, "It is the act of forming a worldview that determines what is important in a world and what is trivial,"[44] and that a worldview "…is a comprehensive philosophy that shapes a body of beliefs about human life."[45] In her "Theory of Life in the Round," Chatman adds that a "worldview is a collective set of beliefs held by members who live within a small world."[46] Of the four concepts within her theory of life in the round, it is the one that would hold the most familiarity with Indigenous peoples. The

[40] Fulton, "An Ordinary Life in the Round," 249.

[41] Burnett, Besant, and Chatman, "Normative Behavior in Virtual Communities," 541.

[42] Edward Benton-Banai, *The Mishomis Book: The Voice of the Ojibway* (Hayward, WI: Indian Country Communications, 1988), 74-77.

[43] "Navajo Clans," Twin Rocks Trading Post, Bluff, Utah, https://twinrocks.com/legends/general-life-men-women/navajo-clans.html, accessed June 12, 2021.

[44] Pendleton and Chatman, "Small World Lives," 749.

[45] Pendleton and Chatman, 736.

[46] Chatman, "Theory of Life in the Round," 213.

word "worldview" is frequently used by Native peoples in common conversation and in writings by and about them. It is a word that is often unexplained but denotes a commonality and strength: we stand together because we share this way of looking at our surroundings and dealing with each other. Worldview is invisible. It is the general result of living an Indigenous life, the amalgam of values, behaviors, beliefs, customs, and philosophy in living today and in thinking of the past.

Worldview is felt individually and expressed collectively. Worldview is what a community holds in common. It is how a group creates, understands, shares, and responds to "an inside joke." Just as there are many tribal nations, there are multiple worldviews. As Mihesuah reminds us, "There is, of course, no one Indian worldview."[47] Fulton interpreted Chatman's definition of worldview to be "collective of shared beliefs, customs and language used by members of a small world to evaluate behavior and interpret the world."[48] In their work with marginalized populations in institutionalized aged care of New Zealand, Burrow, Cook, and Gilmour acknowledge the importance of Chatman's work "it is necessary to have an appreciation of the worldview that shapes life in the round in order to address information poverty influenced by the normative behaviours of insiders."[49] As there is no one worldview, there must be more work done to understand, appreciate, and work respectfully within and maybe without the worldview of others to effectively serve the informationally impoverished in a way meaningful to the community.

PART II: CHATMAN'S SMALL WORLD THEORY OF INFORMATION POVERTY AS IT RELATES TO INDIGENEITY

In her discussion of lives in small worlds, Pendleton and Chatman open the door for discussing Indigenous peoples' small worlds in stating that "…it seemed reasonable to start with an examination of how a cultural world establishes standards for information-seeking behaviors."[50] While Native people may indeed be impoverished, in Chatman's work information poverty is not the equivalent of economic poverty. Instead, she looks at four key concepts that constitute her theory of information poverty, which "…may be

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[47] Devon A. Mihesuah, "American Indian Identities: Issues of Individual Choices and Development," in Duane Champagne, ed., *Contemporary Native American Cultural Issues* (Walnut Creek, CA: AltaMira Press, 1999), 32.

[48] Fulton, "An Ordinary Life in the Round," 250.

[49] Burrow, Cook, and Gilmour, "Life in the Round," 21-30.

[50] Victoria E. M. Pendleton and Elfreda A. Chatman, "Small World Lives: Implications for the Public Library," *Library Trends* 46, no. 4 (1998), 733.

evoked as self-protective behaviors during the information-seeking process."[51] These are the strategies that individuals who reside in information poor situations use as coping mechanisms. These behaviors may become acceptable, or a social norm. Thus, the theory of information poverty is related to the theory of life in the round.

Secrecy

Perspective is at the heart of the concept of secrecy. Secrecy allows for in-group/out-group or insiders/outsiders to be defined. Those with the secret or are privy to the secret are the in-group. Ritual, ceremony, and cultural activities may be defined as protocol by insiders, but defined as secrecy by the outside group. Even within a small world, protocol may allow for some group members to participate in ritual performance while excluding others. We see this in patrimonial and matrimonial ceremonies. Information is passed down by gender which controls information behavior for a community. Again, the umbrella of protocol shapes this information dissemination within Indigenous small worlds differently than within a Western approach to information diffusion.

Indigenous peoples can exist in a special position in which their own identity, individually or as a community, is information that necessitates discretion or secrecy. This in turn begs the argument that information poverty in regard to secrecy can be viewed as a result of colonialism/imperialism. Although secrecy is a defense mechanism, it does not necessitate that Indigenous people shut themselves out from advice and information. Secrecy amongst Native people may have contributed to their survival. In writing about the four tribal nations within the state of Louisiana, Goldsmith and Mueller explain the decisions tribes made to remain isolated was an effort to retain their own identities and this move later helped these communities in receiving federal recognition as sovereign nations.[52]

To outsiders, rituals can be seen as a form of "polarized intellectual knowledge."[53] To insiders, ritual viewed as cultural information behavior, may demand secrecy. In her writing on secrecy, Chatman found that "concealed information is intended as a separation mechanism in which a person or select group of persons view themselves as ultimate insiders."[54] Chatman also sees the origin or locus of the information as bearing on secrecy.[55] While she explains that locus helps to define the in-group and the out-group,

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[51] Julie Hersberger, "Chatman's Information Poverty," in Fisher, Erdelez, and McKechnie, eds., *Theories of Information Behavior* (Medford, NJ: Information Today, Inc., 2005), 76.

[52] Sarah Sue Goldsmith and Risa Mueller, *Nations Within: The Four Sovereign Tribes of Louisiana* (Baton Rouge: Louisiana State University, 2003), 3.

[53] Elfreda A. Chatman, "The Impoverished Life-World of Outsiders," *Journal of the American Society for Information Science* 47, no. 3 (1996): 193-206.

[54] Chatman, "The Impoverished Life-World of Outsiders."

[55] Chatman, "The Impoverished Life-World of Outsiders."

there is also another reason that locus might be of importance. If information is born within a group and is meant to stay within the group, that group has the power to forget or delete or even expunge that information. Outsiders have no right to that information. Harkening back to Chatman's view of "polarized intellectual knowledge" and we see a Western point of view of the openness of information. Some information is simply not for others, especially when we speak of traditional cultural knowledge. One example of the right to forget within Indigenous culture is Gloria Cranmer-Webster's work in conservation ethnics and practices of Kwakwaka'wakw culture within the Indian view. Cranmer-Webster relates the Native perspective on carved poles can be one of utilitarianism. When the pole has finished serving its purpose, the next phase is for it to return to the ground.[56] This act of forgetting is antithetical to Western views of conservation. In her response to the question, "how should cultural items be used for display," Bad Bear, a Crow-Sioux museum curator, responded from the perspective of cultural ownership and her view on secrecy. Bad Bear states:

> Some items are meant to deteriorate and should be left to deteriorate naturally. Some are not…But museums should know that there are aspects of our lives that we want to keep to ourselves and not put on display. They should respect that.[57]

Indigenous people have the right to have their information forgotten. We do not value this in Western research or within our belief of intellectual freedom.

Deception

Closely related to secrecy, and sometimes intertwined with it, is deception. Deception as a concept of information poverty speaks to those experiencing a power struggle within their small world. Yup'ik stories highlight how one form of deception, hiding food from others, could expose others—and oneself—to hunger: "hoarding food was as reprehensible as wasting it and brought serious consequences," such as punishment or loss of reputation.[58] For people who find themselves straddling small worlds like many

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[56] Gloria Cranmer-Webster, "Conservation and Cultural Centres: U'Mista Cultural Centre, Alert Bay, Canada," in R. Barclay, M. Gilberg, J.C. McCawley, and T. Stone, eds., *Symposium 86: The Care and Preservation of Ethnographic Materials* (Ottawa: Canadian Conservation Institute, 1986), 77, quoted in Charles S. Rhyne, "Changing Approaches to the Conservation of Northwest Coast Totem Poles," in Ashok Roy and Perry Smith, eds., *Tradition and Innovation: Advances in Conservation, Contributions to the Melbourne Congress* (London: International Institute for Conservation of Historic and Artistic Works, 2000), 155-160.

[57] Sherelyn Ogden, ed., *Caring for American Indian Objects: A Practical and Cultural Guide* (St. Paul, MN: Minnesota Historical Society Press, 2004), 82.

[58] Fienup-Riordan, *Wise Words of the Yup'ik People*, 174.

Indigenous people do, deception or "play acting" may be a way to gain useful information between small worlds. For this viewpoint, we turn to a special subset of an outsider, specifically an outsider who was once an insider and tries to reenter the small world. This is different from a gatekeeper in that affiliation for a gatekeeper is continuous. For this proposed "interloper," an affiliation with at least one small world has been severed. For Indigenous people, returning home can carry stigma. One might feel compelled to "downplay" their wealth, knowledge, or "outside worldly" accoutrement such as clothing, cars, handbags, even accents. The trappings of a Western influence may deny a former insider to the full range of inclusion they had before leaving the confines of the small world.

To better understand the roles that "interlopers" play as former insiders, one can begin to explore "risk takers." Risk takers live on the edges of small worlds, the most marginalized of the marginalized, and are those who carefully balance competing worlds, who embody dual roles of insider and outsider, and even those who may use cultural protocol to their personal advantage.

Risk Taking

Chatman drew her interpretation of risk taking from diffusion theory, defining risk as "the degree of gamble or chance, with the possibility of loss."[59] Thus, decision making regarding whether to accept a new method, task, or other innovation, was based on the perceived possibility that the new innovation would, first, even exist, and second, whether its adoption would result in a negative outcome. Risk refers not only to taking action but also refers to the perceived negative outcome that might result from personal disclosure. Within tribal communities, risk might be avoided in not overtly disclosing feelings. This is illustrated, for example, in a song by a Navajo singer/songwriter/ comedian where the male character in the song is unable to verbalize to his girlfriend that he loves her. Instead, he tells her that her eyes are just "somehow," which, to her, is enough to illustrate his strong attachment.[60] Native communities might also strive to minimize risk associated with following one influential individual: "It is risky on a *waka* (canoe) if leadership is vested in one person, and so leadership is cultivated in all." This serves as a technique to minimize risk and ensure not only survival but thriving.[61]

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[59] Chatman, "Diffusion Theory," 378.

[60] Kristina M. Jacobsen, *The Sound of Navajo Country: Music, Language, and Dine Belonging* (Chapel Hill, NC: University of North Carolina Press, 2017), 76.

[61] Spiller, Barclay-Kerr, and Panoho, *Wayfinding Leadership*, 60.

Situational Relevance

Indigenous education models are based on examining utility or usefulness through a cultural lens. Thus, utility is seen in its relation to Indigenous worldviews. Angayuqaq Oscar Kawagley describes the difference between a Western-based pedagogy and that at a Yupiaq School in Alaska: "Native people…have traditionally acquired their knowledge of the world around them through direct experience in the natural environment, whereby particulars come to be understood in relation to the whole and the so-called laws are continually tested in the context of everyday survival."[62] Thus, what is learned and communicated must be relevant.

To Chatman, situational relevance refers to understanding how new information might make sense to an individual's setting. Within situational relevance, the question for information acceptance in an Indigenous small world is not only the extent to which the resource be trusted, but in what capacity. The individual themself is also responsible for learning. Linda Poolaw, in describing the responsibility to learn placed on the individual, states, "We were taught that you don't ask questions. You just have to stay around and listen, and the answer will come to you."[63]

PART III: CHATMAN'S THEORIES AS APPLIED TO INDIGENOUS INFORMATION NEEDS

Chatman conducted a number of studies on how everyday people with shared lifestyles found and used information. She mapped the results of these studies against various theories, testing which might best explain the behavior she observed. Some of her results may have overlap with Indigenous peoples and their communities, while others may have little relevance.

Diffusion Theory

Diffusion theory explains the rate of the acceptance of innovation within a community.[64] Although Chatman did not find that diffusion theory adequately described the communication within her participant group, her findings can be extended to understand diffusion as well as the unique relativity of information within Indigenous populations.

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[62] Angayuqaq Oscar Kawagley, *A Yupiaq Worldview: A Pathway to Ecology and Spirit*, 2nd ed. (Long Grove, IL: Waveland Press, 2006), 75.

[63] National Museum of the American Indian, *All Roads Are Good: Native Voices on Life and Culture*, 213.

[64] June Kaminski, "Diffusion of Innovation Theory," *Canadian Journal of Nursing Informatics*. Theory in Nursing Informatics Column, 6, no. 2 (2011). http://cjni.net/journal/?p=1444.

For Indigenous peoples, personal referral may be the strongest resource for securing employment within the small world. Yet, the locus of advantage resides solely within the small world. When stepping outside the small world, Indigenous people may have limited access to the personal recommendations that give others an advantage in the "outside world."

Native peoples might exhibit similar behavior to the general public with regards to adoption of innovation. Limited access to digital objects due to low electronic connectivity, heavy reliance on a cash economy, and limited distribution channels can serve as practical challenges to adoption of innovation for Native peoples. Further, while technology adoption might be viewed at the level of tribal nations, it makes more sense to consider its impact on the higher-level interpretation of Indigenous sovereignty. For example, Duarte discusses "how ICTs [information communication technologies] play an integral role in circulating information critical to the daily exercise of sovereignty."[65] In defining sovereignty, she states:

> …at its most minimal, tribal sovereignty may be understood as the dynamic relationship between the will of a people to live by the ways of knowing they have cultivated over millennia within a homeland and the legal and political rights they have negotiated with the occupying federal government.[66]

All too often, technological adoption is considered a marker of progress, of modernity. Often, this same marker of progress is associated by Indigenous peoples with colonialism. In fact, the expansion of railroads across the western United States is now referred to as "railroad colonialism," a phrase that describes the intent of transportation and its foundation of imperialism.[67]

Opinion Leadership Theory

Chatman considered the theory of opinion leadership as a possible influence on how leaders might share information with others. In traditional Ojibwe life, communication might follow a strict channel set by genealogical connection. Pre-contact leaders were hereditary: they were born into that assignment due to genealogy/clan affiliation. The contrast between traditional leadership and colonial leadership models in one Native nation is described thusly:

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[65] Marisa Elena Duarte, *Network Sovereignty: Building the Internet Across Indian Country* (Seattle: University of Washington Press, 2017), 38.

[66] Duarte, *Network Sovereignty,* 37.

[67] Manu Karuka, *Empire's Tracks: Indigenous Nations, Chinese Workers, and the Transcontinental Railroad* (Oakland, CA: University of California Press, 2019).

Traditionally, Ojibway leaders were accepted by the tribe for some immediate purpose and were followed only so long as they fulfilled it. No permanent commitment was made to a leader or to a highly centralized authority system... Emergence of a permanent leadership, some believe, was the creation of white economic control and influence, not necessarily the result of developments within the tribal culture itself.[68]

New skills were needed post-contact when tribal members needed to engage in conversations with Europeans and later, Americans. At that time, orators rose to represent tribal nations and, among the Ojibwe, "oratorical ability was a gift well-respected among the Ojibways as it was the principle means of formulating public opinion and consensus of action."[69] Opinion leadership theory might then best describe a colonial approach to creating a mediator role within some tribal communities. In these cases, communication might follow other distribution models, including strict channels set by traditional interpersonal relationships or through a colonial structure such as a non-traditional governance. Thus, opinion leaders attain this role due to assignment such as election to a tribal governance position or due to their status as an elder. Opinion leaders defined by governance status may represent the policy of colonization and undermine traditional models.

Another opinion leadership model in Indigenous life is that of the "wayfinders who continue to practice their ancient craft in cultural pockets around the world includ(ing) the Inuit who read the snow, Australian Aboriginals who track the desert, Bedouin nomads who traverse the sand dunes and Polynesian voyagers who navigate the oceans."[70] These keepers of cultural practices can be looked to as leaders within the community, not only for traditional knowledge but also in navigating the world outside of the community.

Alienation Theory

Another explanation for information-seeking behavior that Chatman explored was alienation theory. Given the public image of Native peoples as being isolated outsiders, one might assume that understanding alienation theory might give insight into American Indians' information-seeking behavior. Our understanding of a number of tribal nations does not hold this to be true.

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[68] Judith Rosenblatt, ed., *Indians in Minnesota*, 4th ed. (Minneapolis: University of Minnesota Press, 1985), 53.

[69] Mark Diedrich, comp., *Ojibway Oratory: Great Moments in the Recorded Speech of the Chippewa, 1695-1889* (Rochester, MN: Coyote Books, 1990), 9.

[70] Spiller, Barclay-Kerr, and Panoho, *Wayfinding Leadership*, 7.

Alienation theory does not seem to provide useful explanations for information-seeking among Indigenous peoples. Native peoples turn to human contacts, valuing and employing their family members, friends, and community connections as information sources. The Māori refer to this human value as *whanaungataga* or belonging, or "nurturing relationships, looking after people, and being very careful about how others are treated."[71] Their community communication networks are based on traditional tribal community structures, such as clan systems, and upon the high profile and close contact of their governance structures. For instance, tribal members need to continuously interact with each other in order to access social services such as medical and nutritional care. Strong cultural traditions that involve community members in ceremony and expressions such as *powwows* and local community activities such as high school basketball games can be considered information-seeking behaviors. The fact that tribal protocol is both traditional and evolving also is reliant on interpersonal policy setting and enforcement.

Gratification Theory

Finding alienation theory limiting in terms of information dissemination, Chatman moved on to exploring gratification theory.[72] As part of her examination of gratification theory, Chatman looked at the value of time and the importance of its conceptualization in information behavior.[73] Chatman argues that the time systems of poor people look different from those in the middle class. In essence, poor people live in the present without the affordance of a lens to the future. Hope plays a large part in the prioritization of time. One particular way this proposition can speak to the Indigenous perspective is in higher education. Chatman noted that the "seeking of [higher] education was found to be related to an optimistic perception that one's efforts would result in a better future."[74] Indigenous people and their small worlds deal with challenges such as limited access, low connectivity, and limited distribution channels as well as financial poverty that can inhibit hope and thus lend a pessimistic view of information gratification in higher education.

Overall, gratification theory might be less applicable in explaining how Indigenous peoples find and use information. While luck or predestined fate might be used to explain

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[71] Spiller, Barclay-Kerr, and Panoho, *Wayfinding Leadership*, 68; Mead, *Tikanga Māori: Living by Māori Values*, 33.

[72] Kim M. Thompson, "Remembering Elfreda Chatman: A Champion of Theory Development in Library and Information Science Education," *Journal of Education for Library and Information Science* 50, no. 2: 119-126.

[73] Elfreda A. Chatman, "Life in a Small World: Applicability of Gratification Theory to Information-Seeking Behavior*," Journal of the American Society for Information Science* 42, no. 6 (1991): 438-349.

[74] Chatman, "Life in a Small World," 438-349.

circumstances, the Native view of life considers the circumstances of the distant past, such as origin or emergence stories, to be deeply relevant in the present. Time is less distinct: "…Indigenous peoplehood have their own rhythms and momentum, giving rise to ways of inhabiting time that endure even as they remain open to alteration."[75]

Gratification theory also is not aligned with the Native values of humility. Swisher, a Standing Rock Sioux educator, explained how she viewed her own accomplishments: "I support [that] it's one of those indirect teachings, you know, that you don't try to be the center of attention, that if there's any bragging to be done about you, it should be done by somebody else and not yourself."[76] This is also expressed in the popular Māori proverb that translates to "the sweet potato does not announce that it is tasty."[77] Contemporary Māori sea navigator Barclay-Kerr, reflecting on his role as a navigator, states, "and if what you have done has made a difference it will speak louder than anything you have to say."[78]

Social Network Theory

Density refers to how often people within a social group have any interaction with each other.[79] Chatman used the concept of density within social network theory to explore the network of members.[80] Here, the presence of a "gatekeeper" or those on the fringe who can work as a bridge between small worlds is highlighted. In her 1993 study, Metoyer-Duran found that "gatekeepers link their communities by networking extensively with other information sources, including interpersonal ones."[81] Gatekeepers act as physical manifestations of information pathways. Their role is valuable in information diffusion as their representation across multiple homogeneities allows them access to more information as well as serve as a barrier to information flow. One way to think about gatekeepers is to think about invisibility. Invisibility speaks to homogeneity in one group (invisible) and information boon to another (spy). Thinking about Indigenous communities as underrepresented or invisible groups can help to explain their unique position as gatekeepers.

In the most literal sense, connectivity which is a part of both the figurative concept of social network theory and the literal sense of electronic/internet connectivity

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[75] Mark Rifkin, *Beyond Settler Time: Temporal Sovereignty and Indigenous Self-Determination* (Durham, NC: Duke University Press, 2017), 31.

[76] Modica, *Real Indians,* 78.

[77] Hirini Moko Mead and June Te Rina Mead, *People of the Land: Images and Māori Proverbs of Aotearoa New Zealand* (Wellington, NZ: Huia Publishers, 2010), 48.

[78] Spiller, Barclay-Kerr, and Panoho, *Wayfinding Leadership*, 59.

[79] Huotari and Chatman, "Everyday Life Information Seeking," 355.

[80] Chatman, "Life in a Small World," 438-349.

[81] Cheryl Metoyer-Duran. "The Information and Referral Process in Culturally Diverse Communities." *RQ* 3, no. 3 (Spring 1993): 359-371.

can be a challenge for Indigenous populations whose information small world may be located in a physical digital divide. Still, the social network follows tradition, for example, "Māori life is remarkably self-organizing. When a major event occurs, people will gather to make things happen."[82] The essential part of social networking is the individual commitment. This is best explained by the Māori saying, "*he kanohi I ketea*," or "one's face should be seen."[83]

PART IV: CONCLUSION – LEADING A FULFILLED INDIGENOUS LIFE

Chatman's research focused on those who are marginalized, people who live on the edge of majority culture and are thus invisible. Their invisibility is such that they are not mentioned, not considered, and not included in general life activities by those outside of their group. Some aspects of her theories and research can be applied to our understanding of Indigenous everyday life.

Chatman's theory of life in the round provides an opportunity to reflect on the Indigenous experience. The roundness of Native life is the circle of life and the influence of wisdom flowing in from the four directions to the center where individuals reside. Life in the round is seen in the built environments in which we live and work, and in the drumbeat or heart of the earth. Unlike Chatman's view that people residing within small worlds do not cross out of those boundaries, Native peoples have long roamed and traversed the terrain as all land is Indigenous land. Contemporary Native peoples often have to leave their small world to acquire the skills they will need to assist their communities after they return.

Chatman clearly summarized the "glue" that holds Indigenous small worlds together: social norms, social types, and worldview. Social norms within Indigenous communities relate to how one acts. Social norms do not explain how tasks are accomplished but how people behave—both community insiders and community outsiders—according to community-specific etiquette. The social types within an Indigenous community are assigned based on demographics and characteristics such as one's birthright, skills, age, and gender. Included among these social types is the elder: "Elder is a position of respect and denotes that the individual is not only of greater than average age but also possesses skills or cultural knowledge. Some younger people are respected as junior elders and some older tribal members have not earned the respectful

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[82] Spiller, Barclay-Kerr, and Panoho, *Wayfinding Leadership*, 69.
[83] Mead, *Tikanga Māori: Living by Māori Values*, 393.

title of elder."[84] Thus, there are elders, junior elders, and just plain old people. Worldview is the common philosophy and shared notion of what life is all about.

Chatman's discussion of information poverty is seen in specific behaviors of those who also might live in Indigenous small worlds: secrecy (concealing information), deception (disguising information or information need), risk taking (balancing action in the face of potential loss or harm), and situational relevance (making meaning based on setting). And they respond to their needs for information in ways that might be explained by diffusion theory, opinion leadership theory, alienation theory, gratification theory, and social network theory. That is, Indigenous people share information in socially accepted or predictable patterns, they are influenced by those in power, their withdrawal into community may be interpreted by outsiders as alienation, and their information sharing likely follows social pathways.

Indigenous cultures' continued, inflicted invisibility does not mean they come from an information poor small world. Their lives in the round reflect generations of survival or, what, Vizenor refers to as survivance where "survival in Vizenor's accounts is not an end but a constant delicate balancing, achieved primarily through the vehicles of story and humor."[85] Understanding and approaching different small worlds as a blank slate enables us to capture the richness and distinctness of Indigenous life. It may be Chatman's work does not describe Indigenous life and/or information behavior in a complete manner. Chatman's approach to use standard theories in innovative ways in order to understand and serve the information needs of underrepresented people is at the heart of reversing traditional, colonial, Western approaches to research and education.

Cajete describes that the Indigenous complete life is attained through the process of "discovering one's true face (character, potential, identity), one's heart (soul, creative self, true passion), and one's foundation (true work, vocation).[86] Life at the margins can also be a rich life with long traditions and endless potential. Life on the margin can still be one of fulfillment where a life in the round allows Indigenous peoples to continue to thrive into as far as we can see into the future, or the eighth generation.

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[84] Loriene Roy, "Recommendations and Implications for Services to and with Indigenous Elders," in Roy, Bhasin, and Arriaga, eds., *Tribal Libraries, Archives, and Museums: Preserving Our Language, Memory, and Lifeways* (Lanham, MD: Scarecrow Press, 2011), 158.

[85] Kimberly M. Blaeser, *Gerald Vizenor: Writing in the Oral Tradition* (Norman: University of Oklahoma Press, 1996), 63.

[86] Cajete, *Look to the Mountain*, 23.

BIBLIOGRAPHY

Benton-Banai, Edward. *The Mishomis Book: The Voice of the Ojibway*. Hayward, WI: Indian Country Communications, 1988.

Blaeser, Kimberly M. *Gerald Vizenor: Writing in the Oral Tradition*. Norman: University of Oklahoma Press, 1996.

Burnett, Gary and Paul T. Jaeger. "Small Worlds, Lifeworlds, and Information: The Ramifications of the Information Behaviour of Social Groups in Public Policy and the Public Sphere," *Information Research* 13, no. 2 (June 2008): 1-18.

Burnett, Gary, Michele Besant, and Elfreda A. Chatman. "Small Worlds: Normative Behavior in Virtual Communities and Feminist Bookselling," *Journal of the American Society for Information Science and Technology* 52, no. 7 (2001): 536-547.

Burrow, Maria, Catherine Cook, and Jean Gilmour. "Life in the Round and Aged Care: A Theoretical Exemplar for Research with Marginalized Populations in Institutional Settings/ *Ko te noho i te ao whaiti, me te tiaki kaumatua: He tauira rangahau mo nga taupori e parea ana ki te taha i roto i nga horopaki whare okawa*." *Nursing Praxis in New Zealand* 33, no. 3 (2017): 21-30.

Cajete, Gregory. *Look to the Mountain: An Ecology of Indigenous Education*. Skyland, NC: Kivaki Press, 1994.

Cajete, Gregory A. *Igniting the Sparkle: An Indigenous Science Education Model*. Skyland, NC: Kivaki Press, 1999.

Chatman, Elfreda A. "Alienation Theory: Application of a Conceptual Framework to a Study of Information among Janitors," *RQ* 29, no. 3 (1990): 355-368.

Chatman, Elfreda A. "Diffusion Theory: A Review and Test of a Conceptual Model in Information Diffusion," *Journal of the American Society for Information Science* 37, no. 6 (1986): 377–386.

Chatman, Elfreda A. "The Impoverished Life-World of Outsiders," *Journal of the American Society for Information Science* 47, no. 3 (1996): 193-206.

Chatman, Elfreda A. "Life in a Small World: Applicability of Gratification Theory to Information-Seeking Behavior," *Journal of the American Society for Information Science* 42, no. 6 (1991): 438-349.

Chatman, Elfreda A. "Opinion Leadership, Poverty, and Information Sharing," *Reference Quarterly* 26, no. 3 (1987): 341-353.

Chatman, Elfreda A. "Theory of Life in the Round," *Journal of the American Society for Information Science* 50, no. 3 (1999): 207-217.

Diedrich, Mark, comp. *Ojibway Oratory: Great Moments in the Recorded Speech of the Chippewa, 1695-1889*. Rochester, MN: Coyote Books, 1990.

Duarte, Marisa Elena. *Network Sovereignty: Building the Internet Across Indian Country*. Seattle, WA: University of Washington Press, 2017.

Fienup-Riordan, Ann. *Wise Word of the Yup'ik People: We Talk to You because We Love You*. Lincoln, NE: University of Nebraska Press, 2005.

Fulton, Crystal. "An Ordinary Life in the Round: Elfreda Annmary Chatman." *Libraries & the Cultural Record* 45, no. 2 (2010): 238-259.

Goldsmith, Sarah Sue and Risa Mueller. *Nations Within: The Four Sovereign Tribes of Louisiana*. Baton Rouge: Louisiana State University, 2003.

González-Teruel, Aurora and Francisca Abad-García. "The Influence of Elfreda Chatman's Theories: A Citation Context Analysis," *Scientometrics* 117, no. 3 (2018): 1793-1819.

Grande, Sandy. "Red Pedagogy." In *Handbook of Critical and Indigenous Methodologies*, edited by Norman K. Denzin, Yvonna S. Lincoln, and Linda Tuhiwai Smith, 233-254. Los Angeles, CA: Sage, 2008.

Gray, Mel, John Coates, Michael Yellow Bird, and Tiani Hetherington. "Introduction: Scoping the Terrain of Decolonization." In *Decolonizing Social Work*, edited by Mel Gray, John Coate, Michael Yellow Bird, and Tiani Hetherington, 1-24. Farnham, England: Ashgate, 2013.

Hersberger, Julie. "Chatman's Information Poverty." In *Theories of Information Behavior*, edited by Karen E. Fisher, Sanda Erdelez, and Lynne (E. F.) McKechnie, 75-78. Medford, NJ: Information Today, Inc., 2005.

Huotari, Maija-Leena and Elfreda A. Chatman. "Using Everyday Life Information Seeking to Explain Organizational Behavior." *Library and Information Science Research* 23, no. 4 (2001): 351-366.

Iverson, Peter. *Diné: A History of the Navajos*. Albuquerque, NM: University of New Mexico Press, 2002.

Jacobsen, Kristina M. *The Sound of Navajo Country: Music, Language, and Dine Belonging*. Chapel Hill, NC: University of North Carolina Press, 2017.

Kaminski, June. "Diffusion of Innovation Theory," Canadian Journal of Nursing Informatics," Theory in Nursing Informatics Column, 6, no. 2 (2011). http://cjni.net/journal/?p=1444.

Karuka, Manu. *Empire's Tracks: Indigenous Nations, Chinese Workers, and the Transcontinental Railroad*. Oakland, CA: University of California Press, 2019.

Kawagley, Angayuqaq Oscar. *A Yupiaq Worldview: A Pathway to Ecology and Spirit*. 2nd ed. Long Grove, IL: Waveland Press, 2006.

Malnar, Joy Monice and Frank Vodvarka. *New Architecture on Indigenous Lands*. Minneapolis, MN: University of Minnesota Press, 2013.

Mead, Hirini Moko. *Tikanga Māori: Living by Māori Values*. Rev ed. Wellington, NZ: Huia Publishers, 2016.

Mead, Hirini Moko and June Te Rina Mead. *People of the Land: Images and Māori Proverbs of Aotearoa New Zealand*. Wellington, NZ: Huia Publishers, 2010.

Metoyer-Duran, Cheryl. "The Information and Referral Process in Culturally Diverse Communities." *RQ* 3, no. 3 (Spring 1993): 359-371.

Mihesuah, Devon A. "American Indian Identities: Issues of Individual Choices and Development." In *Contemporary Native American Cultural Issues*, edited by Duane Champagne, 11-38. Walnut Creek, CA: AltaMira Press, 1999.

Modica, Andrea. *Real Indians: Portraits of Contemporary Native Americans and America's Tribal Colleges*. New York: Melcher Media, 2003.

National Museum of the American Indian. *All Roads are Good: Native Voices on Life and Culture*. Washington, DC: Smithsonian Institution Press, 1994.

Ogden, Sherelyn, ed. *Caring for American Indian Objects: A Practical and Cultural Guide*. St. Paul, MN: Minnesota Historical Society Press, 2004.

Pendleton, Victoria E. M. and Elfreda A. Chatman. "Small World Lives: Implications for the Public Library." *Library Trends* 46, no. 4 (Spring 1998): 732-751.

Rhyne, Charles S. "Changing Approaches to the Conservation of Northwest Coast Totem Poles." In *Tradition and Innovation: Advances in Conservation Contributions to the Melbourne Congress*, edited by Ashok Roy and Perry Smith, 155-160. London: International Institute for Conservation of Historic and Artistic Works, 2000.

Rifkin, Mark. *Beyond Settler Time: Temporal Sovereignty and Indigenous Self-Determination*. Durham, NC: Duke University Press, 2017.

Rosenblatt, Judith, ed. *Indians in Minnesota*. 4th ed. Minneapolis, MN: University of Minnesota Press, 1985.

Roy, Loriene. "Advancing and Indigenous Ecology within LIS Education." *Library Trends* 64, no. 2 (Fall 2015): 384-414.

Roy, Loriene. "Recommendations and Implications for Services to and with Indigenous Elders." In *Tribal Libraries, Archives, and Museums: Preserving Our Language, Memory and Lifeways*, edited by Loriene Roy, Anjali Bhasin, and Sarah K. Arriaga, 157-163. Lanham, MD: Scarecrow, Press, 2011.

Roy, Loriene. "Who is Indigenous?" In *Indigenous Notions of Ownership and Libraries, Archives and Museums*, edited by Camille Callison, Loriene Roy, and Gretchen Alice LeCheminant, 7-23. Berlin: De Gruyter Saur, 2016.

Smith, Graham Hingangaroa, "Kaupapa Māori Theory: Indigenous Transforming of Education." In *Critical Conversations in Kaupapa Māori*, edited bu Hoskins and Jones, 79-94. Wellington, NZ: Huia Publishers, 2017.

Smith, Linda Tuhiwai. *Decolonizing Methodologies: Research and Indigenous Peoples*. London: Zed Books; Dunedin, New Zealand: University of Otago Press, 1999.

Savolainen, Reijo. "Small World and Information Groups as Contexts of Information Seeking and Sharing." *Library & Information Science Research* 31, no. 1 (2009): 38-45.

Soloman, Paul. "Rounding and Dissonant Grounds." In *Theories of Information Behavior*, edited by Karen E. Fisher, Sanda Erdelez, and Lynne (E. F.) McKechnie, 308-312. Medford, NJ: Information Today, Inc., 2005.

Spiller, Chellie, Hotoroa Barclay-Kerr, and John Panoho. *Wayfinding Leadership: Groundbreaking Wisdom for Developing Leaders*. Wellington, NZ: Hui Publishers, 2015.

Thompson, Kim M. "Remembering Elfreda Chatman: A Champion of Theory Development in Library and Information Science Education." *Journal of Education for Library and Information Science* 50, no. 2 (Spring 2009): 119-126.

Thybony, Scott. The Hogan: The Traditional Navajo Home. Tucson: Western National Parks Association, 1999.

Twin Rocks Trading Post, Bluff, Utah. "Navajo Clans," https://www.twinrocks.com /legends/135-navajoclans.html.

Vennum, Thomas. *The Ojibwa Dance Drum: Its History and Construction*. St. Paul, MN: Minnesota Historical Society Press, 2009.

White, Bruce. *We Are at Home: Pictures of the Ojibwe People*. St. Paul, MN: Minnesota Historical Society Press, 2007.