Learning about Extraordinary Beings: Native Stories and Real Birds

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Abstract Oral traditions of Indigenous American peoples (as well as those of other Indigenous peoples) have long been discussed with regard to their reliability as metaphorical accounts based upon historical knowledge. I explore this debate using stories to discuss the importance of the role of Corvidae in Indigenous knowledge traditions and how these stories convey information about important socioecological relationships. Contemporary science reveals that Corvids important in cultural traditions were companions to humans and important components of the ecology of the places where these peoples lived. Ravens, Crows, Jays, and Magpies are identified as having special roles as cooperators, agents of change, trickster figures, and important teachers. Canada (or Gray) Jays serve as trickster/Creator of the Woodland Cree people, Wisakyjak. Magpies won the Great Race around the Black Hills to determine whether humans would eat bison or vice versa. I analyze these stories in terms of their ecological meaning, in an effort to illustrate how the stories employ dramatic settings to encourage respect and fix relationships in the sociocultural memory of the people.

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One complex issue when working in ethnobiology is determining the empirical bases that underpin oral traditions (Basso 1996; Kelly 2017; Vansina 1985). Euro-Americans often assume that oral traditions are prone to change with repeated telling to such a degree that any information they contain becomes corrupted; Euro-Americans could be characterized as treating oral traditions as if they are equivalent to the game of telephone (Marshall 1995). A recent study of Australian Aboriginal oral traditions, however, argues that these are very powerful when employed according to traditional cultural norms (Kelly 2017). Orality is about “making knowledge memorable,” and uses “stories, songs, and dances to retain vast stores of factual information” (Ong 2002). This allows the coding of knowledge about plants, animals, resource use and land management, and geology. “Indigenous cultures memorized everything on which their survival—physically and culturally—depended” (Kelly 2017:xii).

When survival depends upon accurate retention of knowledge, strong selection ensures that mistakes are not made during transmission, which counters arguments about deterioration of information (Marshall 1995). Kelly (2017:10) argues that “outsiders,” i.e., anthropologists, or even ethnologists, are not properly initiated, and “will not be taught the songs nor told the stories that encode the critical information.” “The reason these stories appear simplistic (and overly anthropomorphic) is that they are usually the versions told to children,” and, “as the children are initiated into higher and higher levels of the society, they are taught more details (that build upon) these first stories,” which allows them to function as structures on which to base future learning. According to Kelly (2017:11), “Taking public indigenous stories as indicative of the depth of knowledge is equivalent to judging Western (science) solely (on the basis of) texts found in the children’s section of bookshops.”

The same is true of many popular versions of stories told by Indigenous peoples around the world including Barry Lopez’s Crow and Weasel (1990), or the beautifully illustrated stories by Paul Goble. These works tell very simplified versions of long, complex, and sometimes brutal and sexually themed stories,
which also contain substantial information concerning ecological themes. There are more complete published versions of such stories (e.g., Bright 1993; Mourning Dove 1990), however, even these stories have often been censored before publication, especially with regard to sexual content. Although her work is often identified as authentic, Mourning Dove was one of the most heavily edited Native American authors. Her works were changed considerably by her editor, L. V. McWhorter: “…at times scholars will not know if they are reading McWhorter or Mourning Dove…unless they are very familiar with the primary documents” (Brown 1993:70). McWhorter enlisted Hester Dean Guie to help with the shaping of Mourning Dove’s traditional stories, which they envisioned as a series of children’s bedtime stories. As a result, all mentions of sex and violence were eliminated, and most of the “legends” were simplified and shortened. McWhorter was an active editor, removing moral points, “superstitions,” and creation stories. Mourning Dove’s classic book Coyote Stories (1933) included editing credits to Guie and McWhorter. Numerous stories as published in this work were unrecognizable to the Colville-Okanagan elders who originally told them (Nisbet and Nisbet 2010).

In this paper I argue that stories told as part of these traditions convey important information concerning socioecological relationships between humans and nonhumans (Pierotti 2011). In previous work I have concentrated on stories and traditions dealing with large, carnivorous mammals such as wolves and bears (Pierotti 2011; Pierotti and Fogg 2017). Here, I concentrate on stories concerning cooperative relationships between humans and birds of the Family Corvidae.

Methodology and Study Group
I follow the methodology on interpreting traditional Indigenous stories that we employed in assessing stories of Indigenous Americans and Australians in our book *The First Domestication* (Pierotti and Fogg 2017:8–11), which relies upon methods developed by Gould (2003) and Anderson (1996:103–104).

My goal is not to argue that the stories I include refer to actual historical events. When I refer to historical veracity, the point I am trying to make is that the antiquity of these stories reveals the attitudes that Indigenous peoples had towards other species hundreds or even thousands of years ago. Western Science has only recently acknowledged the extraordinary capabilities of some nonhumans that Indigenous knowledge has long taken for granted.

When I make reference to megafauna, the purpose is to establish that the peoples had interactions with species that have been extinct for thousands of years, which clearly establishes the antiquity of the story. Other stories I recount may only go back several hundred or a few thousand years, but they clearly predate the knowledge and understanding of the Western scientific tradition, and the existence of “nations” of any kind on any continent.

One of the less appreciated components of oral traditions among Native Americans is the role of avian contemporaries. Among birds, one group stood out for the way they were recognized as important components of many cultural traditions: the Family Corvidae, which in North America includes Ravens and Crows (genus *Corvus*: 2–3 species of Raven; 4 species of crow), Magpies (*Pica*: 2 species), Jays (5 genera; 10 species), and the Nutcracker (*Nucifraga columbiana*). These species have been characterized by scientists who study them as Avian Primates (R. Balda, personal communication) because of all birds, Corvidae seem to show the most complex social behavior and highest intelligence (Heinrich 1999; Savage 1995), a position held by higher primates among mammals. Corvids and some parrots are capable of cognitive feats comparable to those of great apes, and Corvid brains contain very large numbers of neurons, at densities considerably exceeding those found in mammals (Olkowicz et al. 2016).

The Corvidae
Indigenous Americans were fully aware of the unusual nature of this group of birds, and granted at least two species (Common Raven, *Corvus corax* and Gray Jay, *Perisoreus canadensis*) status as cultural heroes, creators, or tricksters, an honor attributed among mammals only to wolves and bears, the most significant carnivores with which these peoples co-existed (Pierotti 2011).

*Raven* (*Corvus corax*)
Ravens are one of the most intelligent and interactive species, both with humans and wolves. Heinrich (1999) describes them as “wolf-birds” because of the close association readily observed between these two species, and argues that “As far as raven was concerned, Man, the new predator, was probably just

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a surrogate wolf who also usually hunted in packs” (Heinrich 1999:243). I suspect that, combined with their high intelligence, this cooperative relationship with both humans and wolves lies at the root of the respect shown to Ravens by Indigenous peoples as illustrated in the following story.

An important creation story concerning Ravens comes from the Apache, and emphasizes a theme of cooperation during difficult times (Cordova 2007:11):

A long time ago the people were hungry…In the midst of this despair, Ravens began to appear among the People…“These Ravens know where to find food” said the People.

The People initially hatched a plan to capture and force a Raven to tell them how to find food. This plan failed, as the captive refused to speak, and grew weak under restraint, forcing the People to release the Raven. When they released him, the Raven was joined by his entire family, who led the People to a herd of Buffalo. At this point it is recounted that “Many other Ravens rose to greet the People (saying), Welcome.” After gathering enough food, the people decide to return to their homeland. On the return trip, Cordova (2007:11–13, emphasis added) said that,

…they encountered a large Raven…[who] spoke to them: “It is our way to share what we have with others. Many times we invited you to come with us and you ignored our invitation. Our children played among you… They had come to invite you and wanted only that you should follow them. You would not do that. There will come a time…when our peoples will not speak directly to one another. We will have different languages, different homes, but we will always experience hunger. That is the way of beings on this Earth. The next time our children come among you, do not ignore them. They have come to invite you to a feast.”

This story reveals how Indigenous peoples were forced to learn how to communicate with nonhumans by understanding nonhuman forms of communication, e.g., following birds such as Ravens who would lead them to places where food was available. It also refers to a time when direct dialog was considered possible between humans and nonhumans, perhaps because humans regarded themselves as more similar to nonhumans in early times.

For some tribes and First Nations, Raven could be considered a Creator figure who showed humans who were entering a new habitat, on a new continent, how to survive. What is most significant, however, is that these stories emphasize the same point made by Heinrich (above), concerning how Ravens interact with cooperatively-hunting species such as wolves and humans because these species may be less skilled at finding food items, but they are much better at killing.

Such stories effectively counter arguments made by Euro-Americans that Indigenous peoples using “Buffalo Jumps” to kill bison ended up “wasting” food when more buffalo were killed than could be eaten or processed by humans alone (e.g., Krech 1999:135–155). There was waste only if one fails to consider all the participants in the hunt. Wolves, Ravens, and Magpies had all participated in the hunt, and in the case of the wolves even participated in the killing. As a result, they were entitled to feed as well (Fogg et al. 2015; Pierotti 2011; Pierotti and Fogg 2017). “Waste” as defined by Euro-Americans seems to mean that persons other than humans were able to feed. To them, only human use of food or other material counts as proper use. For Indigenous peoples this food was shared with cooperating relatives, including non-human species, a concept totally alien to Europeans.

Indigenous peoples regarded their cooperators as fellow beings and as relatives who shared the space where they all lived together (Anderson 1996; Pierotti 2011). Ravens may have been even more important to peoples in the Arctic and Pacific Northwest where they guided humans to caribou and other prey (Pierotti and Fogg 2017), and were considered to function as both creator and trickster figures (Pierotti 2011). This dual role emerged because the peoples considered Raven to be important, but also a figure of mischief and even clownish behavior. This reflects the playful nature of this species (Heinrich 1999), as much or more as their powerful ecological role. The Koyukuk people of Southwest Alaska regard ravens as spiritually powerful, but they are made uneasy by contemporary ravens’ tendency to “penetrate the human sector of the world” (Nelson 1983:30). They feel that ravens should be “out on the land, where they belong” (Nelson 1983:31). Scavenging around human settlements reduces their power and reveals how without traditional shamans, both people and birds become separated from the Raven power. This reflects the impact of contemporary living conditions
upon the oral tradition. In Koyuk traditions, as with the Apache above, ravens helped to find game when they were hunting by flying overhead and “then toward an animal that is visible from above, calling ggaagga (animal)” (Nelson 1983:83). As one Koyuk (Nelson 1983:83) reported:

We were hunting along the river...me and a couple of young boys. A raven flew over us real low, and I told the boys to watch closely where it went, so it might lead us to something. It went across to the far bank and flew right along above the edge. We followed it with the boat and, sure enough, we came onto a bear standing on top of the bank. We shot it right there.

Black-billed Magpie (Pica pica)

Magpie is included among honored relatives because this species is credited with a powerful strategy that succeeded in winning an important victory for the Two-leggeds (which include both birds and humans) against the Four-leggeds (Mammals other than humans), in the history of tribes on the Great Plains. This involves a story about what is referred to as “The Great Race,” in which humans and Bison competed to determine which species would be the predator and which the prey (Goble 1991; Grinnell 1926). The two-leggeds and the four-leggeds each chose their champions: a young human male for the two-leggeds and a young Bison cow, named Slim Walking Woman for the four-leggeds (Goble changes the bison to a male). They raced around the Paha Sapa (Black Hills) in a valley the Cheyenne call the Race Track, today known as Buffalo Gap (Grinnell 1926). All two-leggeds and four-leggeds were allowed to participate, so the story recounts how all these species were scrambling around the valley that surrounds Paha Sapa for several days, providing a wealth of ecological and behavioral information about the various participants.

Bison was well ahead, but failed to realize that Magpie had surreptitiously landed on her /his back (Goble version), or had gotten into the lead as others tired and won easily (Grinnell’s grittier version). As they neared the finish line Magpie swooped off Bison’s back and beat her/him to the finish line, ensuring that humans could eat bison for the foreseeable future (Goble 1991). As compensation for this helpful act, Magpies are immune from human harm, and are always allotted a share of kills made by humans (Grinnell 1926). This story is obviously metaphorical; however, it is meant to fix in human minds how dependent humans have been upon magpies over their cultural history. One obvious consequence was that after this victory, humans took to wearing feathers as an expression of solidarity with their fellow two-legged relatives. Grinnell’s version includes animals collapsing from exhaustion and bleeding from their lungs, which is said to explain why the ground in the valley is stained red to this day.

Gray Jay (Perisoreus canadensis)

As a young boy, I was fascinated by Gray Jays, but never could figure out why their common name in the north was Whiskyjack. While living in Canada, I sought out stories from Canadian First Nations and learned that Canadian Cree have a trickster/hero known as Wisakyjak (also Wisakedjak) (Ballantyne 1991). To the Cree peoples, Wisakedjak is a shape-shifter who frequently appears as the Gray Jay, a benevolent trickster, teacher, and messenger of the forest. To many northern First Nations, the appearance of a Gray Jay in the morning is a good omen; its chattering and whistles serve as early warnings to hunters of the presence of nearby predators. Gwich’in guides in the Yukon tell of gray jays singing while flying from tree to tree to lead a lost and starving hunter home.

Anishinaabe scholar Niigaan Sinclair (2016) writes about this species, which goes by many names. To the Cree, she is wisikejack; to the French, she is mésangeai du Canada. To the English, she is gray jay. Sinclair (2016) states that “To my people...she is Gwiingwiishi” (Figure 1):

Gwiingwiishi lived with us since the beginning. She is a life giver, a trick player and one of the smartest beings in Creation. Everything she does challenges thought and perception, gifting teachings of responsibility, relationships and life. Many say she is a food-stealer, but she is brave in her fearlessness, bright in her mistakes. She is kind to those who are kind back, harder on those who need a dose of humility. She is the best parts of all parts.

Unlike many birds, she stays among our lodges all year, watching, playing and calling for our attention constantly. She is fierce in her protection of her family and community, travelling only with her relatives and taking care of her young... Gwiingwiishi is a great,
wise teacher...there is an old story telling of her abilities to give gifts.

One day long ago, our great trickster-transformer Nanabozho changed himself into Gwiingwiishi and sat in a tree above two blind brothers as they began to share a meal. As the first man reached for a piece of meat, Gwiingwiishi flew down and stole it. Startled, the man asked his brother if he had taken his meat. The brother replied no, reaching for a piece himself. As he was about to place the food in his mouth, Gwiingwiishi flew down and stole it, too, then returned to the tree to watch. The brothers accused one another of stealing, arguing with fear that one was trying to hurt the other. Just before they came to blows, Gwiingwiishi let out a huge laugh. Suddenly, the two men realized that Nanabozho was playing a trick, teaching them to not let petty things come between them. Nanabozho transformed back into a human but left a spirit of play and gift giving within Gwiingwiishi, something she still shares today (Sinclair 2016).

According to the Cree peoples, Wisakijjak was clearly familiar with megafauna. In one story he/she avenge the death of his/her brother wolf at the paws of a giant lynx (almost certainly a reference to Sabretooths, Smilodon spp.). In a connected Earthdiver story, he/she kills the last Giant Beaver, Casteroides spp., which threatens the raft on which he and other refugees from a flood (probably referring to the formation of Lake Agassiz at the end of the last Ice Age; Fisher et al. 2002) are riding. This allows Wisakijjak to employ diving mammals to go to the bottom of the lake to retrieve soil that could be used to rebuild land for terrestrial organisms to re-inhabit.

What should be obvious at this point is that Wisakijjak represents more to Indigenous peoples of the Northern Woodlands than just P. canadensis, although this Corvid species has become the

Figure 1 The Gray Jay—or Whiskey Jack or Canada Jay—features prominently in the traditional stories and art of Indigenous peoples such as the Anishinaabe, to whom it is Gwiingwiishi. (Sources: Artwork, Mark Nadjiwan; Photo, Steve Phillips/Can Geo Photo Club).
contemporary image of this trickster-transformer figure. Brightman (1993) describes *Wisabkichiwak* (there are dozens of alternate spellings) as being able to transform into a fly, a goose, and a moose. Sinclair (2016), quoted above, states that the Anishinaabeg trickster-transformer *Nanabozho* can transform into the Gray Jay, *Gwiingwiishi*, when the trick requires the behavioral attributes of this species. This suggests that *Perisoreus* can be considered to be, at the very least, a significant aspect of the *Wisabkichiwak* identity (Figure 2; see also video [Treaty6 Productions 2018]). The attributes Sinclair ascribes are to the bird itself, not the humanoid figure discussed by Brightman (1993). Nor are these the attributes shown in illustrations by Ballantyne (1991). There is conflation of human and nonhuman characters in these stories, with the nonhumans behaving both as their “modern counterparts” and as shapeshifters. Brightman (1993:39) states, “Cree say that stories with exclusively animal characters describe events that occurred earlier than those in stories of the trickster and other humanoid heroes.”

This seems a bit oversimplified, however, because tricksters often interact with animal characters in events supposed to represent very early times, such as the Earthdiver story recounted in Ballantyne (1991), which is a creation story. Brightman’s interpretation seems more in line with the temporally oriented thought patterns of Euro-Americans, rather than the time-free spatially oriented stories of Indigenous peoples (Deloria 1992). As I have discussed elsewhere concerning Europeans and tricksters:

Once Europeans arrived in North America as residents, a number of the tribes began to associate them with the concept of Trickster, apparently because their motivations seemed unclear and because they tended to consider things as being important that Indigenous people thought were marginal or peripheral (Ballinger 2004; Hyde 1998). They were obviously human but seemed trapped between adulthood and childhood, and quite immature in their attitudes and relationship with truthful speaking. This concept seems to have been intended as a mild reprimand, because Trickster stories are often told to show how it is proper to live (or not live), as with the discussion about death and reincarnation. Nonetheless, dealing with Europeans was deadly serious, even if it had humorous overtones. A more subtle and Indigenous definition is provided by Ramsey (1999:27–29):

The Trickster is an imaginary hyperbolic figure of the human...whose episodic career is based on hostility to domesticity, maturity, good citizenship, modesty, and fidelity...given to physical disguises and shape-changing; and who in his clever self seeking may accomplish important mythic transformations of reality, both in terms of creating possibility and of setting human limits. From a structural standpoint, tricksters are important mediative figures.

Ramsey’s use of the term mediative implies a dynamic interposing of the mind between polar opposites, allowing it to hold on to both; this does not mean “compromise or reconciliation,” but a continuing process of the mind, rather than a transitional step towards a conclusion (Pierotti and Fogg 2017:182).
Conclusion
The oral tradition is a crucial component of both cultural and physical survival among Indigenous peoples around the world. In North America, such traditions make frequent use of birds to exemplify important themes. In the cases I employ, all of the birds are important to the peoples culturally, and are also extraordinary species who teach humans about the value of cooperation between and among species. In addition, all of these stories involve dramatic circumstances, i.e., avoiding starvation and establishing long term ecological relationships. The drama may seem unrealistic, but the relationships and resolutions are not. Corvids are recognized by Western science for their intelligence and complex behavioral repertoires (Heinrich 1999; Savage 1995). It is important to recognize that Native peoples were very consistent in identifying species with complex social behavior and ecological significance as major figures within their oral traditions.

The values these stories teach are not simple lessons, as in Aesop’s Fables, but they demonstrate connection, respect, and how to live properly in a world filled with nonhuman beings. These stories function in a metaphorical fashion, in that the dramatic settings represent a way of both serving as mnemonic devices, while encouraging their recipients to be respectful and to consider the bird species featured as important individuals with great skills. Marshall (1995:8) states:

The first peoples...understood that they had a power to understand...Likewise they knew that other species (also) had abilities that (made them unique compared to other life forms)...In other words, the first peoples did not see their ability to reason or understand as anything that made them superior; instead it was simply their key to survival.

They used this understanding of the skills of nonhumans to craft the stories that made up their oral traditions, as a way to code knowledge and stimulate memory in ways that aided in their survival (Kelly 2017).

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References Cited
Anderson, E. N. 1996. Ecologies of the Heart: Emotion, Belief, and the Environment. Oxford University Press, New York.
Ballantyne, A. 1991. Wisakiyjak and the New World. P.G. Downres, trans. Penumbra Press, Waterloo, Canada.
Ballinger, F. 2004. Living Sideways: Tricksters in American Indian Oral Traditions. University of Oklahoma Press, Norman, OK.
Basso, K. 1996. Wisdom Sits in Places. University of New Mexico Press, Albuquerque, NM.
Bright, W. 1993. A Coyote Reader. University of California Press, Berkeley, CA.
Brightman, R. 1993. Grateful Prey: Rock Cree Human-Animal Relationships. University of California Press, Berkeley, CA.
Brown, A. K. 1993. Looking Through the Glass Darkly: The Editorialized Mourning Dove. In New Voices in Native American Literary Criticism, edited by Arnold Krupat, pp. 274–290. Smithsonian Institution Press, Washington, D.C.
Cordova, V. F. 2007. How It Is: The Native American Philosophy of V.F. Cordova, edited by K. D. Moore, K. Peters, T. Jojola, and A. Lacy. University of Arizona Press, Tucson, AZ.
Deloria, V. Jr. 1992. The Spatial Problem of History. In God is Red, edited by V. Deloria Jr., pp. 114–134. North American Press, Golden, CO.
Fisher, T. G., D. G. Smith, and J. T. Andrews. 2002. Preboreal Oscillation Caused by a Glacial Lake Agassiz flood. Quaternary Science Reviews. 21:873–78. DOI:10.1016/S0277-3791(01)00148-2.
Fogg, B. R., N. Hernandez, and R. Pierotti. 2015. Relationships between Indigenous American Peoples and Wolves 1: Wolves as Teachers and Guides. Journal of Ethnobiology 35:262–285.
Goble, P. 1991. *The Great Race*. Aladdin, Division of Simon and Schuster, New York.

Gould, S. J. 2003. *The Hedgehog, the Fox, and the Magister’s Pox*. Harmony Books, New York.

Grinnell, G. B. 1926. *By Cheyenne Campfires*. Yale University Press, New Haven, CT.

Heinrich, B. 1999. *The Mind of the Raven: Investigations and Adventures with Wolf-Birds*. Harper Collins, New York.

Hyde, L. 1998. *Trickster Makes the World: Mischief, Myth, and Art*. North Point Press, New York.

Kelly, L. 2017. *The Memory Code: The Secrets of Stonehenge, Easter Island, and Other Ancient Monuments*. Pegasus Books, New York.

Krech, S., III. 1999. *The Ecological Indian: Myth and History*. W.W. Norton and Co., New York.

Lopez, B. 1990. *Crow and Weasel*. North Point Press, San Francisco, CA.

Marshall, J. III. 1995. *Voices in the Wind*. In *On Behalf of the Wolf and the First Peoples*, pp. 133–152. Red Crane Books, Santa Fe, NM.

Mourning Dove. 1990. *Coyote Stories*. Bison Books, University of Nebraska Press, Lincoln, NE.

Nelson, R. 1983. *Make Prayers to the Raven*. University of Chicago Press, Chicago, IL.

Nieh, J., and C. Nieh. 2010. Mourning Dove (Christine Quintasket). [web page]. Available at: http://www.historylink.org/index.cfm?DisplayPage=output.cfm&file_id=9512. Accessed on August 14, 2019.

Olkowicz, S., M. Kocourek, R. K. Lučan, M. Porteš, W. T. Fitch, S. Herculano-Houzel, and P. Němec. 2016. *Birds Have Primate-Like Numbers of Neurons in the Forebrain*. *PNAS* 113:7255–7260. DOI:10.1073/pnas.1517131113.

Ong, W. J. 2002. *Orality and Literacy: The Technologizing of the Word*, 2nd edition. Routledge, New York.

Pierotti, R. 2011. *Indigenous Knowledge, Ecology and Evolutionary Biology*. Routledge, New York.

Pierotti, R., and B. Fogg. 2017. *The First Domestication: How Wolves and Humans Co-evolved*. Yale University Press, New Haven, CT.

Ramsey, J. 1977. *Coyote was Going There: Indian literature of the Oregon Country*. University of Washington Press, Seattle, WA.

Savage, C. 1995. *Bird Brains: The Intelligence of Crows, Ravens, Magpies, and Jays*. Sierra Club Books, San Francisco, CA.

Sinclair, N. 2016. Anishinaabe Stories about the Mischievous, Wise Gray Jay. Canadian Geographic. [web page]. Available at: https://www.canadiangeographic.ca/article/anishinaabe-stories-about-mischievious-wise-gray-jay. Accessed on August 14, 2019.

Treaty6 Productions. 2018. Wisakedjak and The First Mother STORYHIVE Pitch [Video]. November 30, 2018. Available at: https://www.youtube.com/watch?v=iDNR8L3xv0Q. Accessed on April 24, 2020.

Vansina, J. 1985. *Oral Tradition as History*. University of Wisconsin Press, Madison, WI.