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Abstract

We highlight the significance of process, event, and context of human practice in Indigenous Creation traditions to integrate Blackfoot “Napi” origin stories with environmental, geological, and archaeological information pertaining to the peopling of the Northwestern Plains, where the northern Rocky Mountain Front may have played a prominent role. First, we discuss the potential and limitations of origin stories generally, and Napi stories specifically, for complementing the fragmentary records of early human presence in the Blackfoot homeland. Second, we demonstrate the intimate

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connection among processes, events, place-making practices, and stories. Last, we aim to expand multivocality in the interpretation of the deep past through an archaeological practice that considers Indigenous philosophies and stories to be as valid as non-Indigenous ones.

Keywords

Blackfoot, plains, oral tradition, memory work, paleolandscape, place-making

Stories are the defining characteristic of a people belonging to a place. (Little Bear, n.d.)

The colonial and American history of the Northwestern Plains Blackfoot is as rich and colorful as their deep past is mysterious and stark. For more than two centuries, European sojourners recorded in detail historic Blackfoot culture and society (e.g., Ewers, 1958; Grinnell, 1962; McClintock, 1999; Schultz, 1962, 2002; Uhlenbeck, 1911). To a lesser extent, archaeologists endeavored to connect both trajectories with some success in the late precontact period (e.g. Kehoe, 1960). Limitations largely stem from applying the direct historical approach (Forbis, 1963) to the interpretation of an archaeological record that is difficult to accurately date and largely devoid of artifacts resembling those described and photographed by Western ethnographers. Yet the Blackfoot assert long-term occupation of the region.

Blackfoot oral tradition is an extensive and yet untapped source of information about the First People (*Matumataapi* in Blackfoot) and subsequent ancestors of the three geopolitical divisions of the Blackfoot Confederacy (*Kainai* or Blood, *Siksika* or Blackfoot Proper, and *Piikani* or Blackfeet and Peigan) that can potentially inform, expand, and complement fragmentary archaeological knowledge of the deep past. Unfortunately, oral traditions of Blackfoot origins and ethnogenesis were often misinterpreted or dismissed just as were those recorded from other groups (Grinnell, 1892; Lowie, 1915). Yet, their vast aboriginal territory in southern Alberta, western Saskatchewan, and Montana encompasses thousands of archaeological sites (Bethke, 2017) and hundreds of Blackfoot place names (Lanoë, 2019), all of which attest to the depth and extent of their emplacement, that is, the permanent grounding of experiential knowledge in the land.

The Blackfoot possess four suites of stories. Although their narratives cannot be ordered in a Western-style chronology, origin stories roughly speak of a time when the *Matumataapi* experienced a fast-changing world and, from Creator Old Man (Napi), learned how to live in it (Dempsey, 2018). The Star stories describe interactions between humans and Sky Beings to obtain knowledge, objects, and social ordering principles that became the foundation of Blackfoot identity (Hernandez, 1999). The *Kutoyis* or Blood Clot epic narrates a culture hero's quest to rid the Blackfoot of their enemies (Grinnell, 1962). And then, there are myriad individual

accounts of power and knowledge acquisition and interactions among humans, nonhuman persons, and the material world (Wissler and Duvall, 1908). Contained in this archive are environmental referents of the Blackfoot homeland on the northern Rocky Mountain Front (hereafter, the Front) and adjacent Plains. These referents speak of the ancient and intimate relationship between oral tradition and emplacement.

In this article we apply a multivocal framework (Cipolla et al., 2019; Colwell, 2017: 79) to integrate Blackfoot origin stories with environmental, geological, and archaeological information pertaining to the peopling of the Northwestern Plains, where the Front may have played a prominent role. The goals are, first, to discuss the potential and limitations of origin stories generally, and Napi stories specifically, for complementing the fragmentary record of early human presence in the Blackfoot homeland. Second, to demonstrate the intimate connection among processes, events, places, and stories. And, third, to contribute to decolonizing an archaeological practice so that it may consider Indigenous philosophies and stories to be as valid as non-Indigenous ones.

Creation

Creation did not just happen before Christ; Creation happens all the time... (John Murray, 2004, personal communication)

Contrary to creationist stories of Old World religions, Native Americans conceive of Creation as emerging anew not only from earth, ice, water, or ash (e.g., Echo-Hawk, 2000, 2018; Rooth, 1957), but also from danger, hunger, disease, massacre, and the iniquities of reservation life. The creation and recreation of nature, self, and society are explained by their metaphysics, cosmology, and language. Little Bear and Heavy Head (2004: 38) note that the key to understanding Blackfoot metaphysics is embedded in the “anatomy” of Blackfoot words. Their perception of the world, as encoded in this native language, is not “a fragmented landscape of solids within solids, acting as agents of change in the world but rather, [a] fluid event manifestation, arising from and returning into a holistic state of constant flux.” Within this flux, reciprocal bonds among humans and the universe are created and recreated, knowledge flows through formal and informal channels, and a sense of harmony and order eventually rises from the eternal uncertainty of the flux.

Thus, Creation in Indigenous worldviews should not be conflated with creationist views of a primordial Eden that assume a unidirectional history of humanity. Rather, it should be viewed as a point of departure from old to new, from dark to light, from broken to whole. In the Blackfoot case, Napi stories speak of the *Matumataapi* emergence onto an unknown but potentially fertile landscape.

Process, event, and context in Napi Creation stories

The Blackfoot as well as most Native Americans speak of *Time Immemorial* as their point of origin or emergence—a time so long past as to be indefinite in history or tradition. From a legal perspective, it is also a time antedating a period fixed as the basis for a custom or right. Native Americans bear the burden of proof of their antiquity in the homeland; their vision of Creation or emergence in it has been routinely sidelined by scientific evidence (Deloria Jr., 1992; Little Bear, 2001). Yet, each Creation story, fantastical or comical as it may be, conveys a process of landscape evolution, describes a creative event, and provides a cultural context from which to scrutinize the true significance of time immemorial.

A major limitation of attempts to integrate Indigenous narratives with written history (let alone ancient history) is the emphasis placed upon ascertaining their historical “truths” (Echo-Hawk, 2000; Whiteley, 2002). A classic example of this problem is the debate about the connection between African oral narratives and written records (Vansina, 1965, 1985; cf. Henige, 2009). Critics often point out that Creation stories are timeless and unchanging, or that archaeologists who embrace them are not doing science (e.g. Mason, 2006). Despite such controversies, North American archaeologists have successfully integrated oral traditions into projects addressing the last 2,000 years (e.g. Bernardini, 2005; Martindale, 2006; Moodie et al., 1992). It is far more difficult to integrate philosophy and traditions into deep-time reconstructions (but see Echo-Hawk, 2018; Sanger, in press; Yellowhorn, 2019), unless one comes to realize that contexts and events to which ancient narratives refer may have left recognizable landmarks, objects, and environmental records.

Origin stories do not speak of ancient truths in the creationist or historical sense, but of interwoven processes, events, and contexts of practice memorable enough to inscribe and retell over multiple generations (Echo-Hawk, 2000: 272). They speak of people on the land: their lived experiences, dreams and visions, and, ultimately, their emplacement (Basso, 1996; Ortiz, 1969). We employ the terms “place” and “emplacement” in the sense of “locality” as defined by Burkhart (2019: xvi): “Locality is more than just the personalized human voicing of meaning. Locality is the way the human voice as the conveyer of human meaning arises from the voice of the land (knowing-from-the-land or meaning-from-the-land) . . .” Taken together, Blackfoot narratives lend process to multiple contexts and events by providing a clear sense of constant becoming at various scales, whereas Napi stories specifically bring into perspective a keen awareness of local and regional environments, as well as human inventions.

Time, memory, and place

In shifting from temporal concepts to spatial terms, we find that a revelation is not so much the period of time in which it occurs as the place it may occur. Revelation becomes a particular experience at a particular place, no universal truth emerging but

an awareness arising that certain places have a qualitative holiness over and above other places. The universality of truth then becomes the relevance of the experience for a community of people, not its continual adjustment to evolving scientific and philosophical conceptions of the universe. (Deloria Jr., 1973: 80)

Native Americans use time immemorial to assert their right-of-being in their territory since a time so long past it is beyond the reach of science. While they consider this right-of-being to predate the end of the Ice Age, science at this time does not catch up with their traditions of a much older origin in the New World. This limitation notwithstanding, their earliest (known to science) ancestors on the continent are of great antiquity. One would expect that origin stories might encode the earliest and most memorable events, and contexts of human practice.

Paradoxically, space is the most important dimension in the oral reckoning of time. Contrary to the Western sense that time moves inexorably from past to future, Indigenous cultures often have alternative senses of time (Nabokov, 2002: 14). Not surprisingly, seasonally mobile hunters of the Northwestern Plains reckoned time as a cycle that brought about the first thunder as wildflowers bloomed and constellations appeared or disappeared on the horizon (Yellowhorn, 2019). The cycle continued with the move to summer ceremonial grounds, ending with snowfall and the return of bison herds and hunters to the sheltered valleys of the Front and foothills. Moving in a spiral rather than a circle, each cycle brings new knowledge and higher enlightenment, but no sense of inexorability. Cycles might be punctuated by upheaval and change (e.g. a volcanic eruption), but eventually they return with, perhaps, new cultural and social practices (e.g. Moodie et al., 1992: 156).

Among the Blackfoot, the most powerful mnemonic and calendric devices are the sacred bundles and, more recently, the winter counts (Raczka, 2016). Bundling, or the ability to bring together the powers of tangible and intangible things and beings to achieve a particular social or personal goal, is the principal instrument of knowledge keeping (Lokensgard, 2010; Zedeño, 2008). As the oldest and most venerable of Blackfoot institutions, the Beaver Bundle contains all the elements of the Blackfoot universe, going back to Creation, continuing through the present, and into the future (Bastien, 2004; Lokensgard, 2010). Among Beaver Bundle holders, for example, there is a clear sense that certain animal persons in the bundle (otter, beaver, loon, owl, bison, and dog) are older than others because knowledge about their engagement with people and the universe can, in a sacred way, be ordered in time (Carol Murray, 2015, personal communication). With each bundle ceremony, society renews the cycle and its ancestral and spiritual bonds.

At a different scale, human time is the way in which biological and cyclical forms of experiencing and measuring time become integrated into daily practice to reinforce and expand knowledge. Human time refers to the multigenerational nature of social interactions, practices, and events that occur within an individual's life (Van Dyke, 2008; Zedeño, 2018). The interacting group acts as a repository of language, genes, liturgy, technology, social mores, and the geography of cycles that, together, lend a greater temporal depth to contemporaneity than is generally understood by

those who measure it using Western parameters exclusively. Human time allows for expansive memory work and oral reckoning acuity. Yet none of the knowledge encoded in Indigenous oral history would persist today without emplacement: historic memory lives because it is firmly and purposefully anchored in places where events and cultural practices occurred, and in objects. Henry (2017: 189) writes:

Memories become imprinted onto objects, providing the ability for objects to embody past human experiences. Indeed, memory and materiality cooperate to play crucial roles in organizing the creation, maintenance, and transformation of social relationships between places, people, things, and the past. . . . I argue that understanding the creation and consequences of human and non-human relationships within these societies must take into account the role memory serves to arrange and rearrange connections among people, places, materials, and social action.

The archaeological perspective aptly summarized by Henry contrasts with earlier works on oral tradition as history (Vansina, 1985) or metaphor/symbol (Levi-Strauss, 1978) in that it explicitly incorporates the materiality of remembering through object and place (e.g., Meskell, 2003; Oetelaar, 2016). Scholars refer to this process as “memory work” (Mills and Walker, 2008: 4) because remembering requires that individuals engage in materially mediated social practices in order to make memories from experience, recall them, and transfer them to others. Memory work is discerning: certain experiences are best forgotten or stored while others are crucial to survival and cultural reproduction.

The production and transmission of memories entail concerted and reinforcing place-making practices (Basso, 1996; Van Dyke, 2008). An Indigenous priority on space and place helps to explain why present peoples can and do experientially connect to ancient landscapes: time is not a limiting factor in how memory work facilitates place-bound interactions with spirits, ancestors, and one another. Connecting origin stories to the places and objects that embody them can animate archaeological and paleoenvironmental localities where the ancestors’ experiences of the deep past may be more thoroughly apprehended in the present (Hansford and Vest, 2005: 577). Napi Creation stories speak of the *Matumataapi*’s encounters with paleolandscapes and the learning process on how to live in them. These may be understood from the perspective of Blackfoot philosophy and practice as well as Western science.

Napi creation stories

Language and stories embody the ontological view, values, traditions and customs and as such continuously orient and instruct community members. (Crop Eared Wolf, 2007: 15)

While Blackfoot oral traditions as a whole are tied to myriad objects, resources, and places including the sky and the underground, Napi stories specifically are

encoded in geological, paleontological, and archaeological localities as well as in ancient technologies. Most of these mnemonic devices can be experienced in the homeland or within the Northwestern Plains. Napi stories come in multiple versions gathered by Western writers since early European contact (Dempsey, 2018: 13), but mostly in the late 19th and early 20th centuries (Dempsey, 2018: 20). These versions provide singular details, for example, the geography of each Blackfoot division within the territory, but generally preserve the root structure of each story. Just as Bowers (2004) noted that, for a Mandan story to be true, it must have many versions, Wissler and Duvall (1908: 5) wrote of the Blackfoot:

Myths are told by a few individuals, who take pride in their ability and knowledge, and usually impress their own individuality upon the form of the narrative. Thus it seems equally probable that the various versions represent individual contributions, and, in a certain sense, are the ownership-marks of the narrators. Once when discussing this matter with a Blood [Kainai] Indian, the venerable old man pulled up a common ragweed, saying, "The parts of this weed all branch off from the stem. They go different ways, but all come from the same root." So it is with the different versions of a myth.

Variation in singular stories augments rather than detracts from credibility of narrated events—the more versions a story may have, the greater its age and impact on society (Nabokov, 2002). Ancient oral traditions survive multiple generations because their root encompasses material contexts and events periodically enriched with new experiences, and thus they are recalled to explicate the present and plan for the future. While Napi Creation stories are repositories of broadly shared deep-time experiences, their contexts and mores remain alive and relevant to the living community.

An important factor in the reckoning of Blackfoot traditions is the fact that they are learned through open and closed scaffolds. They are told to children in different versions owned by individuals or families (LaPier, 2017; Mabel Running Fisher, 2020, personal communication) but the rights to share these stories' sacred meanings belong to initiated members of ceremonial sodalities, such as the Horn Society (Allan Pard, 2015, personal communication). Past processes, events, and contexts in the Blackfoot trajectory were handed down through dreams, visions, songs, stories, ceremonies, and daily practices attached to named places (Lanoë, 2019; Yellowhorn, 2019).

We suggest that the question *What are the earliest events recorded in Blackfoot memory?* may be answered through the correlation of Napi stories with the archaeological record and the paleolandscape.

Who is Napi?

Among most Native North Americans the creative force that animates the world takes on two earthly forms: the Trickster (e.g. Old Man Coyote) and the

Transformer, or He who creates the world and recreates it after a series of shattering events (Deloria Jr., 1973: 17–31). Often, both forms are embodied in one person, as in the case of Napi. Napi is a sexually charged male, either the Sun's (*Natosi*) brother or his human incarnation. He and his companion (a dog, fox, wolf, or coyote)¹ are Sky Beings. Through his interactions with humans and animals one can trace the evolution of Napi the Transformer into Napi the Trickster (Wissler and Duvall, 1908: 9). Napi is not venerated as a god given his propensity to commit crimes. Rather, his misfortunes are to be celebrated through humor (Dempsey, 2018: 2).

Narratives of Napi the Trickster are comical, embarrassing, even brutal tales of his crudeness toward others; they are fables meant to teach and reinforce social mores. Narratives of Napi the Transformer, on the other hand, are explanations of the evolution of the Blackfoot world. Here we focus specifically on Napi's creative enterprise, whether as Transformer or Trickster, to highlight the process of emplacement in memory work. Storytellers order Napi stories to make a point or highlight significant places and resources, and they tell them from their position on the landscape. We have ordered them according to processes and events in the paleolandscape to illustrate how awareness of deep time is emplaced on the geography of the Front (Figure 1).

First Creation

Nothing resonates more with the evolution of the North American postglacial landscape as Creation stories do. Most of these begin with the "earth diver's myth" (Dundes, 1962) or the notion that the Creator made the world from a clump of earth rescued by the last of four animals (generally duck, otter, badger, and muskrat) he sent to dive into the waters of a great flood. As Echo-Hawk (2018: 29) and Raczka (2016: 7) note, narratives of emergence are likely distant memories of a dark, cold, icy world and the massive glacial lake outbursts at the end of the Ice Age. Although the Blackfoot also narrate "The Flooding of the Earth" (Hale, 1885: 224), their "genesis" begins on land rather than water. Some versions identify named landforms Napi crossed in his creative journey (e.g. Dempsey, 2018). As recorded by Grinnell (1962: 15):

[Napi] came from the south, travelling north, making animals and birds as he passed along. He made the mountains, prairies, timber, and brush first. So he went along, travelling northward, making things as he went, putting rivers here and there and falls on them, putting red paint here and there in the ground, —fixing up the world as we see it to-day. He made the Milk River (the Teton) and crossed it, and, being tired, went up on a little hill and lay down to rest. As he lay on his back, stretched out on the ground, with arms extended, he marked himself out with stones, —the shape of his body, head, legs, arms, and everything. There you can see those rocks to-day. . . .

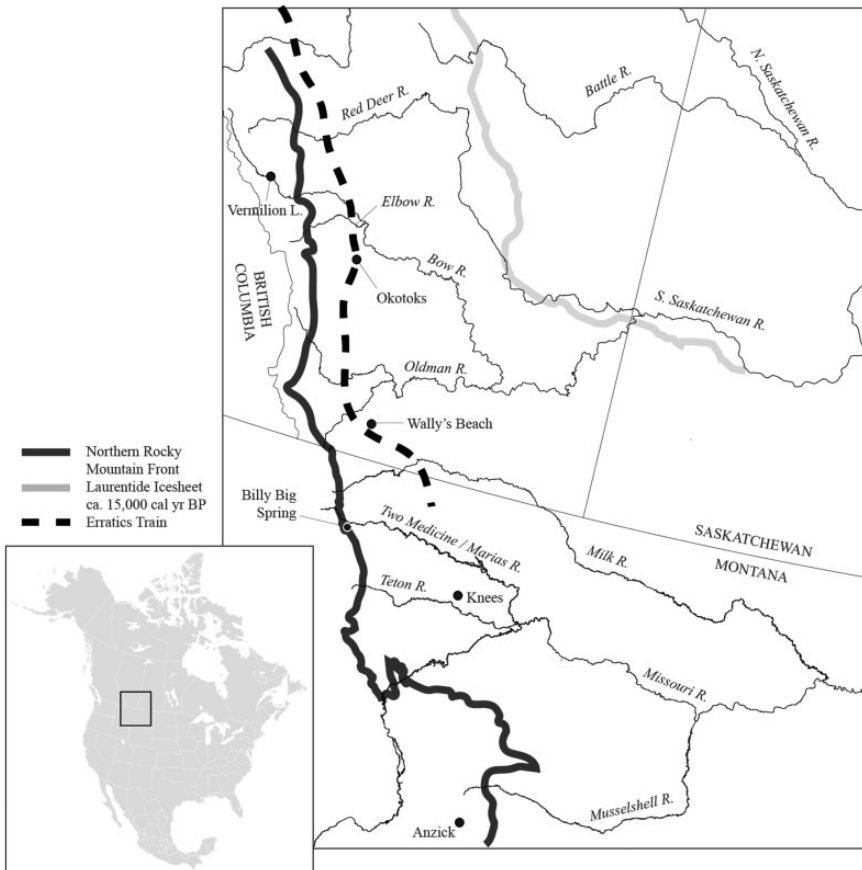


Figure 1. Paleolandscape localities mentioned in the article.

This abbreviated story has two environmental referents. First, Napi's journey from south to north while he created the world recalls the slow process of revegetation and faunal repopulation at the end of the Ice Age, when forest and grassland recovery began in the south and advanced northward, in turn attracting a diverse fauna, from insects and waterfowl to aquatic mammals and megafauna (Dyke, 2004). Along the formerly glaciated part of the Front there is a recovery time lag of up to 2,000 years; the south end revegetated after ca. 14,000 cal BP whereas forests farther to the north took much longer to develop (Lanoë et al., 2021). This story potentially carries in it a sense of natural renewal of the paleolandscape.

Second, the story points to the geography embodied in Napi, which signifies the extent of the Blackfoot homeland. The ancestral Blackfoot memorialized Napi's resting places with anthropomorphic boulder effigies built on prominent

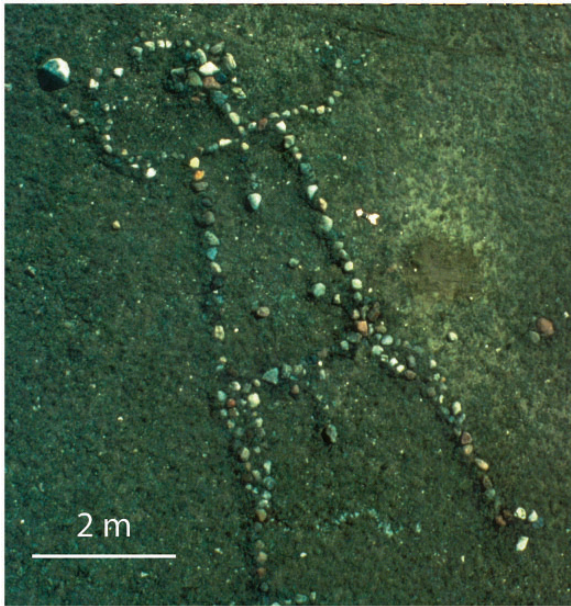


Figure 2. Napi effigy at Cabri Lake, Saskatchewan. Adapted from Brace (2005: cover). Courtesy the Saskatchewan Archaeological Society.

landforms (Figure 2; Brace, 2005; Vickers and Peck, 2009), though the one between the Knees and the Teton River (Montana) referenced in this story has probably been lost to farming.

Red paint

Without red paint, we wouldn't exist. (John Murray, 2004, personal communication)

During the First Creation Napi makes paint pigments and this is a foundational link between the paleolandscape and the humans Napi later creates. Just as Grinnell recorded the origin of red paint from Piikani storytellers, so did Rev Wilson (1890–1897) from the Kainai:

[Napi] was wounded and bled as he came, wherever this blood fell there is found to this day – red earth used by Indians as paint, in some places there is found white earth, which was caused by matter flowing from the wounds when in a bad state.

Red paint, a nearly universal sacred substance, is closely associated with the early peopling of North America. Roper (1987) documented the pervasive use of red

paint in human burials and objects in the Plains. Burials such as the Anzick Child in Montana (Lahren and Bonnicksen, 1974) and the Upward Sun River children in Alaska (Potter et al., 2014: 17061) are associated with red-painted projectile points, bone rods, and/or bifaces. More recently, early Paleoindian points were discovered at the Powars II red ocher quarry in Wyoming. The points include the classic Clovis style common to the east and south of the Front and “stubbies” or short fluted and unfluted points generally found farther to the north (Frison et al., 2018: 5). These styles, in turn, correlate with widely distributed high-quality stone quarries and local raw materials such as glacial cobbles, respectively. This finding demonstrates a strong connection between early Paleoindian ceremonialism in the Northwestern Plains and red ocher. Frison and colleagues interpreted this finding as a series of offerings to the quarry.

The Powars II discovery underscores the sacred character of red paint and explains its centrality for human survival: red paint is not only healing but also has the power to create, consecrate, and transform everything and everyone it touches (Zedeño, 2009). The Blackfoot have known, and still use, pigments of all colors and many that produce red paint including ferrous oxides, manganese oxide, and mercury sulfide or cinnabar. In their view, not all paints are created equal and a few are only known to the initiated. The rights to gather, prepare, and use paints of all colors are strictly guarded and ceremonially transferred (McClintock, 1999: 215). Piikani religious leaders share a distant memory of journeys to Wyoming to collect valuable paints (John Murray, 2006, personal communication).

The Foothills Erratics Train

Extending along the Front, a linear scatter of erratic boulders, known as the Foothills Erratics Train, marks the coalescence of the ice sheets. Sometime near the end of the Pleistocene a massive rockfall took place in the upper reaches of the Athabasca River Valley as the side of a mountain dislodged and fell on top of the valley glacier. Millions of tons of beige-pink Gog Group quartzite rode eastward atop a narrow valley glacier that butted up against the southwest-moving massive continental ice sheet. As the ice melted, the Gog material was dropped in a north-south distribution as far as Montana (Brink, 2014: 175). Cosmogenic dating of erratic boulders places the age of the train between 23,000-10,000 cal BP (Jackson et al., 2011).

The origin of the Foothills Erratics, and specifically the very large erratic near Okotoks, Alberta, (Figure 3) is encapsulated in the story of Napi and the Rolling Rock:

Once when Old Man was travelling about and felt tired, he sat down on a rock to rest. After he was rested he started on his way, and because the sun was hot he threw his robe over the rock and said to it, “Here, I give you my robe because you are poor and have let me rest on you. Keep it always.”

He had not gone far when it began to rain, and meeting a coyote, he said to him, “Little brother, run back to that rock and ask him to lend me his robe. We will cover ourselves with it and keep dry.”

The coyote ran back to the rock, but presently returned without the robe.

“Where is the robe?” asked Old Man.

“Why,” said the coyote, “the rock said that you had given him the robe and he was going to keep it.”

This made Old Man angry, and he went back to the rock and snatched the robe off it . . .

Pretty soon they heard a loud, rumbling noise, and Old Man said to the coyote, “Little brother, go up on the hill and see what that noise is.”

The coyote went off, but presently he came back, running as hard as he could, saying, “Run, run, the big rock is coming.” . . . The rock was gaining on him all the time. . . . [A]nimals came to help him, but could not stop the rock; it was now close to Old Man, so close that it began to hit his heels. He was just going to give up when he saw circling over his head a flock of night-hawks.

“Oh, my little brothers,” he cried, “help me; I am almost dead.” The bull bats flew down one after another against the rock, and every time one of them hit it he chipped off a piece, and at last one hit it fair in the middle and broke it into two pieces. . . . (Grinnell, 1915: 109)

This is perhaps the most important Napi story for linking the Matumaatapi to the Blackfoot homeland: erratics from this geological formation occur only along the foothills of the Front. Many other stories situated later in the epic adventures of Blackfoot culture heroes and the practices of historic and contemporary Blackfoot are also associated with erratics. For example, the Okotoks erratic has a series of rock art panels that have been added through time (Brink 2014). In the past, mourners cut a finger bone and placed it on erratics. Today, it is common to find tobacco or a dollar bill left as offerings.

Glaciated landforms

The Front, known to the Blackfoot as *Soyistakis* or “shore of the mountains” (Allan Pard, 2014, personal communication), offers a dramatic and deeply scarred glaciated topography of large moraines and trough valleys formed by valley glaciers. The Blackfoot attribute this landscape to the footprints of Heavy Runner,



Figure 3. Okotoks locality, Alberta.

Keeper of the Buffalo. During a hunting trip to the Milk River Ridge (Montana) in the 1880s, Schultz (2002: 197) recorded this story:

Away back in ancient times, after Old Man had made buffalo and they had increased and covered the plains, they had great desire to wander westward and see what might be on the other side of the great mountains. The people—the Blackfeet—learning of this were greatly distressed. . . . What to do about it they had no idea, so they called upon Old Man for help.

Said he: “I made the buffalo to be plains animals, and here upon these plains they shall remain . . . So, do not worry. . . .

The people went home. . . . They wondered how Old Man was keeping them [east]. They soon learned. In a vision it was revealed to an old medicine man that a huge god, a man of enormous stature, was patrolling the mountains from far south to the everlasting snow of the north, with a club driving the buffalo back eastward as fast as they came anywhere near the summit of the range.

Although rare, well-preserved Paleoindian sites may be found in association with certain glaciated landforms. Ongoing research at the multicomponent Billy Big Spring site (Montana), for example, indicates that kettles or shallow ponds

formed by melting ice chunks were particularly attractive to both hunters and game at that time. Located on a high ridge overlooking the upper Two Medicine River Valley, the locality offered protection from the elements, a commanding view of the hunting ground, and a productive aquifer surrounded by edible plants, tree stands, and grassland (Lanoë et al., 2021). Over 12,000 years hunters returned to the site to camp, hunt, and take refuge from harsh climatic episodes and possibly enemies.

Glacial lakes

There is no modern analog to the dramatic natural processes that occurred at the end of the last glaciation, when melting glaciers formed enormous lakes, landforms rebounded once freed from the weight of the ice, and a new landscape thus emerged. Not surprisingly, the melting glaciers were memorialized across North America and beyond. Glaciation left in the Blackfoot homeland a unique topography. Geological findings indicate that ice sheets retreated and advanced several times during the Late Pleistocene; the glacial advances that blanketed the region are known collectively as the Wisconsin and/or Pinedale (approx. last 100,000 years). When glaciers retreated, the ice funneled into valleys to form rivers of ice known as valley glaciers. Within the Blackfoot territory one of the main valley glaciers was in the Bow River (Belyea, 1960: 29)—a prominent, storied feature of the Blackfoot landscape for the past 12,000 years. Another storied feature, the valley of Oldman River, had an extensive glacier lobe (Jackson et al., 2011).

Large glacial lakes formed by water impoundment along the receding icesheet and montane glacier lobes. Some of them spilled in catastrophic outbursts, carving deep channels, for instance, the Battle and North Saskatchewan Rivers formed from the spill waters of Glacial Lake Edmonton (Huck and Whiteway, 1998). Other lakes occupied substantial portions of the Blackfoot homeland (Alley and Harris, 1974: 1220). The myriad of trough lakes and kettle lakes that now pepper it are also repositories of sacred knowledge and gifts the ancestors received from the Water People, most notably the Beaver Bundle (McClintock, 1999: 133).

Blackfoot historian Raczka (2016: 5–7) was among the few scholars who, after Duvall (1911 [1908]: 616), acknowledged that the Flooding of the Earth is not the first Blackfoot Creation story. He inquired further and learned the events leading to the Flooding of the Earth and Napi's recreation of it:

Here then is the story of the flooding of the first earth while Napi [Old Man] was traveling with his friend the wolf.

One morning they awoke, and Old Man said: “Oh my young brother I have had a bad dream. Hereafter, when you chase anything, if it jumps a stream, you must not follow it. Even if it is a little spring . . .”

Now one day the wolf was chasing a moose, and it ran on an island. The stream about it was very small; so the wolf thought: “This is such a small stream that I must jump it . . .” As soon as he entered the brush, a bear caught him for the island was the home of the chief bear [a Water Bear, one of the Underwater People] and his two brothers.

Napi waited for a long time for his wolf to return and grew very worried. He inquired among the animals and finally the kingfisher told him that “the Chief Bear and his brothers have killed your wolf and eaten the meat and thrown the fat into the river . . .”. Napi further found out from the kingfisher where the bears lived and, when they came out to play, he killed them. This part of the story was originally recorded by Grinnell (1962: 50–52) from Piikani elder White Calf. But Raczka (2016: 7) explains that the bears were Underwater People, and when they found out what happened they flooded the earth in revenge for the murder of their own.

The earliest known glacial lakeshore encampment in the Blackfoot homeland is located on a south-facing beach of the then receding Glacial Lake Vermillion in Banff National Park, Alberta. The lowest component of the site produced 5,000 stone artifacts and hundreds of bone fragments as well as a structural feature consisting of a circular arrangement of rocks, a post mold, and a hearth. No diagnostic points were found in situ, but fluted points were recovered nearby. The earliest component dates to ca. 13,000 cal BP, suggesting a Clovis or Folsom affiliation (Landals, 2008). Also in Banff, Lake Minnewanka just to the east of Lake Vermillion produced a Clovis point (not in situ) as well as the earliest known evidence of bighorn sheep hunting (Landals, 2008). The Blackfoot carried on this winter hunting tradition on the Front for millennia and into the historic period, as recorded by P Fidler in 1792 while wintering among the Piikani (Haig 1991).

Today, Blackfoot individuals remember the Great Flood:

In this dream I was an ancient, I felt very, very ancient. I was standing high up, with others in a cave. Looking down at the valley we could see the ice move. The ice was melting. We waited for a very long time until the water receded and was safe to come down. (Carol Murray, 2017, personal communication)

As Andy Blackwater explained (2018, personal communication), the Blackfoot can dream of the Ice Age; through individual dreams and wake-time *déjà-vu*, people are able to recollect the deep past by bonding to ancestral spirits from long ago.

The Ice-Free Corridor?

Archaeology in the Blackfoot homeland has great potential to reveal *Matumataapi* presence on the Front. The peopling of North America certainly was not a one-step process; on the contrary, archaeological and genetic findings suggest that ancestors of Native American and Asian groups lived in or near Beringia (Alaska and northeast Asia) in relative isolation from other groups for close to

8,000 years during the Last Glacial Maximum (Potter et al., 2017). Biogeographic barriers, such as the ice sheets and expanses of land with few resources, impeded movement into North America until 16,000-14,000 cal BP, when climate improved and the ice receded substantially, opening viable passages. One such passage from Beringia to unglaciated North America, known as the Ice-Free Corridor, went along the Front (Dawe and Kornfeld, 2017; Freeman, 2016). Wissler and Duvall (1908: 22) recorded one version of a migration led by Napi that recalls the dispersal of the *Matumataapi* to and from a place far to the north, mirroring archaeological models of dispersal of the First Americans:

The first Indians were on the other side of the ocean [also big water and/or lake], and Old Man decided to lead them to a better place. So he brought them over the ice to the far north. When they were crossing the ice, the Sarcee [Tsuut'ina] were in the middle and there was a boy riding on a dog travois. As they were going along, this boy saw a horn of some animal sticking up through the ice. Now the boy wanted this horn, and began to cry. So his mother took an ax and cut it off. As she did so, the ice gave way and only those on this side of the place where the horn was will ever get here [where the modern Blood Reserve and the Wally's Beach Paleoindian site are located]. . . .

(When crossing the ice, only about thirty lodges succeeded in getting across, and among these were the representatives of all the tribes now in this country. At that time the Blackfoot were just one tribe.)

This version of the migration story has geographic and social referents. While it is true that ice forms and melts with the seasons, this particular memory points to an encounter with a primordial animal that emerged from the ice, permanent separation from a part of the traveling group and some of their dogs, and awareness of others who later dispersed beyond the Front. Many aspects of the continent's peopling are arguable because, as new evidence emerges, scientists revise, discard, resurrect, or develop new models. This is why Napi Creation stories are so important, because they lend contexts of human practice to the paleolandscape.

Extinct fauna

In the beginning, ancient bison and other animals were cannibals. We had to learn how to kill them. (Francis First Charger, 2004, personal communication)

Marine and terrestrial fossils are common in the Blackfoot homeland and thus are deeply tied to oral tradition and ceremonialism. Although not all fossils are Pleistocene megafauna, the memory of living among powerful and dangerous animals of another time is reckoned today as one of the eras through which the *Matumataapi* lived shortly after Napi made humans near the Elbow River, Alberta. Grinnell (1962: 140) wrote:

In those days there were buffalo. Now the people had no arms, but those black animals with long beards were armed; and once, as the people were moving about, the buffalo saw them, and ran after them, and hooked them, and killed and ate them. One day, as the Maker of the people was travelling over the country, he saw some of his children, that he had made, lying dead, torn to pieces and partly eaten by the buffalo. When he saw this he was very sad. He said; “this will not do. I will change this. The people shall eat the buffalo”.

Napi then taught the people how to make weapons from black “flint” (black cherts and other black/gray raw materials are common in the region), surround these animals, and hunt them. Today, tribal elders acknowledge that the *Matumataapi*’s first encampment was located among extinct fauna.

The paleontological remains of the monstrous bison (*Bison antiquus*) that tormented the *Matumataapi* before they learned how to hunt them are scarce in Alberta. However, this was the most common large herbivore on the Plains during the Late Pleistocene, so future finds may augment the current specimen numbers. Remains of *Bison antiquus* were found at the Wally’s Beach site near the Blood Reserve in Alberta (McNeil et al., 2004). This very large bison species gradually diminished in size, leading to the modern Plains bison (*Bison bison*) after 12,000 cal BP (Hill et al., 2008), that is, when the *Matumataapi* were already emplaced in the Blackfoot homeland.

Notably, the Blackfoot acknowledge that an ancient species of horse once inhabited their land. In 2004, Piikani elder Florence Running Crane observed that “there were horses back then, we had horses but they were different horses than the ones we have now” (personal communication). The Wally’s Beach site provides evidence in support of her memory. The only evidence thus far of the *Matumataapi* hunting extinct camels or horses south of Alaska was found in direct association with stone tools (Kooyman et al., 2006). Dates of this archaeological component are among the earliest in North America—13,300 cal BP (Waters et al., 2015: 4263). Bones and prints of roughly contemporaneous fossils of other extinct or extirpated species including muskox, mammoth, caribou, and scimitar cat are also found at the site (Ewald et al., 2018; McNeil et al., 2004), thus confirming Blackfoot traditions of their interaction with powerful and dangerous animals.

Fossils of any age, which superficially may resemble megafauna, are part and parcel of many other Blackfoot stories, such as the adventures of Kutoyis.

Conclusion

I have come to realize that Napi is the environment... (Allan Pard, 2015, personal communication)

From ancient times to the present, the Blackfoot have reached into the past to organize the present and plan for the future. Napi Creation stories are the Blackfoot way of explaining dramatic landscape changes, memorable enough to survive untold generations. Such narratives attest to the power of an epistemology that, by integrating formal and informal learning scaffolds, preserves the root and core message of the experience while allowing storytellers to refresh lessons and perspectives gained from it. Whether their memories are buried in daily practice or formally inscribed in liturgy, the Blackfoot know they must remember in order to survive as a people. As John Murray (2021, personal communication) puts it, “I was told we live with time in such a way that the past, present and future are always in the here and now.”

When Creation stories are weighed without appeal to object and place, they appear as metaphors or symbols of the human experience. As illustrated in short excerpts of a small sample, Napi stories represent deeply held environmental knowledge. Alone, these stories seem whimsical and timeless, but their temporality takes on flesh once incorporated into the dynamics of local and regional landscapes and human inventions. From the intricacies of Napi’s creative enterprise a comprehensive picture of emplacement emerges; once the materiality of his stories fuses into the plot it becomes clear that Napi embodies both creative power and the evolutive potential of his Creation, wherein the biography of the homeland is also the biography of the Blackfoot.

Blackfoot memories complement and expand anthropological and scientific knowledge of the Northwestern Plains paleolandscape and its contexts of human practice. We provided examples of the dynamic character of ancestral Blackfoot Creation where there is a clear understanding of who the First People were and how they were recognized as the ancestors of all people in the continent. Although the only suite of oral narratives discussed here represent Napi’s creative enterprise, the clear distinction between early *Matumataapi* Creation and dispersal and ancestral Blackfoot ethnogenesis permeates the entire body of Blackfoot oral traditions; it reveals an uncanny understanding of the human trajectory from the end of the Ice Age through subsequent millennia when the ancestors had to negotiate natural and social challenges in order to survive as a people.

For archaeologists, a way to finding common ground with Indigenous narratives is to “listen” to them systematically and analytically to assess their potential for corroboration. Although integrating oral traditions into archaeological interpretation presents greater conceptual challenges to Paleoindian archaeologists than to those who work with more recent time periods, acknowledging the complementarity of science and tradition may lead to richer and broader understandings of the past. Furthermore, a commitment to decolonization and philosophical plurality in the explanation of deep time is essential for fostering meaningful collaboration and non-confrontational dialogue between Indigenous peoples and Western scientists.

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1. The heavenly origin of canids is explained in the Blackfoot Star Stories (Hernandez, 1999).

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