



ISSUE SEVENTEEN : FALL 2020
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RETHINKING WATER, PLACE & COMMUNITY

RELATIONALITY

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from multiple perspectives within and beyond the academy.

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GEOGRAPHIES

SKY WATCHERS, EARTH WATCHERS, AND GUARDIANS OF THE FORMER AND FUTURE GARDEN

By Jim Rock

In their 2016 article “Wakan Tipi and Indian Mounds Park: Reclaiming an Indigenous feminine sacred site,” Roxanne Gould and Jim Rock argue that “Like all Indigenous peoples, the Dakota relationship to place is core to their existence” (23). This relationship is multifaceted and needs to be explained in a manner that both takes time and requires simultaneous understanding of multiple perspectives. A central

tenet to Dakota thinking, per Gould and Rock, can be summarized and simplified “as above, so below”: we need to understand the heavens to understand the earth, and vice versa. These understandings come down through generations by stories told that concern place, birth, death, and the ceremonies that in many ways hold a culture together.



Image courtesy of Waziyatawin/Makoče Ikikčupi.

This Geographies column offers a window into this complex world.

-Patrick Nunnally, St Paul, MN

Oikonomos or Oikonomia (Greek, οἰκονομία, silent initial o) is an old world house guardian or today's economic/environmental steward for "rational use of the field resources" including slaves or the "rational economization of natural abundance." [i] Whereas here at Bdote, where the Wakpa Taŋka (Misi Ziibi) and Wakpa Mni Sota rivers join, thípi awáŋyaŋka (Dakota) means to watch over the thipi as to watch for approaching game, predators, or the threat of enemies.

So if Space and Turtle Island Mother Earth (Space&TIME) is our mutual Ultimate Thípi, then we must somehow "Ištásu thókhiyopñeunyanpi..." Basically, we trade eyeballs and tongues(k'a čeží) as more than two-legged relatives, and we learn from each other. As Earth is our thípi, we must all watch, live, work, and row together within the same wáta (canoe) circling through the ocean of spacetime. But it can also seem like the time to stop leaning thípi poles together with those whose individualized values are incompatible with our Mother's collaborative values. Systemic and personal acts of racism, aggression, and violence continue in the land O'MinNice.



Unktomi's Rainbow Tipi. Image courtesy of Jim Rock.



Unktomi. Image courtesy of Jim Rock.

Makoče Ikikčupi is a wonderful reparative justice project of Dakota land recovery for the return of our exiled relatives after 157 years away. See the [M.I. website](#).^[ii] See a five-minute explanation of our [vision](#).^[iii] Dr. Waziyatawiñ and her governing council, on which I serve, are building traditional earth lodges using Indigenous permaculture. Indeed, what is “perma-?” Yet even if we choose to live “off-grid” without electricity or light with dark skies on our 21 acres of non-reservation, yet original homeland, the state and local building and fire codes require certain infrastructure.

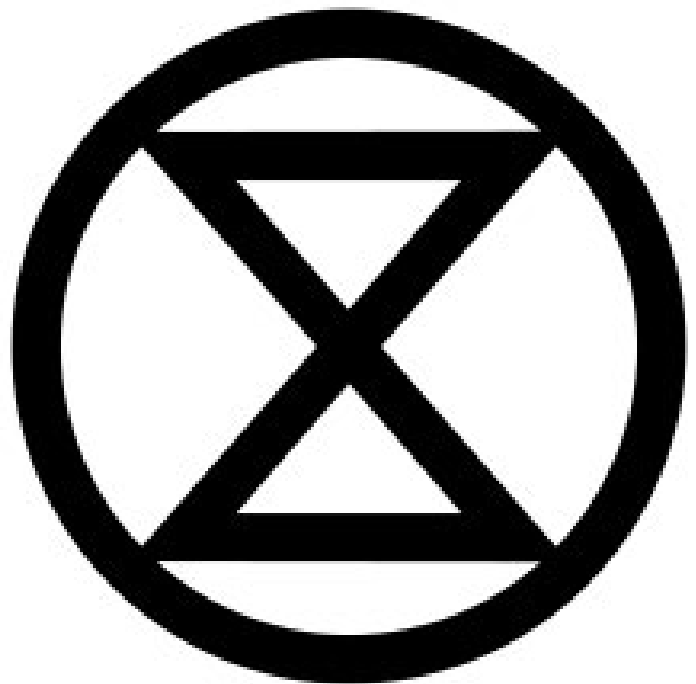
In September 2019, we received a cease and desist construction order after starting the first three lodges. The city came to the table with two attorneys and we came with two tobacco and prayer-loaded pipestone pipes, our ancient and highest law. Feeling the support and presence of our ancestors, we would now need to enlist Minnesota legislators to write, sponsor, agree, and vote on a new law in the only state with a divided floor like the National Congress. The separate, jacketed bills were SF4232 and HF4229. By February 2020, the city and the Minnesota tribes and other outstate tribes were in support.

It was looking quite possible for Indigenous people to legally live in sustainable ways to contribute to climate solutions until Covid-19 again stopped the vote and our lodges from this summer’s labor season. But should we have to ask our “great steward Euro-Father” for his benevolent permission to exist back on our own land? Waziyatawiñ’s (2008) book asks, “What does justice look like?”^[iv]

Yet some of us are still the descendants of the Tatan̄ka Oyate, the bison people. My Dakota father’s Yoda-like name was “[Bison Bull Black In Front Of Stand Not! BBBIFOSN](#)”

The bison was one of our keystone relatives who gave us life from the bison stars above to the earth prairies below. “Kapemni” is a powerful,

tipi-shaped, Sky-Earth mirror symbol of our life philosophy. But almost a decade ago, I saw Europeans waving flag and banner symbols with our Dakota kapemni symbol. Were these new allies waking up to our old ways? Around 2011, a UK street artist/activist, still only known as ESP, created a version of what we Dakotas would simply read as the kapemni. It has now developed the new meaning of an hourglass run out of time called the [Circle X symbol for extinction](#).



Extinction Symbol as Kapemni after Goldfrog ESP.

As above, so below. As we lose our constellational bison, turtle, elk, and other stars above to photoextinction by light pollution, we also lose the mirrored biological counterparts below to extinction by our daily and cumulative lifestyle choices. Now out of sight, mind, and memory to infinity...

Humans have feared what is out there beyond the campfire for millennia and until the first electric light bulb (streetlight in Cleveland, April 29, 1879), we had to burn combustibles (wood, whale oil, kerosene, natural gas) to light the



Earthlodge construction at Makoče Ikikčupi. Image courtesy of Jim Rock.

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night, unless we wished to be in the darkness beneath the countless stars. But now, 140 years later, two-thirds of the world's population never experience a truly dark sky. In the mid-1840s, Thoreau wrote, "I believe that men are generally still a little afraid of the dark, though the witches are all hung and Christianity and candles have been introduced."^[v]

Should our 1879 annual wintercount, buffalo-robe symbol have been a lightbulb? As the last few hundred of sixty million bison were being killed, this same year 1879 my great grandfather was born. Up to a decade later he was still seeking to gather any remaining bison chips to burn for heat and light on the prairie. A light can be relit with time and effort, but all the relative-life forms

extinguished on our watch during this Holocene-Anthropocene extinction cannot be re-animated. We are seeing loss of life 100 to 1,000 times higher than the natural rate as humans have become a "superpredator."^[vi]

What single painted symbol will we place on our wintercount spiral for 2020-21? Should it be a black ball of spikes for Covid-19? The first confirmed Minnesota case on March 1 was followed by a state of emergency declared March 13. This was the end of 2019 for us Dakotas. Our Dakota New Year came with the spring equinox and lock down. Should the symbol be a mask? Or should the symbol be a knee on a neck for an entire life eclipsed within 8 minutes? What should justice look like? Perhaps a skull and crossbones.



Kapemni Mirror of Earth-Sky and Tipi reflecting both. Image courtesy of Jim Rock.

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A true guardian/warrior/steward of Household Earth must now protect the darkness from powerful lights. Instead of more hyper, light-polluted, parking lots turning night-phobia into daylight false security, the International Dark Skies Association is taking action and reversing the harm done. In so doing, birds are better protected from flying into lit skyscrapers, and turtles, insects,

and our own bodies will suffer fewer changes to chronobiology leading from sleep deprivation and hormonal shifts to cancers. Our firefly relatives can't even find each other to mate. Do crickets, frogs, and fireflies need to turn up the volume and candlepower to get our attention? Who speaks for them? The Pacific hydrogen bomb tests of the '50s certainly turned up the megaheat, light,



Land, Sky, Tipi. Image courtesy of Jim Rock.

radiation, exile, and mutation of our relatives in Oceania. And what of the lost and fading night skies and our constellational star stories?

As an Indigenous astronomy professor, some of my previous collaborations were with NASA and NOAA where teamwork is critical to mission preparation, timeliness, accuracy, communication, and success. I was privileged to work on several projects, one of which was called Beautiful Earth, with Valerie Casasanto and others and Dr. Thorsten Markus who is the Principal Investigator of ICE-Sat2 launched almost two years ago this September. ICE-Sat2 is reflecting 10,000 green laser pulses per second earthward

and off the ice while traveling about 4 miles per second across the pole, to earth-watch from sky how ice is changing. It's melting way faster than we thought. Actually these laser beam pairs are 90 meters apart to also calculate elevation changes during each 90 minute pass over the pole. Ninety meters is over half of the two millenia-old REMA Giant Snake Mound (55.3% of REMA = 163 m). Minnesota's REMA is an Unktehi who is both flood watcher and eclipse watcher and who also gains elevation from 1 foot at the rattlesnake tail to 5.5 feet at the head. REMA is further explained by this author in a [separate article](#) in this same journal.



*Waiting for the roof poles and Earth covering for the earthlodge at Makoče Ikikčupi.
Image courtesy of Jim Rock.*

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In August 2020, NASA's ICE-Sat2 was joined by the ESA's Cryo-Sat2 to combine their orbital data swaths so as to "trade eyeballs" as said in the first paragraph. These paths actually look like thípi poles being leaned together (see first paragraph again), over our Earth Thípi Mother. We must be the accurate watchers of Her changing ice and ocean levels! Ahán! Watch it! Look out! Careful! See the [crisscrossing path](#)^[vii] of the polar thípi poles! See more of these [Earth-Skywatchers](#).^[viii] Also watch a 16-year view of [polar ice loss](#).^[ix]

A post on Nick Humphrey's [State of Cryosphere Page](#) wrote, "Watching the ice melt like this is freaking scary. I feel like Dorothy watching the

sand run out of the hourglass."^[x] Here is yet another reference to the kapemni-hourglass-Circle X extinction symbol. If a steward in the Greek biblical texts is supposed to watch, guard, and manage the affairs of a household while the owner is away...presumably until that land owner or Earthmaker/Land Creator returns, then that steward will be measured and judged accordingly in this Western view. Yet our local "Garden of Eden" at Bdote (river joining) as Čhokáya Kiŋ (the center) of Mni Sota Makočhe (the land where the water reflects the sky) is still here, albeit drained, exfoliated, paved, toxic, and 99% de-prairiefied and on life support since alien colonization.



Healthy sunshine over Zani Otunwe (Healthy Village) Lodge. Image courtesy of Jim Rock.

So consider the shock and horror of the original Turtle Island-loving caretakers or non-land-owning “stewards(?)” as they were displaced or removed by exile or death when invaders calling themselves “the new stewards” took over. Our ancestors watched these fever-crazed invaders clear-cutting and plundering every last tree, fur pelt, bird and mineral, etc. So who best modeled ethical Athenian stewardship?

Stewardship questions are not to be asked of us, since it assumes we Turtle Islanders were some kind of “stewards.” This is not even like equating cubits to feet or meters, which are at least all interconvertible lengths. But these invader “stewards” would go to any length for immeasurable profit and exce\$\$ beyond even the rational

thought of the mi\$ogynistic, philosophical, Greek economi\$t-\$laveholders.

Indigenous “First Residents” could not even conceive of owning The Mother, but rather we were to see ourselves as Her children in a loving relationship of gratitude and reciprocity. For well over a thousand generations we were asking permission for every heart-like strawberry and handful of water, thinking ahead of the seventh generation. We were not to overuse and abuse, nor to accumulate individual wealth, since others were in need of generosity and hospitality as our relatives. What \$emi-annual, balanced-\$pread-sheet \$ymbol does the colonial-\$ettler power of imperma-culture, mo\$t use, value, and remember? They rarely or never memorialize and remember the descendants of slaves (say their



Unktomi Tachekpa—Unktomi’s navel. Image courtesy of Jim Rock.

names) or the descendants and ancestors of First Nations Dakota (say their names) in Mni Sota Makoče.

So would you like that glass of water with micro-plastics over ice and a squeeze of MHC, (Methane Hydrate Clathrate) perhaps? To watch for the MHC gun, please see [here](#)[xi] and [here](#). [xii] Then look for the helpers, the sky watchers, the earth watchers, and the guardians of gardens past and future. Mom watches us, as we all watch over each other as relatives and over [Her](#). [xiii]

The above 1812 words are 193-4 more than 1619 Slaveships and 1620 Pilgrims...1812 for the year Fort Snelling was being built at Bdote and 46 years after 1766 when Jonathon Carver carved his family crest for Manifest Destiny and the Doctrine of Discovery in Wakan Tipi Origin Cave and our mother's womb to match the Bison Star above by the kapemni principle. Now add these 51+ more to reach 1863 words and years and our exile from our Origin Garden at Bdote where X marks the spot.

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Patrick Nunnally is a lecturer in the Department of Landscape Architecture in the College of Design at the University of Minnesota. He also teaches in the College of Food, Agriculture, and Natural Resource Sciences and was one of the lead scholars for the University's John E. Sawyer Seminar, "Making the Mississippi: Formulating New Water Narratives for the 21st Century and Beyond," funded by the Andrew W. Mellon Foundation. Nunnally's teaching and writing are public-facing, connected to community, and focused on the Mississippi River as a corridor for environmental justice and climate change. You can find more about his work at landwaterplace.umn.edu, a website offering resources on questions of environmental justice, community, and environmental change.