Vultures, and the Rules of the Afterlife

*How Mongolia’s Open Air Burial Tradition is Responding to Environmental and Political Pressures*

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# Table of Contents

Background ................................................................................. 3

Politics ...................................................................................... 5

Religion .................................................................................... 10

Karma ....................................................................................... 13

Vultures .................................................................................... 14

Fear and the Future ................................................................. 17

Works Cited and Bibliography ................................................ 21

Appendix .................................................................................... 26
Background

“How you handle the body is a material concern that depends on geography and urban development. Where are you going to put it? It’s big. Bodies take up a lot of space. If you just leave it out, they don’t decompose that quickly.” – Christine Murphy

I spent my summer searching for sky burials in the hills around Ulaanbaatar, the capital of Mongolia. Sky burial, known in Mongolia as open air burial, is a Tibetan Buddhist tradition of offering the dead as food for birds of prey - typically, vultures. Lamas use observations about how the body is eaten to determine the sort of rebirth the deceased has taken. I was traveling on a grant from Stanford University. Vulture populations were down across Asia, and I wanted to find out how the tradition was responding to the changing environmental reality.

In the United States, a body left outside will take between four weeks and nine months to decompose, depending on the elements\(^1\) (Pope 2010). Temperature and weather both affect the bacteria and insects that aid in the process (Beger 2013). In Mongolia, thanks to a harsh landscape of desert and permafrost, bodies may never decompose underground.

The questions of when and where open air began is fairly clear; the question of why is less so. Evidence at Gobekli Tepe, an archaeological site in Turkey, puts the origin of open air burials as early as 9,500 C.E. (Wylie 1964). Similar customs were recorded in 11\(^{th}\) century Tibet, and, more recently, Sichuan and Inner Mongolia, Southern India, Bhutan, Nepal, and the Yankton Sioux and Blackfoot Native Americans tribes (Yarrow

\(^1\) One study found that in Arizona, skeletonization (50% of more of the remains) took between two and nine months (Galloway \textit{et al.} 1989) while summer in Tennessee could skeletize a body in only two to four weeks (Mann \textit{et al.} 1990).
According to Christine Murphy, a graduate student in Religious Studies at the University of California Santa Barbara, open air burials may have begun out of geographic necessity.² The Steppe environment³ is not conducive to Western traditions of either underground burial or cremation. “If you have diggable land with lots of worms, [the body] will decompose in the ground,” Murphy explains. “But when you look at the Gobi, where the sand moves so quickly, it’s harder to bury. When you look up North, where there’s a layer of permafreeze, it’s harder to bury.” Cremation is only an option if you’ve got a lot of trees, which Mongolia does not.

Mongolia is vast — two and a half times the size of Texas⁴ — with the population of New Hampshire⁵. That means, on average, a full square kilometer of land per person. That ratio meant that, until very recently, sky burials are not socially or culturally problematic. Murphy explains:

Given the lack of human population density in Mongolia, you’re not likely to stumble across a body in the countryside, so it’s also not a hygiene issue. It’s so big here, you can leave a body and no one will come across it. But remember that Ulaanbaatar when it was built was built with the expectation that it would only ever house 50,000 people.

In 2013, the population was 1.345 million (UN Data 2013).

Bodies that used to be left on remote mountainsides for vultures to eat are not being left in someone’s backyard. Christine Murphy explains:

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² Murphy lives at the Dashchoilin Monastery in downtown Ulaanbaatar, translating the Altan Gobi, or Book of the Dead and writing her thesis on the impact of socioeconomic development on Mongolian religious traditions (Image 1).
³ An ecoregion stretching from across Russia down to Mongolia. See image 2.
⁴ Mongolia’s total area is 1,566,000 km² compared to Texas’s 695, 662 (United Nations 2012, United States Census Bureau 2010).
⁵ In 2013, Mongolia’s population was 2.839 million (World Bank). Subtract the population of Ulaanbaatar (1.345 million, according to UN data from 2013), to get 1.495 million. Compared this to New Hampshire’s 2014 population of 1.327 million (United States Census Bureau).
“Not only did the population explode beyond expectation, but the question of urban planning came into play. Unlike European cities which tended to sort of have a slower population growth, and so grew a bit more organically, the Soviet city design was imposed on the land and then the people grew in spite of it…people are living on graves because there isn’t enough space and what it used to be remote, far away from the city is now smack dab in the middle of a major residential area.”

Murphy believes funerals represent a concentrated nucleus of the social and political changes in Mongolia today. Society’s handling of a body depends on geography and urban development (Murphy 2015). “Inevitably,” she says, “how we handle a body shows an impact if the economy’s going up or down, if things are becoming more secular or less secular, if there’s been a reversion to traditional forms.”
Politics

“The scene would be very not nice, if you see some bones lying around, when you look at a dog running around with someone’s hand in his mouth.” – Ganbat Namjilsangarav

The legality of funerary traditions in Mongolia is a hazy mess of Soviet regulation, shamanistic tradition, and municipal laws that come and go every six years, with the government. Sky burials have been illegal in Ulaanbaatar since 2013. In the end, culture trumped written law. In Ulaanbaatar today, most people are buried underground, in the Soviet tradition (Namjilsangarav 2015, Murphy 2015).

The tradition of underground burial did not reach Mongolia until 1921, when the Soviet Russians helped spark a communist revolution that engulfed the country. When one of the Mongolian revolutionary leaders died, the Russians recommended an underground burial.6 Thus, the first known occurrence of underground burial of a Mongolian (Namjilsangarav 2015).

During the Soviet period, open air burials were considered to be unhygienic. Worse, they were considered to be religious (which, in Soviet ideology, was very bad), and shamanistic, seen as backwards and stupid. “Communist rhetoric talks a lot about hygiene, it talks a lot about progress,” Christine Murphy explains. “Anything that doesn’t seem to be very sterile and forward moving is considered antiquated, inappropriate, and potentially dangerous.”

Mongolians still practiced open air burials through the 1950’s, despite Soviet laws making the custom illegal, explains Ganbat Namjilsangarav, a Mongolian freelance

6 Soviet Russian leaders were typically buried in mausoleums, as in the Kremlin Wall Necropolis and Novodevichy Cemetery.
journalist and fixer working mainly for Associated Press. (I credit Namjilsangarav with my success in Mongolia.) “People in remote areas were still practicing open air burials, but in large cities like Ulaanbaatar, most government employees were buried underground,” he says. By 1990, most people were buried underground (Murphy 2015).

Then, in 2002, Mongolia regained its national identity and became an independent democracy. Religious traditions suppressed under Communist leadership were revived. For funerals, lamas began recommending old practices with new fervor, and traditions like open air burials began popular once more (Namjilsangarav 2015).

The problem was that Ulaanbaatar was expanding well beyond its boundaries and the city began running out of space to bury people. Space around Ulaanbaatar is limited — the city sits in a river valley twenty kilometers wide. On one side sits the junction of the Tuul and Selbe Rivers; on the other side, a maze of forests and steep mountains.

Hills that used to be remote enough to leave a body now make up a family’s backyard, leaving Mongolians like Tsogbadrakh Damdinsuren, a driver and small business owner in Ulaanbaatar, to have horrifically negative experiences with open air burials.

Damdinsuren buried his mother in law out in the open, following detailed instructions by a Buddhist lama. He and his family drove for a full day in order to take the body to a supposedly picturesque, remote hillside far away from the populated city. Below is a portion of the transcript from out interview on August 10, 2015. Namjilsangarav translated.

DAMDINSUREN: We saw the site, it was a grizzly site. There were bodies, people without heads, hands. We saw it, was very grizzly sight. And then birds were coming, and we saw it. They were carrying some limbs, taking some, flying back..
LEVINSON: You watched birds eat other bodies?

DAMDINSUREN: These birds, these vulture birds know when people have good karma. So some of the bodies are taken, and some are not taken. So we saw it. There were many bodies are.

LEVINSON: And what did you think when you saw that? Because it’s supposed to be -- you imagine a very beautiful sight, right?

[14:30] DAMDINSUREN: Yes. Site wise, there were many bodies. And therefore I think the practice is not suitable for a place like Ulaanbaatar.

Stories like Damdisuren’s accumulated in the early 2000’s. These, along with newspaper articles claiming stray dogs were bringing body parts into the city, led municipal authorities to ban open air burials in 2013 (see image 3). The 2013 resolution is posted on giant blue billboards all around the city and surrounding graveyards. It reads, “Open air burials are not to be permitted in the city of Ulaanbaatar.” At the bottom is the fine, 1,200,000 tugrik, or six times the normal monthly minimum wage (about USD$600.)

At the same time, the Mongolian Funerary Association — Mongolia’s first — began to grow into a successful and politically prominent business. The MFA was founded in 2004 by Idermaa Gavrasuren, a Mongolian educated at the Washington University of Cemetery Management (Mongolian Funeral Association 2015). Rumor is, Gavrasuren began the Association after

Christine Murphy explains, on its surface, the MFA was an entirely capitalist idea, founded on the principle of consumer convenience. “Before the MFA, people had to go individually to a million different places to organize [a funeral] themselves,” Murphy says. In many ways, you can compare the MFA to a Western funeral home. When someone dies, you call one person and that person organizes everything, from getting the body at the hospital to doing the makeup and organizing the ceremony and burial.

But Murphy, like many others I spoke with, is suspicious of the MFA and its
growing power over religious culture in Ulaanbaatar. After the MFA was founded in 2004, Gavrasuren sent out a letter to all of the monasteries in Ulaanbaatar, requesting that they not recommend open air burial for anybody due to hygiene concerns. Although open air burials were already illegal — since the Soviet legislation of the 1920’s — sky burials were still being done (Murphy 2015, Namjilsangarav 2015). When a loved one died, families would go to a monastery and one of the astrologers would open the golden chest and predicts what would be the best means of handling of the body.

Instead of convincing individuals, Gavrasuren went straight to the religious source. “By contacting the astrologer, the idea was that she could discourage that from happening. If an astrologer doesn’t recommend it, than the odds of it occurring are much slimmer,” Murphy says. According to Murphy, changing the minds of astrologers will not complete discourage people from leaving bodies out in the open. The average cost of a funeral in Mongolia is around $7,775, plus cemetery costs (grave marker, opening and closing of the grave) of between $1,500 and $2,500 (Funeral Arrangements Guide 2015). “There’s a lot of poverty in Ulaanbaatar,” Murphy says. “Putting a body out is culturally engrained and really cheap.”

Some, like Murphy, see the MFA’s services as a conflict of interest. Near the Gandantegchinleng Monastery in Ulaanbaatar, Gavrasuren funded the construction of a new astrology temple, now privately owned by the Association. Murphy explains:

The conflict comes in with this question of the religious predictive element, because they offer services for earth burials and cremation, they don’t offer services for sky burial. Financially, it doesn’t make sense for them to encourage the lamas to advocate for sky burials. Because it’s not something they can make money for.

Of all the monks at Dashchilling Monastery, Murphy said, all had been approached by Gavrasuren’s astrology monks to work with the MFA, and all turned it down.
Religion

“According to Buddhist philosophy, the human is composed of two parts. One is flesh, the physical body, and the second is the spirit or mind. If the soul has left, the body is not necessary. It’s useless. It can be thrown away. So instead of disposing of it uselessly, wasting it, it’s better to use it to feed someone.” – Mathematician

The first step after a person dies is to wait for the entire family to reconvene at home. Mongolia is a vast country — 1,471 miles and thirty nine hours from East to West (according to Google Maps). Waiting for extended family members can take days, sometimes weeks (Nanjilsangarav 2015).

Waiting is the first step in a long process of reincarnation. Mongolians are predominantly Buddhist, a 2011 survey by XX puts the figure as high as 82.6% of the population. In the Buddhist belief, souls are reincarnated after death. There are six states of existence and therefore six potential “levels” of reincarnation. Next lives are not guaranteed. Reincarnation is a complicated process, and many factors stand in the way of the transition. The first step is waiting, up to forty-nine days for the average person.

I spoke with a mathematician at a small Astrology Temple next to the well-known Gandantegchinlen Monastery in Ulaanbaatar. According to religious philosophy, he explained, lamas and other saintly people are prepared for death. For them, transition to the next life is peaceful and easy. Their souls leave their bodies almost directly. For ordinary people, the soul leaves within three days. Then, for the next forty-nine days, the soul is in an intermediate, transitory state. “He can be born as a man, as a dog, can go to

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7 Buddhist states of existence, in Sanskrit, from lowest to highest: Naraka-gati (beings in hell), Preta-gati (hungry ghosts), Tiryagyoni-gati (animals), Manusya-gati (humans), Asura-gati (demigods, semi-blessed, plagued by jealousy, anger, and constant war), and Deva-gati (heavenly beings).
hell, can go to a higher state,” he explains. “During this state, if good karma is generated, he will get a good reincarnation.”

The immediate family sits down with a lama at an astrology temple, a Tibetan Buddhist temple specializing in reading horoscopes, excising spirits, and preparing good karma for the afterlife. In the Mongolian tradition, astrological lamas are very special lamas, trained in the art of horoscopes and the mathematics of reading the Altan Gobi, Book of the Dead, also referred to as the “Golden Vessel”. This process often takes a lifetime to learn, and astrological lamas are often the senior most lamas at a temple (Murphy 2015, Namjilsangarav 2015).

Here is where Mongolian and Tibetan Buddhist practices begin to differ. Academia tends to regard Mongolian Buddhism as a unified belief system in the steps of the Tibetan Buddhist tradition (Wallace 2015). The reality, however, is a bit different (Hyer 1981, Kollmar-Paulenz 2003, Mullin 2012). Murphy explains:

There’s a really hot debate as to what it takes to be an, an astrologer in the Buddhist tradition, because traditionally you would study about 8 years for it, and that just doesn’t happen [in Mongolia]. They don’t have the history to study here, the monks going to India usually don’t stay for the full 8 years… the astrologers here aren’t real if we compare them to the Tibetan context.

Using the deceased’s birth date, animal year, and date of death, the lama triangulates the horoscope and reads the result from the Altan Gobi. There are three funerary practices in Mongolia: cremation, underground burial, and sky burial. Each comes with its own karmic upsides and downsides (see image 4). Once a method of burial is decided on, the lama helps the family prepare the body for death.

Preparations begin with a sotra, or chant, meant to cut the soul’s attachment to its body. In Buddhism, worldly positions distract a soul from moving on to its next life. Anchors and attachments lead souls to stick around and become unhappy and potentially
destructive ghosts. In order for a soul to continue onto its next life unburdened, all ties to this world must be severed. Clothes are burned, and the body, the last worldly possession, is offered as sustenance for new life. This is where the vultures come in.

Here, Tibetan and Mongolian Buddhist traditions begin to differ more seriously. “Tibetan and Mongolian open air burials share the same basic principle, to benefit all living beings and generate good karma,” the mathematician explains. “To offer your body to feed living beings instead of disposing of it uselessly.” In Tibet, how quickly a body is eaten directly affects the soul’s path to the afterlife (CITE). In Mongolia, if a sky burial is not going so well (perhaps there are not enough vultures), the situation can be “fixed” (Nanjilsangarav 2015, Mathematician 2015).

Lately, karma is being “fixed” more and more often.
Karma

“The funeral itself has the power to alter memory and perception of a person.”

– Christine Murphy

In the West, identity is finalized during the funeral; in Mongolia, persona continues to change after death. The tradition of sky burial plays into a larger retroactive process of reimagining a person’s life.

In *L’Invention Du Morde*, Gregory De La Place describes Mongolian funerals as instruments in constructing the identity of dead people. The text is in French; Christine Murphy translates a few paragraphs. She explains in simpler terms, “When someone is a jerk in life but dies and then has this wonderful burial where the vultures come and he’s picked clean in an hour, suddenly people speak about him and it really changes the memory.”

Ariuntamir Lkhagvasuren is a Mongolian in her twenties. She works as a translator and guide in and around Ulaanbaatar. When she was very young, her grandfather was buried in the open. “We put him on a hilltop, near a mountain, in this --” her hands describe a valley, space between two ridges, “-- and left him. Two birds, big and black, came down.” Lkhagvasuren tells me with pride that grandfather was consumed within hours. “This is good. This means he was a good man, had good karma.” Below is a snippet of our transcript:

[05:30] ARIUNA: The Mongolian says like, sometimes the ground animals, for example wolves and some, some other animals could be eat that body, but it consider its a kind of bad signs, it’s a kind of bad sign.

READE: So wolves can eat the body, but -

ARIUNA: Wolves or dogs or fox, like these kinds of ground animals. Its considered like a kind of bad signs. Hm. Uh, this vulture considers as a heaven, a heaven animal. Which mean’s good, that is it represents this person was
completely good man. In his entire life.

READE: Wow. So what did it mean that your father’s uncle was eaten by vultures?

ARIUNA: Because it represents he was very, like, hm, uh, good man. Because he had accumulated lot of good deeds his whole life, so he was eaten by the vultures and heaven animals.

Vultures

“They almost come up to your waist...they have a triangular-shaped head that gives them a more binocular vision appearance, which for many people I think makes them appear to be a little more like a mammal or a human... another feature that sort of endears them to many people at first glance. They are just impressive to look at.” – Keith Bildstein

Mongolians believe that there are three types of animals that could eat a body. One is animals of the sky, or birds of prey, vultures. The next level is dogs and wolves, animals of the earth. The lowest level is maggots. Being eaten by vultures, and quickly, offers the best chance at a good reincarnation (see image 5).

In Mongolia, vultures are seen as heavenly birds, both literally and spiritually. Out on the steppe, a sitting vulture is often mistaken for a person. Mongolia has five known species of vulture, the largest of which is the Cinereous, or Black, vulture. With a wingspan up to ten feet, the Cinereous vulture is the largest bird of prey of the Old World. In the literal sense, vultures are heavenly beings because they represent people in flight high above the clouds. Spiritually, their livelihood as scavengers resembles monks,
who beg for food rather than kill or harm other living beings.

The two most prevalent problems facing Mongolia’s vultures today are urbanization – habitat loss -- and industrialization, or the threat of veterinary drugs. Both have negative consequences for the Mongolia’s open air burial tradition.

The hills used for open air burials move further and further away from the city center as Ulaanbaatar expands to accommodate an ever-growing population. To guarantee good karma and a beneficial afterlife, open air burials depend on a large number of vultures arriving to said hillside promptly. Because of the way old world vultures hunt, changing burial sites presents a huge problem for the tradition.

Unlike the New World vultures, known for their keen sense of smell, Old World vultures like Mongolia’s Cinereous vulture locate prey by sight, explains Keith Bildstein, Director of Conservation Science at the Acopian Center for Conservation Learning. Bildstein works at the Hawk Mountain Sanctuary studying birds of prey, specifically, vultures. He explains that once vultures find a regularly available source of food, they can very quickly change their behavior and will return regularly to that location. “The same would apply for the sky burial locations. If they’re used regularly, in a routine fashion, in a predictable fashion, time wise, the vultures would learn that,” Bildstein says.

Without this regularity, vultures will simply not be able to find a body left out in the open and consume it in time to assure a positive afterlife. The problem is, if someone dies and their family drives the body to a really pristine location in the middle of nowhere, the vultures are pretty much guaranteed not to find the body. “That pristine aspect would make the locations of the carcasses of dead people less predictable, so the birds would probably find them by sight,” explains Bildstein. In other words, the closer a
family follows the lama’s instructions, the lower the chance of vultures finding the body.

Industrialization and the threat of veterinary drugs also present a growing threat to Mongolia’s vultures. Vultures act as canaries in the coalmine of environmental change. They are “wonderful sentinels of ecological change,” says Bilstein. Mongolia is a nomadic rather than agricultural society. Many, including Ganbat Namjilsangarav, believe that is changing fast.

Diclofenac is a non-steroidal, anti-inflammatory drug singularly responsible for wiping out most of Asia’s old world vultures. Sort of like aspirin, it is used to treat aches and pains in cattle. “This drug when given at approved levels, can be toxic to the point of killing a vulture within 72 hours,” explains Bildstein. Diclofenac “has resulted in declines of the two most formally most common vultures in the world by over 99.9%.”

So far, Mongolia’s vultures have been safe from the negative effects of drugs like Diclofenac. Bildstein explains:

I believe the continued success of cinereous vulture in Mongolia is that the animal husbandry practiced there for herding animals is not industrialized to the point of the widespread use of veterinary drugs...diclofenac is not in any way shape or form in widespread use, or at least it wasn’t until recently if at all - in Mongolia. The lack of veterinary drugs in Mongolia is something I guess you could say is a godsend, for the birds.
Fear and the Future

“Those big mines bring in a big part of income to the government, so at the moment the government is not really concerned about what is going to be the environmental impacts of this dam and other projects.” -- Bolormunkh Erdenekhuu

“And then of course you have what I would argue is the, the immaterial significance of the funeral, you have the inevitable and inexplicable transition from the living to the dead. This is something that humans have wondered about forever because of the truth for all of us that we all die, but none of us knows really what that means.”

-- Christine Murphy

Mongolians avoid talking about death and suffering, which makes planning for the future survival of a funerary tradition a complicated and tender process.

When I asked Ganbat Namjilsangarav, he said he wasn’t sure why the topic was so taboo. “I don’t know why we avoid it. We just don’t talk about it, not so much,” he said. “I think it’s mainly because we like to talk about good, bright things of life, and not too much focus on the death and other inevitable the negative sides of life.”

In Mongolia, death has an element of contagion. “It doesn’t matter the cause of death, it doesn’t matter the circumstances, it’s bad luck,” explained Christine Murphy. “It’s not just unlucky, but it’s unluckiness that you can catch.”

Similarly, mourning is forbidden because it may anchor the spirit to earth and prohibit reincarnation. “Usually Mongolians doesn’t morn a lot during the death because it will cause obstacles for the deceased soul.” Namjilsangarav explains that lamas
prohibit crying and mourning during a funeral. “Your tear drops are like an ocean and the deceased person will drown in it. So you don’t do that during the funeral.”

Death as a taboo subject, combined with a constantly changing, oil-focused political scene, makes discussing the future of sky burials in any sort of organizational context incredibly challenging.

Mongolia has an energy shortage, explains Bolormunkh Erdenekhuu, a Mongolian Conservation Biologist working with Wildlife Sights and Conservation Center, an avian-focused NGO in Mongolia. Erdenekhuu’s work is focuses on education and habitat protection for birds on the endangered species list.

Erdenekhuu believes the government’s response to the energy shortage is to build as many hydropower dams as quickly as possible, and he’s spent every summer for the past five years in the field catching and tagging birds, studying migration patterns in the hope of quantifying the environmental impact of various hydropower dams. “Their impact is overwhelming,” Erdenekhuu says. “And unfortunately the government is not paying any attention how this dam is influencing the surrounding environment.”

Erdenekhuu says the government’s highest priority is boosting economic growth from bringing in big mining contracts. The environment comes last. “It’s going to be quite difficult to negotiate with the ministry of the environment, which is in charge of environmental aspects,” he says. “Each four years the government changes, and almost all managers and officers at the [Ministry of the Environment] change, and sometimes the people have no environmental education.” Big mining comes first.

Right now, Mongolia’s vultures population is relatively safe, at least compared to the vulture crisis in India and Africa. Mongolia is predominantly nomadic, still, meaning
drugs like India’s diclofenac have yet to reek havoc on bird populations. “There is no illegal hunting,” explains Erdenekhuu. “Traditional Mongolians don’t hunt any bird species or fish species.” Years ago, shamanism believed any animal which flies or lives in the water has a natural spirit (Erdenekhuu 2015).

For the government of Ulaanbaatar, hygiene concerns are much more important than either karmic consequences or the situation with the vultures. Ganbat Namjilsangarav and I went on many excursions to the countryside around Ulaanbaatar, to hills where it was rumored open air burials still took place. On one such trip, on August 9th, we met a woman paid by the city government to guard the graveyard against families attempting open air burials. Below is a snippet of the transcript. Ganbat translated.

GUARD: I sit like this, wait for families to come. When families show up, I show them what is the available land, and they do their ceremony. Then I wait for the next family to come.

LEVINSON: Do people still do open burials here?

NAMJILSANGARAV (translating): She says no, not so much open burials is done. Like almost zero, she ways. But I think she is afraid. She thinks we are inspecting her work or something, so everything is good, she says. She’s kind of like reporting to us.

LEVINSON: Does the Ulaanbaatar municipality send people to inspect a lot?

GUARD: Yes, yes.

Sky burials are slowly becoming a tradition of the past. I found scant (and unverifiable) evidence (see images 6 and 7) that open air burials still taking place, only a handful of graves with the traditional khata, or blue, silk scarf, white linen wrapping, and offerings of tea bricks.

In the end, the immaterial significance of the funeral matters holds much more weight than the individual rules, which, in Mongolia, can always be “fixed”. In
Mongolia, the details of a religious tradition don’t matter as much as the karma, or sum of a person’s actions, and how people will find people ways to pay it forward when they can no longer give their bodies to animals.
Bibliography and Works Cited

Berger, Michele. “From Flesh to Bone: The Role of Weather in Body Decomposition.”


“Chopped up and fed to the vultures, a haunting glimpse of the closely-guarded tradition of the Tibetan sky burial.” The Daily Mail. July 24, 2013. Online.


Damdinsuren, Tsogbadrakh. (2015, August 10). Personal interview.


I Have Seen the Earth Change Season 2, Mongolian Documentary. BBC News, 2013.


Murphy, Christine. (2015, August 7). Personal interview.
Murphy, Christine. (2015, August 9). Personal interview.
Nanjilsangarav, Ganbat. (2015, August 5). Personal interview.
Nanjilsangarav, Ganbat. (2015, August 9). Personal interview.


Sanders, Joanne. Personal interview. February 26, 2015.


U.S. Census Bureau International Data Base. “Mongolia Country Summary.”


Appendix

Image 1

Dashcoilin Khid, a Buddhist monastery in Ulaanbaatar, Mongolia.

(Photo courtesy of the Tourist Information Center, Mongolia.)
Image 2

*The Eurasian Steppe Belt shown below (in red).* (Image courtesy of Wikipedia’s public domain.)
2013 Resolution by the City Government of Ulaanbaatar banning open air burials in the municipality of the city. Image my own.
Pamphlet detailing the most beneficial burials according to a person’s animal year, given to me by a mathematician at an astrology temple in Ulaanbaatar. Born in the year of the rooster, the most beneficial burial for me is a water burial. As water burials don’t happen anymore, my karma can be “fixed” to accommodate an underground burial.

<table>
<thead>
<tr>
<th>Насыртас (дата рождения)</th>
<th>Элемент</th>
<th>Где ухаживать</th>
<th>Вещественный символ</th>
<th>Вопрос о взаимодействии</th>
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Image 5

11\textsuperscript{th} century depiction of an open air burial at the Erdene Zuu Monastery, six hours west of Ulaanbaatar. The painting shows those with good karma being eaten by vultures, seen as heavenly birds. Those with lesser karma are eaten by dogs and wolves, and at the lowest rung bodies are consumed by maggots.
Probable evidence of a sky burial just outside of Ulaanbaatar. Shown in the image is a tea brick, a traditional funeral offering. No headstone or grave is present – instead, a khata, or blue silk scarf, and white linens, which traditionally cover a body during an open air burial. (Image my own).
Image 7

Another image showing evidence of a sky burial outside Ulaanbaatar. Near to the headstone is a set of folded white linens and food offerings traditional to sky burials.