SIT Graduate Institute/SIT Study Abroad SIT Digital Collections

Independent Study Project (ISP) Collection

SIT Study Abroad

Spring 2018

Coming in Hot: Motor Vehicles, Capitalism, and Modernization in Mongolia

Thea Bergen SIT Study Abroad

Follow this and additional works at: https://digitalcollections.sit.edu/isp_collection

Part of the <u>Asian Studies Commons</u>, <u>Family, Life Course</u>, and <u>Society Commons</u>, and the <u>Growth and Development Commons</u>

Recommended Citation

Bergen, Thea, "Coming in Hot: Motor Vehicles, Capitalism, and Modernization in Mongolia" (2018). *Independent Study Project (ISP) Collection*. 2856.

https://digitalcollections.sit.edu/isp_collection/2856

This Unpublished Paper is brought to you for free and open access by the SIT Study Abroad at SIT Digital Collections. It has been accepted for inclusion in Independent Study Project (ISP) Collection by an authorized administrator of SIT Digital Collections. For more information, please contact digitalcollections@sit.edu.

Coming in Hot: Motor Vehicles, Capitalism, and Modernization in Mongolia

Thea Bergen University of Oregon

SIT Study Abroad, Spring 2018 Ulaanbaatar, Mongolia

Table of Contents

Abstract	iii
Acknowledgements	iv
Introduction	1
Methods	4
Findings	6
Discussion	12
References	20
Appendix	22

Abstract

Traditionally, nomads in Mongolia have used horses for transportation. The horse was used to help herd livestock and also allowed them to get to the *soum* center quicker (Yembuu, 2015). This way of transportation is seen less and less now. With globalization comes an increase in different products from around the world. Herders now have the opportunity to buy cars and the ever popular motorcycle. Now, when out in the open Mongolian steppe, one can see motorcycles racing around to get herders from place to place. Some even use them to herd instead of a horse. And when a family decides it is time to move locations, instead of seeing a camel carrying the family's belongings, you may see a car (Yembuu, 2015). This transition from using live animals for transportation in their daily lives to using motorized vehicles brings a new lifestyle and potentially new problems.

The purpose of this study was to examine how this new transport option has changed the way people live and how it affects their lives. This research explored the following question: How do nomads view these newer types of transportation? How do they view the use of these new vehicles? Do they see it as a loss of tradition? How do these vehicles impact to the land? What are the benefits of using motorcycle over horse? For the field research I visited Undershireet soum and conducted twelve interviews with families who own motorcycles and cars, particularly male family members since they are generally the ones who used the vehicles. There were several patterns that emerged through the interview process. Herders often thought that motorcycles were damaging to the land but that the benefits of them outweighed damages done. Interviewees commented on how time-saving motorcycles were and how they were necessary to keep up with the times. Finally, they saw their traditions changing with the use of motorcycles. This research looks at how herders view the modernization of their profession and livelihood.

Acknowledgements

I would like to start by thanking my parents for supporting me through this opportunity to study abroad in this unique country even when they were at times skeptical.

Thank you to all of the SIT staff for the hard work and coordination they put into making this experience possible. Thank you Nicole for your input and being a great advisor through this sometimes difficult and frustrating process. Thank you Ulzii bagsh for your stories and your consultations throughout the process. Maralaa, you probably deserve the biggest thanks, for helping us endlessly and patiently through arguably the most important aspect of this program, the language lessons. Thank you for putting up with us and our constant frustration with the language. Thank you to Shijir for helping us through the excursions and putting up with our shenanigans.

Thank you to my UB host family for taking me in and making sure that I was as comfortable as I could be.

To my Bayankhongor family your kindness and willingness to accept me into your home will never be forgotten. Thank you for showing me your life and teaching me as much as you could in such a short time. The experience you gave me was one of a kind and I will be eternally grateful.

Thank you to my translator Urantuya for doing several interviews in a day, working very hard to translate not only in interviews but also with my host family so that we could communicate with each other. Thank you to my Undershireet host family for supporting me throughout my research and giving me new experiences in the countryside. Thank you to the participants in my research for taking the time out of your day and making this whole paper possible

Lastly, thank you to the seven once strangers and now friends who all happened to pick Mongolia. Jesse, thank you for your philosophical discussions that sometimes frustrate me and hurt my brain, but also push me to think in ways I otherwise might not have. Austin, thanks for sticking out NGO week with me and being comic relief. Lindsay, I can honestly say I have never met someone so dedicated to horses and its impressive. Thanks for being the rational one of the group. Abbey, your laugh is contagious and though you make no sense sometimes I thoroughly enjoyed it. Maddie, thanks for pulling me into your shenanigans and making the trip a bit more interesting. Julie, I will always appreciate our nightly debriefs in the apartment and our daily walks to the program center.

Introduction

Mongolia has gone through massive changes politically, socially, and economically in the last 30 years. The country went from being a communist state under the control of Russia to gaining independence and forming a democracy in 1989 (Pomfret, 2000). This sudden freedom caused changes in every aspect of Mongolian life. Herders suddenly had no restrictions on the number of livestock they could have, people were able to vote in a multi-party system, and a free market developed. With democracy came access to the global market and free trade. This introduction to the world market naturally led to an increase in the import of goods from other countries. Cars may have been a scarce commodity during communist times but now traffic is backed up as far as the eye can see on the main streets of Ulaanbaatar.

The use of these motor vehicles extends to more than just the capital city in Mongolia. Since goods have become more available, herders also can easily acquire motor vehicles. More often than not, one will now see herders racing around the Mongolian steppe on motorcycles and moving their gers to new locations with cars. This switch from horses and camels as the main form of transportation to motor vehicles, means that some traditions that have been around for hundreds of years in the Mongolian nomadic culture are changing. For example, prior to motor vehicles, families would move their belongings with camels and stop at gers along the way for rest. This created a sense of community (Yembuu, 2015). With the use of motorcycle and cars there is not a need to stop at other families' homes along the way, severing these relationships that herders had when they moved by horse and camel.

Political Changes in Mongolia

Mongolia has been an example of a peaceful democratic transition. Beginning in 1989, Mongolia transitioned from being under the control of Russia to becoming a democracy (Pomfret, 2000). Since this transition, Mongolia has gone through political and social change in a short period of time. This "accelerated rate of economic development and infrastructure construction has impacted the nomadic lifestyle and natural ecosystems and traditional pastoral livestock production as well as traditional knowledge" (Yembuu, 2015,103). The economy was suddenly launched into the global scene and because of this, huge changes were made to the lifestyle of every citizen in Mongolia, even the herders in the vast Mongolian steppe.

As Mongolia continues to grow, there are two separate transitions happening, one in the city main city, Ulaanbaatar, and another in the rural countryside (Yembuu, 2015). Mongolia has held on tightly to its nomadic history in the city though they are living an urban life and are far removed from the *gers* where their ancestors used to live. In the city you may often find apartments that have a setup similar to *gers* in the way they arrange things and how they decorate. (Marsh, 2003). Though the people in the city may be holding onto the lifestyle in an urban setting, over half the population is still living this traditional nomadic lifestyle. Nomadic identity continues to shift as "more and more of its nomadic population move to urban areas in search of education, employment, and modern conveniences. Indeed, modernity attracts not only those Mongolians who have moved to the city, but also those who have chosen to continue with their nomadic lifestyle" (Reyes, 2014). The traditional picture of Mongolian nomads is changing as they leave behind some of their more environmentally friendly ways in order to be connected with the rest of the world through technology. This in turn, may be altering the traditional identity of Mongolian nomads.

Traditional Knowledge of Herders

Traditional knowledge can be defined as knowledge held by indigenous peoples about their immediate environment as well as cultural practices (University of Michigan, 2008).

Traditional knowledge varies depending on one's environment and location. The traditional knowledge that herders have had for centuries is now beginning to change. For example, now nomads have taken some old traditions and combined them with modern comforts. They continue to herd and move several times a year but they sometimes herd with motorcycles instead of horses and move with cars instead of camels (Reyes, 2014). This replacement of livestock with motor vehicles raises the question of what knowledge is being lost in the process? Some traditions may be starting to disappear with this increased use in motorcycle. People had more communication with other local herders making the ties with other people stronger and more information was being spread when herders would stop for a night during their travels. With quicker forms of transportation becoming more popular, this tradition and the knowledge that is spread through it is being lost.

Motor Vehicles and Land Degradation

A survey done by Enkhbayar Shagdar shows trends of automobile and motorcycle use with herders. In 1995 15.6% of herders had motorcycles and in 1999 the number increased to 15.8% then 16.6% in 2000, and 18.3% in 2001 (Shagdar, 2003). Yambuu's research indicates that in 2013 47.3% of herders now owned a motorcycle. A similar trend can be seen with automobiles. In 2001 only 9.5% of herders owned one (Shagdar, 2003). In 2013 that number grew to 38.4% owned (Yambuu, 2015). From these statistics one can see that with the transition from socialism to democracy, the use of motor vehicles has greatly increased. Since there are few roads in the countryside, this means that these vehicles are being used on the land. Kevin Kelly, a journalist who lived with a family for several weeks, describes the motorcycle use saying that motorcycles can now take herders in difficult terrain that would be much harder to do on a horse. (Kelly, 2017). This raises the question as to how land health is being affected by the

increasing use of the vehicles. These vehicles can help herders economically but can also have negative impacts on the environment (Yambuu, 2015).

When thinking about motor vehicles, most people immediately think about the issue of emissions. However, when there are no paved roads and the cars are driving directly on pastureland of herders, the health of the land is also of concern. A study that focused on the vegetation health next to unpaved roads in Mongolia found that an off road vehicle "strips the vegetation, removes the surface soil and the seeds it contains, and compacts the soil." This then "induce(s) wind and water erosion, which cause further land degradation" (Kinugasa, Suzuyama, Tsuchihashi, Nachinshonhor, 2015,19). With the increase in the number of vehicles being used by herders, this land degradation is likely increasing as well.

The Present Study

This research will examine how motorcycles are affecting the land and how traditional knowledge may be changing with the transition from horse to motorcycle for herding. My hypothesis was that use of motor vehicles causes a loss of traditions, herder knowledge, land knowledge, and an increase in land degradation. This paper will also address the possible negative effects of motor vehicles on the land.

Methods

<u>Setting</u>

This research took place exclusively in the countryside of Mongolia, specifically Tov aimag Undershireet *soum*. Undershireet *soum* is located about three hours outside the main city of Ulaanbaatar. This soum is centrally located but more towards the north east part of the country. Undershireet has one main river running through and a semi mountainous region.

Because this research focuses on motorcycle use among herders, and herders live, generally

speaking, out in the countryside, it was necessary for interviews to be conducted there. This aimag and soum were chosen because the herders there have ten years of contact with a local NGO in Ulaanbaatar making connecting with them easier than a soum that has no ties to Ulaanbaatar.

Seven of the interviews were conducted inside a ger, four were conducted outside while the interviewee was herding, and one was conducted inside of a car.

Participants

The participants of this study were all herders who were at least 18 years and older. The ages ranged anywhere from 20 years old to 50 years old. There were nine men and three women interviewed. Eleven of the herders had motor vehicles while one herder had no motorcycle or car. Ten out of the twelve interviewed were raised as herders. One woman married a herder and thus became a herder and one other woman was raised in the soum. All herders interviewed were asked roughly 20-29 questions varying depending on the answers given by the participants. Interviewing was the most efficient way to conduct this research because there was very little prior research done and firsthand information in this case was most helpful. Before interviewing, participants signed a consent form that detailed exactly what information would become public and what information would not. They gave consent as to whether or not they wanted to be audio recorded during the interview. This consent form was also explained to the participants by the translator to make sure that they understand that they did not have to consent to the interview. Participants were asked to answer the questions as honestly as possible. This research was overseen by SIT Ethics.

Measures/Procedures

Participants were asked questions about motor vehicle use and how they see this changing customs, traditions, and land quality. They were asked a total of 20 questions including around nine follow up questions. The interview lasted on average anywhere from 15-30 minutes depending on the participant. Participants were asked questions such as; If your parents were herders, do you feel as if you herd in the same way that they do? How many vehicles do you have? What do you use them for? (See appendix for all interview questions). Participants were also asked if their parents were herders to get a feel as to whether or not they have followed their parent's traditions. Observations were made about how many motor vehicles each family had as well as on the way to and from the countryside.

Findings

Each participant had clear ideas about the important aspects of herding. The answers generally revolved around the care and health of their livestock. The director of the soum noted that the "quality of the industry" was the most important aspect of herding (Interviewee 1). Some herders had similar answers in that they all wanted their animals to be of good quality. Others presented a more personal connection to their animals than the director. One herder's answer showed a deep connection for the work:

Interviewee 9: "herding animals to make them feel full, you don't need anything else.

Animals are our life resource"

This kind of response was common among the herders, who believed the animals were the most important part of their job, and that having quality animals was part of a personal duty for them.

Justification of Motorcycles

2.1 Value of Time

All participants acknowledged an increase in motorcycle use and a decreased use of horses for transport. The director of the soum said that "90% of herders use motorcycle for herding" and that "100% use car to move" (Interviewee 1). However, this number may be a bit off as one herder did not own a car.

The necessity to save time and have the jobs they must complete in a day get done faster was repeated by almost all of the herders. Eight out of the twelve participants said they use a motorcycle because it saves time and is easier. One herder felt particularly strong about the need for motorcycles and replied that, "Without them we can't live because the number of animals are increasing" (Interviewee 2).

Having the number of animals increasing yearly and therefore the need to do daily tasks quicker was stated by three herders total. Nine herders said the speed and efficiency of the motorcycle was necessary because they had more work to do in a day. This work could range from having more animals to having to get into the village center in a shorter amount of time. Of eleven herders only one had no motor vehicles of any sort. He voiced that he "prefers to go slower and make animals more comfortable" (Interviewee 6). Time and pace were important for herders with motorcycles but also for the herder without one.

2.2 Horse Strength vs. "Laziness"

One herder expressed that he did not wish to be using his motorcycle as much as he does but feels he is left with little choice because "grass is not as good so horses are weaker" (Interviewee 3). After hearing this, the interviewer asked other herders if they agreed with this. Five herders also said or agreed that the grass was not as mineral rich as it used to be and

therefore it was not good to ride the horses as often. However, three other herders disagreed with this statement. One herder said that "they just prefer easier way but does not know for sure. My horse is fat and strong enough and so are other families" (Interviewee 6). In some cases, the herders either admitted to their own "laziness" as a reason for motorcycle use or for that of other herders. For example, when asked if he agreed that horses were weaker due to poor grass, an interviewee responded "People use it as an excuse to be easier and more comfortable" (Interviewee 11). The reasoning that motorcycles are more necessary because horses aren't as strong anymore is an idea that is not agreed upon by herders, though a majority said that they do think this is true. Another herder had a similar reaction to this question and said that "horses are strong, enough people are just lazy now and want a more comfortable way to live" (Interviewee 12).

With the increase in animals and a worsening of the quality of grasses, ten out of eleven herders responded that the motorcycle is of utmost importance in order to save time and get the job done as quickly as possible. Only one herder felt that a slower way to herd was more important.

Transition of Traditions

With the increasing use of motorcycles, some of the ways that participants' parents herd and how they themselves grew up herding may have changed. All herders said that they generally herd in a similar way to their parents but as one herder clarified, he "also has his own experience and it depends on the environment" (Interviewee 7). This comment about also creating their own style in conjunction with their parent's style of herding was common. Eight herders believed that using a motorcycle to herd was one way that they have shifted away from their parents herding style. A participant expressed that "all the people around here are looking

for the easiest way of herding" (Interviewee 11). The transition away from using horses to herd is attributed by the herders themselves to "laziness" and that is why traditions are changing.

Herders all said that they saw motorcycles being used more often and horses less.

However, not all saw this as a changing tradition. Three people said that they did not think that any traditions had changed because of motorcycles. Nine herders saw the use of motorcycles as a change in these traditions. Though the use of motorcycle is more popular, one participant "prefers to herd animals with horses because it is tradition for 1,000 years but nowadays they use motorcycles because it is quicker" (Interviewee 3). The sentiment of still wanting to use horses and stick with this tradition was mentioned three other times by different herders but a reason was provided each time as to why they cannot, or choose not to, continue to use horses. Some participants were asked if the future of herding would be void of horses and only motorcycles would be used. Every participant responded with a strong "no" stating that this is a "tradition for 1,000 of years and it's in our blood and so we must use horses" (Interviewee 12). In spite of the increased use of motorcycles, there is still a strong tie to horses and the tradition of them being a part of herder culture.

Modernization and Globalization

3.1 Democratic transition and economy

The transition from socialism to democracy impacted every aspect of Mongolian life and herders were no exception. Though this transition was impactful, it was mentioned directly only once by a participant who, when asked why he does not follow his parent's way completely, explained that "during socialist time the livestock was the states organized it and the people were then very responsible for their animals but then they became privatized and can do whatever they want now" (Interviewee 12). His parents were herders during the socialist time and this switch to

democracy fundamentally changed the way herding was run. For example, one herder explained that he "needs to raise the number of his herds for economical benefit" which can be connected to the transition from collectivization to privatization (Interviewee 7).

3.2 Keeping Up with The Times

The concept of modernity and modernization is complicated and questions about this were not directly asked of participants. Several participants however, mentioned motorcycle use in connection with modern times and the necessity of their use. For example, one herder said that motorcycles are "the standard of life for modern day" (Interviewee 11). When talking about what they do differently from their parents, herders said:

Interviewee 8: "I herd animals in modern way using a motorcycle"

Interviewee 9: "Techniques are different like motorcycle because it's modern time and need to follow the times"

This change from horse use to motorcycle use is seen as something that comes along with time passing and living a more modern life. Interviewee eleven was particularly aware of this change and the need for it to happen. Not only did he think it is necessary for modern day life but said that, "Every country is developing so it is good for this country to develop too with everyone else". This was the only time that a participant talked about development directly. With the transition from socialism to democracy, Mongolia's markets were globalized, distinctly changing the products that people can buy and the way they live. To keep up with the changing economy the herders believed they need to go with the times.

Land Degradation

4.1 Noticeable Changes

Mongolia's landscape has been distinctly changing with the increase of mining, grazing animals, and the effects of climate change. Herders' work is completely interconnected with the land so when asked if they had noticed any changes in the land, the answer was overwhelmingly "yes". All twelve interviewees said that they had observed changes in the land since they first started herding. For example, one herder said he has noticed that "there is not enough rain, grass grows a lot less" (Interviewee 6). The answers given almost always centered around the lack of grass and water but some participants also had other views about why the land was like this. Their responses included:

Interviewee 8: "livestock of Mongolia used to be 28 million now it is 78 million which contributes to the grass not being as good"

Interviewee 6: "it's because more vehicles and smoke from vehicles but also climate changing affects this too"

These responses were also always incorporated with there being less rain and more dust which also negatively impacts the grass. There was much concern expressed when talking about the land because their lives directly depend on the health of the land and the grass it produces

The herders held conflicting opinions when it came to whether or not motorcycles might also be a cause for the deterioration of the land. Seven out of the twelve people interviewed did believe that motorcycles caused some damage. The most common example of that damage was that motorcycles "affect the ground a lot and damage the roots of the grass and leave lots of tracks" (Interviewee 10). Eight people out of twelve said that the motorcycles leave tracks

4.2 Motorcycles Impacts

behind wherever they go which causes lasting damage. Some interviewees were unsure about the damage and did not feel like they could comment on it because they were uncertain. One participant seemed to defend his use of a motorcycle. When asked about damages, he said "It might affect the land a little bit but without them they could not do their job" (Interviewee 2). This interviewee wanted to make sure that it was known how important having motorcycles is for his life and even with the damages it would be worse to not have them.

The benefits of motorcycles outweighed the damages being done to the land for almost every herder who was asked. Eight herders were asked and seven said that the benefits are so important to them and a defining factor for getting their work done that yes, the benefits outweigh the damages.

Discussion

Mongolia has visibly changed in the last thirty years. The economy, government, religion, social life, environment, and so much more have changed since 1989 due to the transition from socialism to democracy. In many ways, these changes have greatly benefitted the citizens of the country but in other ways it has caused hardships and unforeseen consequences. The use of motorcycles among herders can be seen as one of the changes which has brought benefits but also carries consequence. This research sought to examine how the increasing use of motorcycles is affecting the traditions of herders and how these vehicles are affecting the land. Though this was the original intent of the research, the results point to a more complicated conclusion than was expected.

Mongolia's recent history can be separated into two very distinct parts: socialism and post-socialist democracy. This political transition completely changed life for herders. In the 1950's under the communist regime herding was collectivized and broken down into *negdels*

which were collectivized groups of herders during the socialist time. These *negdels* were divided into brigades and in each brigade, families were assigned animals to look after (Sutton-Smith, 2017). Herding was strictly controlled but this tight control brought more resources for herders. Under Russia's control, the Mongolian herders' lifestyle was very different than it is today:

...it offered free education, healthcare and pensions. It provided veterinary services, animal shelters, hay and transportation for people and equipment. It marketed all livestock products jointly, and supplied consumer goods in return (Bruun, 2013, 67).

Most of the herders' current concerns did not exist during socialism because they had the support of the government. The land was in better condition as well because herding sizes were restricted and controlled by the government leaving less possibility of the over-grazing that we see today in Mongolia. Though in many other areas socialism failed, with herders and livestock, the support was better for them than what is seen today under democracy.

It was reported that herders currently face many struggles to continue to support themselves. With the increasing amount of *dzuds*, a summer drought followed by a severe winter, as well as the increasing number of livestock the land has been impacted in a way that might be hard to recover from. In the transition to democracy, citizens of Mongolia gained religious, economic, and social freedom. This freedom came with different costs for different groups. Nomads now had privatized herds and could own as much livestock as they wanted. For some, the increase in livestock numbers came from a need to keep up with the economic changes. With democracy comes capitalism and globalization of the countries markets:

...capitalism has managed to transform Mongolia to a large extent. Vendors sell coke on the grassy steppes. Satellites have proliferated the countryside to connect Mongolia with the outside world (Bilskies and Arnold, 2002, 215).

While this is great for foreign investment and even business within the country, there are often groups that fall into economic trouble due to capitalism and globalization.

Herders exemplify this. They went from having the full support of the government under socialism to having very little to no support under democracy. One of the ways herders could try to keep pace with the new economy in Mongolia was to have more livestock. More livestock meant that if *dzuds* hit and killed a majority of their livestock, they would still have some that survived. Increase in livestock also meant more profit for the herders. The herders needed this livestock increase because the new government left little support for them in emergencies or in this new emerging capitalist market. One interviewee said that other countries are developing and they need to try and continue to develop along with these other countries. While capitalism in many aspects brought great change for Mongolia it also has left a large portion of the citizens in a worse economical position trying to compete with other countries when they do not have the economic means to do so.

One way to compete with other developed or developing countries is to modernize. In order to continue to be seen as a competitor in the market having modern technologies is essential. In a country like Mongolia where there is a large city in the midst of modernizing and the rest of the country is still living in the rural countryside, modernization looks very different. Herders will not be building apartment houses as in the city because it does not fit with their work. They generally move four times in a year, which would not allow for this type of modernization, at least not yet. However, they have found other ways to modernize, such as motorcycles. The motorcycle has given herders the gift and curse of more time. With modernization comes more technology and technology can change the way time works for us. It has the potential to make us experience time differently.

Herder's have adopted the motorcycle because they are faster and more efficient. It is theorized/said that increasing modernity changes perceptions of time.

Technology makes us impatient for anything that takes more than seconds to achieve. You press a button and you expect instant access ... so technology is pushing more and more of us into a very immediately-focused time zone (Zimbardo and Boyd, 2008).

With this constant access of information, people expect things at a different pace than they did before the internet was available. Modernization brings technology, which in turn may affect the speed at which we want things done. This is evident among herders in Mongolia today: Communication and information technology have not heavily impacted herders yet. Most herder families have cell phones now, but generally only use them to make phone calls. Smart phone and laptop technology may have not made their way out to the countryside in Mongolia yet, but motor vehicles have changed the way herders view time. Almost every herder said motorcycles are good because they allow them to get to places quicker, save time, and are easier to use than a horse. The use of faster technology makes anything slower, such as using a horse, seem less useful. Herders said that with horses it can take a whole day to get a job done that otherwise could get done with a motorcycle in half the time. The speed that motorcycles offer has made them invaluable to herders as time becomes more important to them. There was only one herder who expressed the value of doing things slower. The herder who had no motor vehicles and only used horses said he liked to do things slower and move the animals slower because it is more comfortable for the animals and for himself. There is a clear distinction between how time functions with herders who use motorcycles and the herder that continues to use the horse.

The increasing modernization of Mongolia has not only affected the way herders see time and the necessity to save as much of it as they can, but it has also affected the land. Mongolia is

in a unique position because one of their main revenue sources is agriculture (herding), but the land is suffering greatly and this in turn impacts this source of revenue. Currently 70% of Mongolia's available pastureland is damaged due to overgrazing and desertification leaving Mongolia in a precarious situation (T.S. Sukhtulga, 2018). There was little incentive after the transition to democracy to keep livestock numbers contained. In fact, with the new economic troubles, herders saw an incentive to keep increasing livestock numbers. On top of this, the increasing number of dzuds has caused Mongolia's pastureland to suffer greatly. Every herder interviewed expressed concern for the land and noticed how much the land they have grown up using has changed. The lack of grass was one of the changes herders noticed the most and seemed most concerned over. The worsening condition of the land and grass was often cited by herders as a reason that they do not use horse as much. Many herders seemed to believe that their horses were weaker now than ever before due to poor grass quality. Because the horses are now weaker, the herders must find another form of transportation and the motorcycle fits their requirements well. However, there is concern that motorcycle may also be contributing to land degradation. Many herders noticed that with the increase in motorcycle use more tracks left behind which makes it harder for grass to grow. However, a majority of the herders also said that the necessity of the motorcycle in their daily life outweighed the damages that motorcycles could be doing to the land. The predicament that the herders are in now may leave them feeling as if they have little choice between protecting the land and keeping up with the modern times and the economic development of the country.

The herds are larger now than ever before for economic and personal gain as well, leading to overgrazing and the need for a new form of transportation to keep up with the work that comes along with a larger herd. However, though many herders stated that they needed

motorcycles to save time, keep up with the work, and because the horses are weaker, other herders believed this was just an excuse and they are becoming "lazier". This conflicting view of the reason for motorcycle use may have a bit of truth on both sides. Access to technology in many ways can often make our life easier. Motorcycles have made herders' lives easier because it saves them time with the increasing number of livestock and is more powerful than the weakening horse according to some herders. But technology can also make us "lazier". With smart phones, people have the ability to get any information they want and when the information is not available they may not be inclined to go out and find it in another way because this seems like extra effort that they are not used to exerting. This may also be happening to herders. They now have access to modern technology such as motorcycles, which make their daily lives so much easier that using horses again seems like unnecessary effort. The prospect of going back to using something that takes longer and is more work is not appealing, especially when the easier option is readily available. Each herder may give a different reason for the use of motorcycle but no matter the answer, it is clear that modernization and technology have significantly changed herders lives and possibly the values herders hold as well.

As more and more herders continue to turn towards motorcycles for herding purposes and away from the traditional way of the horse, it may seem that some long-standing herder traditions are changing. A majority of herders interviewed seemed to feel that using motorcycles to herd instead of horses was a change in tradition. However, they did not feel that they were losing the tradition of horse riding or that people would all together stop riding horses.

Originally, this seemed like a contradiction. How could herders no longer be riding horses for herding but still believe that the tradition will carry on? The tradition of herding with horses is seen as transitioning to herding with motorcycles but the use of horses will not go away because

it is more than just a tradition, it is a part of who they are. Herders see the use of motorcycles as a necessity to keep up with the times and not so much a choice. Horses will never be unimportant or go unused because they are more than a tradition, they are a part of Mongolian identity. Tradition is often thought of as the passing down of beliefs, customs, and information from generation to generation. The horse is an integral part to Mongolian history and remains so for herders today as well. They will not give up the use of horses because it is a part of them. Tradition in this case may not necessarily be actively used but can be something that is remembered and will continue to be remembered. Herders do believe that the traditions are changing but they will not be lost just because they are not currently being used. Times are changing and ways of life are changing so they must adapt with motorcycles to keep up, but they do not think that they are losing the traditional horse riding culture.

Strengths and Limitations

This study brought information that was previously unstudied to light. There has been research done about the transition from horse to motorcycle, however, none of the research specifically touches on how herders see this transition and how they think motorcycles affect the land. There is also limited research on the affects that motorcycles have on the land from a scientific perspective This research adds to previous studies because it presents the herders' perspective on these transitions that are occurring.

One limit of this study was the sample size. There was only one week available to complete the interviews so twelve interviews were collected in five days. This sample is relatively small and only taken from one *soum*. It is possible that herders in other parts of Mongolia have different views. This *soum* was also located relatively close to Ulaanbaatar and thus herders had easier access to motorcycles compared to other *soums* further away. Research

may be more accurate on the amount of motorcycles used had there been more time to go to other *soums*. There was also a language barrier and a translator needed to be used. Because the information needed to be translated, there is potential for miscommunication. Funding for this research was also limited which restricted the resources that could be used for this study.

Conclusions and Further Research

With the sudden open markets, herders had to keep up with a new economy and find new ways to adapt to it. One of these ways was the use of motor vehicles, specifically motorcycles. They have larger herds to try and keep up economically and many herders interviewed felt like they could not complete the amount of work they had to do without the motorcycles. The country's transition to capitalism has left them with "chronic poverty" that is greatly impacts herders and the way they continue to herd (Bilskie and Arnold, 2002). Capitalism has caused this change that might not have happened otherwise. The use of motorcycles came about because of the economic changes and modernization, which are byproducts of capitalism. With the widening gap between the rich and the poor that happens in almost every capitalist society, Mongolian herders needed to find a way to keep up with the economy and they did this by having more animals. With more animals came more work and a need to get the work done in a faster manner. Motorcycles can provide a speed which horses cannot. The modernization of the countryside has changed the way herders view time but it has not changed the value they place on horses. Further research may begin to look in greater depth at how the transition from socialism to democracy along with modernization is creating a more "modern" nomad. Research into how herders see traditions and how the traditions they value are being changed due to modernization is also another possible avenue of investigation.

References

- Bilskie, J.S, and Arnold, M.H. (2002). An examination of the political and economic transition
 - of Mongolia since the collapse of the Soviet Union. *Journal of Third World Studies*, 19(2):205Bilskie, J.S, and Arnold, M.H. (2002). An examination of the political and economic transition of Mongolia since the collapse of the Soviet Union. *Journal of Third World Studies*, 19(2):205
- Bruun, O. (1996). Mongolia in transition: old patterns, new challenges. New York: Routledge.
- Kelly, K. (2017, November 16). What Mongolian Nomads Teach Us About the Digital Future. Retrieved April 18, 2018, from https://www.wired.com/story/what-mongolian-nomads-teach-us-about-the-digital-future/
- Kinugasa, Toshihiko & Suzuyama, Yukie & Tsuchihashi, Noriko & U. Nachinshonhor, G. (2013). Colonization and expansion of grassland species after abandonment of dirt roads in the Mongolian steppe. Landscape Ecol Eng. 11. 1-9. 10.1007/s11355-013-0230-y.
- Pomfret, R. (2000). Transition and Democracy in Mongolia. *Europe-Asia Studies*, 52(1), 149-160. Retrieved April 18, 2018.
- Marsh, Peter K. "Modern Mongolia." Faces: People, Places, and Cultures, Oct. 2003, p. 8+. Student Edition, WEBSITE. Accessed 20 Apr. 2018.
- Reyes, H. (2014, October 16). Mongolia: Nomads in Transition. Retrieved April 18, 2018, from https://thediplomat.com/2014/10/mongolia-nomads-in-transition/?img=3#postImage
- Rinkevich, S. E. (2008, Traditional ecological knowledge. *Endangered Species Update*, 25, S18-S19. Retrieved from http://reference.sit.edu/docview/746748046?accountid=45073
- Shagdar, E. (2002). The Mongolian Livestock Sector: Vital for the Economy and People, but Vulnerable to Natural Phenomena. ERINA REPORT. Vol.47. pp.4-26.
- Yembuu, B. (2016). Mongolian Nomads: Effects of Globalization and Social Change. *Education in the Asia-Pacific Region: Issues, Concerns and Prospects Everyday Knowledge, Education and Sustainable Futures*, 89-105. doi:10.1007/978-981-10-0216-8_7
- Zimbardo, P. G., & Boyd, J. (2010). The time paradox: The new psychology of time that will change your life. London: Rider.

Appendix

- 1) How old are you?
- 2) How long have you been a herder?
- 3) Were your parent's herders?
 - a) What did you like about herding as a child?
 - b) What did you not like about herding as a child?
- 4) Do you hope your kids continue to herd?
 - a) Why do/don't you want them to continue?
- 5) What are some important things you think people should know about herding?
- 6) If your parents were herders, do you feel like you herd in the same way that they do?
 - a) What do you do the same? What do you do differently?
 - b) Why do you do some things differently?
- 7) How many vehicles do you own? Motorcycles, cars, both?
- 8) Why did you purchase them?
- 9) What do you use them for?
- 10) How often do you use them?
- 11) Do you still use a horse for transportation?
- 12) Do you think the use of motorcycles and cars are changing some of your traditions (herding style, knowledge of the land)?
 - a) How are they changing them?
- 13) Have you noticed changes in the land since you started being a herder?
 - a) If yes, what changes?
 - b) Why do you think the land is changing?
- 14) How do you think motorcycles and cars affect the land?
 - a) Do the benefits outweigh the damage it might be doing?

PARTICIPANT INFORMED CONSENT Form

Title of the Study: Coming in Hot: Motor Vehicles, Capitalism, and Modernization in Mongolia Researcher Name: Thea Bergen

My name is Thea I am a student with the SIT Mongolia: Geopolitics, the environment, and nomadism program.

I would like to invite you to participate in a study I am conducting (for partial fulfillment of my r as part of the SIT Study Abroad program in Mongolia). Your participation is voluntary. Please read the information below, and ask questions about anything you do not understand, before deciding whether to participate. If you decide to participate, you will be asked to sign this form and you will be given a copy of this form.

PURPOSE OF THE STUDY

The purpose of this study is to see how cars and motorcycles are affecting traditions of herders as well as to see if these vehicles impact the health of the land.

STUDY PROCEDURES

Your participation will consist of answering questions and will require approximately 1 hour of your time. If you consent the interview will be voice recorded.

POTENTIAL RISKS AND DISCOMFORTS

There are no foreseeable risks to participating in this study and no penalties should you choose not to participate; participation is voluntary. During the interview (focus group) you have the right not to answer any questions or to discontinue participation at any time.

POTENTIAL BENEFITS TO PARTICIPANTS AND/OR TO SOCIETY

There are no personal benefits from participating in this study.

PAYMENT/COMPENSATION FOR PARTICIPATION

There is no compensation for being involved in this interview.

CONFIDENTIALITY

Any identifiable information obtained in connection with this study will remain confidential such as your name and your age. I will not write down your name or your age. After I have finished the research paper I will delete all voice recordings of the interview.

When the results of the research are published or discussed in conferences, no identifiable information will be used.

PARTICIPATION AND WITHDRAWAL

Your participation is voluntary. Your refusal to participate will involve no penalty or loss of benefits to which you are otherwise entitled. You may withdraw your consent at any time and discontinue participation without penalty. You are not waiving any legal claims, rights or remedies because of your participation in this research study.

"I have read the above and I understand its contents and I agree to participate in the study. I acknowledge that I am 18 years of age or older."

Participant's signature	Date
Researcher's signature	Date
Initial one of the following to indicate your ch (initial) I agree to (initial) I do not agree to	noice:
and this will involve no penalty or loss of ben withdraw you're your consent at any time and	ntary. You can refuse to have the interview recorded efits to which you are otherwise entitled. You may discontinue the voice recording without penalty. or remedies because of your participation in this
Participant's signature	
Researcher's signature	Date
Initial one of the following to indicate your chefinitial) I agree to (initial) I do not agree to	noice:
Consent to Quote from Interview	
•	our child either in the presentations or articles l be used, include this statement: A pseudonym our child's identity.]
Initial one of the following to indicate your ch (initial) I agree to (initial) I do not agree to	noice:

Consent to Audio-Record Interview
Initial one of the following to indicate your choice:
(initial) I agree to
(initial) I do not agree to

RESEARCHER'S CONTACT INFORMATION

If you have any questions or want to get more information about this study, please contact me at tbergen@uoregon.edu or my advisor at researcherabroad@gmail,com

RIGHTS OF RESEARCH PARTICIPANT – IRB CONTACT INFORMATION

In an endeavor to uphold the ethical standards of all SIT proposals, this study has been reviewed and approved by an SIT Study Abroad Local Review Board or SIT Institutional Review Board. If you have questions, concerns, or complaints about your rights as a research participant or the research in general and are unable to contact the researcher please contact the Institutional Review Board at:

School for International Training Institutional Review Board 1 Kipling Road, PO Box 676 Brattleboro, VT 05302-0676 USA irb@sit.edu 802-258-3132