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Name	SIQINGAOWA
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**MONGOLS IN NATURE, MONGOLS WITH NATURE AND
NATURE TO MONGOLS
WITH SPECIAL PERSPECTIVE OF NATURE VALUATION**

モンゴル人と自然の関係性
環境倫理学における自然評価論の視点から

BY
Siqingaowa

DISSERTATION

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Introduction

By tracing various elements in the lives of Mongolian of inner Mongolia in a detailed manner, this thesis discusses a need for a more robust and holistic approach to understand human-nature relationship which is strengthened by a discussion and analysis of the limitations in the existing valuation systems. Large part of the chapters almost traces Mongolian nomadic life in anthropological details despite no primary research done for this thesis. This richness of details comes from researcher's being a native and bringing in an insider's perspective to my thesis, which is an added value of this work, in addition to proposing a better and new valuation system called holistic intrinsic valuation system.

Human activities with the interaction of the natural environment started from the beginning of human history. The major destructive activities started from a large expansion of agriculture and industrial programs easily traced back to recent history. The destruction and degradation of nature followed by anthropocentric valuation on nature have dominated the nature valuation system. One can assert that at the root of many present-day environmental problems, is the fact that the world is dismissing the importance of nature. These critical problems have already caused a social and ideological disruption that are difficult to resolve through the existing forms of politics, economics, or religions. The complex environmental issues have to be approached from different traditions and should not be restricted to the secular and rational approach espoused by mainstream societies. Besides, the most critical and urgent task facing contemporary humankind is to properly address and re-recognize the relationship between humanity and nature and the abundant study and research on this field should be encouraged.

The contradicting context of the disappearance of current nomads and their existing natural thoughts with their wisdom should be shared over worldview boundaries. There are themes in Mongol environmental thoughts that can make a considerable contribution

to current human-nature relationship research, which would allow for mutual growth and possibilities for the rest of the world. In nomads life, nature, as a central focus, embraces the close and interrelationship between humans with nature and share abundant knowledge stemming from rich and diverse nature built up their cultural and natural backgrounds. There might be a solution by analyzing and observing the relationship between human beings and nature to the environmental problem by understanding how the people of nomads people perceive and stand for their natural environment.

Mongols are one of them that can be defined as ecological citizens. Their ecosystem is firmly based on its ecological or natural environment within which its social structure and possible economic formation are transformed. Besides, in the modern context of the human-nature relationship, recognizing a holistic view of environmental protection or ecology is neglected due to humans' alienation from nature. Compare to the current trend in the agricultural and industrial world, this strand of nomads thought should be construed as providing the basis for the promising environmentalism and addressing a better human-nature relationship. Currently, the entire nomadic system in Eurasia, mainly in Inner Mongolia, is collapsing due to the severe grassland degradation and destruction. The intricate nomadic ecological lifestyle has barely been successfully adopted in modern life because of the imbalanced grassland usage weakens and threatens the relatively fragile steppe ecology. One of the leading causes is the monetary valuation of grassland based on the market economy's development. Environmental problems must be understood as part of the larger setbacks for nomads in an examination of ecological steppe degradation to its social and cultural changes. The changes in nomads' life in Inner Mongolia are suitable subjects to illustrate how the relationship between humans and nature transformation should be, and what kind of unsustainable consequences are a result of those changes.

The question remains that how to explain the dynamic human-nature relationship in nomads to be acceptable, how to prove it to be plausible to the rest of the world. Without

knowing the connection of the nomadic way of life with nature, the outsiders also don't understand why Mongolia's people still live a traditional way of life with their herds and why they usually move from pasture to pasture. Further, one cannot understand the nomadic ecosystem, nor its significant meaning.

At this point, environmental ethics studies provide a very suitable exit to properly explain the human-nature relationship in nomads context. The environmental ethics perspective on the relationships between humans and nature has long been discussed and it is the environmental philosophy that considers the ethical relationship between human beings and the natural environment, in particular, is striving to achieve a better understanding of human-nature relationships. The discussion falls on intrinsic, instrumental, and relational values. Except the environmental ethics, intrinsic, instrumental, and relational values contribute to environmental behavior, and ecological service fields. The intrinsic value is the field of inquiry that addresses human beings' ethical or moral responsibilities toward the natural environment. The core theme of the intrinsic value is on objective and subjective intrinsic value. The instrumental value is criticized for its economic-centered valuation on the natural environment. The relational value is a relatively new approach that of attempt to alleviates the dichotomy between intrinsic and instrumental value. Assuming the separated concepts and ideas on three valuation systems do not cover the holistic approach of human-nature relationship in some particular group of people, this study combines the research results from anthropological and historical studies to the environmental ethics and focuses on finding a better theoretical framework.

Nature is a holistic and interactive system. For demonstrating this presumption is reasonable, this research is to analyze how Mongols place significant emphasis on nature and claim that everything, including human beings in nature is interrelated. Thus, fundamentally differentiated from eccentric, but not excluding people from nature, I claim this as nature-centered ethics. The interaction between Mongols and nature has

successfully resulted in protecting the ecological environment wherein they live. It is manifested in preserving the environment and ecology and preserving its engagement with nature while practicing nomads life. Nomads life facilitates ecological thoughts in dealing with diverse nature. The complex nature networks are constituted of parts interacting with each other in the context of integrated wholes. The wholeness of nature is essentially grounded in Mongol nature philosophy. The integrated wholes or organized networks of interacting parts adapt dynamically to exchanges between and other natural parts. The study of the relationships within the natural environment dramatically contributes, in part, to an increased understanding of the interrelationships in an ecosystem.

There are studies that prompted by worldwide changing socio-economic conditions like the human-dominated world that need to be nurtured by the broad range of sources of knowledge of nature. This work inclines to create a framework that possible to address and explain the human-nature relationship in nomads life and further activate social and cultural movements that can extend and spread the nomads-styled environmental thoughts by advocating studies addressed through the environmental ethics thoughts. The environmental ethics approaches on three nature valuations are possible methodologies and theories to explain the essentials of Mongol people's nomads life and foster an easier way of understanding the changing relationship between Mongols and nature. Moderating the nomads ecological system from environmental ethics, it is necessary to comprehend how Mongols perceive and stand for their nature and highlight the inseparability of nomads and nature. The transformation of relationships that was dramatically interrupted by modernization has been caused by environmental destruction, which is displayed to address the process and the cause of the disappearance of nomads.

Chronologically, in this research, at first, this research has attempted to document the balanced and harmonious linkages between nomads and nature. Then, from an examination of steppe destruction and degradation to address the dismantlement on the

relationship. It is explored in the intersection of three nature valuation methods by comparing the changes of this relationship from the past to the contemporary to conclude that if the destruction of nomads ecosystem is continuously neglected, it will end up to the severe ecological destruction of the whole Eurasian area. Finally, it explores the nature-centered relationship between humans and nature by advocating the human-nature coexisting scenario in which nature is prioritized.

This research assumes the nomads system is established on three fundamentally indispensable factors of mobility-free moving boundaries, shared resources (land usage), and Shamanism. Thus, after documenting the relatively harmonious linkages between Mongols and their natural environment in migration and Shamanism, this work analyzes the collapse of these elements and alienation of the relationship in land privatization. The migration is kept the balance between humans and nature so as not to hurt nature and benefit human beings and unified the human and everything within the grassland ecosystem as well. The significance of Shamanism is spiritually carrying the relationship between nature, nomads, and their land together. The science of nature and the cosmos subsumes the idea of the material world, or the universe as a whole, under a very general religious perspective. The conception of God or the Creator in Shamanism is the sacred belief in the very basis of the indigenous cosmology. It is interpreted to conceptualize the nature and human relationship in ways to fit the holistic intrinsic relationship. Land privatization diversified the land usage patterns like farming and mining and accordingly limited mobility. The administrative land separation from the beginning of the Qing dynasty to the privatization of grassland since the 1980s in Inner Mongolia largely diminished the free moving space and accelerated the sedentary life.

During all this period, I also have fully realized how difficult it is to ask outsiders to be engaged in common interest and concerned with their own. The common understanding requires that we should be aware of the explicit acknowledgment of different worldviews of other people with a different culture. So, in this research, to make

the whole thesis easily understandable to all readers, I applied the environmental ethics theories trying to fit them into nomads studies. Despite being a native researcher, I have maintained objective and critical attitudes towards the issues and concerns and tried not exclusively to speak from a Mongol perspective. For example, in critiques of human nature alienation in modern society, there is no attempt or a tendency to oppose modernity, only attempted to put stress on the differences between the contemporary scientific existence and traditional ecological lifestyles.

Significance

The specific significances of this research are as follows. Firstly, as I insist the widespread attention and observation should be given to the system of nomads people and their nature, this work examines the nature-centered human-nature relationship in nomads context with nomads environmental thoughts, also interpret the reasons that caused the disappearance of nomads life or the environmental problems in Inner Mongolia from a different academic perspective. Vice versa, this is the first academic work that tries to address the environmental ethics theories by examining one ethnic's environmental thoughts.

Nomads' relationship with nature in the Eurasian area is an existing active research topic that can illustrate the authenticity, integrity, and balance of the close relationship between humans and nature. Many scholars have promoted the theoretical discussions on nature valuation. Therefore, so far, no research has tried to break down those theories to an actual existing case and attempt to find out the limitations of adopting these three systems in the real ecological system. The three nature valuation approaches are offered to enable and encourage open and logical understanding across nomadic worldviews on the human-nature relationship.

Thirdly, this research helps to enrich the nature-valuation research framework by addressing the new framework that might fit to address some of the indigenous and local group people's relationship with their nature. Current environmental ethics studies

indicate that human behaviors have caused severe damage to nature around us and some of the scholars have more inclined to focus on the separations of valuation system, which tends to separate human beings from our original existence of nature. Human being's re-recognition of our relationship with nature must be in a holistic way to maintain the balanced and harmonious, which deserve attention and should arouse scholars from ignorance of it; in that sense, it is also vital. Nomads people's topic can offer a prosperous case to study, and the legacy provides qualitative and quantitative examples. Basically, this work provides a interdisciplinary insights in both nomads and environmental ethics studies.

Research Questions

This thesis approaches interactions between nomadic peoples and their nature at the fundamental level to seek the answers to questions like what kinds of relationship exists between humans and nature in nomads' society? How nature underpins nomadic people's relationship with the natural world? What are the concepts of three relationships applied by environmental ethics studies, and what are their limitations? Furthermore, how these relationships were kept and how they collide with current environmental issues?

More specifically, this thesis delves deeply into nature valuation theoretical perspectives of intrinsic, relational, and instrumental in addressing those questions. Although the main target of Inner Mongolia is chosen, the scope of the thesis is broader, encompassing concerns that are relevant to the whole Eurasian nomads world.

1) What perspectives on the human-nature relationship of the nomads ecological system can Environmental ethics theories have? Is it possible to apply intrinsic or relational value theories to nomads ecosystems? If not, is there any alternative that can explain the human-nature relationship in the whole nomads system?

2) Currently, the nomads system faces a significant threat, which causes changes in the human-nature relationship. How can these changes be applied by Environmental ethics

theories? Thus, how nomads handle the changing relationship caused by the current grassland degradation and destruction?

3) Why do we need to explore the human-nature relationship in nomads fields? What kinds of insights can nomads offer to an anthropocentric relationship?

Research Objectives

This study aims to challenge the limitation of existing environmental ethics theories on intrinsic, instrumental, and relational value to clarify the human-nature relationship in the nomads system and finally resulted in applying an new theoretical framework. This study revealed that the nomads system perceived the nature-prioritizing relationship, called 'holistic intrinsic value'. Specifically, this work clarifies the Mongols and nature relationship and contributes to addressing the human-nature relationship in the Eurasian area. Thus, the historically and systematically developed relationship between nature and humankind in nomads life still preserves human beings' coexistence with nature. In addition, this study calls into deep on the importance of the relationship between humans and nature in nomads context and explores its collision to modernization; further, the disappearance of this balance works on the influence of disappearance of nomads life and the imbalance of the whole ecology in Eurasia. Finally, discuss the further implication that can have for the nature-prioritized human-nature relationship.

1) This study explores and reviews the current research on intrinsic, relational, and instrumental value. This overview resulted in a broad theoretical framework of holistic intrinsic value with a perspective of intrinsic, relational, instrumental value with a holistic approach as a human is part of nature. All nature beings are interconnected and interdependent. (Chapter III)

2) This study explores and understands the perceptions of Mongols and their relationships with nature by analyzing migration and Shamanism and conceptualizes these relationships into a holistic intrinsic valuation system. (Chapter IV and Chapter V)

3) This study explores and understands the perceptions of land usage privatization and the changes of the relationships and examines the influence of instrumental value factors on the Mongols and nature relationship, thus the contradicting context of original environmental thought and its current instrumentalism of nature; and its further threat to entire Eurasian nomads area. (Chapter VI and Chapter VII)

4) Finally, this study explores and understands the radical human-nature relationship by addressing to preserve nature prioritized relationship to maintain the human-nature coexistence. (Conclusion)

Research Methodology

Firstly, the theoretical framework explains the path of study and grounds it firmly in theoretical constructs. The overall aim of the frameworks is to make the research findings more meaningful, acceptable to the theoretical constructs in the research field, and ensure generalizability. So, in this research, the holistic intrinsic valuation system generalizes the nomads nature relationship and helps the readers to understand it properly. The framework also gives a foundation to make sure this new theory would be acceptable and available to interpret multi-culturally human-nature relationship. The theoretical framework also makes this research much easier for ascertaining its academic position and underlying the assertion of the intrinsic and relational value of nature are not enough to interpret indigenous or some group people's relationship with their nature. The theoretical hypothesis not only reflects the natural, ecological, and biological contexts of nomads societies, sponsored the existence of larger nomadic communities through the use of standard conventions; but that they also served to modify or construct a specific concept for understanding the nomads worlds.

The study will be based on empirical analysis of the literature contents and secondary data collected from environmental ethics, anthropological and environmental studies in Inner Mongolia and the rest of the nomads area, etc. To build the basic premise, numerous research articles, books, and online resources have been consulted, which

constitute the secondary data for this study. Being a native of Mongolian experienced and witnessed the changes from nomads to sedentary life that happened in my birth place when I was teenagers, the little chunk of information that are derived from the writer's subjective experience and understanding of the nomads worlds. The central focus of this empirical approach was on using the interpretative and descriptive analysis to explore a broad spectrum of perceived realities surrounding the topic of inclusion in human and nature relationships in nomads fields. Descriptive and interpretative analysis on literature contents and secondary research data is a qualitative research approach that involves observing variables to arrive at objective research outcomes. This dissertation research uses interpretive and descriptive analysis to examine the studies on migration, Shamanism, and land tenure of nomads produced by researchers and scholars from Western, Chinese, Japanese, and Mongolian. Specifically, with the above approaches, this project investigates how that nomads and nature context portraying a broader ideological discourse concerning the harmonious and healthy human nature relationship and focuses on reconstructing the nature-based historical, social, and cultural contexts in which nomads lived and worked.

With an associated theoretical framework, the analysis is guided by the speculative hypothesis stated above. Still, it remains open to other scientific-cultural explanations for the human and nature relationship. Also, by focusing on nomads' relatively commonly known knowledge, this research will contribute theoretically to synesis the pieces of this general knowledge to one.

Limitations

Firstly, because of the limited access to the research materials, most of the materials applied in this research are in English and Mongolian. Chinese and Japanese articles and books only share a small part of this work. In the following study, I would take time to read more from these two languages.

Next, every subject like migration, Shamanism, and land tenure movement can be extended to more prominent topics of environmental ethics fields. This research gives a general understanding of the human-nature relationship in nomads fields. In the following studies, I would more specifically focus on three subjects separately.

Finally, this study is based on qualitatively and abstractly analyzing the existing literature and secondary data. More quantitative studies are needed to amass sufficient data. Furthermore, the holistic intrinsic value should be subjected to tests and compared to ascertain whether it can be academically generalized or subject-dependent. The impact of holistic intrinsic value needs to be tested through more transferability studies, including quantitative studies and studies that measure the application of this model to novel situations of nomads people. Besides nomads, further research could examine the impact of this new approach on different ethnic groups. Of course, comparative studies of different countries would also be valuable to this line of research. The goal is to help the mainstream world adopt the new paradigm and convivial use of this new approach in research and decision-making. Immensely, suppose any study aims to support government decision-making regarding sustainable development. In that case, it can narrow the gap between the knowledge requirements of the local perspective and the research results established by the scientific community. The concept of holistic intrinsic value, operationalized by combining the three-valuation with holistic viewpoint, is a practical, theoretical methodology to identify such gaps. It can be concluded that without holistic judgment on the human-nature relationship, land-use policies most likely fail to generate useful results for decision making while only addressing the instrumental value of the land.

Structure

Chapter I gives a brief introduction of academic studies from past to present on nomads and environmental ethics fields. Chapter II provides the background information related to Mongols and their ecological problems; the third chapter gives a theoretical

framework. The fourth and fifth chapter offers the understanding of migration and Shamanism in the grassland system and the holistic approach that Mongols hold with their nature. Chapter six gives a comprehensive knowledge of the dismantlement of the nomads system by connecting it to the instrumental value of nature. Chapter seven continues the human nature separation discussed in the previous chapter in a modern context. The conclusion part gives insights into the theoretical framework and nomads ecosystem. It finalizes the whole work by concluding that the nature-prioritized radical relationship is the basis for human-nature coexistence.

Chapter I is a literature review devoted to describing and summarizing the insights of academic works on nomads and nature valuation system of intrinsic, instrumental, and relational value from environmental ethics points. This chapter tries to give a clear picture of the studies on these subjects and findings provide the researcher a guide and helps develop and familiarize this project. The first section provides a general idea of historical and anthropological studies on nomads and land tenure movements. The second section briefly discusses the fundamental theories of environmental ethics fields. In the third section, some social studies on the alienation of human and nature studies are picked up. Finally, it concludes that the environmental ethics theories are needed to be applied to an ethnic group of people's environmental thoughts to challenge its limitations.

Chapter II outlines the backgrounds for the thesis as a whole. In the first section of this chapter, the brief introductions of Pan-Mongols are added to give my readers a quick understanding of Mongols worldwide. In the second section, the economy-expansive activities and their substantial effects on the nomadic ecosystem have separated Mongols from their traditional land. This background information addresses illustrative approaches to know the reality of environmental problems in Inner Mongolia. These are of critical concern to Mongols' situation today, which is an unprecedented one: the global ecological crisis and the conflict between economic development and the protection of nature. Much can be done to address ecological degradation problems followed by

agricultural and industrial expansion in Inner Mongolia. The environmental problem already happened is one of the vivid examples that nature was utilized as natural resources. In conclusion, these severe environmental problems caused by humans and their relationship with nature stand for reflecting the instrumental value of nature, and grassland serves as an instrument without any proper replacement.

The chapter III forms a basic theoretical framework in which all the other chapters will radiate and commonly connect the whole thesis as a whole. The existing environmental ethics studies on intrinsic, instrumental value and relational value which mostly in ecosystem service studies, are compared by presenting the theories in this field to support the fundamental analysis and discussions that run through the following chapters. It concludes that instrumental is anthropocentric, relational values is partly anthropocentric, partly non-anthropocentric, and intrinsic value is eccentric. Finally, the holistic intrinsic value of nature is provided as a radical attitude toward nature from the perspective of intrinsic value proponents of Rolston III, John Baird Callicot, Leopold. The following sections explain the concepts, characteristics, and limitations of these three valuations and briefly question the grounds for attributing them to the nature valuation system. Lastly, it concludes in the last part of this chapter by surveying the limitations of all three valuations, and addressing the holistic intrinsic valuation is a need for the most effective approach to value nature by drawing attention to the interdependency and interconnectedness of wholes and parts, the objectiveness of intrinsic value, the subjectiveness of recognition or discovery of intrinsic value, human beings' dependency on instrumental value of nature. With this, the holistic intrinsic valuation framework is synthesizing the intrinsic, instrumental, relational value and holism for nature is an integrated system with all living beings and non-living beings as well, and which forms centers of nature and all of them have the best of their own. Therefore they should be subjects and objects of the biotic community as a whole.

Chapter IV outlines the migration in nomadic life to clarify the nomads people's various connections with these nature and nature objects. The first section introduces the mobility and the founding of the definition of the nomads' ecosystem concept. The following section follows a narration of the nomad's relationship with nature by picking up their relationship with domesticated animals, wild animals, and vegetation that have enriched the understanding of the nomads' ecosystem. An appreciation of these concepts and their different nuances and natural related expressions are essential for understanding one of the thesis's central arguments. Nomads people's connection with nature with relevance consists of ecological perspectives and environmental approaches.

The description of specific instances of Shamanism related to nature forms Chapter V. The first section explores the rising of Shamanism in the Mongol area. And in the following section, Shamanism tends to address a synthesis relationship between people and nature. It thus aims to conjoin nature and human beings through spiritual and ceremonial rituals by the closer exploration of natural animation, *Ovoo* ceremony, and Tengerism. A broad overview of the practices of Tengerism is given to discuss the concept of the holistic intrinsic value of nature. The third section underpins many theoretical assumptions that appeared in chapter first; for instance, such a notion of humans in nature, the relational relationship of human and nature, is developed when people recognize the intrinsic value of nature.

After alluding to the mutual interactions between people and nature through the mobile life process in the previous chapters, it finally investigates the force that has caused the stifling of the nomads life in Inner Mongolia that the separation of people and nature. The key concepts explored in Chapter VI are instrumentalism of land usage in Inner Mongolia and try to prove that instrumental value of nature is the main cause of nature degradation. The first section addresses the historical process of administrative divisions and the land privatization process. Following the land privatization process that accelerated the diversification of grassland usage is discussed in the third section. Finally,

I bring the insights gained from Chapter III to bear on the question of the spread of instrumental value and its influence in the contradiction between the holistic intrinsic value and the instrumental value and its thread on entire Eurasian nomads.

Chapter VII is to encourage a greater awareness of and commitment to the understanding of the relationship between humankind and nature by further examine the alienation of human and nature relationship in the modern context. The influence of outsiders upon current nomad ecosystem changes is questioned in Section two. Section three challenges the assumption that notions of the anthropocentric human-nature relationship caused by human alienation from nature originated from agricultural and industrial societies are now universally accepted and sought after by most world cultures. The third section then focuses on the current issue between human beings and nature in non-nomadic communities. For nomads people, the relationship stage changed from nature to society is picked up by analyzing the disappearance of group work tradition in nomads life. Besides, its holistic intrinsic relationship with nature and land usage has never been recognized and affirmed by mainstream societies. The conclusion part of this chapter further questions the anthropocentric judgment of nature against holistic intrinsic value.

In the concluding part, the outline of the relationship between nomads and nature is explained by sticking to the title of this dissertation. The application of the holistic intrinsic approach to the nomads fields and its possibility of addressing indigenous backgrounded human-nature relationships is justified. In part, the final suggestion is making a nature-prioritized human-nature relationship is possible to maintain the coexisting of human and nature.

Introduction

There are three broader strands of literature and studies that have been cited and reviewed in this chapter. They tackle the different understanding, visionary ideas, and other development related to the study of broadly three overlapping areas of study like the nomads, environmental ethics including alienation of humans and broadly human-nature relationship studies.

Most of the nomads studies were developed through anthropological and historical viewpoints to justify the existence of nomads. Few pieces of research related to nomads issues have been done under the environmental ethic study. Technically, this study investigates the research observations from anthropological and historical studies to the environmental ethics point of the human-nature relationship. Theoretically, this study will focus on a new valuation framework that is generated from environmental ethic studies. The natural environment, interactions with human beings, the evolution of human nature relationships, and the environmental ethics itself are combined in this study. The combination of three valuation discourses into one strategic framework, Expanding the understanding of different human-nature discourses and making an attempt at correcting the way people in mainstream societies relate to nature, instead of separating them by focusing on their contradicting characteristics. Further, a new approach helps solve the disagreement on objective and subjective intrinsic value employed by environmental ethics studies.

Three broader strands of literature are discussed and reviewed here in this chapter which follow. The first strand establishes whatever little has been studied about nomadic life through themes of grassland, shamanism etc. followed by establishing a need for environmental ethics with the existing gaps followed by human-nature alienation. By

reviewing the literature, a claim to establish a need for a new holistic valuation system is made, which shall be attempted in the subsequent chapters.

Section one Nomads Studies

There is a significant divergence of opinion about what constitutes the nomads society from the western point of the study. Literature about three main themes of animal grazing, grasslands and threats to it, and shamanism that constitute nomadic life has been briefly discussed in this section. Many anthropological and historical studies have tried to justify the existence of nomads as migration in Eurasian areas without demonstrating any changes along with history. In recent studies, natural degradation and destruction were connected to the land privatization program in Mongolia and Inner Mongolia. “Mongolian Nomadic Society” (2001) by Bat-Ochir Bold, Mongolian native author and historical researcher in the University of Reykjavik, Iceland, conducted studies explaining the nomadic society is built on mobile livestock keeping, which supports its economic and social structure. He concluded that it is inaccurate to compare the nomadic system with the agricultural system. Bold examines the nomadic society and its transformation from the time of Chinggis Khaan in the 12th century to the Manchurian Conquest in the 19th century and criticizes the adaptation of the feudalism concept to nomadic culture. The book analyzed the economic conditions and everyday life of livestock keeping, tribal and political-administrative organization, and the social strata of mobile society during the 13th-19th centuries, demonstrating that nomadic development cultures in Central Asia cannot and should not be evaluated following European norms. This work gives one of the significant sources of discussion of migration and group work tradition of nomads.

Some scholars identify nomads with the mastery of Eurasian nature to prove that migration is necessary for preserving their nature by Imanishi (1995), January 6, 1902 – June 15, 1992) was a Japanese ecologist and anthropologist, in his work “Nomads

Theories and Others”¹proved the construction of nomads is based on the mobility of domesticated animals that are required for their survival. In Imaishi’s view, domestic animals are selected by nomads to adapt their adaptation to the local landscape and climate. Imanishi (1995) conducted anthropological research on nomads from an ecological point of view. It is also comparatively easy to evaluate that nomads choose to migrate to save nature.

He tried to explain why nomads move around. Nomads travelling from Mongolia to the Middle East are not just changing a landscape but are also a living a form of life. He suggests that one of the origins of nomadism is the domestication of a herd of animals. His surveys among nomads people in Mongolia show that Mongols kept the migration lifestyle to protect the grassland from overgrazing and overusing.

“The End of Nomadism? Society, State, and the Environment in Inner Asia” by Humphrey Caroline, a well-known British anthropologist, and David Sneath (1999), professor of sociology and social anthropology in University of Ulster, delves into the various land-use policies of Inner Mongolia of China, Mongolia, and southern Siberia and examines how these have had varying impacts on the people and ecosystem of this vast region. Humphrey and Sneath reveal the complicated lives of modern nomads facing modernization and the significant impact on Asian culture and environment. Via case studies comparing pastoralism in Siberian Russia, Mongolia, and Northwest China, Humphrey and Sneath explore the different paths taken by nomads in these countries in reaction to a changing world. In examining how each culture is facing not only prospects for sustainability but also different environmental problems. They conclude that migration and mobility is a technique that can be compatible with a modern and urbanized world. As Sneath and Humphry (2012), who developed comparative studies around, Russia, Mongolian, and Inner Mongolia of Eurasia, the reasoning for retrieving and recovering nomads in the Eurasian area is the conclusion.

“China’s grassland policies and the Inner Mongolian grassland system” by Min Liu, Professor in Lanzhou University, studied the land tenure movement in Inner Mongolia. Liu (2017), in her dissertation, mainly discussed “China’s grassland policies and studies the outcomes of the policy interventions for grassland systems in Inner Mongolia”. The primary purpose of her work is to contribute to a better policy construction. I more than agree with her first conclusion, “Grassland privatization is a significant reason to cause grassland degradation in the long term” (2017, Liu), which is emphasized in Chapter V of land privatization. However, in her second conclusion, she confirmed that land privatization boomed livestock production. Still, the number of livestock is increased by fenced area and with the least freedom of movement. She also concluded that Ecological Construction Program has helped improve grassland recovery, which is, as far as I can see, less obvious around Inner Mongolia.

Some of the studies are trying to change the stereotype of thinking of nomads migration are wandering for better water and grass for the domesticated animals. “A History of Land Use in Mongolia” By Elizabeth Endicott (2012), professor of history at Middlebury College, focuses on the conflicts of modernization and nomadism in Mongolia. This book provides a summary of how land use has been organized in this nomad society over the past 700 years. She is concerned about the pastoral collapse as a result of overstocking, along with climate change, dwindling water resources, and the impact of mining. Nomads are at a crossroads concerning how rangeland resources will be managed and governed amidst rapidly changing market relations. Now the pastoral economy remains a leading position in Mongolia. The livestock industry accounts for roughly a quarter of its GDP and engages forty percent of the national workforce; moreover, eight percent of Mongolia’s land is grazed by livestock herds of nomads. Endicott’s approach favors the vision of ancient nomadic traditions, surprisingly resilient in the face of modernization.

In the Soviet-dominated socialist era (1921–1991) of Mongolia, herders migrated, as before, from one seasonal pasture to another. However, today, nomads have become salaried employees, subject to state control. A complex mixture of traditional customs and practices combined with legal statutes written in the post-socialist era constitutes land use rights. But there are inherently contradictory impulses in Mongolia's land legislation. On the one hand, the state's commitment to maintaining communal access to pastureland coexists uneasily with the emerging approach to land as marketable. Still, with careful regulation and conscious planning, Endicott (2012) hopes that Mongolia may prove to be more compatible with the herding way of life, at least in comparison with Mongolia's mining industry. As a function of their economic contribution and the Mongols' deeply held identity as a nomadic people, pastoralists and those who represent them will remain significant players in the country's contemporary politics, and nomads' partisan interests will continue to play a role in Mongolia's political and economic development.

There are some other studies on land privatization and environmental degradation and destruction. Some studies discussed the negative influence of land privatization in Inner Mongolia caused harmful effects either resulting in ecological destruction or hurting the nomads culture (Williams, 1996; Wu and Du, 2008; Li and Huntsinger, 2011). This study indicates that privatization of land in pastoral societies can be less meaningful for sound resource management, such as secure tenure, equitable access to community resources, and significant institutional supports in the form of credit, production services, and legal protection. Some of the authors suggest that we should abolish private grassland use rights, tear down wire fencing, abolish set stocking rates, and establish a legal nomad administrative licensing system to resume nomadism (Wu and Du, 2008).

A group of researchers conducted the land privatization and land tenure studies; for example, Maria E. Fernandez-Gimenez (2006) disagrees with the idea of privatization of land and claim that land privatization is "a vicious cycle" because the declining mobility

leads to increasingly unsustainable grazing practices which exacerbate tensions and lead to conflict among herders fighting over the key pastures and campsites.

Like Endicott (2012), some scholars support the common property policies in Mongolia and Inner Mongolia. Williams (1996), Fernandez-Gimenez (2006), Wu and Du (2008) give a high priority to reserve the common property rights of land use in Mongolia. Wu and Du (2008) stated that privatization of grassland use rights has led to ecology destruction by expanding the farming, excessive livestock stocking, etc. It suggested abolishing private grassland use rights to resume nomadism.

Some scholars have generally attributed the degradation of grassland capacity to overgrazing (Hilker et al., 2014; Steffens et al., 2008; Su et al., 2004; Ren et al., 2015). Some other blames the over-cropping caused the nature destruction, which traced back to the Qing dynasty when agriculture expansion dominates over herding (Geng and Gao 2012).

Several scholars have generally attributed the grassland destruction and degradation to privatize land use rights and the household enclosures movement under the Rangeland Contract Responsibility System (Cao et al., 2013). Cao et al. (2013) stated that climate change and overgrazing are believed to be the drivers of grassland degradation in China over the past thirty years by policymakers. However, recent work has suggested that policies that have led to privatization of land use rights and household enclosures are more important drivers of degradation. Thus, policy drivers such as grassland conversion to arable land and enclosure movements have played an essential role in creating and exacerbating the grassland degradation in China's pastoral areas.

Studies on Shamanism

Another striking factor of a nomadic life is the spiritual connection with nature explored through Shamanism. Most of the studies related to Shamanism are descriptions in ethnographical monographs, but few works on its connection to nature and the reviews on Mongolian Shaman or Shamanism are based on its healing power instead of its deep

connection to nature. “Sky Shamans of Mongolia: Meetings with Remarkable Healers” by Kevin Turner (2016), part spiritual travelogue, part participant-observer anthropological essay, described the authentic shamans in urban centers of modern-day Mongolia. Along the way, the author tells of spiritual and physical healing practices and shamanic ceremonies and rituals that lie at the Mongolian Shamanic traditions. Huang Hao (2019) described the healing practice of shamanistic rituals and Shaman’s concerns on the destruction of nature.

Some studies concern the spiritual connection between Shamanism and people. “Spiritual Connection with The Natural Environment- Pathways for Global Change” by Carolyn P. Egri (1997) discussed the religious and philosophical lessons of Asian religions like Shamanism, Hinduism, and Taoism concerning the relationship of humans and nature. The utilitarian instrumental worldview towards nature in the modern industrial age was criticized. He also emphasized the holistic balance and harmony within the interdependent webs for relationships between humans and the natural environment. As presented by Egri (1997), Shamanism is a nature-centered tradition based on three core concepts. The first is holistic that including everything in nature for its belief system. Thus, everything in nature has inherent value and power. Therefore, Shamanism can be described as the mediator between humans and the spiritual world. Second, the interconnections of everyone and everything in the natural world are expressed in Shamanism. The third is a holistic balance within nature. Therefore, the nature-centered spiritual traditions attempt to regain the holistic balance and harmony in the cosmos. He also stated that Taoism originated from Shamanism, and it holds the holistic interdependence, interpenetration, and interaction between humans and the natural environment. He attempts to find out what these religious organizations can do in changing the individual and collective groups’ ecological consciousness. He suggests facilitating the ideational motives by offering information and guidance by connecting

between these people and groups. He calls for the respect of the varieties in the human-nature relationship.

Section Two Environmental Ethics Studies

In this section, environmental ethics are discussed that concern the human moral responsibilities towards nature. Since the 1970s, environmental ethics has been concerned about the human and nature relationship intrinsically and instrumentally. Further studies suggest that these two may not be capable of transferring and introducing the human-nature relationship properly and have given rise to the relational value proposed by Muraca (2011) and officially announced by IPBES in 2015 as a third valuation framework, except intrinsic and instrumental value. To demonstrate that relational value is successful in filling the gap that intrinsic and instrumental value dismissed, some scholars raised the relational value of nature as its efforts increase the nature valuation quality, but that emotional attachment to nature can transfer to novel situations, including policymaking.

While discussing environmental ethics, Aldo Leopold's land ethic is one of the inevitable topics. "A Sand County Almanac" (1989) by Leopold extended the ethics to include nonhuman members of the biotic community, referred to as "the land". Leopold states the theme of land ethic as: "A thing is right when it tends to preserve the integrity, stability, and beauty of the biotic community. It is wrong when it tends otherwise." "The land ethic simply enlarges the boundaries of the community to include soils, waters, plants, and animals.... It implies respect for his fellow-members, and also respect for the community as such." Leopold's ecological holism considers that humans should view themselves as plain members and citizens of biotic communities, the equal relationship between human and non-human entities in nature area preserved; human' moral concerns toward nature should extend to maintain the integrity, stability, and beauty of the biotic community.

J. Baird Callicott, among the top of the environmental philosophers, grounded his environmental ethics theory on Leopold's land ethic in his book "In Defense of the Land Ethic" (1989) and "Beyond the Land Ethic" (1999). He extends Leopold's environmental philosophy by engaging a broad spectrum of topics, including the troubled relationship of environmental philosophy to current mainstream academic philosophy; the connection of recent developments in evolutionary and ecological sciences to the Leopold's land ethics; the debates in environmental ethics about the ontological status of intrinsic value and the necessity of moral pluralism, etc. Callicott puts effort to defend and extend the seminal environmental philosophy of Leopold in his works. Callicott explained that the intrinsic value of nonhuman natural entities and nature as a whole should be justified by engaging in debate with proponents of animal liberation and rights. He asserted that American Indian peoples hold land ethic in their nature thoughts.

The distinctiveness of environmental ethics turns on non-anthropocentrism, which further depends on the question of nature's intrinsic value. Callicott is one of the supporters of nature's subjective inherent value and offers a theory that all value originates in subjects (human or otherwise) and is conferred by those subjects on various objects. All intrinsic value is "grounded in human feelings" but is "projected" onto the natural object that "excites" the value. "Intrinsic value ultimately depends upon human values." "Value depends upon human sentiments."² In short, Callicott claims there would be no value without human valuers. These objects, however, are valued by subjects in two fundamentally different ways: instrumentally and intrinsically.

The core of Rolston's theory is the intrinsic value of nature, technically objective intrinsic value of nature. The value theory of nature as an environmental philosophy argues the ethical relationship between man and nature. For example, in his works "Value in Nature and the Nature of Value"³ and "Naturalizing Callicott"⁴, Rolston clarified and justified his objective intrinsic assertion; "Humans can value nature both intrinsically and instrumentally. Objective natural things and events may contribute to these subjective

interest satisfactions; a tree supplies firewood, and a sunny day makes a picnic possible.” Rolston criticized the Callicott for its subjective intrinsic idea in his work ‘Naturalizing Callicott’: “Callicott, although a dear friend, is I fear, a doubtful guide at rather critical turning points and has gotten himself lost. He cannot find values in nature, not intrinsically. Indeed, he cannot find nature at all, not original nature, only a nature commingled with culture. So, paradoxically, we need to get Callicott, although he thinks of himself as a naturalist, really naturalized.... I cannot follow him in his arguments (1) about nature and culture, or (2) about intrinsic natural value.”

For Rolston, the relationship between man and nature is a relationship that humans experience nature and find the value of nature. Human is the only animal who shares consciousness, that makes people to value nature. Rolston believes that human beings can experience nature’s values, but the value is not a product of valuer. The natural world itself is the carrier of value, and the value exists within nature. This objective value of nature is an intrinsic value that does not depend on the purpose of another person. The discipline of objective intrinsic value by Rolston is given to enrich the nature valuation theory to the unity of subjective awareness or consciousness and objective perspectives or judgment.

The instrumental value of nature is easily understandable when nature is regarded as a tool to serve human beings. Instruments of various kinds epitomize the kind of objects that subjects value instrumentally; themselves and certain other human beings epitomize the kind of objects that human subject value intrinsically. Neither kind of value is usually done irrationally. When a tool is broken or otherwise becomes useless, a rational person ceases to value it instrumentally; and often, broken and useless tools are discarded as trash. Even though the application of instrumental valuation for natural resource and ecosystems is suggested by F, Gregory Hayden (1991), conservation and nature from an instrumental approach is strongly anthropocentric. An instrumental valuation can easily be blurred with commercial values and some measure of the commodification of nature

(Chan et al., 2016; Justus et al., 2009). Instrumental value is more effective than the intrinsic value in guiding the decision-making process of nature conservation (Justus et al., 2009). James Justus (2009) claims that decision requires tradeoffs and inherent value of non-human entities cannot be measured, prioritized, or traded off; statement survey proved that relational value was widely supported the nature conservation activities and the instrumental value is criticized for its monetary value of nature.

Except for its intrinsic and instrumental value, one values various things for various reasons. A rational person does not typically value a speck of dust instrumentally, nor does a rational person typically love a plastic cup intrinsically; besides, there is special meaning attached to the speck of dust or the plastic cup. Hence, the third group of values explaining the human-nature relationship has recently gained attention: relational value was given a philosophical foundation by Muraca (2011) and proposed by IPEBS in 2015 as a third valuation framework. Relational values reflect the relationship humans have toward nature. Besides, Relational values give rise to questions regarding how to deal with nature and the land to live a good and meaningful life. Relational values include the relationships of humans with nature and the responsibility associated with them, and the relationships and decisions that people made involving nature. In the last years, several articles on the topic of relational values have been published (e.g., Chan et al., 2016; Arias-Arevalo et al., 2018; Klain et al., 2017; Chan et al., 2018) that helped to achieve a better understanding of the relational value and displayed its strength to a wide range of research fields like environmental ethic and ecosystem service. Relational values are often less visible by their context, like stewardship, identity, and emotional attachment to a place or a kind of nature. Relational values are not substitutable and quantitative in the way that instrumental values are. The relational view focused on a collective group or an individuals' nature value practices like the continuity of traditions, responsibility to a particular landscape, and commitment to a place helps to explain why natural destruction practices in local areas confront the fight back. Disconnection from these distinct

landscapes or places harms stewardship, identity, ecological knowledge, and social cohesion of this group of people.

Section Three The Alienation of Human-Nature Relationship

Environmental ethics studies the human-nature relationship philosophically and focuses on its two dimensions: nature to human, and human to nature. However, it still could not have stopped the separation of humans from nature. The alienation of people from nature blinds people to their dependence on the world. A change in the way people see the nature-human relationship holistically is needed. There are still some works that stress holism in nature and attempts to change people's understanding of their position in nature.

"The relationship between people and nature in traditional rural landscapes" by Andra Ioana Horcea-Milcu (2015) is a dissertation about the bidirectional relationship between nature and humans, ecology, and society. In chapter three, the writer mentioned about land privatization aroused the booming of foreign investment. Besides, the increasing global competition harmed traditional farming. The author discussed the coexistence of nature and humans in the same landscape and concluded that understanding the nature and habits of animals benefit balancing the ecology in that area. She indicated that The landscape and bear coexistence pathway contained two components. The first component was related to how people conceptualize interactions between bears and the surrounding landscape, while the second component described people's opinions on bear behavior and ecology. The pathways demonstrated that coexistence was supported by people's understandings of bear behavior and hindered by concerns about inadequate bear habitat, deforestation, and increasing bear populations. People with a positive perception deemed forest size and food supply in the region sufficient, while people with a negative perception deemed it insufficient.

Human nature alienation in modern society is studied by Richard Joseph Doherty (2015) in his dissertation, “The Alienation of Humans from Nature: Media and Environmental Discourse”, applied that the mediated human-nature relationship. He suggested that people are alienated from nature and discouraged by environmental problems reported by the media. The media reports contents provide the communication discourse dominated by economic progress and techno-scientific perspectives that sidestep and obscure ecological concerns and social relationships, leading to discouragement and alienation of people from nature.

Some studies give profound insights into the holism of nature and its interdependence and interconnection. “Silent Spring” by Rachel Carson (1962) examines disastrous chemical pesticide spraying programs and insects distinguishing movements around the US and then focuses on a discussion of pesticides’ effects on humans. She also suggests that many insects are developing resistance to new pesticides. Finally, Carson suggests, rather than chemical products, controls nature by deploying predators of pests. In summary, she argues that not only are pesticides dangerous to nature and humans but that they also massively disrupted the natural system and balances. Her work is a landmark work of environmental studies. This book mainly discussed the potentially harmful effects of pesticides on nature and people, including fish, forests, birds, soil, rivers, lakes, plants, and people either live in cities or countryside, either live in the USA or Canada. Except for the discussions on the dangers of chemical pesticides, this book contains an argument of the proper relationship between man and nature by highlighting the interconnectedness and interdependence of all living things within nature.

“The Invention of Nature” By Andrea Wulf (2015) recalled the life of German naturalist Alexander von Humboldt (1769-1859) and raised his scientific discoveries and influences in nature studies. Humboldt was an explorer and adventured around South America, Europe, and Asia, climbing the world’s highest volcanoes, paddling down Siberia. As Wulf stated, “Most important, though, Humboldt revolutionized the way we

see the natural world. He found connections everywhere. Nothing, not even the tiniest organism, was looked at on its own. 'In this great chain of causes and effects,' Humboldt said, 'no signal fact can be considered in isolation.' With this insight, he invented the web of life, the concept of nature as we know it today." Perceiving nature as an interconnected global force, his discovery and writings inspired naturalists, poets, and politicians. Wulf also argues that Humboldt influenced many people from evolution, ecology, nature conservation, and literature. For example, Charles Darwin's 'the Origin of Species' John Muir's preservation ideas, Thoreau's famous literature work "Walden" and Carson's Silent Spring". "Wulf does much to revive our appreciation of this ecological visionary through her lively, impressively researched account of his travels and exploits, reminding us of the lasting influence of his primary insight: that the Earth is a single, interconnected organism, one that can be catastrophically damaged by our destructive actions,"⁵ Wulf suggests that Humboldt's discoveries forever changed the way we understand the natural world. Among his most revolutionary ideas was a radical conception of nature as a complex and interconnected global force that does not exist to use humankind alone. Humboldt, Wulf writes, "The effects of the human species' intervention were already 'incalculable,' Humboldt insisted, and could become catastrophic if they continued to disturb the world so 'brutally'." Finally, Wulf suggest revising Humboldt's holistic and interdisciplinary approach into current environmental and nature studies as "his concept of nature as one of global underpins our thinking".

Conclusions and Rationale for Additional Research

Most environmental ethics literature provides philosophical instruction on the non-anthropocentric point of intrinsic value against the anthropocentric view of the instrumental value. The research here pushes beyond prior studies of environmental ethics to examine the discouraging elements in these discourses.

The limitations of three (intrinsic, instrumental, and relational value) existing nature assessment methods employed by environmental ethics philosophy as a tool to explore the human-nature relationship is incomplete. Even I am most persuaded by the intrinsic value that defines nature as a holistic whole. I do also acknowledge that the rest of the two fields privilege different epistemologies, but I do think that these may discredit the existence of general value thinking and reifying its subject domains. Separating discourses of 'intrinsic, instrumental, and relational values may weaken the nature valuation by discouraging any human interaction with nature. Some materials are out of scope of this thesis except that it bears directly upon the questions concerning intrinsic value with its subjectiveness and objectiveness. Previous studies look at the intrinsic discourse of nature and reveal a threat of people's domination of nature and contradictions in human relationships with nature. Even this review section addresses only some of the works of thinkers in the environmental ethic studies, and this research bears these patterns out.

So additional research is needed. What I mean is emphasis should shift from the philosophy of separating the three valuation systems, 'intrinsic, relational, and instrumental' to the evaluation of environmental discourses that are combining all these positions. Recently, researchers have started to notice relational relationships and have performed numerous studies analyzing different aspects of relational value, such as the types of relational value, the prevalence of relational value, and the application on political decision making. Still, one thing that hasn't been studied is whether or not the lack of any of the three valuations affects people's judgment on nature.

This study thus includes extensive research into the nature valuation system in nomads context and its influence on preserving the nomads system and examining if these three different valuation systems employ the connections to cope with the multicultural-based human-nature relationship.

Chapter II Natural Degradation and Destruction in Inner Mongolia

Introduction

This study mainly focuses on the geographical area of Inner Mongolia. This chapter gives a brief introduction to pan-Mongolia and Inner Mongolia, for which readers might realize that nomads are occupying a larger area of Europe and Asia borders, and most of them share a lot of similarities in their cultures. Its current natural destruction and degradation in nomads area are highlighted by following the explanation of agricultural and industrial expansion. Further, it pushes one to think of the tragedy of disappearance of nomads and nomadic life from these areas. There are three sections in this chapter; in the first section, Mongolians live across the contemporary nation states has been introduced followed by the introduction of Mongolia and Inner Mongolia, in the second section, geographical and demographic aspects of Inner Mongolia are touched briefly followed by the change in their habitat and life under the influence of Chinese immigration, in section three and four, in which agriculture and industrial activity is discussed, changing nomadic way of life.

Section One Pan-Mongols

The Mongols are a large group of people with nomadic cultures living in East Asia. Chinggis Khaan united Mongol tribes in 1206 and founded the Mongol Empire, and Hublai Khaan⁶, the grandson of Chinggis Khaan, established the Mongol Empire called the Yuan dynasty⁷. Chinggis Khaan assigned the kingdom area to his brothers, sons, and grandchildren, respectively. The Jochids, the eldest son, occupied the Kazakh Steppe, southern Siberia, the lower Volga, the Qipchaq steppe, North Caucasia, and the Rus principalities. Chagadai, his second son, reigned Western Turkestan; Ogedei, his third son, had his territory in Jungharia and later moved to Central Mongolia; Tolui, the youngest, received eastern Mongolia (Khazanov and Wink, 2001). From that time on, Mongols' separations continued, and currently, there are one country and several regions where they have settled, including Khala Mongolian in Mongolia, Buryat, Tuva, Altai

and Kalmyk Mongolian in Russia, Inner Mongolians and Oriat Mongolians of Xingjiang⁸ in China, and some of them were located in Turkey, Hungary, and some other eastern parts of the Eurasian continent, etc.



Figure 1. Pan-Mongolian Map

Mongols in China:

Inner Mongolia

Heilongjiang: 1. Dorbod Mongol Autonomous County

Jilin : 2. Qian Gorlos Autonomous County

Liao Ning: 3. Fuxin Mongol Autonomous county

4. Kharchin Mongol Autonomous County

Hebei: 5. Weichang Manchu and Mongol Autonomous County

Qinghai: 6. Henan Mongol Autonomous County

7. Haixi Mongol and Tibetan Autonomous Prefecture

Gansu: 8. Mongol Autonomous county

Xinjiang : 9. Bayingol Mongol Autonomous Prefecture

10. Bortala Mongol Autonomous Prefecture

11. Hoboskar Mongol Autonomous County

Mongols in Russia:

12. Altai Republic

13. Tuvan People's Republic

14. The Republic of Buryatia

Mongolia and Inner Mongolia

Many people confuse Mongolia and Inner Mongolia, and even some people do not realize the existence of Inner Mongolia. Mongolia is the only independent country in which Mongol people are living, and Inner Mongolia is one province of China inhabited by Mongolians. Mongolia is also called Outer Mongolia with 3 million populations, and its capital is Ulaanbaatar. Mongolia occupies large plateaus with an average elevation of 1,580 meters. Almost 80 percent of Mongolia is covered by plain grassland with hills,

snowcapped mountains, and highlands. Mongolia stretches out for about 2,400 kilometers (1,500 miles) from east to west and 1,300 kilometers (800 miles) from north to south at its widest point. Inner Mongolia is the Autonomous Region of China (official name: Nei Mongol Autonomous Region), with Chinese and Mongolian as its official language. Topographically, most of Inner Mongolia is a plateau averaging around 1,200 meters in altitude with over an area of 1.183 million square kilometers, about 1/8th of the total area of China. It is bordered to the north by Mongolia and Russia. Its capital is Hohhot. Geographically, Mongolia and Inner Mongolia are close to each other, and most of Inner Mongolia's northern part borders are bounded on Mongolian side, while a small portion is on Russian side. They share much more similar cultural, religious, and language backgrounds than any other Mongols living in other parts of the regions and countries.

Language

Mongolian language is a mother tongue for nearly 3 million people in Outer Mongolia, 4 million Mongols in Inner Mongolia, and 0.2 million in the Xinjing Autonomous region of China. In Mongolia, the traditional writing style was calligraphically changed to the Cyrillic alphabet in the 1940s under the political pressure of the Soviet Union. Inner Mongolia and Xinjiang kept the language that is written vertically from top to bottom. The use of Mongolian in Inner Mongolia and Xinjiang has witnessed a sharp decline over the last decades. Han Chinese greatly outnumber the Mongols, so Chinese is widely used in social, political, and economic fields. As a result, Mongolian is more a family language than a social language. Chinese-speaking Mongols are most likely to survive, register as ethnic Mongols, and identify themselves as Mongols.



Figure 2. The Mongolian Word “Mongol” in Vertical and Cyrillic Writing

Section Two Inner Mongolia

Topography

Topographically, Most of Inner Mongolia is a plateau averaging around 1,200 meters (3,940 ft) in altitude and is made up of highland, grassland, and deserts. The northern part consists of the Hinggan Mountain, and Hulun Buuri forests have a cooler climate and more forested. The eastern part of Inner Mongolia grassland is lower than the western region so that the eastern part is much more tolerable in preserving the humidity, which is why the agriculture expansion in the Eastern part was much earlier than the rest of the parts. Besides, the area has been assimilated to Manchu and later to Chinese from a very early time. The eastern region has been mostly cultivated for cropland since the Manchu Administration, where most of the Mongols have been engaged in agriculture, and some of them in half agriculture, half nomads, and few involved in a small portion of herds of goats, sheep, or cattle until the 1990s. Currently, there is almost no pastureland left. The western part is plain with less tolerance for humidity and drought, which is the significant cause of desertification. The pastoral areas are mostly located in the western area, and half of the western part overlaps with the Gobi Desert, where a large population of Mongols is struggling with the traditional nomadic lifestyle.

Religion

Shamanism was the original religion of the Mongols. However, the influence of Buddhism throughout history weakened the existence of Shamanism. The Mongol Empire was known for its religious tolerance, and many people followed Tibetan Buddhism, especially during the Manchu administration⁹. Tibetan Buddhism became the state religion of the Mongol area, while Shamanism was still popular among the general public.

Today, a sizable proportion of Mongol people are atheist or agnostic, while 53% of the Mongols in Mongolia believe in Tibetan Buddhism. According to a survey held in 2004 by the Minzu University of China¹⁰, in Inner Mongolia, about 80% of the population of the region practice the worship of Heaven and *Ovoo*. Still, many people visit local

temples. The number of Buddhist followers is challenging to estimate because of the broad spectrum of degrees of commitment and because there is no distinguishing difference in Buddhist definitively from non-Buddhist. Despite the prevalence of Buddhism, shamanism is still influential. Currently, In Mongols regions, Shamanism practices are rising, and the number of Shamans has been rapidly increasing since the 1990s. Being a Shamanistic tradition, the *Ovoo* ceremony, has never been stopped, as is discussed in detail in Chapter V.

Population

According to the Sixth National Population Census of the People's Republic of China¹¹, there are around 5.9 million Mongolians in China, of which 70% are living in Inner Mongolia, while the rest of them are mostly in three northeastern provinces (Liaoning, Jilin, and Heilongjiang) and Xinjiang Autonomous Region. Inner Mongolia has a population of 24.71 million¹². Mongolian population shares 17% of the total population of Inner Mongolia. Han Chinese migration into the northeast part of Inner Mongolia began in the early 18th century with the encouragement of the Qing Dynasty. At first, Han Chinese live mostly in central and eastern Inner Mongolia, and now, with the economic expansion and development of transportation systems, they outnumber Mongols everywhere in Inner Mongolia.

Mongols in China already settled in permanent homes as of the Mao Era, and some educated people have taken jobs in cities as migrant laborers; only a few Mongols in the western part of Inner Mongolia have maintained their nomadic tradition, mostly migrating only between summer and winter camps, even some of them are now not migrating at all. Highly educated Mongols migrate to big urban centers.

Inter-marriage between Mongol and non-Mongol populations is now very common, particularly in the Eastern part where Mongols are in regular contact with other groups, and in urban centers, in particular, Mongol men and women get married to non-Mongols at relatively similar rates. The intermarriage rates stand in very sharp contrast to ethnic Tibetans and Uyghurs in their respective autonomous regions. In 1982, Mongol-Han marriages were higher than marrying other nationalities, especially in agriculture and

semi-agriculture areas of the Eastern part of Inner Mongolia, mixed marriages are up to 75.93% percent of those Mongols and Han marriages (Kotkin and Elleman, 2015). In their study, Kotkin and Elleman (2015) also concluded that those with Chinese husbands and wives were age averaged between 20-40 years old. Currently, the intermarriage rate is much higher than in the 20th century. Somehow, mixed marriages have contributed to a drastic increase in the Mongolian population, as new-born children are registered as Mongolian. However, in most family parts, Han-Chinese culture is the dominant status, and children are encouraged to enter Chinese schools.

Chinese Immigration

The migration of the Han population into Inner Mongolia pursuing agricultural opportunities traced back to the 1700s of the Qing Administration. They settled Han refugees from northern China suffering from famine, floods, and drought into Mongolia. Han Chinese successfully had farmed large areas of the Eastern part of Inner Mongolia by the 1780s (Reardon-Anderson, 2000). An influx never stopped from that time on. During the 1920s, the Chinese republic (1912–1949)¹³ unilaterally declared that all Mongol lands belonged to China and Han Chinese get authorization to move into Inner Mongolia (Williams, 2002). During the Republic era, the Han immigration increased from 1.5 million to 5.2 million (Song et al., 1987). By 1924, after the railway line was extended from present-day Zhangjiakou to Hohhot and Baotou, the migration population was increased rapidly. In 1912, there were roughly 2.04 million, then the total population rose to 21million, with a ratio of 6 Hans to every Mongol. Chinese migrants into the region, as in the 1920s and 1930s, warlord and republican governments sought to secure the border areas by populating them with Han Chinese settlers (Humphery and Sneath, 1999). Since the 1940s, the gradual expansion of Han Chinese has been speeding up though there is no exact data that was found for the migration number. In 1949 there were 4 Han Chinese in Inner Mongolia for every Mongolian; by 1960, this ratio had more than doubles to 9:1 (Hyer and Heaton, 1968). In 1947 when it was established, around 6 million people living in Inner Mongolia conducted nomads with main economic activities, to a lesser extent, on agricultural pursuits. Larger influxes occurred in the fifties and late

sixties until Mongolians were vastly outnumbered by Han, who predominantly settled the urban and agrarian parts of the region (Sneath and Humphery, 1999). The total population of Inner Mongolia just over four decades later, in 1989, was almost 21 million, of which about 14.5 million (or 75%) were in agricultural areas, and 1.9 million (9%) lived in pastoral areas (Longworth and Williamson, 1993). In 1989, there were 3.07 million Mongolians, which represented 14.7% of the total population of Inner Mongolia. Now, the people in Inner Mongolia are Han-dominated, and according to the national consensus of China in 2010, 79% of them were Han Chinese, and the Mongol population is only 17.1%.

Chinese immigration to Inner Mongolia shares many positive effects on the Chinese and Chinese government. Immigration reduced the population pressure in Mainland China, expanded the economic growth, and decreased nature recourse pressures. At present, the population pressures are consistently increasing in Inner Mongolia, the pastureland available for extensive livestock herding has shrunk. Currently, Han Chinese from different regions of China is coming into Inner Mongolia partly due to the need for business expansions, technicians, trained workers, and other professionals in modernized areas, which emerged as the leading labor force in the new economic sectors like manufacturing, communication, transportation, and service industries. Gradually, less engagement of local people in the financial process marginalized their role politically and socially, including protecting their nature.

Section Three Agricultural and Industrial Expansion

Agricultural Expansion

The state project plays a more prominent role in motivating Chinese to exploit the new land and encouraged them to have a new economic opportunity in a new land. They ideologically believe it was too wasteful to use the huge, expanded area just for feeding animals. In the early twentieth century, the Qing government lifted a restriction on land cultivation and adopted a new policy of “migrate and consolidate the frontier”. 1907, the Qing government established an administrative agency to promote the migration between

the eastern provinces and Inner Mongolia; From 1912, the Guomindang Government¹⁴ comminuted and organized the migration movement into Inner Mongolia and established Han-based administrative units; the policy supports the expansion of pastureland so that it could gain profits through heavy taxation (Burjgin and Bilik, 2003)¹⁵. “There were 48,710 square km (73,065 Mu) of cropland in 1988, which is 4.2% of the total area of Inner Mongolia, (Longworth and Williamson, 1993).” Grassland accounts for 67% of the total land area of Inner Mongolia; however, only 75.58% is classed as utilizable for grazing. However, from 1975-2000, almost 90% of land cover changes were converted into cropland (Hu and Nacun, 2018). Down to the Countryside Movement¹⁶ was one example to prove their ideological belief in agriculture is a higher economic standard than nomads. In October 1967, a group of school students dispatched to Inner Mongolia’s grassland to transform the backward. They were taught to believe in the socialist revolutionary idea that industrialization was inherently better than agriculture and agriculture better than pastoralism.

In the eastern part of Inner Mongolia, semi-pastoralism and semi-agriculture started from the late Qing dynasty. In the 1990s, “semi-sedentary pastoralism (Khazanov, 1984)” was a lifted pattern in most parts of Inner Mongolia. Pasture districts in Inner Mongolia are classified into three basic categories. First, pastoral communities with significant populations of mostly mobile Mongolian, to which western Hulun Buir, Northern Xilingol, and Ulaanchab leagues belong. Next, semi-pastoral and semi-agricultural districts with residential areas with Mongolian populations practiced farming and some herding; much of the banner districts in Xingan, Tongliao, and Chifeng leagues. Lastly, there were agricultural districts predominantly with Han Chinese, and these large parts of all the Leagues bordered China’s mainland.

According to the archeological findings, cultivation in Mongolian pastureland existed at the beginning of the 3rd century B.C. Like well-known Russian explorers noticed that there were agricultural fields near the temples and especially in the western part of Mongolia. There is much evidence of farming activities found around Mongolian grassland. One possibility that can be connected to the findings is that Mongolian grows

yellow-colored rice called *Huurai budaa* or *Huurai Am*¹⁷ from early times. No maintenance and no irrigation are needed for the Mongolian rice, and it is seeded in springtime and harvest in autumn. So the above agricultural traits found by archeologists probably had been left by this kind of temporary agriculture activity.



Photo 1. Mongolian Rice

Some Mongolian scholars share similar opinions on ancient agriculture activities in nomadic areas. They believe nomadic ancestors attempted to develop agriculture in nomads areas, but they found that the agricultural production was unsuitable for the pastureland. Hence, they choose to keep the nomad's life instead. So the agriculture activities must have been temporary and unsustainable.

The large spread of agriculture activity is a quiet modern sector in Inner Mongolia. Up to the present day, irrigation and capital investment for agricultural expansion have been almost out of the question. Except for the weather and soil conditions, the Inner Mongolian grassland has been maintained under grazing conditions by livestock animals. Currently, most of the territory occupied by agriculture in the nomad's area is supported by stable weather and soil condition plus expensive irrigation-works. The area suitable for cultivation is also good for herding livestock, which means that agriculture competed over land with livestock herding.

Industrial Expansion

Despite the heavy stream of immigration of Han farmers followed by agriculture expansion and increasing contact with the global political economy that new commercial

linkages have facilitated, past and present lifestyles continue to dramatically clash without a stable resolution. In recent years, except for agriculture activities, the cause of environmental damages from a large scale of economic expansion activities like mining, chemical factories, and military basement, hydro-electric power installations.

The diversification of economic patterns was encouraged, and the industrial revolution started rigorously in the 1990s. Industries in Inner Mongolia have grown mainly around coal, power generation, dairy products, etc. The western part of Inner Mongolia has become a significant mining district due to large reserves of coal and rare earth mineral elements. It has more deposits of naturally occurring niobium, zirconium, and beryllium than any other province-level region in China. Inner Mongolia is a major coal production base for China. In 2017, it accounted for 26% of the country's total production. The eastern Inner Mongolia regions include Hulunbuir, Xilingol, Chifeng, Tongliao, and Hinggan League; the production capacity of a large-scale mine is over 4,000,000 tons open-pit mine and 1,200,000 tons for underground coal mine (Aman Fang and Jihong Dong, etc., 2019, p:2-3). The Baotou is an excellent example of industrialization in Inner Mongolia. Baotou has one of the world's largest deposits of rare-earth metals, some two-thirds of known reserves. After 1950, Baotou developed into one of the major iron-and-steel producers in China. The city has continuously started numerous other plants, including manufacturing ceramics, cement, machinery, textiles and leather products, chemical fertilizers, and electronic equipment. Other major industrial centers include Hohhot, Ordos, Chifeng, and others, and, to the west, Wuhai was followed in recent years. The heavy industry in Inner Mongolia has grown and prospered as a competitive export trading in the global economic market.

Section Four Natural Degradation and Destruction

Usually, steppes of Inner Mongolia were arid grasslands spread comprising of patches of rich grass interspersed with patches of poor grass and desert; they were brown and dusty most of the year and became increasingly arid from north to south. After

summer rained, they became richly green and sprout wild. In the winter, they were often covered with snow.

Inner Mongolia was once the world's third-largest grassland, and it is entirely one-fourth of China's total rangeland area. It has been the abode to the nation's leading producer of wool, cashmere, and camel hair. However, these are gradually losing their original scenarios. Official reports from China routinely assert rather alarming figures: fertile grassland is now almost lost into moving sand at an average rate of 2,100 km² per year (Williams, 1997). The official estimates of the extent of pasture degradation are likely to be conservative. Nonetheless, they indicate that 36% of the total pastureland in Inner Mongolia was regarded as degraded in 1988. Over half of the degraded pasture is said to be exhibiting medium to heavy degradation. Official figures suggest that by 1989 the amount of grassland in Inner Mongolia had decreased by 6.2 ha since 1965 (from 92.9 to 86.7 ha), and pastures classified as 'deteriorated grassland' increased from 1.2 to 29.9 ha. According to the Ministry of Ecology and Environment of the People's Republic of China, by 2018, the 150 square meter area was severely affected by mining; until 2020, 300 square meters area needed for environmental protection policy¹⁸.

Agricultural cultivation is one of the leading factors that caused severe environmental destruction and degradation. Some studies state that ecological degradation in Inner Mongolia is mostly blamed for the over-cropping, which traced back to the Qing dynasty when agriculture expansion dominates over herding (Geng and Gao, 2012). Lattimore (1962) was quite right when addressing the problems caused by cultivation.

The colonists had no experience in handling livestock.... To produce financial results, the land had to be farmed even if it was naturally more suitable for grazing than for ploughing. The good soil for pasture is then blown away, and sand begins to work up from below.... these areas become unproductive, for even if they are abandoned, the old-growth of grass will not come back; at least not for many, many years.

Gomboev (1996)¹⁹ suggests changing the policy, when he introduces the land-use in Inner Mongolia, claims as the quality and quantity of pastureland were declining and the expansion of Chinese settlers took over the steppes for cultivation and irritation was

considered as one of the biggest reasons for it. As Humphery and Sneath (1999) concluded, after comparing agriculture and mobile practice in Russia, Mongolia, and Inner Mongolia of China, agriculture was the main reason for pasture degradation in Buryatia, Chita, and Inner Mongolia. The expansion of desertification in Inner Mongolia was rooted in the spread of agricultural activities. The current agriculture activities utilize chemicals and plow deeper, which differ from the earlier sustainable and less harmful agriculture activities. The grassland soil is thin, with only 30cm to 50cm thick fertile soil capable of production for a few years. After a few rounds of agriculture activities, the land loses its capability of holding high nutritionally generated crops; accordingly, people move, and the land becomes deserted.

Besides, with the development of industry and the economy, many cities and towns in Inner Mongolia have become industrialized (Xu and Wang, 1999). Industrialization followed by opening large numbers of less-environmental-friendly manufacturing factories. The liquid and air waste from chemical factories polluted the water, the soil, the air, and the surrounding pastureland. The exploitation of underground resources by removing the underground water dramatically contributes to the drought and water shortage, reducing the accessibility to underground water for both human beings and livestock use.



Photo 2. Grassland at a coal mine in Baorixile, Inner Mongolia²⁰

For example, the mining, runoff from the mining settles down on the grass and deteriorates the growth of vegetation. Areas surrounded by the mine must be avoided for

livestock grazing because of water shortages and pollution. Suzuki (2013) introduced three case studies on mining programs along the main rivers: Tuul River, Ongi River, and Orkhon River of Mongolia. She concluded three major negative impacts of mining on pastureland: firstly, digging up riverbeds causes water to flow underground; secondly, the river water used for gravity selection in extraction is scattered around the mining sites. Finally, most of the scattered water evaporates or vanishes into the air. In this research, she also indicated that mining also contributes to decreased river flow, next to climate change. Besides, the damage to the natural environment, such as the destruction and pollution of the mining, has typically involved destruction and decreased river water, and caused mercury pollution. Mining followed by digging up the grazing grounds and removing the underground water extracted such underground resources as copper, gold, coal, zinc, molybdenum, petroleum, iron ore, and fluorite mostly for export. Finally, this caused severe damage to grassland without benefiting general herders.

The pastureland degradation with the following features: decreasing the grazable land size, reduction in the diversity and density of grass and increase in unpalatable grass species, an increase in soil compaction, changes in plant functional groups, a decrease of water levels due to the long-time drought associated with disappeared rivers and streams, expansion of large-sized sandy dune areas associated with misuse of pastureland. Humphery and Sneath (1999) listed the specific harmful effect that local herders were experiencing as follows: marked reduction in the diversity of grass species; observed diminution in the growth of grasses over annual cycle; increase in unpalatable grass species associated with over-used pastures; decrease in density of vegetation distribution; reduction in water levels in rivers; and expansion in sandy areas and dunes.

The existence of the pastoral economy is not admitted as a kind of real economy in current economic cannons, even though it has lasted for more than 2000 years, and even there are so many studies supporting the nomads is the most suitable economic pattern in Inner Mongolia. Bold (2001) was quite right when he states that the agriculture activity is not ideal for the Central Asian area mainly because extensive parts of the Central Asian highlands were the cold weather and the resulting soil composition and short period of

vegetation. Climatic conditions such as extremely hot and cold weather do not favor agriculture. Because of such natural conditions as an arid climate and low temperatures, nomadic grazing is suitable. So livestock raising on the vast grasslands has traditionally been the predominant industry in Inner Mongolia. Zhang et al. (2007) analyzed the grassland environmental and ecological characteristics in the arid and semiarid mosaic zone in northern China. They concluded that nomadic lifestyle is more environment friendly lifestyles and possible to keep the sustainable utilization of grasslands. Chibilev et al. (2011) suggested the pastoral land use in the Eurasian area is perhaps the most valuable legacy of the steppe people and raised it to 'steppe science'.

Among all these changes, grassland destruction and degradation are the most significant problems, which brings about a confusion of the mobile past and sedentary future, living precariously in the growing insecurities of an unsustainable present. Steppe degradation studies suggest that it is a major setback for ecological, economic, cultural, and social problems in Inner Mongolia (Tong et al., 2004). The enormous expansion of land reclamation vastly reduced the grazing land, and the large population of livestock was forced to be kept in small and limited space. Long-time grazing in one area decreased the reproductive capability of the pastureland of that area and comparatively speeded the desertification. Compared to the migratory pattern of the land-use to longtime grazing in one place, the former led to the increasing pressure on the land over short periods. The unlimited expansion of agriculture and industrial activities dramatically marginalized the nomad's economy. The policy of opening up pastureland completely shattered the old structure of the nomads system, and Mongols became one of the minorities on their land.

After the severe pollution was confirmed harmful, the Chinese government has invested a lot of money, time, and energy to save it. However, none of them is an appeal to the solutions. The anthropogenic activities caused most of the environmental degradation. Overexploitation, overgrazing, overhunting, and over digging are the leading causes of steppe destruction and degradation. The environmental problem remains one of the most severe catastrophes ever to have hit the nomads. Its effects are both long-living and wide-reaching, reminding us how seemingly human interactions

with the natural world can upset the balance of nature, resulting in profoundly life-altering consequences and destruction. Nature of demolition and environmental conflict and never solely about the natural world but influence and permeate the social landscape and affect the communities whose lives are embedded both culturally and economically in that place.

Introduction

The call for integrating plural valuation system is proposed that goes beyond the intrinsic and instrumental value. The instrumental and relational value, for instance, has a limitation on reflecting human-centered valuation, and Intrinsic value is criticized as too eccentric. The anthropocentric relations, including instrumental and relational value, is neglecting what is reflected in intrinsic value by ignoring the objectiveness of nature value and valuing nature as the existence for human's sake.

In this chapter, I propose a need for a holistic intrinsic value framework, which combines the Jan Smuts²¹'s theory of Holism, Rolston²²'s objective intrinsic value, John Baird Callicot²³'s subjective intrinsic value, and John Baird Callicot and Leopold Aldo²⁴'s holistic land ethic theories. On this ground, holistic intrinsic value can be developed to make up a holistic natural valuation system. The application of this new approach is expected to have the following advantages over existing nature-valuation approaches. First, the values held by local, indigenous, and ethnic people are vital for understanding the multi-culturally based human-nature relationships, and their existence should not be overlooked in future environmental assessments or policy interventions. Second, the human-nature relationships in those groups are physical and virtual to foster human-nature experiences and integration. Third, the unified human and nature relationship is expanding the range of human-nature connections, but at the same time, may in the future be a source of solution to the conflict of nature destruction and nature conservation activities. Finally, through their interactions with the land and belief system, large-scale people play a significant role in maintaining the healthy and harmonious human-nature relationships.

Section one The Definitions

The demarcation argument in separating the intrinsic and instrumental values is a hot topic among environmental ethicists. As Muraca (2011) stated, “Demarcation problem framework is well established among environmental ethicists who want to argue for strong moral obligations towards non-human beings.” Some scholars rooted the distribution of instrumental and intrinsic value in the context of Kant’s philosophy that an entity can have either a price or a dignity. Generally, intrinsic value is defined as *end-in themselves*, and instrumental value is *means-to-an-end*. According to Kant, ‘*everything has either a price or dignity*’ so that everything can be in two groups, one is with price, the other is with dignity; one being animate or non-animate, either holds instrumental value or intrinsic value. Not everything has a price, but it might have dignity, vice versa, not everything has dignity, but it can be priced.

“Instrumental values are in principle replaceable, compensable, and (in the extreme) can be price-tagged, or inherent moral values, which have an intrinsic worth in the sense of dignity (Muraca, 2016).” As she addressed that “entities holding instrumental values, which are in principle monetizable and substitutable, and entities holding intrinsic value, which are bearers of rights in terms of dignity” (Muraca, 2016). Intrinsic frameworks view the protection of water, land, and living beings for its own sake by virtue of their inherent worth, which is more inclusive and is typically understood as pertaining to ends-in-themselves. Himes and Muraca (2018) argue for the term ‘intrinsic values’ to “the attribution of inherent moral value to entities that can be legitimately considered as subjects-of-a-life or ends in themselves in a moral sense”. As Rolston (2012) noted in his preface of “A New Environmental Ethics”²⁵ The intrinsic value of nature is primarily connected to the moral responsibility of human beings towards nature. Prominent defenders of intrinsic value in environmental ethics include Callicot, Rolston III, and John O’Neil, and they articulate a non-anthropocentric conception of intrinsic value.

Instrumental values are associated with the benefits that nature provides to people (Diaz et al., 2015; Pascual et al., 2017). Instrumental values have often been measured using quantitative approaches and in economic terms (Arias et al., 2017). Besides, in environmental ethic theory, intrinsic value is inherent moral values constituted with deontological awareness. Instrumental value is nature's benefits to human beings' well-being, and intrinsic value is claimed as the best ethical basis for humans to nature and is discussed with ethnic morals.

Meanwhile, there is a third group of things that has neither price nor dignity but still valuable; they exist within the long-term connection between people and animate or non-animated beings constructed on social, cultural, spiritual, and sentimental levels. Muraca (2011) attempted to provide philosophical ground to relational value and argued that Kantian philosophy is limited to addressing "end-in themselves and means to other's ends". The Kantian argument puts the significance of deontological concerns rather than axiological questions. The vague axiological distinction leads to the weak differentiation between intrinsic and instrumental value, so Muraca (2011) suggests taking a plural valuation framework between the human and non-human worlds, which is what she refers to as 'relational axiology' (2016).

In 2015, the IPBES (Intergovernmental Platform on Biodiversity and Ecosystem Services)²⁶ officially proposed a new conceptual framework on its Second Plenary and intrinsic and instrumental values to support the research focusing on the links between humans and nature relational value was addressed. The theoretical approach of the relational value of IPBES concludes that "Relational value is preferences, principles, and virtues associated with relationships, both interpersonal and as articulated by policies and social norms (Chan et al., 2016)". Relational value focuses on the relationship between people and nature. The IPBES model proposes that research should focus on three dimensions of value: nature (intrinsic), nature's benefits to people (instrumental), and how nature facilitates a good quality of life (Diaz et al., 2015). IPBES's conceptual

framework focuses more on nature's utility and its benefits to humans than on its actual values (Maier and Feest, 2015). Most scholars and researchers praised IPBES's conceptual framework as pluralized in evaluating nature's benefits to people, and some believe the pluralistic valuation is time-consuming. Diaz et al. (2015) share the same point: the conceptual framework simplifies the complex interaction between humans and nature by providing a shared language and a common set of relationships and definitions. Pascual et al. (2017) posted that IPBES's conceptual framework is based on respecting the diversity of different groups of people to rationalize nature's contribution to people.

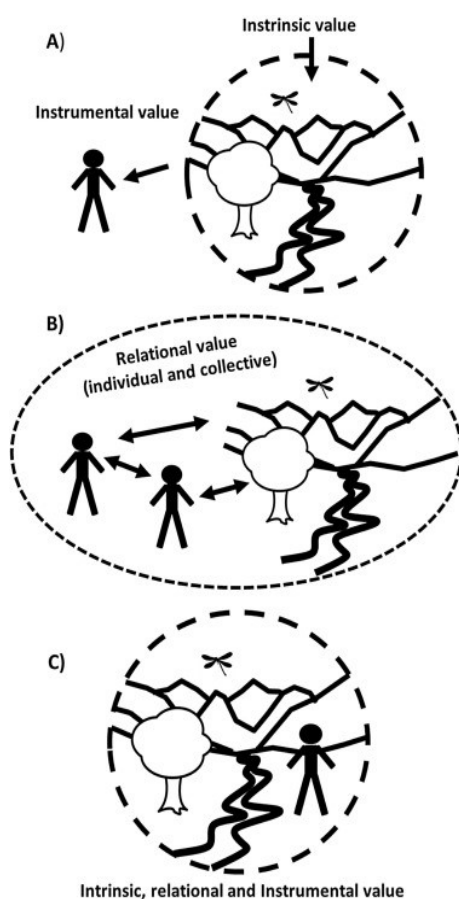


Figure.3 Three Valuations²⁷

Instrumental value is *gaining from nature*, intrinsic value is *living for nature*, and relational value is *living in nature* (Hims and Muraca, 2018). The relational and intrinsic

value of nature is not substitutable, instrumental value is substitutable (Himes and Muraca, 2018). The instrumental value and relational value posted by IPBES represents the utility value of nature for a human being judged from the human perspective, not based on nature itself and also neglecting that the human beings are part of nature, including human's dependency on nature and relates to ecosystem functions that are used for human, rather than for the full objective value of nature. The intrinsic values as being associated with nature's inherent value, and more than that, as independent of human experience and judgment. The existence of nature is a basis; no existence of nature would be no service to human beings. Relational value seems to focus more on relations, including, for example, sensational and spiritual attachment to nature; in this way, the relational value reflects unambiguous and emotional human nature relationship much more effective than intrinsic and instrumental values, especially in out of mainstream cultures that nature is valued in their emotional and spiritual connection with human beings. The emotional and spiritual attachment to their living surroundings is empirical and relational that hard to be proved or categorized. They are invisible, untouchable, and immeasurable, even some of them are unexplainable, so their interaction into an assessment and valuation system is comparatively neglected.

With the above, the definitions are given at the basic and general concept and also added ideas that support and match the points of this research. These concepts are used as the basis for the discussion of different perspectives of three values here.

Instrumental value is an anthropocentric viewpoint that sees nature as a means to serve human beings. This value supports achieving human purpose utilizing nature. For example, people see nature as a natural resource to achieve economic goals, and it is substitutable and compensable.

Relational value refers to a value derived from human and nature interaction and engagement, partly anthropocentric and partly non-anthropocentric. Relational value is anthropocentric in leading to good quality of life or wellbeing of the human being proposed by IPBES; is non-anthropocentric when concerning human-nature relationship from

emotional and sentimental perspectives, for example, indigenous people's non-material deep connection with their land.

Intrinsic value is the perspective that nature has value in its own right. This is an eccentric value that mostly excludes human beings from nature, and controversial theory for defending all non-human entities have to be treated morally.

Section Two Instrumental Value

“Commodification of nature (Kurt et al., 2013)” is the basis of instrumentalism of nature. Instrumental values are associated with the benefits that nature provides to people (Diaz et al., 2015; Pascual et al., 2017). Instrumental values have often been measured using quantitative approaches and in economic terms (Arias-Arevalo et al., 2017). As Klain et al. (2017) claimed, instrumental value is “often derived from human-dominated landscapes”. Instrumental value prioritizes nature's service and benefits for human beings' well-being. “Instrumentalism views nature as natural resources, or as a means to an end, which leads to the protection of nature for the benefit of humans (Serrels, n.d.)”. Economic valuation of nature provides an understanding of the relative importance placed on different ecosystems, and no price means no value, and no value means no protection, and at present, this valuation has vastly expanded. Notwithstanding, this valuation implies a one-directional value flow: the focus is on nature contributing to people disregards values for nature as an end-in-itself. In other words, the instrumental value is the satisfaction of people's preferences, not the value of nature for its own sake, which similarly relies on instrumental rationality, the limitations of which are widely criticized.

Over the past several decades, environmental management decisions have often been guided by prevailing values along an instrumental-intrinsic dichotomy (Arias-Arevalo et al., 2017). Currently, the monetary valuation of nature dominates the economic, social, and cultural valuation system. Instrumental value is more pragmatic than intrinsic and relational value. It serves political decision-making and economic purposes and plays a dominant role in decision-making and is utilized to assess nature as natural resources.

The entrenchment of industrial interests within an instrumental ethic that values the natural world for her “resources” and relates to them as such, manifests a culture based on the illusion of separation. This framework, and the predominant philosophies that shape our society, are based on Newtonian physics with its isolated, mechanical, reductionist paradigm deepening the fissure at the root of the crisis. There is very little hope that the dominant culture will lead to the changes necessary to alleviate the environmental crisis without a different underlying ethic that includes the interconnectedness of all life. What happens to the temperature of the ocean affects the clam that affects other sea life that affects humans that affects communities that affect nations. Life is a web of interrelationships, one affecting the other. *How* we relate in these relationships is what will determine continued cycles of destruction or cycles of life-sustaining reciprocity (Serrels, n.d.).

Nature regarded as an instrument or object, as a means of a tool, aims to satisfy material benefits to human beings. “As a means (instrument) to something else, a thing is potentially replaceable (Kai et al., 2016).” “Instrumental values are replaceable and compensable and can be price tagged (Kurt et al., 2013).” Instrumental value is instead based on monetary valuation and commodification value. Under industrialization, the resulting commodification and colonization of natural resources have accelerated ever after. The commodities in our daily life are mostly replaceable for a better choice with the development of technology. Nature itself is irreplaceable and non-substitutable, so it is inappropriate to narrow the nature value into monetary and market-based value. Also, monetary valuation is limited to the degree of its sustainability, dismissing nature’s spiritual and sensational value to local people. No moral values and no relational and intrinsic factors of nature values are involved, and no local and aboriginal people’s concerns are given. In this way, instrumental value is harder to be suggested to be a proper valuation system to replace the intrinsic or relational value.

Section Three Relational value

More recently, relational values, which have typically been measured using qualitative approaches, have been recognized for their importance and potentiality to inform our understanding of the role play in society (Chan et al., 2018; De Vos et al., 2018). IPBES explained the relational value as a general and integrative valuation method

that would contribute to understanding nature's benefits to human beings and various cultures' relationship with their nature. One of the significant contributions of recent relational value studies in environmental ethics and ecosystem service is that including the indigenous or non-western ingredients on its valuation system. This is great progress made to help people understand that the indigenous and local knowledge enriches our understanding of the human-nature system. Diaz et al.'s (2015) metaphor of "Rosetta Stone"²⁸ embraced the framework that contains indigenous and local knowledge on the human-nature relationship. Relational value in indigenous culture is used in more than one sense to highlight different points, and the development of the concept has motivated people to rethink the relationship between people and nature. The relational value of indigenous people with their nature is to understand how and why some groups of people still keep a close connection with their nature and provide answers to how and why some part of nature matters to some group of people.

As mentioned in the last section, instrumental value is dominating the valuation system in current society. Suppose the relational value becomes a dominant valuation system and plays a vital role in the policymaking process. In that case, the stakeholders with different social and cultural backgrounds will be involved, the policies for the environment would become much more effective and influential. Relational value involves individuals, communities, local people, and indigenous people. Most of the current policymakers dismiss the indigenous and local people's knowledge of their nature. Still, relational values can integrate both non-western pieces of knowledge into the nature valuation system. Relational value refers to the outcome of indigenous and local knowledge systems generated from long-standing nature and human interaction, which can manifest new insights and innovations that evaluate nature. Tengo et al. (2014 and 2017) suggest enhancing the ecosystem and biodiversity conservation by integrating indigenous and local knowledge systems into scientific knowledge.

Some researchers quoted the diversity of relational values. The framing of relational value resonates with many aspects of this relationship and advocates non-materialistic contents that inextricably intervened. “Nonmaterial connection between humans and nature benefits people in numerous ways that impossible to quantify (Russell et al., 2013).” Kurt et al. (2013) emphasize that Relational values are more than an economic valuation framework. Like relational value encompasses “eudemonic” values (Himes and Muraca, 2018; Klain et al., 2017). It respects the fundamental and immediate feelings of people towards non-human entities (Hims and Muraca, 2018). The relationship includes “‘eudemonic’ values or values associated with a good life for human beings” and human’s responsibilities for nature (Kai et al., 2016). Relational values are associated with how nature facilitates a high quality of life through the relationships that people form with nature and the responsibilities that arise from these relationships (Arias-Arevalo et al., 2017; Chan et al., 2018; Kai and Patricia et al., 2016; De Vos et al., 2018). People involved with nature would consider the appropriateness of articulated policies, social norms, and human behaviors and actions to nature as well, by that it emphasized the significance of the balanced and harmonious relationship between people and nature surrounding.

Relational values are emphasized within the long-term interaction between nature and people; “Relational value applies to interactions with nature (Kai et al., 2016)”, and is constitutive (Knippenberg et al., 2018). Kai et al. (2016) suggest that the essential concerns might need to focus on relational values; people’s concerns and responsibilities towards nature emerge in various ways that people are engaged with nature. Relational values mean a way of being, knowing, understanding, feeling, and acting concerning nature and non-nature (Cajete, 1999). Love and respect over nature is not only an emotion that values its objects non-instrumentally but relationally developed through long-term integration with their natural surroundings. Love, respect, and admiration for nature are, at the same time, a proper and specific relationship between their object and oneself. In

some indigenous cultures, nature is no need to be judged by money (Muraca, 2011); the mountains (nature) are neither an instrument for the life of the community living nearby nor an entity holding inherent moral value in the Kantian-based sense of the term. Instead, it is a fundamental condition for the people to define themselves, develop a concept of a ‘good life’, care for their ancestors’ heritage, and give sense to their existence. Within long-term interaction with nature, the stewardship of indigenous people’s culture and nature encompasses kinship between people and nature (Kai et al., 2016). In social contexts of all kinds, including friendship, marriage, partnerships, parenting, extended family, community, and teams, many people naturally think of what is appropriate for that relationship, not only what is beneficial for us, others, or nature (Kai et al., 2016).” The intimate stewardship and kinship with nature are rooted, for instance, in some indigenous cultures, people tie their identity to their natural environment, and some consider the nature associated with their ancestors, collective histories of their community, and sacred preferences. Many indigenous partly related to the notions of ‘Mother Nature’, their identity derives from their relationships with some parts of nature.

The values-as-relations (Sanna and Thoren, 2019) engage with how human-nature relations are conceived. They also describe relational values as: “values where the relationship itself matters, as more than a means to an end”. Himes and Muraca (2018) refer to relational values as a new category of value assessment, i.e., “a new and fruitful category for expressing the importance of specific relationships people hold with non-human nature”.

With the above analysis, it is easy to conclude that the relational value resonates with a non-anthropocentric human-nature relationship, especially in an indigenous human-nature context. In this relationship, the following points are emphasized; firstly, the human’s harmonious interaction with nature is emphasized; secondly, the human benefit did not outweigh the relationship, the relationship is kept in a non-beneficial way to avoid one-directional value flow, and the economic value on nature is avoided; thirdly,

the relational value verified the nature valuation system by including indigenous and local culture aspect on nature including its moral principles to restrain people to respect nature, but little understanding is addressed in the respect, admire and love to nature is more than a morality restriction, and its formation is based on long-term interconnection within nature.

At some point, a relational value is considered as a third value class that can *fill a gap left by inadequacies and ambiguities* of intrinsic and instrumental value (Himes and Muraca, 2018). Besides, the IPBES framework embraces relational values as a departure from the economic valuation framework. Maier and Feest (2015) criticized the valuation framework was econometric and dismissed the biodiversity. Because nature's contributions to people's well-being is a common acknowledgment outlined by the IPBES framework, with this, the relational value concept is proposed under consideration of human wellbeing depending on nature. However, relational values fail to assess the nature value without human judgment. The IPBES conceptual framework enriches the contents of the anthropocentric point of the human-nature relationship by trying to adopt the indigenous way of relational value to emphasize that a good quality of life is defined differently across distinct societies and groups. In this way, the relational value is *anthropocentric yet non-instrumental* (Hims and Muraca, 2018). Diaz et al. (2015) identified 'living-well in balance and harmony with Mother Earth in indigenous culture is one of the many different perspectives on the good quality of life. The new concept based on nature's benefits to human goodwill primarily and theoretically supports human benefits from nature, and the valuation standard is on the human being. Relational value based on nature's benefits on human beings follows the following two interpretations. Firstly, the relational relationship positions the rest of the world as separate nature from human, as if human's long-term involvement and interaction with nature have little relevance to nature or human and nature existing at an equal balance. This ignores risks and insights existing from over-exploiting nature for human use and restricts the potential

for enhancing the intrinsic value of nature itself. Secondly, in anthropocentric relational value, 'rationality' dominates the valuation, and it causes a potential threat to exclude those who have little or no connection with nature. Human-nature relationships are variables between those who hold different values, beliefs, and attitudes and vary between individuals, especially with different cultural backgrounds. It might be at risk of causing inappropriate results forced by external factors to translate the different cultures developed throughout so many years of empirical experiences into one standard.

With the above, the relational value may be translated as both anthropocentric and non-anthropocentric. Just like as follows: the anthropocentric relationship that treats nature as a mere resource, the non-anthropocentric attitude that sees the value of everything as something somehow its connection to human life. If then, anthropocentric relational value is too abstract to include the rich cultural cases. Most of the non-anthropocentric relational value of nature exists in indigenous cultural groups may be neglected. Thus, indigenous ways of appreciation of nature are interpreted into the western way that might fail to be recognized by Western and indigenous people. The human nature connection in indigenous culture is more than a relationship considering nature's benefits to humans; it's a matter of life and death instead. In some cultures, nature is respected more than its relationship with the human but rather by its intrinsic existence. In some indigenous cultures, nature is everything to them, and relational value concepts, especially IPBES, seem to handle this deep connection too casually. The relational relationship stresses the outcome of relations between humans and nature. On the other hand, it provides a very flexible and ambiguous point, since all values can be relational, like social, cultural, spiritual, psychological, physical, and emotional values all developed and generated via relations and interactions.

With the above, it can be concluded that relational value alone is not strong enough to perform neither a qualitative nor quantitative assessment of nature valuation, especially for some local and indigenous cultures.

Section Four Intrinsic Value

Intrinsic value is a powerful motivator for conservation on moral grounds (Hims and Muraca, 2018) in environmental ethics studies, an abstract ethical motivation for nature conservation and preservation. Some biological entities are highly protected, sometimes at the cost of basic human needs. These approaches underpin much of modern conservation by excluding humans to establish conservation parks or reservations. For example, around half of protected areas for purposes of global nature conservation have been established on indigenous territories, and this has frequently entailed expropriation and exclusion (Tauli-Corpuz, Victoria, speech in OHCHR 2016). As such, conservative discourses regularly pit intrinsic values, expressed as rights of non-humans, against human rights. This is an example of misusing the intrinsic valuation system, as it excludes people from nature. It seems to create a binary of nature and people, which is not entirely correct.

Among these three valuations, intrinsic value is the most controversial one. In recent research, intrinsic value is more a philosophical idea than a scientific one (Justus et al., 2009). Within environmental ethics, the notion of intrinsic value is primarily used to articulate a distinction between subjective and objective ethical theories. To break the new ground within the disputes on subjectiveness and objectiveness of intrinsic value, I would claim that the existence of intrinsic value is objective, and the recognition or discovering of intrinsic value is subjective. I defend that intrinsic value is objective with an independent existence in Rolston's sense, and its recognition and discovery from human points needs subjective perspectives of human beings. Environmentalists such as Rolston or Callicot argue that environmental ethics must be non-anthropocentric in the sense that non-human entities must be taken to have intrinsic value. I also argue that all entities have intrinsic value, and it is the most radical and fundamental of any other relationship than determining what entities have what kinds of value. This research will

not argue about the existence of the intrinsic value of nature but defend the significance of the intrinsic value as one of the essential valuation systems. After a short section discussing the features of intrinsic value, this section turns to generalize the limitation that it sets apart human beings from nature.

Objective intrinsic value of nature

The intrinsic value should be understood to be an objective existence that independent of human valuing. In other words, the value of nature is independent of the valuation of a valuer. Objective value exists in the world whether or not there are people to perceive it and whether or not they do perceive it. Defenders of the objective value of nature attempt to link the required objectivity to the fact that things in nature have their good, irrespective of human interests and preferences.

Environmental philosophers like Rolston, Paul Taylor, John O’Neil, and Katie McShane subscribe to this view. Rolston argues that intrinsic value is an objective property of entities: “Do not humans value the earth because it is valuable, and not the other way round?” (Rolston, 1988). O’Neill also defends the objective intrinsic value claiming that intrinsic value is non-instrumental, it possesses intrinsic properties, and intrinsic value is a synonym of objective value (1992). O’Neill’s argument for objective values rests on the premise that things in nature have their good. Objectivism of intrinsic value assumes that they are real properties that exist independently of the valuers: O’Neill, for example, in a survey of the notion of intrinsic value in contemporary environmental ethics, highlights as one of three main uses of intrinsic value, as the idea of “the value as an object has solely in virtue of its intrinsic properties” (O’Neill, 1992). Similarly, Taylor’s theory of respect for nature assumes that animals apply the objective concept of entity-having-a-good-of-its-own. McShane (2007) also supports the objectives of intrinsic value²⁹. The report of The Economics of Ecosystems and Biodiversity (TEEB)³⁰ also advocates “the issue of intrinsic values is helpful to reflect on the relationship between nature and humans. It proposes that nature has value in itself and is valued as an

end in itself, independent of its usefulness to achieve some higher end. In terms of the objective value of nature, it links the human and nature to what human beings ought to bring about, and it does not suffer the same risk of being emotionally and motivationally inert as subjective accounts. At least it depends upon a prior and more fundamental proper attitude to the norms of valuing nature. The objectivist thinks that intrinsic values exist in the absence of valuing the subject. "...Nature itself exists value before human brings the concept of value" (Guixiang, 2015). Defenders of objective intrinsic value also claim that human beings do not create any value in objects: as Justus et al. (2009) stated, "liberating humans from narrow anthropocentrism about value". All the values are already what they were when humans discovered them; in other words, it is already possessed by the object itself. Values exist objectively; they exist independently of human beings. The intrinsic value is objective; that is, a value independent of the evaluative attitudes of some subject. Intrinsic value is a value given to non-human entities independent of human judgment. Nature was, is, and will there, as usual, the subject, being stimulated by the incoming data and translates the object as an entity with value, after which the object appears as having value. But nothing is added to the object; in fact, the object remains what it before was. So value is not human-generated. Wild nature is value-free, and only it seems to become valuable when humans evaluate it. Human beings share the consciousness that enables them to be able to value existing values but not creating values.

Julian Hoffman (2019), in his book *Irreplaceable* depicts the conservation battles being fought by local people for losing and lost species and habitats of flora and fauna that they love, whether it's a London allotment or grassland in Inner Mongolia, the message is the same; they are irreplaceable.

There are countless reasons why we should celebrate preserve and repair the natural world whenever possible, from its beauty to our well-being and all points in between. But perhaps the most compelling for me is the innate right to exist, to be able to express itself uncoupled from human needs. To persist and flourish on its intrinsic evolutionary course; part of the multitudinous, patterned, compound, and mystifying world we are mutually

inherited. We are not solitary on this planet; we never have been and never will be. And yet so often we seem to live as though we are alone, Shorn of ties or tenders two other creatures, inalienable and exclusive in our demands despite our late arrival on this planet and the interwoven relationships we were immediately unnecessarily a part of. We simply won't be here without the intricate leaving Web we are enmeshed in. To substantiate the intelligence, we so fervently claim for ourselves requires the wise recalibration of our commonality while simultaneously acknowledging our differences to see in those other nations not 'underlings' but fellow species with an inherent right to World existence within the net of life and time that we share. To transform them into radically different kinds of us (Julian Hoffman 2019, page 114).

People are trying to rebuild the relationship with nature because nothing humans created through destroying nature can replace it. In people's traditional sense, the natural value refers to the feature of nature. Serrels (n.d.) criticized the modern studies separating humans from nature, and she proposed radical rationalism to restore the human-nature relationship. The irreplaceability of nature has been truncated, missing much of the richness. Even much effort has been cost into proving the natural system scientifically, and no evidence shows its irreplaceable character.

One entity or collective entities, each of them has its role to play in nature. Everything in nature has its role to play, and no other object or subject can replace it. Without the severe destruction caused by human beings, every ecosystem is quite healthy and maintains its organization. A person can cure his or her physical injuries by visiting a doctor. When the natural ecosystem gets wounded, it can hardly be rebuilt and revised. Most of the natural destruction and degradation have been unrecoverable because nature is unique or irreplicable.

Subjective Awareness

I argue that the subjectiveness of intrinsic value itself is what human beings recognize and discover the intrinsic value of nature and does not change the objective attitudes towards the existence of intrinsic value itself. Nature value or nature property

exists before human beings appeared on the earth. While subjectivism assumes that they are conferred, Callicot emphasized the subjectiveness of intrinsic values as he claims, “How to discover intrinsic value in nature is the defining problem for environmental ethics” (Callicott, 1999). Here it means, borrowing John’s words, “the recognition (or discovering) of intrinsic natural value is a fundamental and non-negotiable aspect of an eco-evolutionary worldview (Piccolo, 2017)”. Elliot argues that “a thing has intrinsic value if it is approved of by a valuer in virtue of its properties” (1992). The recognition of intrinsic natural value has been a foundation of conservation biology. Callicott states that, for example, “Nature has intrinsic value when it is valued . . . for its own sake” (Callicott, 1999). And he explicitly aligns himself with “subjectivist accounts of intrinsic value in nature” that posit an “anthropogenic . . . intrinsic value” (Callicott, 1999 and 1989). According to Callicott, there is only subjective intrinsic value in nature. He insists that all value originates in human judgment and claims that objects are valued only by subjects instrumentally and intrinsically. Whatever an entity has intrinsic value related to the person who evaluates it, no values can be found without human beings. According to Callicott, there is subjective consciousness in intrinsic value. He insists that all value originates in human judgment. Callicot defends subjective intrinsic value as he articulates, “Intrinsic value ultimately depends upon human values.” “The source of all value is human consciousness, but it by no means follows that the focus of all value is consciousness itself. . . . An intrinsically valuable thing on this reading is valuable for its own sake, for itself, but it is not valuable in itself, i.e., completely independently of any consciousness, since no value can exist in principle . . . be altogether independent of a valuing consciousness. . . . Value is, as it were, projected onto natural objects or events by the subjective feelings of observers (Callicot, 1989). “Value is, as it were, projected onto natural objects or events by the subjective feelings of observer.” (Callicot, 1989).

Hargrove (1992) questions that if humans are the only beings who value nature. He claimed Callicot as a subjective non-anthropocentric value theorist. Callicot emphasized

human beings' subjective morality toward nature and defined human beings as a part of nature. Hargrove (1992) agrees with Callicott's theory that nonhuman things are not valuable in themselves; all values depend on subjective human beings. But Callicott's theory is confusing when we believe that nonhuman creatures have independent intrinsic value in the sense that they have goods of their own (Hargrove, 1992). Callicott included human beings in his large biotic community theory to restrict human action and behavior to a moral standard. The subjective attitude captures the connection to human interests and desires, and in that, something is good if it is an object of human interest and desire. But it has some risk to exclude cases in which people fail to care about things that are still valuable. When humans judge everything subjectively, the whole valuation process is human-related. It misleads us to the idea that nature values exist for human usage. Subjective intrinsic value goes into prone that humans created the value of non-humans and humans control nature. If humans have the right to control the world, compare those natural areas that remain untouched and those severely damaged by human interruptions where those flora and fauna are created a very harmonious ecosystem to support their survival. One can easily assume that nature might be better without humans.

If we interpret the subjective intrinsic theory as recognition or discovery of intrinsic value depends on subjective consciousness or awareness, the ambiguity and risk can be avoided. The objectivists have a similar intention, like O'Neill³¹ and Rolston³². "The best human life is one that includes an awareness of and practical concern with the goods of entities in the non-human world (O'Neill, 1992)". Rolston (1988) claims values arise out of the interaction between the value in nature and our mental states. "If I did not believe that tigers have intrinsic value, if I did not believe that species lines are morally considerable, if I thought the values of the tigers were only those that this or that culture chooses to assign to them, or not, I would not be making such efforts to protect them" (Rolston 1998). "It is not centered on human well-being, although it is still tethered to human experience (Rolston, 2012)³³. What Rolston means here is protecting tigers with

respect; one must recognize its intrinsic value that is related to human preferences and desires and to motivate what might be agreeable action. Value is anthropogenic even though it is not anthropocentric (Callicott, 1984).

Some people may defend the above by arguing that human beings are animals; in this world, we have the consciousness to find the values of non-human entities. But the truth is that humans are only discovering or recognizing the value that already exists long before human beings appeared. Self-consciousness is the greatest gift from nature to humans and helped them being able to place, discover and recognize values on things that they believe valuable. People are conscious enough to put forward a language like intrinsic value and also discuss and analyze it. Valuing always occurs from the viewpoint of a conscious valuer.... Only humans are valuing agents (Norton, 1991). On the other hand, humans are not the only valuer in this world; human beings are not the unique valuer; non-human entities also can be a valuer. I defend this non-anthropocentric valuation by arguing that valuation is not a human-centered process. If we uphold intrinsic value as someone who has consciousness and the ability to survive, animals value their lives and protect their young. “All this seems to fall short of valuing what an ecosystem is in itself, a healthy, lively place whether or not we humans are around, full of animals and plants, including vertebrates, who are defending their own lives for what they are in themselves, each with their modes of coping, only a few of whom have the capacity for consciously evaluating what they are doing (Rolston, 2012).” Even plants defend themselves from their enemies. If only humans can value objects, I would instead suggest human beings can stand in different positions to value nature; for example, he or she can assume himself or herself as any animals in the forest and imagine their lives in a forest, on the other word, it means the valuer can be another kind of human being with an animal mind or heart. In this way, there would be another kind of intrinsic value of nature. The forest is a habitat and a food supplier to those animals. Animals care for their younger and train their youngers to survive, and they have their own social life, and they defend

their geographical territories. All these activities are independent of human interest, not human-neutral either.

Intrinsic value resides in the triad of relationship and relata (Knippenberg et al., 2018). Not as the relational value, their relationship might be as central to the value of nature, the intrinsic value itself does not depend upon its relationship with any other object. The interaction between the judging subject and the observed object is necessary for discovering or recognizing the valuation. The valuation process is not original; it would be developed through being-in-the-world (Muraca, 2011). Kai et al. (2016) posted that “Consider a tree or grove deemed sacred, associated with collective histories, ancestors, or sustenance of many kinds. Is it valuable intrinsically (independent of human valuation) or instrumentally (for preference satisfaction) ...satisfaction does not produce sacredness”. Here, intrinsic values are thought of as objective values and contrasted against preference satisfaction. It is discovered in the long-term interaction between people and nature. In this way, the recognition and discovering of the intrinsic value of nature exist in relations between humans with non-human nature. Relation not only holds certain values but also that values arise out of these relations. When we insist, the intrinsic value is subjective; the sharp distinction between a valued object and a valuing subject raises particular ties.

Moore relates intrinsic value to intrinsic properties (Bayram, 2016). Intrinsic properties are understood as being non-relational and objective existence. Non-relational intrinsic value is important in environmental ethics to avoid anthropocentric hubris. Intrinsic value holders defend nature as a value without dependency upon its relationship with human beings. Rolston has emphasized this particularly forcefully: “Ecological values . . . seem to be there apart from humans being there” (1988). Again, they have been preserved the existence of the intrinsic value of nature is objective. Humans’ understanding of the objective intrinsic value of nature is derived from its relationship and interaction with it. Finally, on the one hand, intrinsic value can mean non-relational

simply because nature has value independent of its use as a means-end in themselves and also because it has value independent of any relationship to anything else. On the other hand, intrinsic value is discovered and recognized via a connection with subjective entities.

Section Five Holistic Intrinsic Value

Some intrinsic value defenders include human beings to nature for arousing their moral awareness towards nature and stressing their interconnected and interdependent relationship. Those scholars who advocate intrinsic value are called “Traditional conservationists” (Klain et al., 2017), and they are often criticized for minimizing human interference with nature. On the other hand, environmental ethics concerns too much about human beings’ ethical relationship with the natural environment. At the same time, numerous philosophers have been trying to develop some philosophical disciplines to restrain human behavior and action toward the environment.

Shrader-Frechette (1996) considered Callicott and Leopold as holistic environmental ethicists, and the results are a natural result of the evolutionary extension of the boundaries of the moral community. “A thing is right when it tends to preserve the integrity, stability, and beauty of the biotic community. It is wrong when it tends otherwise (Leopold, 1949).” Aligning with Leopold’s motivation for the land ethic, which “enlarges the boundary of the community to include soils, waters, plants, and animals, or collectively: the land,”; the land ethic expands the definition of “community” to include not only humans but all of the other parts of the Earth. He suggests that “in the last analysis, ‘the integrity, beauty, and stability of the biotic community is the measure of right and wrong actions affecting the environment (Callicott, 1989).” The central thrust of the land ethic is that we should care for and protect the land both for our sakes and for the sake of the land itself (Gregory Bassham, n.d.)³⁴.

We abuse land because we regard it as a commodity not belonging to us. When we see land as a community to which we belong, we may begin to use it with love and respect. Callicott attempted to provide the philosophical foundations to ground Leopold's land ethic, arguing that nature possessed intrinsic value and that we owe moral obligations to the land. As he also wrote that "we can only be ethical in relation to something we can see, understand, feel, love, or otherwise have faith in." (Leopold, 1949/1989).

Piccolo (2017) applied Leopold's philosophy to support the holism of intrinsic value: Leopold and an ensuing generation of philosophers had argued two points: one is human is part of nature, as all life on Earth; "we are not apart from, but a part of nature; the other one is morally imperative". When Leopold declares that a land ethic "implies respect for fellow members" of the biotic community, as well as "for the community as such" (1949/1989), it implies that nature has a life and that any entity in this community has the right to survive as human beings do. To signify the equal relationship between man and nature, land ethics emphasized that people are plain members of the land community.

Land ethics has changed humankind's understanding of the relationship between man and nature in western environmental philosophy. Therefore, acknowledging the intrinsic values of nature acknowledges the fact that people are part of nature". Environmental ethics scholars call for moral responsibility to all-natural worlds. Callicott's first-order holistic environmental ethics "locates ultimate value in the biotic community and assigns differential moral value to the constitutive individuals relatively to that standard" (Callicott, 1989). At its core, the idea of the land ethic is simply caring about strengthening the relationships between humans and nature.

I defend the holism in intrinsic value with Leopold and Callicott's "biotic community" with its interconnectedness and interdependence of everything within nature. This simple statement is enhanced with affirmations of the inherent value of any life on earth. In Leopold's vision of the land ethic, the relationships between people and land are

intertwined and mutual. The land ethic is a moral code of conduct that grows out of the interconnected and interdependent relationship between people and nature. Holistic approach in intrinsic value requires to be measured is that human actions on their environment affect not only human species alone. Holistically judge nature values are clued-up by the need to protect the needs and interests of present and future human generations. Preferably, it also has long-term effects on non-human animals and the non-conscious reality that also dwells within the environment. Thus, the prerequisite to safeguard the needs of current and future generations and the interests of other non-rational creations in their own right remains at the core of contemporary environmental ethics. If we understand the intrinsic value in this manner, we cannot capture the core meanings that nature means to us. Besides, the root component of modern culture is non-nature. Modern abstract art, contemporary modern music, even religion has become individualistic, personal, anti-realistic, and largely encouraging people to alienate from nature. Since people try to move beyond or outside of nature, in the modern world, people have become fragmented and intentionally non-holistic. Contrary to individualism and reductionism in the contemporary context, holism exists in Nature. That it is the natural built-in driving force and organizing principle of all entities and phenomena, wholes, towards wholeness (Beukes, 1989).

Smuts' book *Holism and Evolution* (1926) dealt with unity and continuity in nature³⁵ and criticized the separation of all matter in nature. *Holism* is from the Greek *holos*, which means "whole, all, entire, total". "...the making of wholes which makes this universe creative, and the creative universe is therefore necessarily the holistic universe" (Smuts, 1926). He argued that "the whole is more than the sum of its parts" (Smuts, 1926) and that "it is not a mere mechanical system" (Smuts, 1926). In other words, the parts of any whole cannot exist and cannot be understood except concerning the whole; the interconnection between the parts and the wholes are inseparable. In this context, a whole or a part of the whole could be equivalent to a community within which human beings,

non-human entities, and their living surroundings are included. All properties within this community, i.e., ecosystem, living styles, social and cultural systems, cannot be determined or explained by a single object alone. Instead, the whole community situation determines a vital way how the parts behave and vice versa, and it is circulation that the parts will influence the whole, and the parts also affect the whole.

Beukes has agreeable points in explaining Sumts' holism. That *wholes* are the real units of nature, and as a unity whole are self-organizing systems and synergistic, thus cooperating units. For him, every organism, every plant or animal, and every person is a whole that has a certain internal organization and measure of self-direction as well as an individual specific character of its own (Beukes, 1989). The interconnection between whole and parts and within parts is a significant factor in holism. Every organism, every plant or animal, and every person is a whole that has a certain internal organization and measure of self-direction as well as an individual specific character of its own (Beukes, 1989).

The idea of the interconnection and interdependence of all things in nature supports that nature is active and is fundamental to human life. The human as one part of nature thus takes their meaning from nature and is defined by and dependent on total context of nature. The cycle itself is a dynamic interactive relationship, and the interactive process is a dialectical relation between parts and the whole. It cannot isolate the parts into simplified systems that can be studied in the laboratory because such isolation distorts the whole and challenging to find the truth. In her book *Silent Spring* (1962)³⁶, Carson alerted readers to how the widespread use of chemical pesticides was posing a severe threat to public health and leading to the destruction of wildlife, has given enough proof that everything in nature is interconnected to one another, including human beings. Some scholars like Kurt et al. (2013) emphasize that ignoring human dependency on nature will cause negative consequences for human well-being and the economy. "The Invention of Nature" By Andrea Wulf (2015) recalled the life of German naturalist Alexander von

Humboldt (1769-1859) and raised his scientific discoveries and influences in nature. As Wulf stated, “Most important, though, Humboldt revolutionized the way we see the natural world. He found connections everywhere. Nothing, not even the tiniest organism, was looked at on its own. ‘In this great chain of causes and effects,’ Humboldt said, ‘no signal fact can be considered in isolation.’ With this insight, he invented the web of life, the concept of nature as we know it today.” Perceiving nature as an interconnected global force, his discovery and writings inspired naturalists, poets, and politicians. “Wulf does much to revive our appreciation of this ecological visionary through her lively, impressively researched account of his travels and exploits, reminding us of the lasting influence of his primary insight: that the Earth is a single, interconnected organism, one that can be catastrophically damaged by our destructive actions.”³⁷ Finally, Wulf suggests revising Humboldt’s holistic and interdisciplinary approach into current environmental and nature studies as “his concept of nature as one of global underpins our thinking”.

To a significant extent, indigenous resistance to natural destruction is about preserving and living within a holistic biotic community. Current human-nature relationship studies are too reductive, so I claim that environmentalists should extend their observant scope more comprehensively, from one to collect and from entity to entities, from one community to nearby communities, even to the world. To value nature’s wholeness is a defining characteristic of nature’s holism.

Conclusion

After discussing each of the valuation system in detail, one may clearly say that the instrumental value is dismissing nature’s value to a substitutable value. The natures are deemed non-substitutable and irreplaceable; however, instrumental values in terms of human perspective, which are thought of as exchangeable and tradable. Whereas

Relational value is wide enough to include any kind of value, plus every value in this system arises from relations.

The existence of nature in my analysis is impermeable to human judgment. The discovering of intrinsic value might depend upon relationships, especially when the unique value of nature depends upon the relationship with a special group of people. In other words, the recognition of intrinsic value requires someone to discover that essential value. Besides, we cannot deny the fact the final aim of discovering and recognizing the intrinsic value of nature is also for human use and consumption.

The inspiration for my conception of holistic intrinsic value is from Rolston III' objective intrinsic value, Callicot's subjective intrinsic value, Leopold's land ethic, and Jut Smuts' holism, and whose theories support the claim of this study anthropocentric value and reductionism must be avoided, while capturing what is most important about the human-nature relationship: human being is part of nature and emphasize the interconnectedness and interdependence of all beings in nature with each other holistically. The framework provides an intuitive and inclusive understanding of why the natural world matters in itself, for its own value and end use. It can effectively integrate intrinsic, instrumental, and relational value and provide a more specific and syncretic theoretical approach for the nature valuation research field. The holistic intrinsic value of nature relies upon rather a healthy way of thinking about the real nature and proposes a way of developing the radical relationship between humans and nature.

The holistic Intrinsic value widens the relationship between ecology and human to human in ecology to avoid the anthropocentric judgment on nature. The holistic intrinsic value of natural strengths as nature is a kind of unity and integrity; within it, all forms of life are processing in various ways, and they are interconnected and interdependent, in which the agreement of subjective and objective natural value becomes the dominant genre. As the human experience, any other animals and plants are producing in contact with nature and plays a role in nature.

The focus of the human-nature relationship remains conspicuously underdeveloped or absent in considering nature's destruction and damages caused by human beings. And the dominant role of human beings in this relationship that leads to materialistic and economic assessment in the ecosystem. It is time to acknowledge that this focus does not adequately address the human-nature interactions and reduces critical components of accurately and effectively managing this relationship. On the other hand, the focus disproportionately risks the degradation of continuous natural destruction and damages caused by human activities.

The anthropocentric judgment of nature is based on the lack of cognition of admitting human beings as existing within and as an integral part of their nature, which leads to the current human activities like overexploitation and over-cultivation as experienced in Inner Mongolia and has been discussed in the previous chapter by way of description of industrial activities, agricultural growth, and private land ownership. There is urgency in coming to see the world as a web of the interrelated and interconnected process of which we human beings are integral parts so that all of our choices and actions have consequences in any way for the world around us. To understand our own experience with nature, we have to understand the connectedness between humans and nature correctly. The specific source for the conception of holistic intrinsic value is to capture what is most important about the human-nature relationship. The framework serves to provide an intuitive and inclusive understanding of why the natural world matters to local and indigenous people and effectively integrates the intrinsic, relational and holistic approach as an alternative to over-instrumentalism. The holistic intrinsic value of nature rather merely is a healthier framework of understanding the entire nature and propose a way of developing a radical relationship between human and nature and emphasis on perspective taking allows for recognizing the 'in' and 'with' frames of human and nature. Hence a human is situated within the nature and is related with the nature, as per holistic valuation system.

Introduction

As migration is regarded as a core of the nomad's system, the relationship of nature and nomads exists within migration should be contextualized within the system of migration. Here in this Chapter, the migration is addressed to prove that discovering or recognizing the intrinsic value is base for effectively utilizing nature; the relational value of nature is generated through long-term interaction with nature. Within this system, the wholeness of nature is respected. Nomadic migration offers space and time for nomads people to interact with nature actively. During this interaction, humans actively engaged with nature, discovered the intrinsic values of animated and in-animated worlds, and efficiently utilized those for their survival without harming them. There are many styles of corresponding traditions and habits related to nature differently on time, ethnics, and races, are reserved their styles according to their natural landscape, however, the contents share one substantial similarity, which is pointing to the same aim to protect the natural world (Ossuriin, 2000). Within these ethnicities and races, Mongols, with their efforts in preserving nature, reflected in their awareness of the intrinsic value of nature, developed a harmonious relationship with nature and balanced their own life by following the nature's rules.

Section One**Mongols and Migration**

Nomadic life was kept and continued mostly because of its mobility within free movable space. The relationship of nomads people and nature was generated within free migration; the migration was conducted within nature (grassland, animals, and vegetation) and domesticated animals, in which nomads people play a role in adjusting themselves between these elements. They are integrated wholes or well-organized

networks of interconnected and interdependent parts that adapt dynamically to exchange within this whole. The parts, including both biotic and abiotic factors in ecosystems, and the whole subject to any changes are within this system; for example, the loss of diversity of vegetation and soil erosion, then it can be expected that the system will also change either in an adaptive, evolutionary way or in catastrophic and unpredictable upheavals. Seen in this light, it can be considered that any changes within this system have extremely serious and irreversible consequences for the ability of ecosystems to maintain their normal and healthy structure and process. The current situation in inner Mongolia is a vivid illustration of this. Once one part is severely destroyed, the whole process of migration is also stopped.

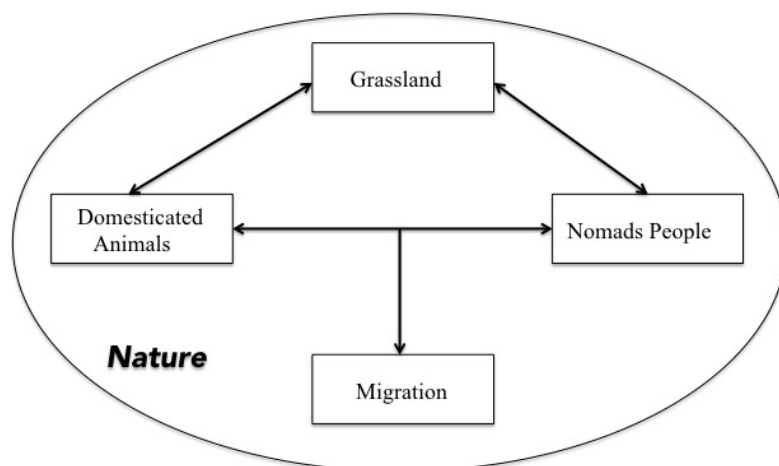


Figure 4. Nomads people, Domesticated Animals, Grassland, and Migration within Nature

Bold (2001) stated that “as the basis of nomadism, or the keeping of the nomadic livestock, the natural-ecological conditions in the Central Asian highlands compelled the peoples to keep livestock to ensure their survival.” Not only does this economic form represent a complete adaptation to the extraordinary natural conditions: but it is, in fact, the only possible by this economic form that they can make use of large prairie land for better survival. A concrete proof was given by Bold, who, with reference to the climatic

changes from early 4000 B.C. to 3000 B.C. in the central Asian area, concludes that the spread of nomadism was the only option around Inner Asia.

In the Central Asian continental regions, the climate is hot to moderately warm in summer and always extremely cold in winter. Relatively homogeneous distribution of forage supply exists in predominantly short grass steppe. A low density of forage plants and a short period of vegetation are characteristic. Nomadic livestock keeping is optimally adapted to these limiting natural conditions. Not only does it represent a complete adaptation to the particular ecology of the regions, but it is also the only possible economic form of using nature. Therefore, nomadic livestock keeping is not only extremely dependent upon the land and thereby sensitive to even the smallest ecological changes; it is also a consequence of specific natural ecological conditions. (Bat-Ochir Bold, 2001)

Migration is the life of nomads (Goto, 1942/2011). Nomads roamed across large swaths of plains, mountains, and grassland, having to travel longer distances and pack up and move many times a year. From the 13th century until the contemporary, nomadic life kept whatever kind of community production group within movable distance. Nomadic life does heavily depend on the natural environment they are living in. The migration follows the “determining ecological factors like climatic conditions, the distribution of forage plants, the distribution of salty soils, and the supply of water (Bold, 2001)”. In all the circumstances, the specific character of the environment is one of the important determinants. Migratory movements heavily depend on the weather like temperature and wind; pasture conditions, growth of vegetation, and pastureland capacity are important as well. The intense tribal dependency on nature and their free moving boundaries gradually faded when Manchurians controlled the Mongols, which is discussed in Chapter VI.



Photo 3. Nomad Migration, Naranbulag sum, Uvs *aimag*, Mongolia³⁸

‘Nomads’ is a definition for those who only take long-distance mobile activities with domesticated animals as Khazanov gave the description (1984) of ‘Nomads’ as a group of people who economically independent enough to self-supply and periodically moving between certain long distances or within the specific grazing boundaries following the management of herds and the maintenance of grazing land. The ecologically appropriate regions need to maintain the balance between the grass and animal rising. Herders classify pasture areas using several different criteria, including the season in which they are grazed, the nutritional quality of vegetation and suitability for different types of livestock, topography, plant community, water quality and quantity, and distance from camp. Herders’ knowledge of plant-animal-environment relationships and the management of animal practices are embedded in their classification of pasture resources. For this, herders share specific and detailed knowledge on every aspect of their land, including animals, vegetation, landscapes, water and soil situation, and climates.

The nomad people are adopting the natural surrounding when they adopt different domesticated animals. The seasonal migrations among winter, spring, summer, and autumn pastures are also a means of meeting the changing physiological demands of the five Mongolian livestock species: camels, cattle, horses, sheep, and goats³⁹ with the most appropriate available resources. “The biological particularities of herding animals which

nomads have to take into account have a bearing not only on the species composition of their words but also on how the herds can be split up and pastured in specific geographical conditions (Khazanov, 1984)". Reindeer can only be herded successfully in the tundra, camels in the desert, and yaks in high mountainous regions. The adaptability of sheep, goats, horses, and cattle is relatively more flexible than reindeer and camels. Goats and sheep can pasture in the same ecological zones. Except for camels, goats are crucial in the dry and rocky regions of the Gobi Desert steppe.

Specific geographical and ecological conditions have a substantial impact on the production of different herding animals. The different topographical area has a different style of mobility. During the winter, livestock needs the grass around an open step and mountain range to keep warm and away from stormy snow in the mountain area. Since the grassroots are frozen and dead, low altitude and minimal snow areas are paradises for animals. So, the winter camp should locate on a southern slope of a mountain to avoid the cold wind from the North. When spring starts, livestock will enjoy the young grass mixed with old that preserved under the snow. The water melting from the snow will keep the ground green and wet the whole summer. They move again in summer; moving the animals around also allows the grass to grow back. So, the winter lands should be left untouched and being recovered for the following winter. If the summer pastures were around the mountains, they move upward to the mountain area to use the grass before the snow covers it. These areas have abundant, lush grass, but heavy snows make it impossible for them to graze in winter. Migration in summer, the vegetation resources, and water conditions are also essential to determine the site. In the winter, the animals are taken to the south or to the desert and semi-desert zones, where autumn rains are imperative for producing grass for animals to eat. Nomads that live near mountains migrate between the high pastures in the summer and the river valleys in the winter.

The nomadic economy is mainly dependent on natural conditions like pasture growth, water availability and climate, and limited by pasture potential and local

resources. “Herders must pay strict attention to the slope of hills and water, the direction of the prevailing wind and prevailing sun, the probabilities of subsoil water and other landscape features of the most obvious of reasons: if they do not, their herds will not live to see the spring (Williams, 2002,)”. In conclusion, the harmony of the herds and the pastures are kept under constant changes in plants, weather, and water availability. The nature condition and the type of grass availability are significant reasons for which animals should be raised. The distribution of domestic animals was subjected to topographical differences that seasonally change along as well.

Section Two Migration and Nature

The nomads people have a respectful relationship with their domesticated animals. In the pastureland system, nomads people raise animals for food by obeying the rules of the natural system, and domesticated animals are not separated from nature (Jalartaiin, 2016). The nomadic economy is a pastoral economy by yielding economic profits from domesticated animals. Bold (2001) argued that livestock keeping was a basis of nomadism, as it is the only economical way to make use of pastureland and make sure humans can survive in this nature.

Five species of the livestock of sheep, goats, horses, cattle, and camels are generally involved in the nomadic life, and most of them are necessary to guarantee a high degree of mobility. Domesticated animals are more likely to live with Nomads people than a product or stuff (Goto, 1942/2011). The animals are treated well. They are looked after, taken care of, cherished, and left to lead a relatively natural life. The animals fatten up in the summer and can withstand the winter; during the winter, the animals generally lose weight and deteriorate, and some will not survive the winter. Nomads slaughter livestock that is unlikely to survive the winter to secure a food supply for both themselves and their animals. The animals graze in groups and are often brought close to the living place in the evening. The exceptional relationship between humans and animals is incredibly

tangible when it comes to horses. Nomads are very skilled horse riders. Horses are used for herding, hunting, shopping, visiting neighbors, racing, games, and transporting the Gers. Children, girls, and boys alike are often able to ride before they can walk and the relationship with the land and the herds develop naturally as they are included in all the daily chores. Most of the herders can find their stockings by looking for the traces of the animals left on the grassland. They can easily separate the footprint of their animals from others'. These examples of experience in relevance to everyday life, for example, how they survived and saved their animals from the heavy storm, how they found the lost group of sheep or cows by chasing their traces left on the pastureland, how they tamed a two-year-old horse. These are the combination of admiring action and skills in which the performance of confidence and control had been practiced.

Every domesticated animal has its role in nomads life; a horse is for traffic and loading, camel is for its milk and fur, sheep and goats are for food (Bold 2001). The Mongols keep sheep as a source of meat, hides, fat, and, to a limited extent, milk.... The relatively small amount of work required for slaughtering and the possibility of conserving the meat are also advantageous for nomadic conditions (Bold, 2001).

Goats are in general kept as sources of hair and milk.... Mongols prefer goat's milk to sheep's milk (Bold 2001). Cow's milk is drunk everywhere with relish and is preferred. In many regions where no *airag* is produced, sour cow's milk is drunk.... Cattle hides are mainly used as floor coverings for the yurt in winter.... Beef is valued second only to mutton (Bold 2001). The Horse mainly serves as a mount, less frequently as a spanned drought animal.... Despite its small size, the Mongolian horse is sturdy and capable of bearing heavy loads. It can carry about a third of its weight and can travel long distances (Bold 2001:37). The camel was used as a source of hair and milk, as the amount, and as a pack and drought animal. As a pack animal, it can carry on average 200-240 kg and as a drought animal, 400-600 kg. A fully laden camel can travel 30-49 km per day (Bold 2001).

In the context of a pastoral ecosystem, where pastoralists closely herd domestic livestock, herders play a crucial role in determining migrating patterns. The significant decisions include the frequencies, the spatial and locational choice of seasonal pastures and campsites, and whether and where to reserve pasture for winter and spring use. At

this scale, natural decision factors constrain herders' ability to apply their ecological knowledge for both survival and balancing nature conditions and domesticated animals. The sustainable utilization of nature needs to be paralleled by controlling the development of livestock. Therefore, herdsmen migrate from one pasture to another to maintain the optimum relationship between livestock and grazing land to cope with changing external pressures. Then, it can be said that pastoral movement is the main form through which herders manage the interrelationships between nature and livestock (Gomboev, 1996).

Wild animals are highly respected. In the earliest time of nomads, hunting activities is one of economic and leisure activities. Except for common sources of wool and milk and nutritional satisfaction was acquired through hunting wild animals. Hunters also follow specific rules of their goals. Hunters avoided killing too much in mating seasons. Most of the hunting seasons were summer and autumn; spring and winter seasons are avoided for hunting. Most animals are to lose weight in winter, or the population growth and reproduction in spring are not affected. On the other hand, it is forbidden to kill the young and males to balance the population and keep their continuous survival. Hunters have a special ritual when killing one animal and would show respect and calm their spirits by mooring and praying for their goals. They believe plans for foods and daily usages were granted from the hidden power of nature, and the rehabilitation of these animals was considered. Certain parts of wild animals were believed to have medical effects for some illness. Besides food and medicine, skin and fur of game animals were also a source of material for clothing like Jackets or boots that are warmer against the bitter winters. The artifacts decoration with animal styles may represent the first "narration" of the ancient legend of animal admiration. Some Mongols will tattoo Wolf or Snake on their chest or arm to express their respect and beliefs to these spiritual animals. The spiritual connection between wild animals and nomads people is discussed in next Chapter V.

Among these wild animals, wolf and Mongol people's ecological connection is the best illustration of the relationship between Mongol people and wildlife. The Mongolian wolf does play an essential role in Mongolian culture both spiritually and ecologically. The folklore has it that Chinggis Khaan and the Mongols were descendants of wolves. The wolf is the messenger of heaven, the cleaner of nature, and the ancestor of Chinggis Khaan. The wolves were respected for their power, strength, and tenacity with their powerful and skilled hunting techniques. The wolf is regarded as a balancer of the whole pastureland system. Since the wolves, snakes and foxes are disappeared in Inner Mongolia. Their extinction leads to one of the predictable results of pastureland facing now is outnumbering of hole digging animals like rabbits, weasel, rats, and marmots. They would be one of the reasons that are expanding the desertification. On the other hand, there is no exaggeration to estimate that the infectious disease from these animals might spread anytime, including the plague. The popular book, *Wolf Totem* by Jiang Rong⁴⁰, illustrates the importance of wolves to the grasslands of Inner Mongolia. It contains parts on the wolf's job as a cleaner of the sick and the old animals and its ability to keep the numbers of the hole animals under control and, therefore, to save the grasslands from over-use and eventual desertification. It is believable that the loss of the wolf is one of the most significant contributing factors to desertification in Inner Mongolia. Every wild animal across pastureland is not merely an animal of it, and it has deep roots in maintaining nature balanced as a whole. No research has been done to determine how these animals have adapted over millions of years to fulfill their pastureland roles, which does not mean that they are not significant.

The vegetation provides food for domesticated animals, while some have medicinal value as well. Domesticated animals relied heavily on soil conditions and vegetation cover. A herder's knowledge about a particular plant may include the ability to recognize and distinguish it from other taxa, knowledge of the conditions in which it grows, specific locations where it can be found, other plants found in association with it, its palatability,

and functionality for different species of livestock. Herders' detailed knowledge of plants suggests a strong understanding of ecological relationships and processes between animals and vegetation. Soyolt et al. (2013) studied the wild plant folk nomenclature of the Mongol herders in the Arhorchin area and concluded that "A special characteristic of plant folk names was focused on the physical characteristics of animals which were closely related to their traditional animal husbandry. Plant folk names are not only a code to distinguish between different plant species, but also a kind of culture rich in a deep knowledge concerning nature" However, they also indicate that "The knowledge concerning grassland ecosystems is vanishing gradually because the related knowledge is no longer useful to the Mongols who are settled down or engaged in farming or other economic pursuits (Soyolt et al., 2013). The high-quality grass makes cattle prosper, is thus derived from naturally organizing a relationship of continuous experimentation and comparison between herders, animals, and vegetation. However, these are systematically linked to the whole setup of links within the nomad's system and through which herders organize their relationships with the vegetation, animals, and grassland.

The current nature reservation excludes the vegetation, and dismissing the human activities significantly affect the quantity and quality of vegetation. There is no doubt that vegetation types are insufficiently protected and exposed to vigorous human activities (Ma et al., 2016). The decrease in quality and diversification of vegetation greatly affects the health condition of livestock animals.

Habits of Respecting Nature

There are many habits and customs for respecting nature. Every act of a person in traditional culture should respect those deities otherwise, they can punish this person. They deeply believed that harmful behaviors towards nature would arouse the anger in nature or its dislike; in return, nature takes revenge in its ways. In this way, Mongols since ancient times have significantly contributed to preserving the natural environment and wildlife.

Nothing would be easily disposed of as waste in Mongolian traditions, just as recycling is well survived by reusing all possible resources. Cow dugs would be used as fuel for heating the house and cooking foods. “Every component of traditional Mongol culture—diet, dress, housing, labor, family form, marriage, fertility—functions in service of mobile stock-herding (Jagchid and Hyer, 1979; Pasternak and Salaff, 1993).” Tseren (1996)⁴¹ stated about Oriat Mongol (Mongols in Xinjiang) habits “Mongols have developed the relevant techniques to recycle or destroy their waste. The people burn old clothes and felt; bones are broken and boiled in water to extract the oils, and then they are burnt or given to the dogs. When the fat is extracted, it can be used as soap to wash the children. Ashes are piled in on place and left to be blown gradually over the grassland. It is unlucky for the people to scatter the ashes themselves, as the only ghost should do this.”

Some taboos like cutting trees will end up in childbirth by a disabled baby or with elderly people in their family by getting injured; digging a hole in the grassland will cause severe injury on people; polluting rivers, lakes, and streams by washing clothes or body and throwing garbage would anger water god and will be ended up by causing a severe flood or drowning him or her or relatives; dumping waste into water offends the water spirits causing him or her to be drowned; fire spirits also do not like to be fed with rubbish, and they don't like to look at exposed feet; the internals of a slaughtered animal has to be honored and are offered to guests on arrivals. Disposing of wastewater such as polluted, contaminated, dirty water into lakes, rivers, and streams are not allowed. It would be encouraged to pour them into the earth since it was believed that water would be purified after passing through the soil. Maintaining water purity is necessary for livestock to drink pure and clean water.

Ossuriin (2000) defined the customs transferred from traditions on environmental protection: attitudes, contents, regulations, and methods as five fundamental contents of respect, restrictions, educations, belief, and observation. With the above, I can argue that

environmental protection is part of Mongolian culture and developed within human-nature relationship. Some of the traditions, like offering milk and cheese to their Mountains and Rivers, have been a general view for all Mongols. These mountains and rivers include many border areas, extended to nations, all people, and even everything they can think of. Mongolian traditional culture restricts human behavior through a complex network of hundreds of interdictions and taboos called *cheer* (Forbidden habits in English). E.g., one shall not put a knife into the fire, and one shall not kill a snake. One shall not break birds' eggs. "The significant part of these traditions is on protecting and preserving the mountains, rivers, plants, trees, and animals as its original way, all these deeply printed in thoughts and beliefs of Mongol people (Ossuriin, 2000)".

During long-term interaction with nature, Mongols adapt taboos. Gradually, these taboos developed into the old traditions and beliefs, which prevent human activities from harming nature and coordination into nature and ensure continued survival. The habits of nature preservation imposed by force with morality standard developed with inner belief and volunteer actions, rather than legal rules and regulations that implemented with certain penalties within its standard. Even the former one is voluntarily constructed through long-term connection with nature itself is more effective than the latter one that was adapted to regulate behaviors of human beings towards nature. In conclusion, the human-nature relationship in-migration was nature-centered coexistence.

Section Three Human-Nature Relationship in Migration

The recognition of intrinsic value with the generation of relational value is simultaneous. Nomads in the Eurasian area fully recognized the character of this land and utilized it for their survival by adopting migration. Migration is generally the best way of coexisting with wildlife populations; this way of survival involves the least manipulation of natural ecosystems. One of the striking thoughts of migration is the priority or the interests that are given to nature. The ability to coexist with wildlife and nature depends

on their respectful and reverent attitude toward nature. Migration had relatively negative impacts on natural ecosystems simply because they did not attempt to manipulate nature further. So, the mobile life in grassland is the only economic pattern that effectively utilizes the natural environment of the Inner Asia area. The assessment of pastoral or nomadic life would positively benefit humanity since the pastoral life kept a harmonious relationship with nature by handling the relationship between human and nature from the perspective of recognizing its intrinsic part and combining and adopting nomads people to nature.

Anything in grassland has an intrinsic value that is not dependent upon whether alternative means come available. All natures' things, water, mountains, rivers, grasses, wild animals, and domesticated animals are blessed to support nomads' survival and conformity, they share respected attitudes towards everything in nature. Recognizing and Maintaining this natural link needs enormous effort. Mongols shared intimate knowledge around their domesticated animals, wild animals, and vegetation and respected their naturalness. An ecological knowledge system embedded into the complex natural link generalized and merged with ordinary or specialized nomads practice. The traditions of concerns of the mountains, river, and grassland, including the technical skills involved in their day-to-day maintenance, ensure proper relationships with the river, mountains, grassland, etc. Nomads hunters substitute their food by hunting wild animals and collecting wild plants. This requires intimate, detailed knowledge of plant and animal species in the local environment. In nomadic migration, the nomadic people used the sun, stars, the shape of hills and mountains, and landmarks to find their way and took their animals to where the pastures were best. In the steppes and deserts, they find places where wild grasses grow tall, and in the mountain area, they see where the pastures are sweet. When Goto described Mongol herder in the 1950s, herders have very sophisticated skills in recognizing the geographical characteristics, grass growth situation, clean water, etc.; some herders can tell the location by smelling the soil at night (Goto, 1942/2011).

The Mongolian term reveals essential clues about their attitudes towards the nature land they are living on. The nature in Mongolian words is *Baikal*, which means ‘state of being’ and ‘the way things are’ (Humphery and Sneath, 1999), derived from the verb *bai-* (to be in English) and refers to the existence of nature. The meaning resembles the meaning of intrinsic that emphasizes the value that nature has in itself. “The conventional Euro-American concept of ‘the environment’ has no direct equivalent in Inner Asian language of ‘Nature’. “*Baikal* includes animate beings as well as inanimate objects. Objects in *Baikal* are attributed with a notion akin to ‘spirit’... *Baikal* thus includes animals, mountains, trees, grass, weather, and so forth as active subjects which have their ways of being that affect human beings, just as humans have ways of life that affect them.” (Humphery and Sneath, 1999). *Baikal* thus includes animals, mountains, trees, grass, weather, and so forth as active subjects that have their ways of being that affect human beings, just as humans have ways life that affects them.

The intrinsic value of grassland is correctly interpreted in migration. They value grassland intrinsically, and recognize the infinite value of nature with its quantity and quality are immeasurable to human beings. Their value and respect they have for nature, in general, or with respect to this particular system and the species living on it with their prevalence and strength that keeps the stability of the whole migration community, including wild animals and vegetation. Nomads also believed in grassland has intrinsic value in virtue of their independence from human design and control and in virtue of what they are. It is uncontroversial that all animals and vegetation have a good of their own and the nomads ecosystem community.

Developing a relational relationship with nature is firmly based on the recognition of the intrinsic value of nature. The relationship with nature, including animals and plants, is characterized as friendship, relatives and families, care, and, most importantly, seeking the common good. When nature is understood as a community or family, moral value is attributed to the community and shows strong feelings towards this community. In this

community, all animate and inanimate are counted as solid members, and the firm recognition of their belonging to this community of nature is ensured.

The importance of maintaining the harmonious and balanced relationships between nature beings is migration with domesticated animals to keep the balance of their role in nature. The interaction between nomads and nature entails a normative requirement to foster a certain kind of relationship. Mongols pay strict attention to their land, which manifests primitive attitudes towards nature: “underlying such observance there is a genuine, sensitive and much deeper feeling that man should accommodate his needs and the use he makes of the land for himself and his herds to what one might call the needs and right of the land itself (Quoted by Williams (2002) from Lattimore 1941).”

The relational value is as a relationship of friends and relatives are eudemonic. We care about our family and friends for love and not merely for the pleasure or profits they might bring. People value certain things that they recognize in a moral, spiritual, symbolic, aesthetic, or cultural importance, and value for what they mean, for what they stand for, for what they are, not for how they are used. Eudemonic relational value in this system can better explain the Mongolian word “*nutug*”, which means homeland in English. Mongols assert themselves mostly for *nutug*; *Nutug* is mountain, river, or name of the specific location. Bold (2001) concludes, “*nutug* is a term with extensive meaning and includes the country as well as the pastureland, the place of abode, the hunting ground, the inhabitants and livestock. In the consciousness of Mongolian nomads, these components are inseparably united in *nutug*.” In the explanation of *nutug*, Goto (1942/2011) has his ideas; *nutug* is not mean the fixed location; however, it includes all the areas they have been moved around, so in which *nutug* means the whole area that they have been moved around and stayed along the whole year-round. Bold (2001) showed similar points on *nutug*; “*nutug* is a term with extensive meaning and includes the country as well as the pastureland, the place of abode, the hunting ground, the inhabitants and livestock.” What is significant here is that the attitude implies Mongols have respect

towards nature as a relative or friends, this kind of respect is not the same as respecting it as natural resources.

The holistic approach in migration is Grassland is always regarded as common property. The grassland is seen as a big community where nomads, animals, and non-human entities live together. Along with the history, the grassland area was kept under the common property to maintain its unity. The land was like air and water, the necessities for living creatures. Generally, nomads people used to have a low intention of owning land as personal property. They believe the grassland is a grant from *burhan* (God in English) and nature only belongs to everyone living on it. According to some historical materials, nomads tribes were mostly fighting for better grassland and water, not for the land itself. In history, the Normal Mongols have no seriously owned land as personal property and are mostly owned and managed by the administrative organization.

Goto (1942/2011) illustrated, Mongols did not own the land, which does not mean they did not care about their land. For most people, grassland maybe just a plain land with grass and flowers, but nomads people can see differences and geographical characteristics on it, which would prove the inseparable relationship of herders and their land (Goto, 1942/2011). The land use pattern of Mongol as: “‘Dominant’ is not the right word to describe the influence which the lie of the land has on the life of the Mongol ‘Pervasive’ is better (Williams, 2002).” Wu and Du (2008) is quite correct when he argues that private ownership of pastureland does not belong to the nature of nomadic culture...what is meant rather is fixed use of and exclusive access to pasture and thereby the loss of freedom of movement which is necessary both for the guarantee of survival and for ecological reasons.

The common property thoughts of the land-owning process are to support the fundamental characteristic of nomads life; migration. Free mobility applied with free moving space as a whole is the center of the web and the most extensive ring outward given shape to stabilize the entire nomad’s ecosystem. In the land-owning process,

keeping the wholeness of the land refers to its strong belief in maintaining integrity in a dynamic strength to balances the requirements for flexibility and freedom of mobility.

The land tenure movement contradicts Mongol land-use habits, and its role in grassland degradation and destruction is prominent. Those misinformed and misdirected attempts in nomads area are the increasingly and overtly blocking of its sustainability and the eliminating the basis of the whole nomad's ecosystem. These are supported by a new sense of the possibility of economic advancing or developing, largely driven by the desire to develop in the absence of neglecting holistic features of the land itself, ignoring the relationship of local people to their land, which will be discussed in Chapter VI.

As discussed in the last chapter, for nomads communities with high dependence on the natural system for their livelihoods, the risk of neglecting the interconnectedness of nature and humans is particularly significant. The longstanding associations and integration with nature is the feature of the nomad's ecosystem, which has developed a nature-centered belief system and the cosmologic perspective on human nature relationship, which dominates their understanding of human and nature relationship.

The holistic approach in migration also reflected in migration is that nomads people are subjected to their nature, not the controller of nature. See nature as a Mother to whom they are genealogically related and therefore morally and spiritually bound to care for. The land was the spiritual as well as a material source of life. Mongols did not identify themselves as separate from the world around him; on the contrary, he was part of nature and perceived himself by analogy with objects in nature. The characterization of nomads peoples is humans indeed in their ecology, naturally a part of nature. Indeed, nomads peoples regard themselves as a part of Nature, not as apart from Nature. In nomad life, the weather and nature surrounding closely related to their survival. Over the centuries, these have formed particular ways of life and means of inter-relationship with the local environment. "Such people commonly view themselves as inseparable from the natural ecosystems and wildlife around them (Gottlieb, 1996)". This is what Leopold, in his essay

The Land Ethic (1949)⁴², claimed human beings are part of nature and plain members of the natural system; human existence depends on the stability of this system. According to Leopold, “we are but plain members and citizens of the biotic community, Human remain a member of an extended family, and a resident of a municipality; the land is a community to which we belong”. The strong belief in humans as part of nature calls for obedience to a multitude of responsibilities and restrictions that govern man’s interaction with nature, always considering the limits of nature and regeneration of nature. The boundaries are drawn from the laws of nature. The belief that nature can only exist in a state of ‘naturalness’ is not excluded human beings. Believing in the supremacy of nature is considered absolute and universal. Mongols see themselves as an essential part of nature and coordinate their life within nature capacities.

For Mongols, the interaction between people and nature is balanced by nature itself, and people are subjected to nature rules. Nature has far more balancing and controlling power than human beings can imagine. The natural law is a balanced ecosystem, and they are objective, which can’t be transferred by the people’s will. Humans as a species on earth, naturally restricted by these objective laws, comply with these laws could promote sustainable development of natural and human society, ignore them could damage the natural environment, finally endangering humanity’s survival.

Conclusion

Given that the nature of the modern world is characterized by the interdependency of global economic and social networking. All forms of technology, politics, the arts, economics, entertainment, and so on are being reduced to westernization. Ceaseless development for chasing westernization is eliminating the basis for renewal and regeneration in Nature. Accordingly, nature destruction and degradation are also global. However, solutions to the global ecological crisis may not be found in western society. Rather, nomads may have the most effective ways of restoring ecological disasters.

Modern culture supports the division between nature and humanity and contributes to the supremacy of human beings over the environment. That is why an environmental ethic is needed to arouse people's moral responsibility towards nature, which naturalists and environmentalists thought the only way to save nature for human's sake. In modern environmental ethics studies, nomads offer support; the reasons for this lies in that both agriculture and the industrial world see themselves as modern human beings stay in society. Still, against nature oppositely, nomads see themselves as part of nature, and they follow the rules of nature and live within nature. The connection between pastureland and Mongolian nomads facilitates Mongolians to incorporate these connections into daily life and encompass the literature and disciplines for protecting their pastureland.

One of the holistic features of nomads eco-systems illustrates that everything in nature is interconnected and interdependent. This holistic system arises from the fact that not only is the circle of everything affected by its environment, but its very survival depends on each other. The belief that damages to one part of nature can severely affect every personal life. Given the above similarities in Mongols thoughts on nature, it can be said Mongols environmental thoughts are holism. To behave and act in terms of natural order and requirement is to ensure their existence in the biological community. The nomads ecosystem circle as a holistic system is not a quantifiable value, and it is not a substance or stuff simply arranged to be assembled. The relationship in this circle is networks of autonomous active parts interacting with each other in the context of integrated wholes. The complexity resulting from the richness of interactions is not readily predicted or understood by analytical methods. But that part also cannot be replaced, and the destruction of the whole is forever. Once the original ecosystem has been fragmented, it can never be recreated by combining the parts. Ecological restoration is always a failed attempt; unlike a machine that can be fixed by adding and deleting parts, their interactive relations to one another cannot be recovered. Accordingly, the replacement of the mobile pastoral economy with sedentary farming and industrial

activities is posing a significant threat to the sustainable development of the whole Eurasia area. Hence in understanding various facets of nomadic way of life very keenly and deeply is a way towards conceptualizing a better holistic valuation system that sees nomads as a part of nature, situated within nature and sharing a relation with nature. Hence, a combination of the three existing valuations systems and more.

Introduction

In this chapter, I would analyze the naturalness of Shamanism, its role in balancing and keeping people's spiritual connection, and most importantly, signifying its feature of a holistic approach towards nature. Whatever means to coexist within nature is a way in which Shamanism adopted the practice of *ovoo* ceremony, animation of nature, and Tengerism.

The Shamanic traditions are diverse and exist all around the world. Mongolian Shamanism is primeval religion with the essence of the nomadic way of thoughts, concerning nature as a unification of the father sky and mother earth. The Mongolian Shamanism can be seen as the basis for interpreting religious or philosophical doctrines about human and nature relationships in nomads context. The nature-centered spiritual and ceremonial traditions of Shamanism can be translated into nomads people's search to find spiritual and emotional confirmation and backup for their existence within nature.

Section One Shamanism

In most cultures, the concern for nature was associated with religious beliefs and rituals. Shamanism is widely regarded as the world's oldest religion, a belief system with a global heritage dating back to tens of thousands of years ago. There are no clear records of when Shamanism was created, but some scholars confirmed that Hsiung-nu⁴³ was worshipping natural phenomenon and practiced Shamanistic rituals. As Bold (2001) stated, the original religion of the Mongols in nomadic pastureland was Shaman. "Shamanism was the reflection of nomadic life and thus represented a spiritual world adapted to nomadism (Bold, 2001)."

Chinggis Khaan was a believer of Shamanism, and he prayed to mountains, rivers, and *Tenger* (heaven in English) before his campaigns. In "The Secret History of Mongol,"; as a young man, he had thanked the mountain for saving his life and prayed at the foot of

the hill, sprinkling offerings, and bowing nine times to the east. Chinggis Khaan was a firm believer in shamanistic powers and genuinely concerned with the will of the Heavenly Being, called Everlasting Blue Sky, and of his guardian spirits. To this effect, he very frequently sought the shamans' counsel, who could also augur for the future. The revival of Shamanism in Chinggis Khaan's rule is associated with Mongol statehood, political unity, and power and was accepted and implemented a spiritual connection to nature.

Shamanism has had a remarkable political influence from the early times of the Mongols. Chinggis Khaan claimed Shamanism as the state religion, and the ritual was widely celebrated. Many of the other Mongol rulers enjoyed shamanic functions and dismissed or eliminated Shamans whenever they threatened their authority; more often, they used their services. The shaman's ability to foretell the future, cure illness, and charge the power of nature, using various kinds of divination and spiritual journeys, was vitally important for nomadic rulers and commoners alike.

As Bulag (2003) quoted, Shamanism was the production of the relationship between humans and nature, had attempted to understand and interpret nature. Follow the nature rules, keep a harmonious relationship with nature and respect its great power is the nature of Shamanism (Goto, 1942/2011). And shamanism was developed among nomads for their belief in nature dynamics and the incredible power of nature. Shamanism is a religion that people learned from nature and tried to find out the rules of nature to suit themselves in nature and seek for better survival way, also an interpretation of nature's understanding (Bulag, 2003). Shamanism is a religion that originated in intrinsic nature and developed within it, so it is a Religion that representing the inherent feature of nature and helps people to understand nature and safely live in it.

Buddhism and Shamanism

The Mongol Empires were known for their religious tolerance, and many general people followed Tibetan Buddhism, especially during the Manchu administration⁴⁴.

Buddhism first entered Mongolia during the Yuan Dynasty around the 13th century. Until the second 16th-century, Shaman remained incomparably influential than Buddhism, especially within the general public (Bold, 2001). The first significant contact between Mongolian princes and Tibetan religious dignitaries was made by Godan, the second son of Ogedei Khan, in the period of the Grand Khaan Guyug in 1247. With this, Buddhism gained a particular influence. When in 1578, Altan Khaan⁴⁵ (1507-83) and the third Dalai Lama (1543-88) exchanged gifts and titles.... (Bold, 2001). The second spread was in the 16th century by Mongol princes for political and ethnic unification (Bold, 2001). This time the spread of Buddhism was stronger than the former one since many temples and shrines were established supported by the Manch administration. The Khaans of the Mongolian Empire were tolerant towards foreign religions and even granted privileges to Buddhist Monks or Lamas. Mongolian khaans and princes positively conducted the spread of Lamaism to support the Manchurian administration; at that time, the construction of monasteries and temples boomed. The Manchu administration substantially accelerated the spread of Buddhism by building monasteries around the Mongol area. Buddhism became the dominant religion in politics. Because successful governance of conquered peoples could only be achieved by accepting their beliefs, Buddhism was politically recognized for populations within Buddhist spheres of influence.

Shamanism and Buddhism have been mixed for more than 500 hundred years in the Mongol area. They exist in equal space, developing into one another and mixed to a large extend. Sneath (2000) called Shaman a pre-Buddhist boo (Shaman in English) in his statement that he means Shamanism is part of Buddhism. Sneath also described Mongolian cosmology as a part of Buddhism. I don't deny some claim of the current theories and teachings of Shamanism are rooted in Buddhism, but the origin of this cosmology is Shamanism, which will be discussed in the third section of this Chapter. The differences between Shamanism and Buddhism are apparent, Shamanism has no

doctrines, or no one bothers to accumulate all these teachings; the gods behind Shamans come from nature, and not like Buddhism, they only exist within a community and no fixed location. Buddhism exists whenever there is a temple or monasteries with Buddha sculptures inside.

Compared to Shamanism, the spread of Buddhism in the Mongol area was politically supported; general Mongols did not detach themselves from traditional Shamanism. According to Bold (2001), the influence of Buddhism remained political, and it faded with the end of the Yuan dynasty; especially among the general public, Shamanism remained and was restored. Buddhism has a widespread doctrine that can gather people. Besides, collecting people and lecturing the teachings in shrines or temples are very. Shamanism has no instructions and principles to spread and no fixed location to gather people, only appear when people need help, and Shaman only lives within their certain tribal community.

Buddhism is much more social and political than natural. Nowadays, Shamanism is spreading around the Mongols area, and the number of Shaman is increasing. Two reasons contribute to the raising of Shamanism. The first one is nationalism. Animals are extinguishing, and plants are disappearing. Mongols begin to live a life that depends on human power and technology by becoming more and more away from nature and choosing urban life. Shamans are coming to save nature and reconnect the human and nature. The destruction and damages of grassland aroused their emotional attachment to their land, and they became environmentalism. Saving the grassland also means being a Mongol. In Mongolia, there is an organization of Shamans for protecting their land from being destroyed by outside powers. So this way, the grassland protection is connected to their identity. In the form of spiritual insurance against the damage that industrial activities inflict on the natural world by re-recognizing the intrinsic value of nature.

The second one is the healing power of Shamanism. When the political institutions are less reliable, and the psychological climate is unstably floating, people need to find

sacred support to keep on. Religion helps people overcome the troubles and relax from the tension. Shamanism is a way of communicating with the holy world, assuring people to feel safe and protected. After the Mongol community collapsed⁴⁶, herders tried to find something reliable to secure both emotional spirit and physical health. The shaman has the power to cure people both physically and mentally. In any community, Shamans perform as doctors, vets, and psychologists, who can heal some disease, a guide or psychologist who can direct a soul to a certain passage, and a predictor who can augur the future to avoid the unfortunate. Some people visit Shaman when they got injured or ill, suffering from pains and injuries. Some people ask for instruction when they lost their livestock. People would often come to ask for a better day for start when they move to a new place or build a new house. Currently, Shaman does heal to negating bad luck and offering advice on relationships and business transactions. Where healing practices often vary from Shaman to Shaman, the authenticity and intention behind the work never vary. The recent revival also shows a range of techniques, with some of them being still fairly pure, whilst others are re-invented, and many now represent a mixture of different ways and traditions.

Section Two Naturalness of Shamanism

Worship of Nature and Animation of nature

Mongol people respect, admire, and worship nature. The mountains and rivers always represent a symbol of identity and the spiritual homeland. The Spirit is invested throughout nature; everything in the natural world is sacred existence. Nature is inhabited, regulated, and controlled by local deities like *luus*, *sabdag* (deity in English), considered to be the *ejen* (master or owner in English) of every single landscape object: river, lake, mountain, hill, pond, or lonely tree in the steppe. People worship the natural landscapes by pouring or sprinkling milk or dairy foods.

Chinggis Khaan practiced the state rituals of worshipping blue heaven and mountains. In one of the legal sources of “Khalkh Jiram” (or Khalkha Rules)⁴⁷ of 1709, mountains and lakes were designated and protected by State law. In 1778, the Bogd Khaan⁴⁸ declared Khaan Khentii (Burkhan Khaldun)⁴⁹ and Otgontenger Mountains⁵⁰ as State protected and worshipped sacred mountains. Since 1995, in Mongolia, State Ceremonies were conducted to honor sacred Mountains like Otgontenger in Zavkhan province, Eej Khairkhan in Govi-Altai province, Khanbayanzurkh Dornogovi province, Great Bogd in Bayankhongor province, Altan *Ovoo* in Sukhbaatar province, and Sutai Khairkhan in Govi-Altai and Khovd province; the participation of President is required. Due to the worship traditions of those sacred mountains, some of them are remaining untouched and pristine and preserve globally endangered and rare species of animals and plants. Being holy places also means protected areas, thus maintained their authenticity and integrity. In 1994, Mongolia stipulated the Law on Special Protected Areas of Mongolia⁵¹, which aims to regulate the protection of natural and cultural heritage properties and safeguard biological diversity, which stated the protection of nature from tradition to legal standard.

One of the demonstrations of nature-hidden power is a way of animation of natural phenomena or landscapes and natural animals. Mongols named mountains as *Khaan* (King in English) and rivers as *Khatun* (Queen in English). Mongols worshiped nature animals from the earlier time by admiring their hidden power and strength (Bayaar, 2001).

No argument that late manifestations of originally totemic animals of Mongolian and other (Turkic, Indo-European) tribes play quite different roles (Birtalan,1995). The totems represent the spirits and animals from which people draw power. To ensure that actions in the human realm are carried out effectively, and in adherence to the Spirit realm laws, shamans are called on. Shamans are recognized as mediators who have attained and nurtured spiritual powers in communicating and connecting the spiritual world and ordinary people. The master behind the Shaman is called *Borhan* (God in English).

The different roles of the animal phenomena present in the Shaman's world, and it is not correct to state that all the animals mentioned are protective spirits and symbolize sacredness. In Mongolian Shamanism, such animals as a wolf, dog, crow, raven, snake, deer, owl, swan, eagle, and lynx are included as some of the most important animals (Birtalan, 1995). Both the deer and the wolf survived in Mongol Shaman tradition as mounts of Shamans and those of their protector spirits alike. Different region has different Shamanic animals, in Siberia, reindeer is the most important animal, and its Shamanic background is also strong with reindeer. In some parts of Mongolia, there was one tribe worship raven. In the Eastern part of Inner Mongolia, the snake is respected as a sacred animal.

Some scholars believe Mongols did not worship plants. That is not true, and they do worship some plants, like trees. Mongols loved plants and trees from early times and worshiped trees from very early times (Da Chagaan 2003). As Da Chagaan (2003) explained, some worship trees in nature, and also honor the equipment made of trees, like an arrow, bar of the flag and spiritual flag, main at home and in some *ovoo* ceremony, the altar of the wedding ceremony, and the main bar for Mongol Ger. In some areas, *ovoo* is a tree, or *ovoo* is made of tree branches. Most of them are Pine trees.

Shamanism is an expression of the animation of nature and belief in the supernatural power of nature. The nature is personified, in which two groups are referred: nature as a whole and the other is a signal animate and inanimate object in nature. On the one hand, nature as one, its force and power are prescribed as having personalities and temperatures. Tsui Tenhu (1996)⁵² stated that the statement "nature would be angry" reveals that he feels there is interpersonal relation between him and nature, which, like ordinary humans, would be angry if others offended him. On the other hand, Shamans were reincarnated as birds, animals, and warriors and bridged the real world with the spiritual world, which presents the single objects in nature is also personified. The role of the Shaman is to sort out communication between humans and all the other aspects of creations in nature.

“Shamanism anywhere is an animistic tradition,” says Nicholas Breeze Wood⁵³. It acknowledges that everything in nature is alive. This is a way of keeping a human-way relationship with nature.

Ovoo and Ovoo Ceremony

Ovoo is rock or wooden piles, sometimes surrounded by wooden slates, and always decorated with mainly blue *hadags*⁵⁴, white or blue colored silk scarfs symbolizing the sky and the sky spirit. The *ovoo* ceremony are still held in most parts of Inner Mongolia and it still stands for people’s belief in nature power. Whenever nomads people move to a new location, they worship the local natural landscapes and animals by setting up an *ovoo*. *Ovoo* intended to offer a ‘home’ in nature to the local spirits and is thought of as representing a god dedicated to local gods of natural landscapes like mountains, nature, rivers, or animals.

They seem to be present everywhere: on mountains and hilltops, in open fields and beside lakes. *Ovoos* are scattered across Mongol living areas, marking the sacredness of local landscapes and animals living on them. Mongols quite naturally honor the custom of circling an *ovoo* clockwise three times in prayer when walking or riding, adding a stone to the pile to increase the power of the spirit of the place. The land around the *ovoo* is regarded as sacred, and hunting, digging or cutting, or any other disrespectful acts are taboo, and anyone who does such a thing will fall sick or even die. The *ovoo* ceremony itself, with its offerings, prayers, and explicitly spiritual character, that most fully represents reciprocal relations with the forces of nature (Sneath, 2000). “*Ovoo* embodied a spirituality connecting humans to the landscape itself (Endicott, 2012)”.

“The most widespread current ritual practice is the *ovoo* ceremony, which is explicitly aimed at reproducing beneficent environmental relations and has a local and folk basis” (Humphery and Sneath, 1999). Se Bayaar (2001) analyzed the nature worship of Mongols about animals, plants, and natural phenomena based on Mongols’ believing logic: ‘everything on earth has its god,’ explained the nature worship developed into *ovoo*

ceremony, which shows Mongols' understanding of nature deepened. *Ovoo* ceremony is “with wider social units and their relationship with the natural and spiritual environment (Sneath, 2000).” “Most of the *ovoo* sites were thought to be inhabited by spirits of nature or ancestors (Sneath, 2000)”.



Photo 4. *Ovoo* ⁵⁵

Ovoo ceremony is a way of connecting people with nature with the rituals. “The purpose of ritual offerings to *ovoo* is embedded in the maintenance of a reciprocal and beneficial relationship with the “masters of the land (Huang, 2019).” *Ovoo* ceremony would be held in the spring or early summer. The ceremony was conducted with Shamanic rituals, and recently in some areas, it was enriched with Buddhist teachings and rites. In recent years, in Inner Mongolia, the *ovoo* ceremony was mostly incorporated with lamas, where “the dominant ceremonial discourse continues to conform to the Buddhist interpretation (Sheath, 2000).” “The *ovoo* ceremony is not carried out generally in natural featured area, usually a mountain, hill, pass or river. The ceremony generally accompanies the Naadam games of Wrestling, archery, and horse racing, widely enjoyed as recreational events. Prayers decorate them with *hadags* and call upon the local spirits for protection from illness, natural disasters like drought, storms, or other adverse weather,

and ask for long life, prosperous herds, and good fortune (Sheath, 2000)". Nowadays, due to the drought in Inner Mongolia, the ceremony is concerned particularly with rain.

Rituals are commonly performed to show respect and gratitude to nature. "*Ovoo* ceremony is a signal that demonstrates one of the social thoughts in believing the hidden power of nature and very significant proof in demonstrating their lifestyle is trying to fit the nature orders or system (Goto, 1942/2011)." At a wider level, ceremonies also refer to the context of shared Mongol cosmological and cultural heritage (Sheath, 2000). Over the years, every region has been revered as sacred places, worshiping sacred natural sites as a living cultural tradition. The specific customs and rituals of worship nature are cultural elements created, developed, and practiced.

"Rituals involve individuals in a social network composed not only of human beings with other human beings, and human beings and animals, but also with the myriad spirits that inhabit the natural world. (Huang, 2019)" The *ovoo* ceremony, which links communities to the land, remained strongest in Russia and Mongolia but weakest in Inner Mongolia (Humphery and Sneath, 1999). In Inner Mongolia, *the ovoo* ceremony was restricted during the Cultural Revolution, was revived in the 1980s. In recent years, local governments and companies sponsor the *ovoo* ceremony. The involvement of the government diversifies the *ovoo* ceremony by relating the cultural activity with the entertainment and economic benefits. On the other hand, government involvement changed the *ovoo* ceremony more official than cultural and natural movement. As Humphery and Sneath (1999) indicated, the *ovoo* rituals in China are the weakest compared to the Mongols in Russia. They concluded that neither *ovoo* rituals are the revival of traditions nor related to any environmental problems. The decrease and misleading of the religious activities distanced people understanding and concerning nature, and especially developed the younger generation's carelessness towards their land.

Humans and Nature are within the realm of Spirit. The significance of ritual has to do with maintaining correct relationships in the very nature of which the people are an

interconnected and integral part. Unity, stability, and order aim to sustain the long-term survival and integrity of people within nature. Ritual enables the human-nature relationship to be continually ordered or maintained by ensuring the intrinsic feature of nature and recognizing the interconnection between people and nature. To the participants, the ritual is orderly, renewing relationships within and reawakening and confirming the real existence of nature and its relationships that may have lapsed or been neglected. It is also the ritual that adequately convinced people that the spirits of the gods watch over and guide the people.

Tengerism

Shamanism centered on the worship of *Tengeri* (Sky in English). *Tenger* is a top on both physical and spiritual existence. In Shamanistic philosophy, Tenger is the most important existence. It creates everything on earth and is generated with extraordinary power, regarded the same as 'God.' Around the 13th century, Tengerism was the main philosophical thought that supporting Chinggis Khaan's military and political stance; D.Dashpuruv picked up several expressions in *The Secret History of The Mongols*⁵⁶; the thoughts of "Mongh Tengger" (Blue Sky in English) developed from the essential thinking of religions to the basis of social philosophy, the foundation of Mongol's political thoughts (D.Dashpuruv 2015). Eternal Tenger is not a special God or a human being, but the existence of the above all-natural world (Dorji,2013). Chinggis Khaan accepted *Tengri* as the highest pantheon of spirits in Mongol Shamanism, and he worshipped *Tenger*. Its power and willingness supported and rationalized the work of Chinggis Khaan, and he has believed himself as the "Decedent from Tenger", "The Willing of *Tenger*" (D.Dashpuruv, 2015). Mongol Khaans after Chinggis Khaan adopted Buddhism, even that the following kings were strongly relied on Tengerism or *Tenger* Philosophy in regulating the state policies (D.Dashpuruv, 2015).

Tenger is father, *Gajar* (earth in English) is mother, and their combination helped human beings to survive. *Tenger* in Shamanism (D.Dashpuruv, 2015): the definition of

Tenger in shamanism also included *Gagar*, the water under the *Gagar* is regarded as *Loos* (Water god in English). The Earth supports wealth and happiness...so Mongols call earth 'Alatan Delhi' (golden earth in English) (Dorji, 2013). *Tenger* or *Mongh Tengeri* contented specific power in influencing all life in nature: the basis, energy, eternity, synthesis, and origin of the world. *Tenger* is the owner and control of all the unification of sky and earth, mountain and water, natural creatures. Se Bayaar (2002) illustrated Tengerism as the situation of the union of human beings and *Tenger*. Firstly, he believes Tengerism is the most significant part of Shaman and Tengerism is the synthesis and existence of the all-natural world. Secondly, people's destiny depends on *Tenger*'s decision, but the decision has to be earned by hardworking. *Tenger* is also a standard to watch or judge people's behaviors. Thirdly, Shaman transfer *Tenger*'s message to ordinary people. With the above three, *Tenger*'s thoughts and Mongolian natural thoughts are combined.

Tengerism maintained the relational relationship of nature and people, but it also presents the holistic feature of Mongolian nature's thoughts. As Bujo writes: "By seriously considering the sacred and cosmic and inter-human relationship, people should become aware of the fragile nature of their human existence.... Human existence could break down if the cosmos is neglected (Bujo, 1998)." *Tenger* includes the cosmos and everything on earth and the center of the universe and creator of everything. The relativity presented here allows for centering so that a being may be viewed as the center of a matrix extends outward from the center in all directions. This center is like the 'focus' in a wider field, where the focus is particular among a field that is a whole (Smuts, 1927).

Shamanism Connecting Human and Nature

The authenticity and sacredness of Shamanism reside in the sky and the earth, the mountains, the waters, the deserts, the steppes, and the animals and plants; they are constitutive of immortal beings and spiritual presence. For those, most of the water and mountain spirits have their own stories of their origin and specify a sacred relationship

with them. They pray to those deities for health, wealth, and happiness and believe in disrespect and harmful behaviors will be punished. Prayers to pacify those nature beings, especially when people behaved severely to nature, and worshipping the water and mountain spirits would deflect them from deadly unfortunateness.

Shamanism is a way people believe, respect, admire, and fear nature and ensure their psychological and physical connection with nature. To explain the relationship between humans and nature in the nomads world, Shamanism is a medium. The association or connection between people, nature, and Shamanism can be triangle as shown in Fig (5).

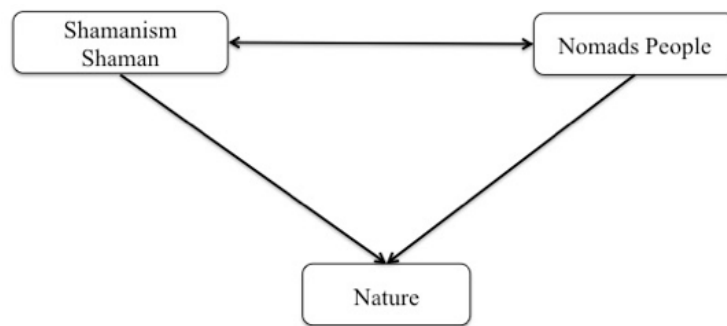


Figure 5. Spiritual World of Nomads People

The world's three great religions, Christianity, Buddhism, Islam, all arose agrarian societies. The power that usually rather reside in individual's relationship to the deity than in God itself. Thus, peoples' connection with the gods is the central part of their relationship. In Shamanism, the power of God is emphasized by the human and nature relationship, and people's relationship with nature is the central part. Humanity is thought to be dependent on external nature in a religious sense and justified in acting within nature to maintain its ways of life (Tsui Tenhu, 1996). In early times, when people hard to understand the intrinsic existence of nature like the weather changes, when lack of knowledge on haven, earth, and sky, moon and stars, mountains, waters, fire, forest, lightning, wind, rain, animals, they tried to explain it reasonably by understanding there

is some invisible force behind those phenomena. As Goto stated, keeping the balance in nature and respecting and admiring the hidden power in nature is the nature of Shamanism (1942/2011). In this hidden power, they are also tracing for the harmonious relationship with their living surroundings and trying to balance nature and within themselves.

In the central parts of the Shamanism system were the activities of Shamans, intercessors between the human world and the nature-based spiritual world. People may believe the relationship between man and nature is direct; however, there is an essential and undeniable truth that people choose an intermediate to keep and connect the relationship safe. Shamans speak directly to the rivers, mountains, and animals and hear the “Great Spirits” voice. They see the life force energy in every natural thing – rock, stick, and plant (Villoldo, 2000). Shaman is connecting this world with the other world; the other world is a spiritual world dominated by animals and natural phenomena in nature. The “other world” invisible to ordinary people in the world of “supernatural”, of the “sacred”. “Shamanism supposes that certain people can, at will, establish communication with the other world. They can see it and know it—unlike ordinary people, who only sense it or suffer from it. These are the shamans. In this relationship, Shaman plays the role of intermediate to work as an interpreter. Shaman is a way of communication that stands between the relationship and keeps this relationship alive and vivid.

Section Three Shamanism Connecting Human and Nature

Intrinsic and relational relationship in Shamanism

Shamanism shows a very significant point of the human-nature relationship by ensuring the intrinsic value of nature is assured within this human-nature relational. The core of the Shamanistic thoughts is on respecting nature as it is. In Shamanism, humans are prohibited from interrupting the entire circulation of nature, should act within this circle. Any kind of destruction and harm to nature is believed to be leaning towards self-destruction, which proves that people try to recognize the intrinsic value of nature and

respect its intrinsic properties. The significance of Shamanism is carrying all these relationships of human beings and nature, attempting to arouse people to understand the intrinsic value of nature by maintaining everything in nature as its way. Boyd shares similar opinions when he explains native American healer who has a profound respect for Mother Earth and for all of her life forms and firmly believes his healing power is granted from the great Creator; “The earth is a living organism”, says Rolling Thunder (Boyd, 1976), I can tell you that understanding begins with love and respect. It begins with respect for the Great Spirit, and the Great Spirit is the life in all things - all the creatures and the plants and even the rocks and the minerals. All things have their own will and their way and their purpose; this is what is to be respected. Such respect is not a feeling or an attitude only. It’s a way of life. Such respect means that we never stop realizing and never neglect to carry out our obligation to ourselves and our environment: to work together to make life good for all of us, all who live upon this Mother Earth (Boyd, 1976).” “Respect, and (at least in some manifestations) reverence and awe also seem to have a similar structure. To respect something is in part to treat it as having a kind of importance in its own right; to be in awe of something is in part to treat it as having a kind of greatness in its own right, to revere something is in part to treat it as having a kind of dignity or nobility in its own right (McShane, 2007).”

Holistic Approach in Shamanism

Everything in nature has hidden power, and those powers and energy are closely connected and interacted with each other. All-natural forces depend on each other so that human beings can live in harmony only in and with the whole of nature (Bujo, 1998). For that, humans can live within nature. The belief in nature created the interconnected and interdependent relationship between nature and Mongol people and emphasized the human is part of nature. Mongols lived with nature equally by respecting its wholeness and fully used nature for their survival.

The holistic worldview with equal merit both the earth as a whole and the parts as interrelated connections. Holism considers the visible and tangible qualities within the earth subjects and fully appreciates the spiritual relationship between those subjects. The earth's interconnections have integrity, which is maintained in a dynamic tension that balances the requirements. If everything is connected to everything else, indeed, this implies the possibility of connectedness leading to arise relationships that the intrinsically interwoven relationships allow the whole in this circle to remain alive and alert, adaptive, and responsive to each other. Of equal significance to the interwoven network, the center of the relationship referred to where everything is connected. The importance of Tengerism in Mongolian shamanism has to do with maintaining balanced relationships in the very cosmos of which physically and spiritually interconnected. Tengerism helps in understanding how a holistic value system is practiced among nomads. Unity, stability, harmony, and order are all aimed at sustaining the long-term survival and integrity of a whole. Tengerism is essential in this regard as it seeks to establish a balance between people and nature and maintain harmony within the whole.

Conclusion

Worshipping nature has been a particular inclination of Mongolian Shamanism. It might be hardly explainable in science; however, worshipping nature is a critical part of nomadic migrations. For them, nature is being alive, and worshipping and honoring nature is something essential, yet mysterious, an indestructible living organism. Shamanism, for Mongols, is a spiritual approach to nature to gain a greater appreciation of nature. The Shamanistic ecological concept has played an essential role in forming Mongol people's holistic ecological thoughts. Chinese Taoism, which originated from Lao Zi of 6th-century, reflected the holism in nature, and endless cycles of Yin and Yang refer to the harmonious balance with nature (Cheng, 1986). Native Americans, indigenous people in Africa, claimed that their traditional relationship with nature is based on respecting the natural world. As Egri (1997) stated, for more than 20,000 years,

shamanic spiritual traditions have guided indigenous peoples worldwide. In this holistic and integrative tradition, spirituality permeates all forms of existence-human, animate and inanimate.

In Shamanism, nature is alive with spirits; animals, vegetation like trees, as signal objects illustrated as a spiritual being. In the approach of nature-human relations, the philosophical implications of the entire fabric of Shamanistic thought were taken as a starting point and criteria. Shamanism concern a feeling for the spirit, a feeling for the inner life of trees and grass, rocks, and eagles. To have this kind of feeling is to identify your 'Self' as part of nature. This feeling and connection with nature are assured by keeping this relationship between people and nature is firmly founded in Shamanism's naturalistic scheme; people share an identity with the particular natural spirit from which they prescribe the relationships and responsibilities to each other.

Shamanic requires people to take responsibility for relationships with the species and sacred sites or animals or plants. Like western environmental ethics, Shamanism shares an account of ethics in real life; the purpose of ethics is to respect and admire nature and coexist with animals and plants sustainably; the purpose of ethics is to answer how human beings and non-human entities can and should coexist within nature. In the Shamanic scenario, everything in the natural world is alive and shares the same soul or spirit as people; everything in nature is sacred and meaningful to its and other's existence. Within this community, Tenger is the creator and coordinator of everything, and human beings are members of that community and plants, animals, etc. They are all dependent on each other for existence, and man does not have the right to reshape, exploit, or transform any of them. In nomads context, the relation of self to the whole (nature) is interconnectedness and interdependence, whereby "people, ...plants and animals, landforms and celestial bodies" are interrelated with one another. Such interrelatedness derives from a common descent source; each person or specific plant or place is linked to

the spirit of its creation and thus to each other. This relationship of mutual spirit extends to all the elements of the nomad's system.

For Mongols, everything in nature has a place on this earth as human beings do. Human beings are not the center of this world. Between *Tenger* and *Gajar*, humans could live a life because they are privileged to have the rights assigned by the Creator. While humans should be equally considered to be a part of nature as other animals on earth, animals should be respected as their sphere and space in Nature. Indeed, there is a relationship between the secular, material world, and the sacred or supernatural realm, both of which are penetrated by and through human long-term connections and experience with nature. The environmental crisis results in the disorder of the whole nature system, and there is now enough scientifically verified irrefutable evidence that entire planetary life support systems are at risk. The diagnosis of the environmental crisis in terms that only acknowledge ecological imbalance avoids questioning deeper and darker issues inherent in the crisis facing all humanity today is more direct in declaring that the cultural crisis of modern progress is, at root, spiritual. Shamanism proved that humans and nature are connected within the larger realm of Spirit. The actions of human beings are required to carry out effectively and in adherence to the laws of this spiritual realm that are based on nature rules.

Chapter VI Land Privatization and Nature to Mongols

Introduction

In the last two chapters, holistic intrinsic approaches in migration and shamanism are discussed. In this chapter, the separation of people and nature followed by the spread of instrumentalism of grassland is investigated. The critical concepts explored by illustrating the land tenure movement chronologically in Inner Mongolia and try to prove that to value grassland instrumentally is, as a result, to degrade and destruct nature and to separate humans from nature. Following the land usage privatization, the agricultural and industrial expansion is accelerated, and the nomads economy transferred to the market economy. Finally, the spread of instrumental value that influences destroying nature. Its influence of separating nomads people from their land, denying every other value in this system.

Section One Limitations on Migration and Administrative Distribution

The limitations on migration and administrative distribution of the Mongol area are the basis for progressing the land usage privatization system in the Mongol area. Historically, Mongol nomadism is characterized by extensive land use and seasonal changes of pasture with supplementary production from agriculture or hunting. The mobility restrictions experienced three stages; the first step could be stepped back to the beginning of nomadic life until the late Qing dynasty. In this period, homogeneous and heterogeneous nomads tribes migrated relatively freely among their claimed territories that no strict bordering lines, some of them only separated by mountains or rivers. The second stage was in the 17th century of the Manchu administration, when ambiguous borderlines encouraged less flexible mobility. The migration within fixed territories was established in the 17th century under Manchu Administration. The third stage of least mobility started from modern China when the clear division of territories was

administratively created, and the further smaller unit division was conducted. William (2002) shared a similar point on migration restriction movement along with the history; “during the Qing Dynasty, China first restricted the movement of Mongol tribes to country-level (banner) boundaries. A half-century later, the Maoist era of collectivization forced herding households to root themselves geographically into settled communities. Now the reform era of decollectivization has introduced pastoral Mongols to the full bridle of restricted land use for the first time by fixing each household to a specific plot of land.” In Inner Mongolia, the establishment as an autonomous region of China was accompanied by the privatization of pastureland and the progressing of settlement. Table 1 summarized the land usage patterns of the above three periods.

Table1. Comparison of Land Usage Pattern

Pre-Manchu Administration	Manchu Administration	Since 1950s
Pastureland for livestock	Pastureland for livestock	Small Scales of pastureland
Small scales of agriculture	Expansion of agricultural land use	Large scales of agriculture
Hunting	Hunting	No Hunting
		Expansion of industrial use

Pre-Manchu Period

Before the Manchu administration, the economic parameters of the pastureland remained ‘indecisive’ and ‘ambiguous’ and shared by people living around the designated area, including those who might temporarily migrate there. In deciphering the economic parameter of pastureland before the Manchu emperor, Bold (2001) emphasizes that the ownership of pastureland before Manchurian administration was “nomadic quasi-ownership (Bold, 2001)”: as regards rights of access to pastureland, in the pre-Manchurian period, the regional noblemen freely used pastureland within their given territorial administrative areas. Common people were economically independent producers and freely chose pastoral areas for their livestock within their *hosho*⁵⁷ region.

Neither the princes nor the highest lamas have distinct pieces of land belonging only to them or him. According to Bold (2001), Pre Manchu administration period was generally kept the traditional seasonal migration patterns with no strict borderlines between tribes and specific locations; In the old Mongolian seven *hosho* divisions during the second half of the sixteenth century and the first half of the seventeenth century, there were no strict borderlines between *hosho*. Even the control of the use of pasture set up by the Mongolian aristocracy considerably altered traditional norms, the free migration within borderless pastureland was kept.

Manchu Administration Era

The rising political power of the Manchu administration in the Mongol area was a landmark that nomadic land-owning structure gradually changed. “With the appointment of 34 representatives of the nobility descended from Chinggis Khaan as the first ruling princes at the conference at *Dolon-Nuur*⁵⁸ in the year 1691, the new division of the *aimags* into *khoshuus* (the same as *hosho*) was completed. Afterward, during 1691-1755, the number of *khoshuus* increased dramatically. In 1725, there were 75 *Khoshuus*, and in the year 1755, 84 *khoshuus* were registered... It is, however, worth mentioning that there were originally no border markings within a *khoshuu* territory. Only from the second half of the eighteenth century, terms relating to borders between *khoshuus* came into official and legal use...(Bold, 2001)” The administrative division of *aimag* start from 17th century, with the *aimag* division, borderlines came to be somewhat more marked (Bold, 2001). Fatherly, the division of *khoshuu* and *aimag* was strengthened during the Manchu administration, and until the 18th century, the borderlines were legally in use (Bold, 2001). Common nomads keepers who crossed the borders were punished by fines or forcefully return to the original *khoshuu* or *aimag* (Bold, 2001). The land administrative system until the 19th century encouraged the Mongol princes, the nobility, and lamas to have the authority over their territory and permit them to mark out the best pieces of this land and seize them for their use, secure them and vigilantly watch to make sure nobody else uses

the land which is now as it were their own (Khazanov,1984). The pastureland was owned or controlled by the Manchu emperor, and the Mongolian princes and noblemen, and ordinary livestock keepers were able to graze their livestock (Bold, 2001). The ownership of land was held by regional princes and highest-ranking lamas, and there were no interdicts for livestock keepers to prevent them from freely choosing pastoral regions for seasonal migration (Bold, 2001).

After the clear administrative separation of Mongol pastureland in the Qing dynasty since the 17th century, the Mongol regional leaders have applied the rights to use and rent their land for the Chinese. From then, they also allowed the immigration of Chinese (Goto, 1942/2011). The independent pastoral lands owned by nobles and lamas were rent out for Chinese farmers. With the foundation of the Current administrative-territorial division as *aimag*⁵⁹ within Mongolia and Inner Mongolia was compromised in the 18th century of the Manchu empire, the administrative division landed the ownership of certain territories to Mongol nobles and lamas. The first three *aimags* arose out of the seven *khoshuus* in the first half of the seventeenth century, and with the *aimag* division, borderlines came to be somewhat more marked (Bold, 2001). The territorial division (Bold, 2001) vastly decreased the availability, flexibility, and freedom of migrating within borderless pasture land as used to be. The migration was only allowed within fixed borders; seasonal migration was kept between selected regions and had experienced greater difficulties in using distant pastures.

Bold (2001) stated that during the Qing administration, the farthest migrations went as far as 250km. Ordinary Mongols were not allowed to travel outside their leagues; they were forbidden to cross the borders of the banner or *aimag*. The administrative controls of the Manchu Empire largely decreased the Mongols' free migration by distributing Mongols to regionals and restricting them within fixed territories. During the Qing Dynasty, the migration of Mongol tribes beyond their country-level was possible; even

though nobilities owned the land, the mobile grazing system was still protected for open space within fixed boundaries.

Since the 1950s

In 1947, Inner Mongolia was divided into twelve prefecture-level divisions: Hulunbuir, Xiangan, Tongliao, Chifeng, Xilingol, Ulaan Chab, Baynurs, Ordos and Alxa Leagues, Hohhot, and Baotou. Hohhot is the capital city of Inner Mongolia, Baotou is the economic center directly administrated by the Chinese central government for its rich steel production.

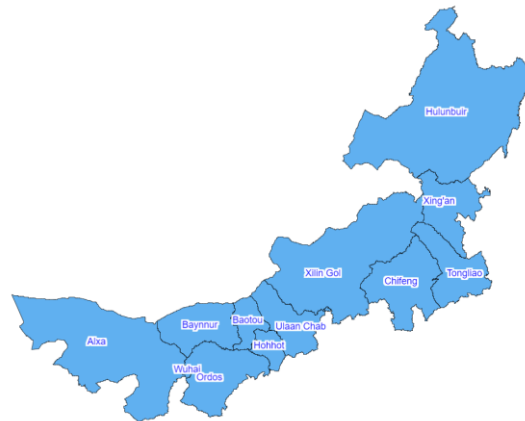


Photo 5. Administrative Distribution of Inner Mongolia

Until the late 1990s, most of Inner Mongolia's prefectural regions were known as *aimag*, a usage retained from Mongol divisions of the Qing Dynasty. Since the 1990s, numerous Leagues have converted into prefecture-level cities, although Banners remain. The twelve prefecture-level divisions of Inner Mongolia are further subdivided into county-level, including township-level divisions. A nomadic production model was maintained in this period, but the nomadic migratory scope was narrowed down to herders' county or mostly village.

Table 2. Current Levels of Administration Top to Down⁶⁰

Administrative Level	The Number	In Mongolian
Central Government		Tub Jasag
Autonomous Region	4 Districts	Ortoon Jasag oron
Prefectural Level	3 leagues/ 9 cities	Aimag/Hotoo
Sub-prefectural Level	508Town city/99 Banner	Hoshuu
County Level	Including ethnic counties	Summu
Village		Gacha/Balgas

Following the administrative distribution, many kinds of dwelling patterns and the character of land-use were generated. The combination of static and mobile settlement is the most common pattern. “Over the second five-year plan, more than 670,000 families became classified as ‘settled’. By 1962, 40 percent of the households of Shilingol (the same as Xilingol), which has been entirely mobile until 1949, had been classified as ‘settled with moving herding (Sneath, 2002).” As Humphery and Sneath (1999) revealed, most herders in Inner Mongolia have permanent and seasonal mobile dwellings. Only 7 out of 36 households have mobile homes only, and the seasonal migration pastureland has become the all-year pastures for most of the herders in Inner Mongolia. Sneath pointed a very brief description of the 1980s Inner Mongolia.

The territory of the Hosshu (the same as Hosho) generally contained several different areas of pasture used in winter, spring, summer, and autumn. These seasonal pastures were divided between the various sums and bags, and within these areas of land, the individual households had customary use-rights to particular pastures. In effect, this meant that each family owned no land as such but had a recognized area of pasture that is used in different seasons, and of these, the rights to the exclusive use of the winter, pasture tended to be the most strictly enforced. Someone grazing their animals near another’s winter site had to leave sufficient land untouched for the owner to feed his animals over the winter months. The other seasonal pastures were not generally so firmly divided between households. In many cases, the summer pastures for all the sums of the hoshuu were in the same general area, and the allocation of land was often very flexible, with few restrictions of exactly where could camp. The division of pastureland between different families was a fairly loose one, marked by topographical features such as rivers and hills, and subject to regeneration. The existence of such informal, but generally agreed, rights to land use remained largely unchanged until the establishment of agricultural co-operative and People’s communes in the 1950s” (2002, page 35-36).

Due to the shrinking availability of transport and reduced opportunities for frequent moving, many herding families have become ‘seasonal settlers’ (Gomboev, 1996). As Lattimore noted, in regions of Inner Mongolia, the total distance of seasonal migrations rarely reached 150 kilometers (1940/1989). Most households migrated to the same summer campgrounds year after year, returning to an even more permanent winter location, sometimes only a few miles away (Lattimore, 1940/1989). The territory of *hoshuu* generally contained several different areas of pasture use in winter, spring, summer, and autumn. The seasonal pastures were divided between the various sums-and-bags, and within these areas of land, the individual households had customary use-rights to particular ranges.

When referring to the grassland ownership from the 1960s, Khazanov (1984) included corporate ownership as a ‘joint operation’ based on the private right of livestock and corporative ownership of pastures. Concerning the cooperative ownership of the pasturing area, Khazanov (1984) confirmed there are two types of possessions; one is no fixed division of territory between its subdivisions; the other one is, in practice, rights of possession and use of pastures are divided up between the different subdivisions of the communities. Gomboev (1996) also concluded that herding people would be rather individual migrations than group migrations, and the distance of migration is shrinking. This time, pasture degradation seems to have increased rapidly, and alongside it, many doomed attempts to farm the grassland launched as part of the leap.

After undergoing collective and decollective economic reforms, herding households have been separated. The land division has been escalated that herders were allowed to move only within their sums-and-bags (smallest administrative unit) territory, some of them within their region. The reform era of decollectivization has introduced pastoral Mongols into the full bridle of restricted land use for the first time by fixing each household to a specific land pilot (Williams, 2002). The herders were settled to graze

their animals around the same public pastureland for the whole year, and the hayfield land was left untouched for winter grass collection. In the western part of Inner Mongolia, some households live stationary life in one spot and send some of their members some distance away on short-term or seasonal herding trips. Herders move two times a year, typically in May and October, usually remain within a 25-square mile or less area and relocate from November to April to a winter camp. To a greater or less extent, herders are connected to the basic economic, social, and cultural parameters of nomadism. The extensive mobility is drawn periodically within very narrow space or never changing the grazing land during the entire year around.

Land ownership changes with the administrative distribution

In Inner Mongolia, the land privatization process underwent a similar process. During the collective era, ownership of land and livestock were all in the hands of the local commune group. The monopoly of pastureland by monasteries and princes was abolished and was administered by local officials (Sneath, 2002). A half-century later, the Maoist era of collectivization forced herding households to root themselves geographically in settled communities. After the collective age, in 1980, With the Chinese government's new reform policy of modernization, the household responsibility system was started in Inner Mongolia. The distribution of land use rights to households began in 1984 in Inner Mongolia⁶¹. According to Li and Huntsinger (2011), In 1984, the first round of allocating rangelands to hot, i.e., a group of households were conducted, and the second round of grassland contracting started in 1996. The hot grasslands were divided and contracted to each household independently.

“The principle of the ownership of land in Inner Mongolia resembles those of the pre-revolutionary period in respect. Ultimately the land is owned by the state, the supreme political authority, just as it once belonged to the Qing emperor. The land is administered on behalf of the ultimate owner by officials in charge of districts, who allocate land to pastoral families, and collect taxes” (Sneath, 2002). Herders became responsible for their

products and made decisions accordingly due to the market demands. The government doesn't take responsibility for preserving the grassland. The integration and balance of responsibilities have never been based on the overall development of pastoral regions. Landowners are authorized to sell and rent the land freely. No one pays attention to the interwoven network of knots and threads in nomads ecosystems, maintaining the web in a healthy condition. Therefore, the net becomes disconnected and disentangled parts leaving the parts vulnerable to every thread and challenge. In this expression, the web is no longer an elegant interconnected and interrelated creation but discarded pieces that can never be re-woven into a whole again.

Enclosure Movements

Except for the limitations on migration and development of the administrative distribution, in recent years, the enclosure movements are encouraged as well. For land, they processed the enclosure movement, for herders, they processed the settlement program. "The practice of enclosing portions of rangeland to protect it temporarily from livestock grazing pressure was indigenous to Inner Mongolia (Williams, 2002)".

The most recent enclosure movement was carried out in 2000, called 'Returning Grazing to Grassland'⁶²: the principal program that commands imposition of grazing bans, grazing restrictions, and through use of restoration grazing made possible by fencing. Apart from the compensation paid to households for the grazing restrictions, significant resources also were given to government agencies to construct or promote fencing, pasture improvement, and more intensive livestock production systems involving pen feeding, fodder conservation, etc.

Nowadays, in most of the areas in Inner Mongolia, no real grazing activity is going on. Most of the livestock are enclosed and fenced in one fixed location. The logic of the enclosure movement policy requires animals to be contained within a bounded territory. Because most rangeland scientists in China simply consider the overgrazing and outnumbered animals caused pastureland degradation. They typically address the issue of

enclosures as if the only possible solution to the sustainable productivity of rangeland. The rangeland enclosure practices were based upon the table discussion without proper fieldwork investigation. The decision discounted factors such as economic expansion scale, population growth influences and neglected the impact of migration on local land use.

Jalartain⁶³ (2016) claimed, “the privatization of pastureland by fencing is the end of the nomad’s life”. The fencing movement dismissed the capability of grassland as being a whole big inseparable system. The enclosure and fence did not even stop people’s communication, but also provided no access to any other territories. Enclosure disputes have motivated many neighborly feuds, even between families and friends who once enjoyed close and cooperative relationships (Williams, 2002).

Many conflicts begin when fences have been vandalized. People brutally attack each other, and many animals were brutally attacked or driven away by somehow government-employed enclosure guards. The heated arguments on property boundaries became the main reasons for community fragmentations. Above all, conflicts among residents and between residents and government never stopped. Enclosure conflicts of one form or another have affected nearly every Mongolian household in Inner Mongolia. People became impatient, but hard to fight against those people since the government’s policy was always a convincing excuse to stop the residents from fighting back. The enclosure movement distanced domestic animals from their original home of grassland and separated nomads from their community.

Section Two Land Privatization Movement

Except for administrative distribution, the coming and settlement of Chinese population increased the possibility of agricultural and industrial land usage. The land-use policy and structure underwent dramatic changes after the Chinese government-

induced privatization policies. The plan of mobilizing humans to conquer nature ended up severe destruction of pastureland, discussed in Chapter II.

Goto (1942/2011) contributed the first reason for grassland degradation to the administrative land separation between Mongol regional and temple leaders from the beginning of the Qing dynasty. He stated that degradation becomes severe during the middle era of the Qing administration. The heavy tax issued by regional Mongol leaders and their debt to Chinese traders has caused a heavy burden on normal herders. In the modern era, the ownership of pastureland changes has a considerable influence on pasture degradation of grassland. As privately enclosed land area has steadily increased, and local elites have advantageously manipulated stocking ratios in such a way as to intensify grazing pressures on traces of land very immediately vulnerable to erosion processes. They do so at the most vulnerable phase in the vegetation growth cycle (Williams, 2002). Humphery and Sneath (1999), when comparing Russia, China, and Mongolia's grassland degradation, stated that the allocation of pastures to households in Inner Mongolia should be the most important factor in analyzing the causes of pasture degradation. Within China, rangeland degradation is widely perceived as a technical problem for technological solutions (Longworth and Williapmson, 1993).

The privatization of pastureland in Inner Mongolia as Sneath and Humphery (1999) described "historically unprecedented". The indigenous patch matrix has been disrupted so thoroughly that residents are less confident about reading the landscape for production (Williams, 2002). Li and Huntsinger (2011) study of the "grassland contracting policy" started from the 1980s examined the connection between grassland allocation policy to individual herders by a case study in Inner Mongolia. They concluded that the land privatization generated the cooperative relationship-based communities that could access the land extent of grassland and further dismantled information exchange relationships within communities. The privatization of grassland use rights has weakened herders' ability to deal with the changing social structure that caused environmental deterioration.

The privatization of pastureland was kept romanticized by the government and has given the impression that the ownership of pastures in the future would be one of the established national policies and the most promising chance to become wealthier. This was believed to be part of the market economy and the necessary steps to modernization. The introduction of a new policy on land-use dismissed the original ecological and climatic conditions of the Inner Mongolian grassland. After the privatization of grassland, keeping cows in a small area has been a challenging task since husbandry animals move around. And the labor distribution has been hard. One of the family members have to control them around one area all day long, and it lasted until the harvest time of agriculture. After crops were harvested in some regions, the animals would be free to move to larger agricultural areas. Liu et al., (2015) conducted an empirical study from 1985 to 2008 in the progress of land tenure reform in Inner Mongolia to analyze the potential connection between grassland condition and land privatization. Their research results proved that the tragedy of privatization occurs in Inner Mongolia, in line with the research by Sneath (1998), which was based on a comparison of the changes in landscapes with and without privatization of grassland in Inner Asia, they conclude the possible explanation for the natural degradation is caused by grassland fragmentation, reduction of vegetation diversity through restricted livestock mobility and single livestock structure with a resulting decrease in accessible grassland. The negative influences of land tenure reform on grassland are more severe and evident than the benefits, especially to herders. Some scholars also suggest the land privatization will bring more conflicts among Mongolians over the land ownership problems. Lee et al. (2014) discussed the widespread ethnic protests against coal mining activities in Inner Mongolia, which caused social and economic inequality, in addition to environmental issues. In particular, Mongolians do not feel they have benefited from the mining of their resources. Finally, maintaining its already fragile and limited ethnic autonomy system. The conflicts are rising when the residents are forced to give up their land for some governmental projects. Violent action

and dissatisfaction were increasing when some herders realized the compensation for their land is not enough.

Farming for crops has been a big part of the local economy. Besides corn, other essential crops, including beans, potatoes, and rice also primarily raised. In Modern China, the expansion of farming into grasslands had been taken for granted; one reason is raising livestock on grassland does not make a quick profit; on the other hand, grassland is regarded rather as a natural resource than a living environment. The profit from agriculture benefits is considered overriding the benefit of keeping livestock. Few people take into account the effective agriculture in nomads area is supported by expensive irrigation-works and a large amount of labor and capital investment. The reduction of grassland to cropland is evident that the grassland is now a valuable economic resource that contributes to the agriculture profits of the whole nation. There is no statistical estimate on how much the financial contribution was made by cultivating the plain grassland. Therefore, the Inner Mongolia grassland forms part of the development infrastructure that fuels the national economy.

The main industrial activities destroy a wide grassland area by expanding factories and mining areas into occupied land traditionally used for pastoralism. Roads and concrete buildings are built, pastureland cleared, settlement patterns reorganized, and new boundaries are erected everywhere. In recent years, mining is a very prosperous industrial activity both in Mongolia and Inner Mongolia. Some herders sold their land to the mining company and moved to the city. When some herders realized they benefit little and the money collected from selling the land does not last long, and they have little opportunity to find a job to support their life, they would want to go back to their pastureland. Unfortunately, it was not there anymore. Tumenbayar (2002) has argued that herders' rights under the current Mongolia's legal system are so obscure that they are vulnerable compared to the mining rights prescribed in Mongolia's minerals law. Even worse, in Inner Mongolia, the mining and factory construction is firmly supported and controlled

under the local government. A fightback mostly ends up as political violence. Hao (2006) discussed the weak legal protection on Mongolian land use rights and the lack of legal protection of their rights are especially vulnerable to the encroachment of private Chinese business interests and international investment on Mongolian lands. Once the area is occupied by industrial use, it quickly expands to encompass more expansive spaces. A transition from a grazing economy to a free-market economy with the privatization of land being the flagship of the reform process has taken quite distinct outcomes. This economic development mechanically occurs by destroying original pastoral economic patterns and easily refashioning them into an inefficient order for market-oriented purposes. Land reform is seen as a key vehicle for promoting economic development. Land usage privatization has numerous unintended consequences because it dramatically alters land usage patterns among nomads people and overturns migration.

Land privatization is considered to be an inevitable development process that agricultural and industrial development and will further encroach on and expand into the grasslands until it disappears. However, few people notice that this phenomenon has not only substantially pressed the surviving space of most of the herders but has also brought destructive damage to the grasslands environment and will continuously accelerate the destruction of the entire Eurasian nature. The anthropogenic destruction on grassland reveals the mistake of not showing enough respect for the nomads people and their land. The primitive life of nomads with nature has its ecological logic, which has never been fully understood. Even if changes need to happen, these should be based on the natives with local knowledge of nature, and their rights should be fully protected. The dynamics of the steppe natural structure on the Eurasian area and its influence on social and economic procedures are neglected. The loss or depletion of grassland limits the productive opportunities of vast numbers of nomads' economies. More commonly, however, steppe decline adversely affects the traditional lifestyles, personal health, well-

being, and livelihood opportunities of the individuals. Mongols in different regional groups are affected differently; some may benefit from changes, and some others are not.

The local economic development projects have never considered ecological consequences. Government programs and policies have often tried to reform nomadic ways of life and move them in the direction of the more compartmentalized and individualized patterns of society. Countless programs have failed because the programs do not conform to the holistic values of nature and are inspired by the worldviews and values that only reflect the interests of a small portion of individualism. There is a pressing need for those working with these issues in Inner Mongolia to appreciate that Mongols have relationships with the natural environment that differ significantly from most mainstream societies, discussed in the previous two chapters. Their relationship with nature can be understood as both physical and spiritual interdependency and interconnectedness of humans and the Earth. At the very least, an awareness of Mongols perceptions of nature is now a requirement for environmental protection movements; it should not take place only within Mongols communities.

Land-ownership Complex

A fundamental principle in the state's treatment of pastoralists is its continued control of the land, as the land remained as state property. The local government was authorized to assign the land to individuals and work units. The increased economic freedom of individual households did not mean that the state relinquished land ownership control. Sneath (2000) suggests that the theory from "*Common Tragedy*" encouraged and provided a reasonable excuse for local administrative organizations to own the land under the name of national poverty, and also the development of new economic patterns is accelerated under the support of the local government by selling the pastureland for financial aids. Williams (2002) shared a similar idea that privatization of land usage followed by the *Common Tragedy* theory might not be suitable in the pastoral economy of Inner Mongolia. As Williams (2002) described, "the first step in the process was to

reorganize communal forms of land ownership and land tenure. In farming areas, the return to private land-use reinstated a familiar relationship to property. But in pastoral areas, private land tenure was a radically new and unfamiliar institution for herding households who had traditionally viewed the range as common property recourse.” Jalartaiin (2016) stated: “privatization of land is suitable for agriculture but may not fit the nomads life.” Jalartaiin (2016) concluded that the privatization of pastureland destroyed the synthetic system of the natural structure of pastureland, accordingly, accelerated the destruction of the ecological system.

Livestock Raising in Market Economy

The increase in the number of livestock followed the process of privatization of pastureland. Nowadays, most of these traditions are gone. As Goto concluded, hundreds of years of experience and skills in balancing nature and stocking were moved to the inclination of only looking at the livestock (1942/2011). Chinese policy in the 1980s to replace the traditional pastoral peoples with commercial livestock producers and turn the mobile grazing system to intensive production on enclosed pastures has been started. The collapse of the grassland system is shown in the imbalance of the numbers of domestic animals.

When Bold (2001) discussing ‘Nomadic Feudalism’, he mentioned that in the period from the 12th century to the 19th century of Mongolian society, there is no specified ownership of certain herd and pastureland but for the livestock. Historically little changes have the domesticated animal structure conducted from the 12th century until the Manchu era. B Bold (2001) believed that private livestock ownership was the main economic factor, mostly with family or tribe units, until the 17th century. The imposition of the Manchurian administrative system and the spread of Buddhism in Mongolia resulted in changes in the economic situation of the country from the end of the seventeenth century. Larger quantities of livestock privately owned by nobles, dignitaries,

and monasteries drastically increased after the Manchu administration granted political power to the regional Mongol leaders, nobles, and Lamas.

After China launched its first Five-Year Plan⁶⁴ in 1953, the official sources recorded, construction of roads, buildings, and wells (Sneath, 2002), which increased the market accessibility and availability for herders. Since the 1950s, the number of livestock has been growing ever. Especially during the collective era, from 1957 to 1963, the total livestock number was increased more than 14 times. The number of animals categorized as ‘good or imported stock’ had shot up by 1962 to 14 times the 1957 figure—totaling 2.144m. Over the second Five-Year plan,⁶⁵ the proportion of livestock consumed by the herding families decreased, whilst the percentage sold to the government increased. This shows the success of the communes as a means by which the state could extract more produce from the rural population (Sheath, 2000).

In Inner Mongolia, the earlier pastoral economies supported a high number of large animals relative to sheep and goats. In the last fifty years or so, the number of sheep has risen quickly. In the market economy, many pastoral households sell private livestock to meet the household’s subsistence needs. (Humphrey and Sneath, 1999), so many herders only raise domesticated animals with high commercial worth. According to Li and Huntsinger (2011), “independent households became more subject to the general conditions of capital availability, access to technology, labor limitations, and markets.” Especially since the 1990s, animal husbandry was streamlined, most Mongol families only keep one kind of animal. Traditionally, keeping cows, sheep, and goats and horse were normal (Williams, 2002).

After abolishing the commune’s system and privatizing property and production, the administrative control of property and production was marked. The standards of wealth in a rural area of Inner Mongolia are measured by the animals they hold. In the collective period, the collective owned the livestock. After the privatization of livestock in the 1980s, the incomes of one household depend on the livestock. But in recent years,

the livestock number is not the only standard for wealth, and some families own modern pieces of machinery and building house.

“The fact that nomadic economies are not on the money economy; at any rate, they were not based on such in the past (Khazanov, 1984).” But in the free market economy, everything is a price-tag marketing product for getting profit. Nomads used to raise domestic animals according to the local nature characteristics, but now, they grow them by following market needs. In the earliest nomads economy, pastureland is for raising animals. In the market economy, domesticated animals are not regarded as a companion in nomads lifestyle but for the subjects for economic income. The pastoral livestock raising system is changing from being a lifestyle to one kind of industry. It is evolved to supply the raw materials of the livestock and dairy industry; however, hardly the herding sector was established as an important national industry. The changes dismantled and separated the Mongol people from their domesticated animals and led to the shrinking connection between nomads and their land.

Section Three Instrumental Value in Land Privatization

The collision of modernization and tradition in nomads area, from an environmental ethics point, it is the collision between instrumental value and the holistic intrinsic value. The allocation of land usage right accelerated the instrumentalism of land by marking the pastureland in commercial ways. A large part of private grassland was rent or sold out for agriculture or industrial use. The privatization of pastureland encouraged cultivation for agriculture and exploitation of mining for the financial aim of local government and private landowners.

In real life, the instrumental value easily overlaps the intrinsic and relational value. In real life, the value of grassland does not depend on the particular experience of nomads public. Suppose judging 100 Hectares of grassland, the experts or government officials calculate that this area is much more worth building a factory than feeding livestock. The

factory can provide local people with jobs and pay taxes to governments, which is far more convincing to raise a crowd of livestock or benefits to human beings by their milk and meat. It hardly prices tag how much it means to local people and how much this area can contribute to the local environment and local people. As Williams (2002) indicated, the ecological environment is constructed and transformed by complex and reciprocal interactions between human populations, animal populations, and the physical forces of nature that occur across local, regional, and global scales. However, at any scale of current analysis, these relational integrations are understood incompletely. A great variety of perspectives are instrumental in the effort to promote human exploration of natural resources. In the words of Williams (2002), substantial population migrations, technological transfers, and rangeland privatization are not instruments in the construction of northern grasslands so much as they are instruments of transformation. Few intellectual people are involved in seeking an injunction on those plans that destroy the grassland's fragile nature. Many experts and local governments involved in the policy-making process might have no idea why grassland is considered valuable, lacking detailed training about nomads life, and cannot give fair judge. Due to limits of practical and local knowledge, the "scientific knowledge" is insufficient to produce reliable principles and practical recipes for land usage management in the nomads area. They instead calculate the effects of economic benefit, then take time to investigate the recent and historical landscape changes in nomads ecosystem and the medium- and long-term impacts of grassland under pasture economic pattern.

The privatization of the land-centered economic system overturned the nature-centered nomads or pastoral systems influenced by political propaganda and economic movement. It accelerated the separation of land and people. Mongols no longer raise livestock in pastureland, preferably in a fenced area. They became less aware that hills, dunes, and trees as boundary marks, and the fence and mud brick walls are new landscape features. In Inner Mongolia, traditional rangeland sharing practice has far gone, and the

traditional belief on the grassland as common poverty is no longer the case. The land as personal poverty with increasing commercial worth has been popularized and was a market product, not air or water anymore.

Section Five The risk of spreading instrumental value around Eurasia

This section assumes the danger of spreading instrumental value around the Eurasian area and the collision of instrumental and holistic intrinsic value. This is the conflict of holism and reductionism, nature-centered and anthropocentric, and instrumental and intrinsic and relational value. For nomad people in Inner Asia, the perceptions of nature, especially grassland, are cultural traits. The conceptions of preservation are regarded as normal behaviors that no need to add any philosophical or moral explanations (Tsui Tenhu, 1996).

According to FAO (2008), grasslands occupy 26% of the world's total land area and 70% of the global agricultural area. They are among the largest ecosystems in the world, contribute to the livelihoods of more than 800 million people, and are essential as feed sources for livestock, as habitats for wildlife, for environmental protection efforts, and the conservation of plant genetic resources (FAO, 2008).

Besides Inner Mongolia, the rest of the nomads world seems obvious in a dangerous situation, which means it has already turned into an endangered position. There is little possibility to remain the same as it has always been. The selfish interference has resulted in severe ecological ramifications throughout the entire grassland ecosystem in Eurasia; however, many of which are still not understood nor recognized. It is no longer a question of preservation but of survival. The Eurasian nomads ecology is still supporting the whole natural system of the Europe and Asia area. The disappearance of nomads ecological footprints is a tremendous loss to human beings and will lead to the destruction of the whole natural environment of Asia and Europe. However, most horribly, its reservation is not getting enough attention and not mentioning the efforts to save it.

As explained in Chapter II, natural conditions as an arid climate and low temperatures, nomadic grazing is the only suitable economic activity in the Eurasian area. So livestock raising on the vast grasslands has traditionally been the predominant industry in Inner Mongolia. When digging into the reason for the nomadic lifestyle in the Mongol area, it would very easily understand that the nomadic stocking lifestyle is the only way fit to the Mongol land, and it is the only sustainable economic pattern to utilizing nature reasonably (Goto, 1942/2011). Notably dry and cold weather in Inner Mongolia, nomads lifestyle has also played a significant role in maintaining the ecological balance of the pastureland. I do not mean to romanticize the human-nature harmony of earlier periods. Still, the fact of Inner Mongolia remains that traditional land use practice has shown much more effective and productive. For anthropocentric point, there is another explanation that might be lie in nomads ecosystem; this ecosystem was developed over the long periods of human's adaptation, transformation, and experimentation for sustainable management, which enhanced people's understanding of how to care for and strengthen their role in nomads ecosystems. Now, nomads people are faced with the challenges of adapting and developing their skills to cope with modern changes. Part of this is locally or regionally maintained, adjusted, and transmitted in practice. Recognizing and strengthening existing nomads ecosystems is essential for building resilience since it will provide a rich understanding of the complex interactions of people and nature. One of our main arguments, in a simple form, is that the maintenance of herd mobility is the primary key to sustainable pastoralism in the region. I argue that the migratory pattern of pastoralism is still necessary for pastoralism to be successful and sustainable in the nomad's ecosystem. Mobile pastoralism is compatible with many different social and economic systems, including technologically advanced and market-oriented ones (Humphery and Sneath, 1999). Nomads nature approach has advantages in ecology and environmental care, sustainable utilization of grasslands, and sustainable social and economic involvement with nature. Conflicion exists in nomads area is essentially

focused on the problem of regional and even global ecological safety. Protection of environmental safety should be given priority because human social and economic existence and development depend on and are decided by the vulnerable ecological safety in the arid and semiarid areas. Protection of grasslands and nomadic culture is far more important or even vital to humans' subsistence and sustainability and all over the world. Protection of nomads ecological safety is for securing the premise and fundamental bases of economic and social development in the Eurasian area.

Conclusion

The grassland is treated as a source to achieve economic goals. Everything in grassland is viewed simplistically as a resource for income to be transformed to produce economic goods and services. Not only is the grassland considered simply as one kind of resource, but the whole grassland system with its subjects like livestock, wild animals, and vegetations are considered as mechanical units intended primarily for utilitarian purposes, emphasizing the economic or market value of nature emphasizes the instrumental approach to nature and underpins the entire nomads ecological framework, property regime, and prevailing management rationale that act as external controlling constraints upon nature.

When nature is regarded as natural resources, the human use of them most notably in its physical forms, like minerals and mines and gold and timber material, etc. This inclination makes people believe that the pastureland should be better judged by its instrumental process than relational and intrinsic parts. Muraca (2011) is quite right when she argued that instrumental thinking cuts off the opportunity of understanding the complexity of those processes and systems that keeps the whole living planet and a meaningful human life going. Lack of comprehensive nature assessment for the project was conducted without any distinctive scientific studies.

Nomads people recognize the idea that any over-exploitation or wrong use of the grassland resources is spiritually unacceptable. Regarding the drivers of change in nomads, the instrumental approach towards nature driven by market economy impacting on the human-nature relationship, with an issue such as vastly underestimating their livelihoods and identities aroused and nourished in nomads countries, whereas human-nature relationship in industrialized societies are more commonly affected by drivers of change related to science or technology, such as through electronic devices and falsely build nature environment vastly underestimating the importance of nature's benefits for their physical and phycological health.

Land usage privatization is a measure to restrict the freedom of herds and herdsmen and harms the right of the herds and herders to move and separated the human and nature. No research has been started to temper this shortage in local, often historical, knowledge on the natural environment. Most of the scientists and decision-makers in Inner Mongolia have limited opportunities to obtain an in-depth understanding of the grassland system since most of them live in towns or cities, rarely conduct fieldwork, and talk to local people. Currently, few nomads people and herders who spend most of their living in grassland know an astonishing number of plant species, even as many as the local flora and fauna.

Instrumental value is always derivative on the importance of something else, and it is still conditional. Something's instrumental value fluctuates based on changes in the desirability of the end to which it is a means and whether alternative, more economical results are available. For example, grassland has instrumental value to those who want to gain access to much more material objects that come out from it. Instrumental value is substitutable, replaceable, and compensable. If something is instrumentally valuable as a means to an end, it is possible to compare it to other potential means to the same fate. Therefore, if non-human organisms, species, and ecosystems are possessed by only

instrumental value, their value is highly contingent, defeasible, and unstable. They can be treated as comparable to and substitutable by other instrumental values.

It can be argued that there was no alternative but to amend the system; the quality of the pastures was declining, there was uncontrolled exploitation by ever-increasing domestic animals and human populations.....limiting nomadic grazing has pushed aside traditional methods of land-use which were most effective for using the natural potential of the fodder lands (Gomboev, 1996). Suppose the governmental policy helps solve the problem. In that case, the local people's judgment on their nature should be counted, which means their relational and intrinsic value towards their grassland should be considered in the policymaking process. If the relational and inherent value should be counted, involving the local people rather than outside experts in the decision-making process is necessary.

Therefore, local people's voices are hardly heard because they are no experts. Their persuasion includes no economic data or numbers to prove their points, and their traditional valuation system is subjected to discrimination and underestimated. Rather resistant to the economic plans throughout the area should be aligned with scientists and ecologists, and local people who have proper knowledge about their land. They kept a long-time relational relationship with their nature and know better about the intrinsic value of it. Nomads people are the eyes, ears, and knows of their land. They experienced every movement and breeze of their land. They know better about their relationship with their nature. A scientific explanation of outsiders overweighs the indigenous ecological beliefs, knowledge, where only everybody believes that the logical solution to the problems is introducing further advanced technology. Today's mechanical powers were available for nomads to decimate and dismiss their natural environment completely. However, the only thing stopping them from doing so was their knowledge of primitive technologies to balance and reserve nature within itself. When local peoples' concerns are continuously and blatantly overlooked and dismissed, indeed, their livelihood or

spiritual basis is threatened, it escalates to previously unexpected and sometimes violent proportions. In recent years, such as the violent activities that Inner Mongol peoples are felt forced to take to arms in defense of a stand of sacred grassland have increased. The confrontation, which started as a peaceful request to responsible government, rose swiftly to the violent and irrational suppression that caused some people to get punished. The greatest threat to Mongols strikes not only at the loss of their economic bases, including the land ownership and land use rights, but also threatening their existence.

Mongol-led initiatives to determine their ways of protecting the culture, governance, and educating their people are often met with open hostility to national unification. A solid law is needed to make sure the land will be protected for local people. The international societies should support Mongols to save their land through laws as well. In 2010, the Bolivia government passed “The Law of Mother Earth”⁶⁶. The law defines the rights of nature’s regeneration and attempts to stop the commercialism of nature. This law is to establish a sustainable relationship, Mother Earth and systems of life, shared by the indigenous peoples of the South American Andes (Dr. Diego 2014). The law draws deeply on indigenous concepts that view nature as a sacred, holistic, and living system on which we depend. As the law states, “Mother Earth is a living, dynamic system made up of the undivided community of all living beings, who are all interconnected, interdependent and complementary, sharing a common destiny.” This law mandates a fundamental reorientation of Bolivia’s economy and society, requiring all existing and future laws to adapt to the Mother Earth law and accepts the ecological limits set by nature rather than focus on producing more goods and stimulating consumption. Even there is a great deal of opposition from mining and agro-industrial enterprises. The Bolivian approach provided a notable example that indigenous people could embrace law enforcement to protect their nature with the nature instrumentalism dominated world.

Likewise, Living-well in balance and harmony with Mother Earth is a concept originating in the vision of many indigenous peoples worldwide, has been recently

incorporated in the legal framework of some Latin American countries, and emphasizes the collective Cosmo-centric relationships across time among people and between people and Mother Earth. Balance and harmony refer to individuals in the context of a broader human community, including ancestors and descendants, and between humans and Mother Earth, a holistic entity that sustains all living things and of which humans are an inextricable part.

Introduction

This chapter mainly contributes to further analyzing an unnecessary separation of human and in the modern context aiming further to clarify the right human-nature relationships. The change in human-nature relationship in the past and current Inner Mongolia is a vivid case that has been highlighted in the previous chapters. How agricultural and industrial world has brought the changes and disrupted the whole idea of nomadic life is discussed in last chapter. The relationship between people and nature in modern communities deeply affects the nomads to face an enormous change that most nomads people are hardly able to follow. In conclusion, the contemporary context of understanding human and nature relationships in nomads context is questioned making a strong case of a new valuation system.

Section One**Alienation of Human and Nature in Modern Context**

Human nature separation is shown through different perspectives in different societies. In the early period of social development, humans lived in and with the natural world, connected with the circling of wild animals, the rains, rivers, and rock formations. In tribal life, nature is dominant, and man is subject to the surrounding nature, in fact a part of it. There is no actual separation between man and nature. People live in intimate contact with nature in forests, near seas, and in plain land. Beginning with the agricultural revolution, human beings 'living surroundings gradually shifted from nature to society, separated from all other natural beings. In industrial society, the separation was carried out at high speed. People no longer live-in nature and are the dominant of this planet. Nature is never part of their life, and the worldview of nature as a dynamic system of which we are a part is dismissed.

The more advanced societies have developed, the more the manipulation of natural ecosystems tends to occur. In an agricultural community, farmers' interaction with nature is performed by planting and growing vegetation and raising domesticated animals for a food supplement. These are instead relying upon and manipulating nature than following nature's rules. After the dense population and permanent settlement that occurred in agricultural societies, the greater exploitation with continuous manipulation of nearby land continued. Areas used for agriculture are not available to support the species or natural plant, except agricultural expansion; domesticated livestock often competes with other animal species for forage. Vice versa, the higher crop yields in advanced agrarian societies can support dense human populations and large cities because many people do not have to work to procure food (Richerson et al., 1996). As agrarian societies evolve, techniques for planting and harvesting become more technologically advanced and more efficient (Richerson et al., 1996). Natural ecosystems provide only a small amount of food in such societies; nearly all of the food comes from human-manipulated agricultural systems. Given both the high population densities and increasing technological altering nature, the impacts on wildlife and natural ecosystems are not surprising. For example, the bigger the population has, the higher the demands for firewood and shelters they need, so it is not difficult to foresee nature destruction in the agricultural area.

In an industrialized society, nature and human relationship is discouraged by highly and speedily developed modern technologies. Modern technologies allow a person to live their entire life and have little or no direct contact with either natural or ecosystems and not believe nature is simply relevant to their daily lives. Most modern new technological products are praised over natural products; technical appliances and tools are encouraged to engage in human activities. Most prominent and creative ideas for business are alienated from nature. The choice of certain technologies distances humans from direct experiences with nature, prompting users to stick more with technology. This can explain the same scenario is happening in Inner Mongolia. Tens of thousands of local people have

lost their land and migrated to towns for survival. Modernized and non-naturalized life has offered comfort for most urban people, leading to the misleading common sense that human beings are separated species and not included in nature. As a result, modern people act like they are not part of nature.

The natural disaster scenes are spreading worldwide through many media reports. All these further distance people from nature. Natural phenomena like wind, rivers, rainfall, and birdsong became a threat. As Doherty (2015), People in the United States learn much of what they know about the environment from mass media. Nature is depicted as a distanced phenomenon in the way of people having a regular and curtailed life. Our language and worldview are shaped by the accepted current scientific explanation of nature; it shaped our view on how we understand the human relationship with the earth. Humans lost the connection to nature and focused on building civilization as a world beyond the minimal needs for survival, which have pushed humans conceptually, physically, and spiritually out of nature.

The current economic system assumes that the earth's environment is a subset of the human economy and that the earth belongs to humans. Modern industrial activity has, as well as the natural systems on which all economic activity depends to satisfy the persistent human needs. So, it makes sense to transfer as much of the earth's natural capital as possible into the engines of the industrial economy for everybody. Placing the human economy above the well-being of the natural world creates a lethal, poisonous wrong relationship with nature. It drives people to believe the economy's purpose is to enhance their wellbeing by constantly maintaining economic growth by exploiting nature. There is also irrefutable scientific evidence of a direct causal link between the overexploitation of natural resources and the global environmental crisis. Few realized that the current economic order has an inappropriate relationship with nature and how the real economy of this planet should work. First, it assumes that nature is a subsidiary of the economy. Second, it mistakes a measure of the wellbeing of a human being by

monetization of nature. Finally, people typically treat nature as solely a matter of instrument, as nature is a tool for making up human beings' wellbeing.

During the process of developing a high leveled life standard, people gradually distanced and alienated from nature. Perhaps the most important trend to keep in mind in the history of the relationship between humans and nature is that the ever-increasing alteration and exploitation of natural ecosystems for human use has led to a steady loss of wildlife, biodiversity, and wilderness through time. Thus, those changes are an unpredictable threat to economic and social stability. This increasing need to control nature combined with the growing disconnection between humans and the natural world finally might fail to reach economic success. Environmental and economic conflicts lead to social conflicts are conflicts between humans and nature.

Currently, the social relationship overweighs the natural connection. People are suffering from psychic diseases like depression, stress, and even suicide, for which industrialization and technical reliance would be an invisible source. Thomas Lowry declares, "man in his natural state was happy, healthy and virtuous; man's trouble derived from the spoiling and corruption brought by civilization (xiv)". People are also increasingly finding spiritual meaning in the wilderness, a trend that reverses the historical tendency in western culture to see nature as less and less sacred (Gottlieb, 1996).

For nomads peoples, the importance of relationships with nature is not limited to ways of knowing but is essential to the ways of living naturally and spiritually. Therefore, holism refers to the interconnections and interdependence between humans and nature. Mongols regard nature as the inextricable part of life forms their family, tribal groups, ancestors, mountains, river, lakes, and land. Those relationships are not only physical but also personal, spiritual, social, cultural.

Section Two Mongols From Nature to Society

Natural Network to Social Network

In this section, the changes of nature life to social life are illustrated via discussing the disappearance of the group work tradition in Inner Mongolia. Migration was hard work, and most of the migration was under group work. The disappearance of group work traditions closely connected with the disappearance of nomads lifestyles and illustrates the strengthening of individualism in society over community in nature.

In all nomadic societies, there are two universal institutions: the family and the community institution (Khazanov, 1984). The information and knowledge are mostly transferred through family and communities (Khazanov, 1984). Until the most recent years, the community was a group of people with kinship and friendship relations. The relationship was a fluid and flexible network. In early times, this cooperative relationship plays a significant role in generating the migration and naturalistic structure of nomads.

According to the analysis of some historical materials by Bold (2001), large group migration of several tribes and thousands of tribe members existed pre-Manchu era. The reason for the large group of migration was not apparent, but self-defense, including ensuring the pastureland would be the most suitable for large group migration. The nomadic migration was ultimately practiced and inherited by community members. The tribe and group communities guaranteed the social function of exchanging information.

As Sneath (2000) concluded about kinship, “the role of kinship in household residence, inheritance and social networking can be closely linked to the requirements of pastoral practicality.” Simukov, who studied the pastoralism of Mongolia in 1930, analyzed the ‘*hoton*’ (smallest group work) in detail. Simukov described the head of the ‘*hoton*’ as a senior figure who mostly an older male or mostly wealthy, and people called him elder brother as for respect. Sheath (2000) believed this ‘*hoton*’ relations match those found in prerevolutionary Inner Mongolia pastoral areas and resemble certain modern

forms. Sheath (2000) described '*hoton*' as a social organization with flexible and voluntary joining and unjoining rules. Since social relations were linked by kinship and included unrelated families, friends, or neighbors, the '*hoton*' should not be a stable social group but a flexible network-based largely on kinship and economic and spiritual dependency and friendship. This collaboration was similar to those early nomads migration groups with close kin or friends who live and work together or follow the clan leader. They were linked to a great extent by ties of mutual aid and sometimes even mutual responsibilities for mutual defense, especially during migration. In summer, several nomadic households as one large independent group would share their pastureland; small groups of separate households move together and jointly pasture livestock. The voluntarily based kinship or group work was reserved until the 1980s. As Sheath stated, the role of kinship in household residence, inheritance, and social networking can be closely linked to the requirements of pastoral practicality (2000). The cooperative community was composed of kinship or friendship. The temporary migration group usually was getting together into one of their camps where various migration judgments were shared and distributed.

A small group of migration of poor and wealthy families lasted until the eleventh and twelfth centuries. Except, the rich and poor bonding group was another widely formed type of ties in Inner Mongolia before the 1980s. The cooperation between rich and poor was mostly for labor destruction and migration facilities. The needy family members work for a wealthy family to exchanging goods, services, and social status. They took care to stay on good terms with the temporal authorities to ensure security and access to grazing land. The rich can take advantage of the labor of the poor, and the poor can access the transportation of the rich, the main determinants of mobility. Poor herders often did not own sufficient pack animals to make seasonal moves and lacked surplus to exchange for motorized transport. Similarly, poor and new herders were more likely to

gain access to campsites and key pasture areas through alliances with wealthier kin or acquaintances.

Nowadays, since the boundaries are fixed, crossing the border is illegal. Hence, the migration distance was shrunk, not so many facilities are needed, and the personal equipment is strong enough to support the short distance movement. the cooperative movement is significantly reduced. The traditional movement patterns are less recognizable, and the customary relations have been dramatically weakened (Gomboev, 1996).

Group work does play an indispensable role in making decisions and transforming natural knowledge that is part of the practical activity of migration. The traditional knowledge does not exist in individual isolated reasoning but within one community, in which it also comprises particular relations, practices, and values. Some of the knowledge-generating capacity that does not rest on individuals but passed on through tradition and habits of communities.

Williams (2002) discussed the enclosure movement was influence the “community fragmentation” by distancing friends and relatives over *boundary battles*. The social relations in Inner Mongolia “transformed into specific types of relations that hover between the commercial and the personal (Humphery and Sneath, 1999).” In modern Inner Mongolia, they maintain close relationships with relatives and friends emotionally and spiritually, rather than the nomadic economic pattern of interdependency. With the increase in static housing, modern family life differed from that before the 1980s. The scope of nomadic migrations was curtailed, the short-distanced seasonal mobility was enforced, and the limited migration within a short distance does not need much labor. Nuclear families have been composed of a married couple and their children as a significant family structure. Mother takes care of family business and child-caring, dad sometimes engaged in camping, life to modern herders has become more stable than ever before.

The herdsman preserved a new relationship to their land, which is professionally contributing to the mobile lifestyle. They were entitled to the 'rights' achieved by challenging the natural world, representing a certain relationship between power and freedom that are active interaction between people with his land. All these challenges in nature have got no opportunities to be demonstrated in the terrain of the city, and the static lifestyles are associated with their isolation from nature and loss of migration. During the migration, the emphasis is placed on the group rather than on the individual. The Mongols did not define themselves as individuals, but a member of the tribe, a living being like other living beings, a part of nature. The cooperative relationship in large migration and kinship groups in nomads practice represents the relative responsibilities of the members and nature and their community. When the naturalistic-based relationship overlapped by social relationships, the profound effects on pastoral populations was caused the psychological change in their attitudes towards nature, dismantled the regional identity, and encouraged the diversification of exploiting local resources. By way of conclusion, the nomads group work is an economic practice that expresses the relational relationship between human and human and human and nature, but a set of structuring concepts that are engineering the human and nature relations preferably in nature than in society.

From Nature to Society

“The pastoral Mongols have historically loved the open steppe and its spatial freedom (Williams, 2002)”. “Cultural realities-including attitudes, values, preferences, perceptions, and identities can be just as important in shaping land-use decisions as to the material realities of political economy (Williams, 2002)”. Daniel Griffiths⁶⁷ of the BBC wrote: “High on the grasslands of Mongolia it does not seem as though much has changed in hundreds of years. The vast steppe still rolls on forever until the blue sky and yellow earth become one. The nomads, astride their small, fast ponies, still herd their animals from summer to winter pastures, following in the footsteps of their ancestors” (Daniel

Griffiths, BBC News, January 11, 2007). However, now, the scenario is changed dramatically in Inner Mongolia; Yurts gave way to mud-brick homes, and cultivated fields have come to dissect many pastures. Ecological disruptions and changes are fundamental for all the other changes of nomadic organization and economic diversification. The revival of agricultural and industrial activities in the Mongol nomads area leads to the tragic alienation of nomads people and pastureland physically and spiritually, which fatherly reflected in social and economic transformation.

The process of urbanization and sedentarisation in Inner Mongolia were closely connected with their intense eagerness to be involved in the modern economy. The economic consequences of nature intensify these processes. “The more urbanized and mechanized a way of a lie, the more developed it was considered to be. Arable farming was valued more highly than livestock farming, as was shown by the state prices paid for the products (Humphery and Sneath, 1999)”. As everybody seeks for following the marketing economy, many herders attempted to follow the modernized economic activities; starting grocery stores to supply essential daily needs for community people and operating vehicles for transportation usage, some households are attempting to marketing domesticated animals, and many Mongolian herders have started intensive agriculture, industrial and commercial life. Despite some attempts at economic activities, Some residents practice trading domesticated animals or dairy products. The increasing multiplied demands for nature resources pressured the reshaping of social organizations and dismantled the naturalistic relationship between human and nature and human and human, especially the increasing domination of agricultural and industrial activation reinforced the settlement of nomads people, in which nomads people gradually separated from their pastureland, and enhanced non-nomads who are outsiders come for the new economic opportunities accessibility to pasture nature resources.

Nowadays, herders become more confident in making their own decisions following the market, not from their elders. They are facilitated by modern equipment

and information. The children of most herders were away from their families for most of the year. They stay in boarding schools at the Sumuu center from the age of seven, being kept away from their parents and pastureland. After they grew up, most of them will choose to stay in cities. “Herding skills have become less relevant, and herders have become more apathetic about their ability to control livestock and herd dynamics. More and more, households have no grazing strategy; they simply let the animals wander the range where they will (Williams, 2002)”. In cities, skilled labor and the incredible expansion of white-collar occupations from the 1970s and the 1980s meant that families belonging to the administrative and professional elite could pass their status on to many of their children, who acquired educational qualifications and professional jobs. Some moved into skilled trades or executive positions, while only a few of them remained with grassland.

For nomads people, the stage is not nature anymore, and it is society. People born and grown up in the cities have little connection with nature and are removed from their contact with nature, and they lost the appreciation, admiration, and worship of nature. Environmental concerns that tightly bonded with the local common sense become increasingly rare, resulting in children growing up with less and less intimacy in the natural world. Most of the current young generation, the hometown they grew up with, and acquired nomads knowledge and experiences have changed dramatically that virtually unrecognizable in its present as the tremendous changes have undergone. They used to be close to animals and plants, at least the greater part of their life. Nature is a teacher and a school of life and used to recognize and befriend animals and plants. In nature, the present generation passes on their cultural traditions and practices to the younger generations that only could be generated within the direct connection to nature. Surrounding the economic area, new public facilities like schools, hospitals, and departments were built. The changes have rendered nomads a natural foundation from which to rebuild to fit in society, as Longworth and Williamson (1993) point out that

“present-day ethnic minority communities in pastoral areas have lost much of their traditional culture.” The almost godlike status attached to grassland by their ancestors has gone forever and in its place is a kind of commercial pragmatism.

When the living environment changed from nature to society, the natural relationship becomes a social relationship. The ties from nature to human in nature have to be switched to the relationship between individuals and individuals within social organizations. The modern individual typically determines their level of involvement in societal matters based on what they stand to gain from contributing to a minimum. In the competitive market economy, the most important player is oneself. To seek collegial relations with others is now referred to as networking. Modern and unnatural lifestyles depart people from nature realities, communities, and individuals are challenged to adopt modern social lifestyles to reflect social patterns and rhythms. In the modern idealistic society, regardless of ethnic origin, gender, age, country of birth, religious creed, and even culture, every individual pursues the same set of rights. The individual becomes the universal basic unit of society. People become more and more involved in seeking rights in society. The individual’s abstract notion as a part of the community is settled rather than as a part of nature. In nomads culture, the emphasis used to be placed on the group as a whole rather than on the individual. However, this does not imply that the individuality of each person is not highly regarded. The nomads sense of belonging extends beyond the limited definitions of an individualistic human self to a much wider acceptance of each being as more fully oneself because of relationships with others, including non-human species or natural phenomena and landscapes.

Current Inner Mongolians on Modernization

Currently, Inner Mongolia is undergoing the transition from a pastoral economy to an industrialized economy, and the process seems non-directional, and herders accept these unexpected from outside their areas. This change damaged the resilience of the pastoral economy and also makes it difficult for functioning effectively. Herders are

becoming “not quite farmer and not quite a herder, not quite Mongol and not quite Han, not quite traditional and not quite modern (Williams, 2002).” Growing desires for cash value and access to modern facilities and equipment generally generate new thinking of unfamiliar fields. Mongol people of eastern parts of Inner Mongols have adopted half agriculture and half nomadic life, or some people changed to agriculture life only. Some herders followed the market and increased the number of domesticated animals in the fenced area. Some herders sold their land voluntarily or involuntarily to mining or chemical factories, and some of them had to move into cities. They become industrial company employees or unemployed. Some of them increasingly find their interests and lives connected to urban centers far beyond traditional lives. But some herders who lack marketing knowledge become poorer and poorer, and Most of them are tuned to no successful nomads nor a commercial man. Economic diversification requires different skilled workers and labor intensity. Herding skills and ecological knowledge have become less relevant and less familiar with the agriculture and industrial world. In the rapid diversifications of the economy, some herders are smart enough to be part of these lives, and, however, some of them find it hard to follow the changes and left far behind.

The industries will continue to develop at an accelerating pace. The traditional way of life has shaped throughout thousands of years, currently withstanding many types of external stresses. Development projects often fail to replace native forms of the economy involving native people with productive and beneficial ones. Most economic projects from outsiders expect local people to give up many of their customary economy and cultural activities without apparent substitutes, alternatives, or incentives. Animal grazing economic structure was marginalized and developed into a streamlined industry. The utilization of land is unsustainable, and additionally, most of the activities are not continuously profitable to local people. Therefore, these activities are a huge discontinuity from the past. Potential solutions and proposed political policies are also never considered in the local cultural and economic network structure.

Mongols' response to agriculture and industrialization is very confusing. Most people are concerned about ecological conditions, but some think that development has to get rid of pastureland and follow the modern lifestyle. Some Mongol researchers are very optimistic that tradition will change after intense pressure from the outside world. Some people insist that some traditions survive and continue to serve people when they can reconcile themselves to the evolution of the natural environment. However, with current severe damages and destruction on grassland, there is no evidence to show that the grassland culture gets used to the current transmission.

Section Three Mongols with Outsiders

Different Perspectives on Nature

The influence of agricultural and industrial economies on nomads was considerable. External forces and stresses on a balanced ecosystem, whether natural or human-made, have caused long-term or irrevocable alternations. Depending on the strength of the external disturbance, the reproductive reaction rates of the parts will be distorted or may be able to absorb the stresses without collapsing. Numerous studies show that significant differences do sometimes exist between insider and outsider perceptions of the same physical environment (Cronon, 1983). In nomads life, the interaction between nomads people and nature are performed within nature. However, in agricultural and industrial societies, people are indirectly involved with nature, mostly via tools or some intentional efforts or manmade methods, which undoubtedly generates different judgment towards nature between these groups of people.

Human beings are prone to protect and value what they consider as intrinsically and relationally valuable. The feeling of love and admiration for living surroundings differed from what one has for distant living surroundings. Thus a sense of a foreign nature is less than to their community, the associations with those closer to one's own life stirring up an attitude of protection, respect, and love. We cannot ask someone in the USA to stop driving a car, explaining that carbon dioxide is causing climate change and then climate

change causes drought to the Eurasian grassland. Those, a few, living far from Amazon, who might value tropical rainforest, are likely to feel the same sense of emotional connection to the Amazon; they may have learned through medium way such as nature documentaries or personal experience, which should be counted as relational value. But maybe not like local people, who know better about their land and its preciousness, which could measure as recognition of the intrinsic value of their land while keeping the relational relationship with it. Most modern people and organizations, especially private organizations, similarly regard nature as a collection of natural resources. When outsiders take control of the local economy, instrumental value dominates the whole process of human-nature relationships. For nomads people, the grassland is intrinsically and relationally valuable, but for most outsiders, the instrumental value of nature works as a natural resource and for economic profits.

Chinese and Westerners on Nomads

Long-standing ideological beliefs in the linkage between grassland environment and human beings among nomads people are not so understandable and acceptable to Chinese who nested within frontier walls who can propose enclosure movement (Williams, 2002). For the Chinese, walled cities were the major landmarks of traditional China, with a proud and distinctive morphology that, despite gradual evolution of form, remained remarkably static through history (Williams, 2002). Mongols destroyed walls and buildings during the Empire times. Indeed, there had been an ingrained bias towards nomadism among dominant agrarian groups during China's long history. Besides, Chinese ideology is based on the Marx-Lenin-Mao political ideology. They believe in achieving modernization, so mobile nomads should be transferred to a higher level of economic pattern. The widespread destruction of grassland in Inner Mongolia can explain cultural differences in understanding Mongolian and Chinese nature.

Sometimes, the meaning of language implies the ecological ideology and identity of one race or one nation. For example, it is just like Chinese words describing grassland

and northern minorities as *Huang* (the waste in English), *Kuang* (vast in English), *wu* (ungrown in English), *ye* (untamed in English), *qiong* (impoverished in English), *xu* (emptiness in English). Thus, the positive term *kai* (open in English) is used to refer to the action of preparing a virgin land for farming: *kai Huang* —to open up wasteland (Williams, 2002). Whereas the Han looked upon cultivation as “opening up wasteland,” Mongols traditionally viewed the same activity in strongly negative terms. The Confucians simply despised the barbarian nomads, considering them incapable of following a civilized way of life.

Further, the political philosophy built in the 19th century around the world tended to view the primitive traditions as ‘worthless’. The ideological force supported the current economic practices on grassland. People turn to believe all societies should pass through a series of social development stages toward modernization, followed by mobile pastoralism, sedentary agriculture, finally to the industrial society. From this notion of social evolution, the interests of the minorities are best served by rapid assimilation. As agriculture and industry could only raise the value of the land, the settlement on farms and factories from nomads life could reach a higher step of human development.

Besides, most outsiders hardly regarded grassland as ‘Nature’. For westerners, nature is untouched or untouchable virgin land without human interruptions, mostly forests and mountains. Even the great scientist Alexander von Humboldt⁶⁸, when he failed to see the Himalayas, the Altai was as close as he could get to collect data from a mountain range in central Asia (Wulf, 2015). He dismissed the plain grassland and only tried to reach the Altai Mountains as quickly as possible. As Humboldt traveling across the Mongolian steppes, he collected plant samples and stones but showed less interest in steppe ecology (Wulf, 2015). Henry David Thoreau lived in a cabin on Walden Pond to finish one of his most famous American nature writing pieces: Walden. In the words of Wulf (2015), nature helped Thoreau. They might not represent all western people, but basically, western people’s thought on nature is different. In western people’s philosophy,

grassland or rangeland is not a “Nature” that can offer philosophical illusions and assumptions; instead, untouched, and virgin forest and mountains provide many more challenges and ventures to encounter unexpected bumps.

Westerners know little about pastureland management; however, policymakers in the pastureland world respect their thoughts. Western intellectuals’ assumptions and biases can have a considerable effect upon public interruptions of environmental changes, policy goals and implementation decisions, and even the very process of scientific data collection and knowledge construction. As Williams (2002) pointed out, cultural perspectives from the industrialized western nations also play an active role in domestic environment conflicts that arise when developing countries like China rely upon global capital and international institutions to boost modernization efforts. In pastureland studies in China, Chinese scholars’ attitudes and research further influences western scholars. Since natural scientists from Western nations and Japan almost invariably rely upon Han scientists to access practically all field data (Williams, 2002). They do not speak local languages and so receive their critical orientation primarily through the filter of translation. They do not stay long enough to explore reality. Because political permission gives little access to those communities, some gain no access to the Mongols community. Most western scholars collaborated with Chinese scholars to access Inner Mongolia, but the collaboration rarely included the Mongols or local people. After some kind of data was collected, and even when the data is not scientifically and practically connected to the local herders’ situation, it will become a basis for policymakers to make decisions. As Williams (2002) stated, the invisibility of such cultural bias makes it easy for Western scientists to be unaware that alternative representations of nature even exist in Inner Mongolia. Of course, not all of their data is contaminated, or that they have no proper perspective by which to interpret ecological change. But their experiences and knowledge base must not be construed as ‘local’, ‘insider’ or ‘native’ (Williams, 2002). Few

researchers point out that the sustained intellectual distorted view on nature and culture carries adverse practical consequences.

Conclusion

In the modern world, there are two significant misunderstandings in nature. One is nature viewed as mechanistic terms with reduced complex wholes to their parts and attempts to analyze each part in isolation, and the other is human is separated from nature. On the other hand, nature is simply regarded as a natural resource. Thus, an addition of holism and the intrinsic and relational value of nature is neglected, and the instrumental value of nature is largely adopted. Similar discussion was emphasized in Chapter IV that everything in grassland are instrumentalized driven by market economy. Within this, the anthropocentric judgment towards nature is the leading cause.

An ecological system is necessarily a complex system. The parts are connected through mutual relationships in such a way that they all contribute to the formation of functional units to the whole. If one part is removed, the system is weakened and losses stability. Each part contributes equal value to the healthy functioning of the whole. Unlike a machine, nature cannot be improved by adding, deleting, or fixing its parts. Once the original ecosystem has been fragmented, it can never be recreated to its original whole because the interconnections are changed. Thus, the relationship of the whole to the part is not oppositional but complementary. The part constitutes and participates in forming the wholes. The whole is something that cannot be replaced if the whole is analytically split into parts. Indeed, the destruction of the whole is forever since one can never achieve a replica through summing up. The current ecological restoration that attempts to heal environmental destruction by reconstructing the whole or focusing on the protection of one species is always a failure. Besides, scientific developments have done little help in current ecological problems. The contemporary conservation scientific research and data are all collected and conducted by a group of people disconnected from nature. This

mismatch has been a mainstream of current scientific studies, and its results are utilized in most of the fields. Most of the research analysis is partial and static; the environmental ethic tries to persuade people to change their attitude towards nature. They argue that the current anthropocentric understanding of nature is incapable of producing long-term, real solutions to environmental problems.

The anthropocentric is a human-centered perspective. Human beings are positioned as the 'center in the world' and 'Man is the measure of all things. Consequently, now, any actions that appear to be of advantage to humans are considered normal. The conception is a significant factor in the human-caused mass extinction of nonhuman species, environmental degradation, and mistreatment of natural worlds. If nature has intrinsically valuable entities other than human beings, then (contrary to the present situation that people need to be justified their demand of non-intervene to nature) any demand of intervention to it would need to be justified (Callicott, 1999).

Human beings consider themselves superior. All scientific and technological products can prove that humans are creative but not superior. Except for human beings, no species on earth value these creations, and no other species argue about the value and creation with human beings. Animals, species and plants and rivers, mountains also have their lifestyles to live. Animals and plants have families as well, and they have defensive power from the outside world. Accordingly, how could human beings have the right to doubt other nature's existence and wellbeing on this earth? The exclusion of nonliving human-built environments, though these environments often do serve as the matrix within which nature affects people.

If there is any other distinctive difference between human beings and animals, that would be human beings are more destructive to nature than animals. There is much evidence found to conclude that humans were destroying nature several times throughout Earth's history. The extinction of the Australian megafauna and mega beats 45,000 years ago, 12,000 years ago in America, the large extinction on Pacific Ocean islands 1500B.C.,

New Zealand in AD 1200 and other islands Atlantic, Indian, Arctic Ocean and Mediterranean Sea (Harari, 2015).

A natural being, human is the part of the whole. A member of a specific species adapted in ecology through the evolutionary process, which is closely connected to a larger biotic community within a network of ecosystems. So natural beings construct their intrinsic value, they defend their existence, and this value successfully becomes transfer from the individual natural beings to the species, and then from species to the biotic communities, up to and including nature as a whole. Everything in nature plays a role in which humans live as part of nature, and their history evolves. In nature evolution and ecology, the kinship of humans with all the other living beings are coevolved, whose survival depends on the integrity of a certain number of ecological processes.

As emphasized in Chapter III, human nature separation is one of the leading problems of environmental issues. There is a famous last person theory proposed by Routley (1973)⁶⁹, asking if there is anything wrong with destroying all plants and animals before he dies, which was an illustration of the environmental ethics defenders' opposing points on human-centered valuation system. Richard himself is a strong defender of environmental ethics. On the one hand, with the last person theory, I would oppose anthropocentrism with the following points, it is wrong to believe that nature has no value in a world without human beings since nature does not exist just to serve human beings' well-being. Maybe, without human beings, nature would be a great disaster. There is also another possibility that non-human entities in nature might flourish much better, and the earth might be a much more comfortable habitat for other species. Along with human beings, there might have millions of opportunities that our siblings or any other animals had controlled the natural surroundings. If we think humans are playing a major role in this history, non-human entities are playing sub-characters. Without these sub-characters, the whole show might be very dull to watch, and the main character is unnecessary. On the other hand, the last person's argument might arouse misunderstanding as separating

human beings from nature, setting nature and humans as separating parts, and supporting the anthropogenic belief of humans deciding the existence of nature value. If nature shares the objective intrinsic value was believed, no damage or destruction caused by human beings should be encouraged. A proper attitude based on intrinsic (non-instrumental) value shows only those certain attitudes ascribe non-instrumental value to nature. If the forest were the cause of the destruction of the human race, the Last Man's action might be acceptable. However, the truth is quite the opposite. In other words, whenever it is wrong for the Last Man to destroy the forest, the forest thereby has its intrinsic value.

With the above, it does necessarily imply that nomads life presents a fundamental challenge for modern societies to re-appraise their ideals of relationship with nature and concerning nature. Given that nature, in the modern world, is characterized by interdependency and isolated geographical box. Accordingly, the environmental crisis is a global concern, requiring an appreciation of social, cultural, and natural complex systems. And yet, modern scientists have monopolized the topic, continuing to treat environmental degradation as if it were a separated problem. Instead, maybe one of the most effective methods of curbing ecological disasters requires the participation of nomads and indigenous people.

Conclusion

As concluding, the nomads ecosystem was kept under the combination of migration, shared land usage, and Shamanism. The core of this system is to keep the holism of the whole nature system and ensure people's survival. The instrumentalism of land usage disrupted the synthesis of this entire system. In this study, the construction of holistic intrinsic values in grassland in the early period of the nomad's life and its replacement of instrumental value is strongly highlighted and analyzed in Chapter VI. The spread of instrumentalism is the continuous pressure towards the disappearance of nomadism in the whole Inner Asian regions. It remains the biggest challenge they are facing now for preserving their land and ecosystem. This instrumentalism of nature and denying the intrinsic value of nature, opposing the relational value, jeopardizing the holism in nature, unfortunately has come to define nomads people's relationship with nature and threaten the existence of nomads.

Human-nature Relationship in Nomads

The whole work is connected and also conclude by making three critical distinctions in how nature matters to Mongols, referring to the changes in the relationship between Mongols and nature from the early nomads era to current modernization, which I got inspiration from O'Neill (2008). He described humans' close connection with nature by "Living from the world, living in the world, living with the world". John O'Neill attempts to show the relatively harmonious part of the human-nature relationship; nature is a resource for human being's living, the world is a living place for human beings where every event or activity takes place. This theory shows that we are part of this nature that we are one species among the larger biotic community living on this planet and points to how we coexist with non-human nature. Thus, we are one species alongside the larger biotic community living on this planet. I differentiate a third category, *nature to humans*, which points to the very fact that we apart from nature, and this separation makes us

concentrate on what we got from nature. With the above, the title of this project shall follow the following explanation.

Mongols in Nature - reflects the value of nature as a means of our existence to which we belong to. Generally, nature is a place that is the source or primary stage of life events, in which cultural and social values are born and everything related takes place. It manifests that the Mongols coexist with non-human entities alongside, and they are one species of the larger biotic community. This notion of a holistic perspective is reflected in the early nomads system. Living together with natural beings is associated with recognizing intrinsic values of non-human nature and respecting them as they are, and reflects spiritual experiences with nature.

Mongols with nature - emphasize the mutual and equal relationship between nomads people and nature, which means nature is inclusive of people. It expresses that people share nature with the non-human world in equal space. The nomads ecosystem functions not only for humans but also for non-human entities like wild animals and plants. It can be related to practices of care, kinship, and reciprocal relationships between people and nature.

Nature to Mongols - spans both the material contributions that nature makes to Mongols, mostly in the current nature-Mongol relationship. This ranges using grassland as natural resources, and these values are predominantly instrumental and relate mainly to relational values constitutive of well-being for people. Most importantly, it reflects instrumental values associated with benefits gained from nature trade-offs, such as money formed economic expansion. "Nature to Human" has become heavily integrated within science, policies, and mainstream paradigm.

As emphasized in the analysis of the migration system in Chapter IV and Shamanism in Chapter V, the recognition of intrinsic values have developed throughout the long-term direct connection and interaction between humans and nature. It is impossible to fully reflect the intrinsic values of nature without human beings' reference

or experience. Human beings tend to value the things around them, and the more they understand, the more they are prone to protect and value intrinsically. The general meaning of Rolston's environmental ethics philosophy is more accessible by seeking the presence of objective intrinsic values of nature, where the human mind encounters or discovers them rather than giving them to the world. For nomads point, yet the recognition of intrinsic values of grassland needs to be distinctly articulated via nomad peoples' long-term experience within it. The nomad ecosystem suggests that recognition of intrinsic values was intimately intertwined with relational values. The recognition of intrinsic value via relational connection living with and in nature provides an approach to understanding why the nature-world matters to nomads. Subjective intrinsic values embedded within relational values such as Mongols recognized that the grassland was only sustainable under migration system. Maintaining a close relationship with nature is rooted in nomads migration lifestyles and spiritual norms. Indeed, within this sustainable long-lasting relationship, the whole nomads system displayed a potent combination of intrinsic, relational, and instrumental values.

The intrinsic value of nature is independent of humans' account, which reflects that non-human entities in this system are respected as they are and, at the same time nomads people utilizing the system for their survival. The migration talks of how nomads manage to live in grassland, indicate the intrinsic quality of the grasses and species, whereas the focus is on the perspective of how the whole nomads system kept preserved and protected irrespective of human interruptions. The intrinsic values of this nature are closely associated with a subjective perspective and articulated by the positive recognition. Thus, the relational value was embedded in the environment where the nomads people and natural objects like domesticated animals, wild animals, and vegetation are involved. The intuitive and comprehensive understanding of the nomad system provides an avenue for holistic intrinsic value, allowing for a broader understanding of intrinsic values as non-instrumental overlapped with relational values.

In Chapter III, the framework of holistic intrinsic value is clarified. The existence of a whole is a fundamental feature of the world and every presence in the universe. It regards animated and inanimate natural objects as wholes and not merely as assemblages of elements or parts. The wholeness includes both the physically existing entities and the spiritual appreciation of such existences in nature. Nomads mobile organization forms a unity with grassland, domesticated animals, Shamanism and migration, and herders. Of importance is that it emphasized the balancing whole by adjusting the parts. The balance of the whole allows an individual's equal surviving condition within its interdependent and interconnected relationship, and the community exists in equilibrium and remains a functionally integrated phenomenon. The holistic conceptions are firmly grounded in the recognition of mutually interlinked and interdependent connections within those factors.

With the above holistic theory nomad ecosystem is a holistic whole that includes four basic holistic approaches:

(1). Every physical property (migration, livestock animals, sharing grassland, nomads people) in this whole cannot be reduced to separate parts.

(2). Its parts are dependent on the nomad ecosystem as a whole so that the parts cannot exist without the whole.

(3). The whole system is intrinsically purposive and self-organizing.

(4). Nomad people in this system instead is the coordinator between nature and humans themselves than the center of this system.

The parts themselves thus take their meaning from the whole. Each particular part is defined by and dependent on the total context. The unified cycle itself is a dynamic interactive relationship of all its parts and a dialectical relation between parts and whole.

Each biological individual in the entire ecological chain plays their respective functions within their circulation; most important is that their value cannot be only judged by their contributions to humanity. The holistic approach that is the central thinking of Leopold's Land Ethic theory, it links everything in nature as one integrity unit. Leopold

holds a negative and critical attitude on anthropocentrism and criticizes anthropocentrism for seeing the natural environment as a subsidiary product outside the relationship between man and society. Land ethics has changed humanity's understanding of the relationship between man and nature by including the human, non-human, mountains, rivers, forests, wetlands, and everything on Earth. Leopold's land ethics advocated that ecology is the existence of all the species' living conditions and mutual relations. Within this circulation, there is an interaction between species and humans. Within this interconnection and interdependence of this community, the activities of the species and vegetation will impact humans as well.

Mongol's holistic culture not only embrace human as part of nature and people live within nature, and do not try to transcend nature, but honor nature's rules and ways of supporting life on Earth as part of the cosmic order, which is especially shown in migration and Shamanism. Traditional holistic living is a way of life, which emphasizes balance, harmony, and respect for all living things in nature. To understand nomads is the holistic system, connecting with nature on natural wholeness, which is a defining characteristic that distinguishes it from agricultural and industrial worlds; nomads life is under cosmic order tightly related to nature. This can be extending to the Inner Asia area, as "Indigenous Inner Asian pastoral people represent their 'traditional' orientation toward surrounding nature (*baikal orchin*) as respectful and holistic" (Humphery and Sneath, 1999). "The culture of Inner Asia was closely tied to mobile pastoralism with its connotations of space and freedom of movement, and to Buddhism, associated with respect for all life-forms and the cultivation of individual and communal spirituality (Humphery and Sneath, 1999)."

However, the implication of land usage privatization followed by agricultural and industrial expansion in Inner Mongolia is that the grassland is tagged with economic value with the assumption of humans can manage the whole ecosystem processes. Given the increasing emphasis on nature as a service provider and contributor to human well-being,

the increased attention to human-centered approaches in nature valuation pays little attention to justice concerning the interests of non-humans. The current conflict between the grassland degradation in the nomad area and the acceleration of modernization is characterized by eliminating relational and intrinsic value and opposing its original holistic approach that has existed for such a long time. In instrumental philosophy, the holism of intrinsic nature is rather understood as a mechanical and technical process of parts than as a whole that emphasizing the interconnections and interdependence between parts. Instrumental valuation is inadequate, and the perspective is particularly unsatisfactory in that it fails to acknowledge the interconnected and interdependent relationship within nature. It jeopardizes the intimate relationship between humans and nature and rejects any other values that exist within nature, vice versa, it encourages humans to view nature or nature objects to be exploited or a resource to be managed to meet human demands and expectations. Given this anthropocentric failing, it is little wonder that Mongols find themselves in opposition from essentially incompatible nature thoughts with mainstream societies.

Connecting Back Human-Nature Relationship to Holistic Intrinsic Value

The limitations of the environmental ethics studies suggest that intrinsic, relational, and instrumental value, within which only the combination of intrinsic, instrumental, relational value with a holistic approach, is close to addressing the nomads' nature thoughts. Environmental ethics studies are often assessed using various methods designed to address broader research questions. Therefore, the concept of three nature valuation systems loosely related to the actual research outputs outside of mainstream societies. Thus three nature valuation approaches originating from environmental ethics academic disciplines, which diversity of approaches and lack of cohesiveness loosen the possibility to correspond to the nomads environmental ethics studies rightfully.

As analyzed in Chapter III, unsurprisingly, the most frequently studied instrumental and intrinsic value of nature are the most easily quantifiable, further deepening the gap

between people and nature. The relational value perspectives seem to reflect the development of a relatively new research field that attempts to provide a well-established, reproducible research framework for the human-nature relationship in border fields. However, relational value is a vibrant research arena where incipient directions emphasize its anthropocentric part, which is definitely against the nomads and indigenous understanding of their nature. An overemphasis on quantifiable usage of nature leads policymakers and local peoples to assume that these represent the economic development that is sacrificing the local nature and landscapes as a whole. Monetary valuation eases the accessibility of nature is a crucial factor typically included in monetization. Unfortunately, the trade-off relations between humans and nature, particularly in instrumental value, is centered. To overcome the anthropocentric valuation, focusing on nature's qualitative approaches is justified by embracing the holistic intrinsic value.

There are and will be many scholars and researchers who have been trying to explain the nomads and some indigenous cultures with the agricultural and industrial worldviews. However, the holistic approach is dismissed among those works. The holistic intrinsic value of nature is underlined to gain a holistic understanding of the human and nature relationship and highlights robust linkages between people and nature within nature. The collaboration of several research theories in holistic intrinsic value is equally necessary to uncover a range of partially overlapped or unidentified literature in nomads and indigenous studies. Despite this, the framework shows non-anthropocentric environmental ethics scholars should be more inclined to find the concept of human-in-nature in conflict with the utilitarian literature. The framework can associate and reflects nature's intangible and invisible benefits to people. Deeper engagement of this further strengthens the methodological and philosophical foundations of environmental ethics studies.

Being a new theoretical framework, the holistic intrinsic value can formulate theological or philosophical insights. Holistic intrinsic value is a good point of departure

for nature value research, not least because they incorporate holistic concepts that fall outside the three-valuation system. The merge of discrete research clusters reveals plausible alternatives and distinct ways to conceptualize and measure nomads and indigenous ways of environmental thinking. The following are becoming possible: (1) to synthesize the existing approaches to human-nature relationship and nature valuation in different research communities, (2) to mobilize it as a conceptual bridging between research field in out-of-main-stream worlds and to address real human-nature relationship in nomads and indigenous groups. (3) to reduce the production of disconnectedness in three-nature valuation. The divergent perspectives illustrated by the three-valuation system should not compete but, rather be complementary. For example, the recognition of intrinsic value shares many aspects of relational value. Similarly, discovering the instrumental value of nature to serve human beings is caught between human participation in discovering the inherent value of nature.

The holistic intrinsic value calls for diverse elicitation and valuation methods across multiple scales and types of societies. Environmental ethics research seems especially well-positioned to use its moral focus on nature to illustrate that nature is indispensable. On the contrary, the factual accounts processed by the economic assessments are less successful in arousing environmental awareness. The holistic intrinsic value can be used as an effective foot in order for engaging stakeholders with different values and goals.

This framework suggests a right relationship between humans and nature that should be based on nature-prioritized relationship to maintain a sustainable relationship of coexisting nature and human beings, which is what holistic intrinsic value refers to. In this life-threatening crisis, a new relation shaped by human-nature to restore our relations with the Earth is needed. Ultimately, nature and humanity are inseparable; nature cannot be defined so that it does not include humanity. Concerning local and indigenous nature and human relationships, the new environmental valuation that culturally informed and appropriate solutions to such problems and issues are urgently needed. Nomads system

includes people utilizing nature as a whole. Nomads established their relationship with nature by prioritizing nature rights without dismissing human existence.

We human beings are now in a position to have a far greater impact on nature than most of the other life forms on this planet. Given that human beings need food and shelter, human rights are over-prioritized. Humans have strong intentions to enjoy rights to their own life, liberty, and the pursuit of happiness in terms of sacrificing nature and connecting them to their fundamental human rights. Over billions and millions of years of evolution, the coexisting arrangement of life and non-living components in nature is symmetrically organized. However, contemporary scientists are dismissing this holistic function and focusing on the 'reductionist' view, in which the activity of a living cell or an ecosystem, for example, is explained by being reduced to its parts, rather than including the relationship between those parts as essential to our understanding. Similarly, one animal is also studied partly rather than studied by one part of the whole ecosystem. Scientists should try to prove that physical substances work and exist in highly complex, interdependent, and changeable contexts and relationships.

The right relationship with nature is based on feeling a sense of awe for the cosmos and embracing humankind's appropriate place in the cosmos and nature. The development of the right relationship between humans and nature should be nurtured by the holistic, relational, and intrinsic value of nature. This value is a relationship between friends and relatives for love, and not merely for the pleasure or profits they might bring. Besides, recognizing the intrinsic value makes much more sense to be inspired to live within the Earth's ecological limits than to ignore the ecological consequences of relentless economic growth. Moreover, understanding the mutual interconnections and interdependencies of the inhabitants of the planet is essential to make sure own survival within this system.

This study showed that human-nature coexistence is possible, and we identified one major driving that influenced human-nature coexistence from the perspective of the

nature valuation process. The coexistence was supported by people's understandings of the local nature. People with a positive and right perception deemed to give the right decision. The peaceful, harmonious, and balanced, and relatively low damaged traits are considered critical to the coexistence of humans and nature. Experiencing nature and the values ascribed to them were vital in shaping people's perceptions. The perception was positive for people who had long-term interactions with nature. How people conceptualize their interactions with nature might be described by people's opinions on nature. Moreover, preventing conflicts by adjusting human behavior or using traditional techniques was seen as an integral component of this coexistence.

The nomads case showed that critical drivers for people's perceptions of human-nature coexistence were non-use values, thus, nature-prioritized relationship. These were constructed through genuine links between people and nature, where people valued their surrounding landscape and considered nature as part of themselves. Such values may be more important drivers of people's perceptions towards nature than damage risks. Moreover, such a genuine link to nature is perhaps facilitated by continuous coexistence over long periods. Such coexistence most likely influences human behavior to avoid conflict with nature. Thus, constant coexistence shapes the emotional component of human culture to accept and adapt to nature.

The mismanagement and misinterpretation of the human and nature relationship could become significant obstacles to coexistence. The feeling of disempowerment can be reduced by including people in local nature management through participatory processes. Such participation or collaboration could react against some natural issues by increasing local people's voices towards nature. In particular, regional participatory approaches foster people's connection to their landscape and provide transparency around management. Therefore, much more scholars and researchers should be encouraged to obtain a comprehensive drive to human-nature coexistence. Hence this thesis is an attempt to advocate strongly for a holistic valuation system but brings to table a much

finer and detailed paradigm of understanding human-nature relationship, especially by an example of nomads people, Tengirism, migration with animals and a larger system of co-existence with nature. Agriculture and industry are the contemporary realities of modern life which are even impacting the nomadic life but a genuine evaluation of these systems in degrading nature makes us realize that a better and holistic system of nature valuation is still awaited and much needed, and this thesis is a small attempt in that direction.

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- ⁵ <https://www.andreawulf.com/about-the-invention-of-nature.html>
Review from ‘New York Times Sunday Book Review, 10 Best Books of 2015’
- ⁶ Hublai Khaan was a grandson of Chinggis Khaan, the second son of Tolui, the fourth son of Chinggis Khaan, reigned from 1260 to 1294 and established the Yuan dynasty in 1271.
- ⁷ Yuan Dynasty was established by Hublai Khaan and ruled China from 1271 to 1368.
- ⁸ Official name is the Xinjiang Uyghur Autonomous Region, is an autonomous region of China.
- ⁹ Qing dynasty was from 1636 to 1912, the last imperial dynasty that ruled China.
- ¹⁰ The university is one of the universities in China for ethnic minorities, located in Beijing.
- ¹¹ Sixth National Population Census of the People’s Republic of China.
内蒙古自治区 2010 年第六次全国人口普查主要数据公报
http://www.stats.gov.cn/tjsj/tjgb/rkpcgb/dfrkpcgb/201202/t20120228_30397.html
- ¹² Sixth National Population Census of the People’s Republic of China.
内蒙古自治区 2010 年第六次全国人口普查主要数据公报
http://www.stats.gov.cn/tjsj/tjgb/rkpcgb/dfrkpcgb/201202/t20120228_30397.html
- ¹³ The Republic of China (ROC) was lasted 1912 and 1949 established by Sun Yat-sen, which overthrew the Manchu administration.
- ¹⁴ The Guomindang was Formed by Sun Yixian and his followers in 1912, China’s largest revolutionary and republican party until the late 1930s and was able to rule China until the Japanese occupation in the late 1930s.
- ¹⁵ The article: Contemporary Mongolian Population Distribution, Migration, Cultural Change, and Identity, included in the book “China’s minorities on the move: selected case studies”.
- ¹⁶ Down to the Countryside Movement was a policy initiated by Mao Zedong in the late 1960s and early 1970s, sending urban educated youth to the countryside to learn from the workers and farmers.
- ¹⁷ Mongolian Rice is golden colored, crunchy texture and tempting flavor. It can be stewed with meat, soaked up within Milk Tea, fresh milk, or yogurt.
- ¹⁸ http://www.mee.gov.cn/xxgk2018/xxgk/xxgk15/201810/t20181017_662671.html
The Autonomous Region rectification program requires that by 2018 the geological environment management must be 150 square kilometers around the new mine area, by 2020 must be up to 300 square kilometers, the mine production staged treatment due acceptance rate of 100% have to achieve the "side mining, side treatment, side restoration".
- ¹⁹ Included in *Culture and Environment in Inner Asia, Volume 1: The Pastoral Economy and the Environment*. 1996 pp.12-57.
- ²⁰ Article title: Inner Mongolia sinking under the weight of its mining industry
<http://www.globaltimes.cn/content/734241.shtml>
Photo taken By Yan Shuang, Lu Guang, courtesy of Greenpeace at *Global Times* 2012-9-20 1:40:04

- ²¹ Jan Christian Smuts (24 May 1870 – 11 September 1950) was born in South Africa, was a political statesman and philosopher. In the academic field, he was known as a pioneer of the concept of holism in his 1926 book “*Holism and Evolution*”.
- ²² Rolston was born in Nov. 19, 1932, Rockbridge Baths, Virginia. He is a philosopher and Professor of Philosophy at Colorado State University. He was a pioneer in the field of environmental ethics. “A New Environmental Ethics: The Next Millennium for Life on Earth” (2012) and “Environmental Ethics” (1988) etc.
- ²³ John Baird Callicot, born in Memphis, Tennessee on May 9, 1941. American environmental philosopher and leading contemporary exponent of Aldo Leopold’s land ethic in his works as “*Companion to a Sand County Almanac*” (1987) and “*In Defense of the Land Ethic*” (1989) etc.
- ²⁴ Leopold Aldo (January 11, 1887 – April 21, 1948) was an American author, environmental philosopher, and environmentalist. He was one of the most influential environmentalists in modern environmental ethics. He was a professor at the University of Wisconsin and is best known for his book “A Sand County Almanac” (1949).
- ²⁵ As Rolston III noted: “In the West, following the Enlightenment and the scientific revolution, nature came to be regarded as a value-less realm, governed by mechanistic causal forces. Values arose only with the interests and preferences of humans, for whom nature was natural resources. For four centuries, Western philosophy and theology were both dominantly human-centered, anthropocentric. People were all that counted in ethics. In the second half of the last century, somewhat ironically, just when humans, with their increasing industry and technology, seemed further and further from nature, having more knowledge about natural processes and more power to manage them and rebuild their environments, the natural world emerged as a focus of ethical concern.”
- ²⁶ <https://www.ipbes.net/about>
The Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) is an independent intergovernmental body, established by member States in 2012. The objective of IPBES is to strengthen the science-policy interface for biodiversity and ecosystem services for the conservation and sustainable use of biodiversity, long-term human well-being, and sustainable development.
- ²⁷ Fig. 1: John J. Piccolo (2017): *Intrinsic values in nature: Objective good or simply half of an unhelpful dichotomy?*
- ²⁸ “The Rosetta Stone is an inscribed rock tablet discovered in Egypt in 1799, which holds the key to understanding Egyptian hieroglyphs (<http://www.britishmuseum.org/explore>). The top band consists of Ancient Egyptian hieroglyphs, the middle band of Demotic script, and the bottom band of Ancient Greek writing. The inscriptions are three translations of the same decree, issued in Memphis in 196 BC, affirming the royal cult of Ptolemy V. In the early years of the 19th century, the Greek inscription was used as the key to deciphering the others (Sandra Diaz and Sebsebe Demissew et al., 2015).”
- ²⁹ The more we learn about our world, the more we see it as made up of things that are interrelated, interdependent, and defined through their relations with other things. It would be strange, then, to see value as something that can somehow stand alone. It might be thought to be especially strange for those of us who work on environmental issues: we spend much of our time urging people to recognize the interdependence of the different parts of the natural world. How odd that we should be insisting on values that are independent” (Katie McShane 2007, p 44)
- ³⁰ <http://www.teebweb.org/>

- ³¹ The subjectivist claims that the only sources of value are the evaluative attitudes of humans. But this does not entail that the only ultimate objects of value are the states of human beings. Likewise, to be an objectivist about the source of value, i.e., to claim that whether or not something has value does not depend on the attitudes of valuers, is compatible with a thoroughly anthropocentric view of the object of value?
That the only things which do have value are humans and their states, such that a world without humans would have no value whatsoever (John O'Neill 1992, p.121).
- ³² We humans carry the lamp that lights up value, although we require the fuel that nature provides.
The actual value is an event in our consciousness, though natural items while still in the dark of value have potential intrinsic value. Man is the measure of things, said Protagoras. Humans are the measurers, the valuers of things, even when we measure what they are in themselves (Rolston 1993: p15).
- ³³ From Rolston's article "Naturalizing Callicott" (2002: page 117) included in "Land, Value, Community: Callicott and Environmental Philosophy" (2002).
- ³⁴ From his article: Aldo Leopold's Land Ethic: A Critique.
https://www.academia.edu/37775523/Aldo_Leopolds_Land_Ethic_A_Critique
- ³⁵ Jan Christian Smuts and his permanent mission by Paul H Möller. This article was dedicated, in 2006, to the 80th anniversary of the first publishing of Holism and Evolution at London, 1926.
- ³⁶ The book was published in September of 1962 and named one of the greatest science books. The book documents the adverse environmental effects caused by the spread of using pesticides. The book brought public attention and finally get to the enormous changes in polices.
- ³⁷ <https://www.andreawulf.com/about-the-invention-of-nature.html>
Review from 'New York Times Sunday Book Review, 10 Best Books of 2015'
- ³⁸ This photo is from Facebook Account: Beautiful Mongolia posted on May 3rd, 2019.
- ³⁹ These are five main types of domesticated animals referred to as the *Taban Hushuu Mal* (five animals in English).
- ⁴⁰ The novel is published in 2004 with great popularity. This is a semi-autobiographical novel about the experiences in Inner Mongolia of a Chinese young student from Beijing. The writer, Jiang Rong was dispatched to Inner Mongolia and stayed with a nomads family in 1967.
- ⁴¹ Included in Culture and Environment in Inner Asia Volume 2: Society and Culture (1996).
- ⁴² "Land Ethic" is a chapter from his well-known book, *A Sand County Almanac*, which is considered as the basis for the current environmental ethic theory.
- ⁴³ Hsiung-nu was a tribal nomadic people who inhabited the eastern Eurasian Steppe from the 3rd century BC to the late 1st century AD.
- ⁴⁴ Qing dynasty was from 1636 to 1912, the last imperial dynasty that ruled China.
- ⁴⁵ Altan Khaan lived between 1507–1582. His name means Golden King in the Mongolian language.
He had managed to unite a tribal league of Mongolia and the Southeastern part of Inner Mongolia.
He also established the current capital city of Inner Mongolia, Hohhot.
- ⁴⁶ The Mongol community was a group work tradition that based on migration;
the collapse of it has much greater influence in Mongol people and their separation from nature.
- ⁴⁷ Khalkh Juram Law was enacted in 1709 as customary laws of the Khalkha Mongols and was the compilation of many laws from different fields.
- ⁴⁸ The Bogd Khaan was born in 1869 in Tibet and died on 20 May 1924). He attempted to unit Mongolians

and separate from China. In 1911, G declared independence from the Qing dynasty but lost his power in 1919 to Chinese troops.

- ⁴⁹ The mountain is situated in the northeast of Mongolia. The site is believed to be the place of Chinggis Khaan's birth and burial.
- ⁵⁰ Otgontenger is located in Zavkhan Province. Its summit is currently calculated to reach an elevation of 4,008 meters above sea level.
- ⁵¹ This law was one of the laws in Mongolia's purpose to protect nature. This was effective on 1st April 1995. It consists of 39 articles and Specially protected areas are broken down into strictly protected areas, national conservation parks, nature reserves, and monuments.
- ⁵² Culture and Environment in Inner Asia Volume 2: Society and Culture (1996)
- ⁵³ He is an editor of Sacred Hoop, a magazine about Shamanism.
- ⁵⁴ Hadag is a blue or white-colored long silk or fabric cloth with sacred meaning and blessings, mostly used in traditional ceremonies and presents to guests.
- ⁵⁵ This photo is taken by a local people named Duudagulaa on June, 9th 2020 and the location is Inner Mongolia, Jiriim *Aimag*, Naiman banner, Sebhuliinovoo Gacha.
- ⁵⁶ "The Secret History of The Mongols" is the oldest surviving literature on early Mongolian history that written anonymously. It was a very important source of the account of Chinggis Khaan and the old Mongolian language.
- ⁵⁷ Throughout the Manchu period, the *Hosho* was the basic political unit and gradually increased the number of *Hosho* both in Mongolia and Inner Mongolia. The other bigger or smaller administrative units were also added.
- ⁵⁸ Dolon-Nuur is located in Xilingol *Aimag* of Inner Mongolia. Historically it was the summer capital of Mongol Khaans from Kulai Khaan. During the Qing dynasty, this location was also a religious center. In 1691, Khalkah Mongol regional leaders gathered in Dolon-Nuur and decided to follow the rules of the Manchu administration.
- ⁵⁹ In Mongolia, *Aimag* is equivalent to Province. In Inner Mongolia, *Aimag* is smaller administrative districts that belong to Autonomous region that equivalent to Province.
- ⁶⁰ The number is from the Chinese Government homepage:
http://www.gov.cn/guoqing/2016-11/18/content_5134287.htm
- ⁶¹ According to Hu Mingge(1994), a senior director of the Animal Husbandry Bureau in Chifeng City, the practice first began in western Inner Mongolia in Yikezhao league. Before that, the term 'enclosure' was used for warming pens for livestock.
- ⁶² In 2002, the State Council approved the program, and the program is to restore grassland vegetation, improve the ecosystem and productivity of grassland.
- ⁶³ Jalartaiin Munghetogteg: Born in Ulaanhadaa of Inner Mongolia, Freelance Writer, Journalist in Inner Mongolia, Ulaanhadaa Radio Station. He has got very basic information for all the Mongol herders. In his book, he explained the changes and relationship of Mongols with their living surrounding, including its limited nature, that occurred after new economic trending emerges.
- ⁶⁴ China's First Five-Year Plan was a Soviet modeled economic program that ran from 1953 to 1957 and Industrial output more than doubled. During this period, the Chinese government also supported the infrastructure buildings and roads for industrial activities in Inner Mongolia.

- ⁶⁵ Following the first five-year plan, the second five-year plan started in 1958 with an ambitious plan and ended in 1962 causing imbalances in the national economy, fiscal deficits over consecutive years, and great hardship for the people.
- ⁶⁶ It has the following characteristics: It is cosmocentric and holistic because it reinforces the balance and complementarity between human beings and nature; ii) it is based on the non-western foundations of society because it is born from the views of indigenous peoples and social organizations of the world, iii) it is polycentric because it recognizes the diversity and plurality of visions and approaches existing in the world, including social, economic, cultural, and political arenas; and iv) it has a non-market-oriented mindset because the capitalist accumulation is not at the heart of society (Dr. Diego 2014 P:4). The relationship should be respected as recognizing Mother Earth as a living being with which we have an indivisible, interdependent, complementary, and spiritual relationship (Dr. Diego 2014 P:2). The economy of Mother Earth originates in the views of indigenous peoples, in which nature is sacred and therefore its environmental functions cannot be monetized and converted into a commodity (Dr. Diego 2014 P:3).
- ⁶⁷ He holds degrees from Durham, London, and Cambridge universities and senior broadcast journalist with the BBC.
- ⁶⁸ He was born on September 14, 1769, in Berlin, Germany, and died at the age of 89 on May 6, 1859. He was a notable Prussian geographer, explorer, and naturalist. With his book '*Kosmos*' he made a valuable contribution to the popularization of science. On the 5th of June 1799, he started his long-term exploration of South America. In 1829 he set off on an expedition to Eurasia. He failed to reach Himalaya, so the Altai was to collect data from Central Asia.
- ⁶⁹ Full name Francis Richard Routley (13th December 1935 – 16th June 1996) was born in New Zealand, philosopher, and environmentalist who was a proponent of environmental ethics. The last person's theory is in his important 1973 paper "*Is There a Need for a New, an Environmental, Ethic?*". In his work, he defended the intrinsic value by criticizing anthropocentrism and argues that ethics should recognize the intrinsic value of various nonhuman or even nonsentient items.

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