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## Editor's Letter

Dear Reader,

In many ways, the *Journal of Eurasian Insights (JEI)* is an experiment. It is an experiment for our ambitious undergraduate students who can now experience how it feels to go through the daunting process of being peer reviewed. It is an experiment for us doctoral students on its editorial board, as it offers us an opportunity to assess undergraduate scholarship and assist their authors as editors of our respective fields. Finally, it is an experiment in publishing a multidisciplinary undergraduate academic journal, despite the added difficulties of working with diverse methodologies, frameworks, norms, expectations, and styles. If I may, I cannot help but be proud of the results of this experiment. While we are indebted to our undergraduate students for taking the time to submit and revise their intriguing works for this success, I would also like to thank the people that helped us create *JEI* in the first place. This journal would not exist if it was not for the encouragement and mentorship that we received from Dr. Di Lu, Dr. Adina-Camelia Arvatu, and Dr. Uli Schamiloglu. We are also thankful to our heads of departments in the School of Sciences and Humanities, and numerous other professors who pledged their support for this project. Furthermore, we are indebted to the Nazarbayev University Library, and especially to Lazzat Arystanova, for believing in this experiment and hosting it on their repository. We also cannot thank our reviewers enough, as without their selfless work, none of the studies presented in this issue would have reached their true potentials.

Of course, humbly, I especially want to thank the editorial board of *JEI*. After all, it was the labour of these nine individuals, who generously donated parts of their summertime to work on this project, that made sure that starting an undergraduate academic journal did not remain as an interesting talking point among a few friends. Those of us who are doctoral students worked as editors for our respective fields, assessing the submitted works, finding peer reviewers, and copyediting the final works as necessary. Ali Dukayev (anthropology), Kamila Kovyazina (sociology), and Aleksandr Motin (political science and international relations) were excellent editors to work with, and on my part, I had immense pleasure of editing the history section. Moreover, we were all extremely lucky to have five fantastic undergraduate students join us in the editorial board. Mira Azhibayeva, Rabiga Akhmetova, Ilyas Butayev, Yersultan Kudaibergen, and Adiya Yessengali worked as highly devoted and meticulous managing editors for their respective fields, which helped reduce the workload of editors considerably and hastened the entire process. I certainly hope that this was

not merely an instructional experience but an outright enjoyable ride for all of us on the editorial board, and I also hope that we can continue to work on this project in the future.

As I conclude my remarks, I would like to add that while the future of *JEI* remains uncertain, it remains uncertain in the best way possible. That is to say, we are constantly thinking of new ways to improve this publication, and thus we are always on the lookout for young scholars who wish to contribute to this project voluntarily. Upcoming issues will indubitably be improved in many regards compared to this introductory and admittedly experimental first issue, and I for one cannot wait to see them in due time. However, until then, I hope that you enjoy the already ripe fruits of our labour.

Sincerely,

Mustafa Serdar Karakaya

Editor-in-Chief

## **Nation-Building Narratives in the Kazakh Literature Curriculum for 11th Graders and Their Moral Towards Women**

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This paper takes as a subject for study the textbook for the governmental program in teaching Kazakh literature to 11<sup>th</sup> graders, looking at Smagul Elubay's Hansulu and Talasbek Asemkulov's Bektory female characters, and tries to investigate them through the theoretical framework on nation-building (Brubaker, Abashin, Anderson) and gender studies. These literary pieces were analysed according to the language utilized, the roles of main characters, their behavior and perspectives, and the issues raised in the course of the storytelling. The goal is to explore how moral narratives towards women are presented to the youth in the process of nation-building. There are brief summaries provided of the excerpts. The concepts of *pa'kness* (sinlessness) and idealized heroine are applied as a parallel for the stories about Hansulu and Bektory. This work eventually considers a modern woman in a world of western-style global norms competing with traditional ones, arguing for the search of balance between the two.

**Keywords:** Kazakh literature; nation-building; gender studies; Er Tostik; female role; kelin

A major part of nation-building is being imposed on Kazakhstani citizens since their childhood years. The national narratives are told through subjects such as Ana Tili (mother tongue), Kazakh language, Kazakh history, geography, as well as Kazakh literature, latter of which will be the focus of this work. It might be crucial to underline that 11<sup>th</sup> grade is the final year of high school for teenagers, and their approximate age is 16-18 years. Kazakh literature is a subject that entails both the culture and history of Kazakh nation as well as transmits morals to the young learner, which ideally should be kept in the reader's mind and spirit in the further stages of life. Each narrative seems to have a slight hint into the students' futures. This paper not only considers the nation-building lines throughout the 11<sup>th</sup>-graders' Kazakh literature curriculum but especially focuses on what the moral is regarding the woman. Who is a woman and a girl in the nation-building narrative, what is her role, and how it may affect the young learners' perceptions of the female – these are the questions which will be investigated. This work will be based on excerpts/chapters in the book used for Kazakh literature for 11<sup>th</sup> grade, which are named after females. Then the women in these pieces will be analysed in their roles, narratives, and moral values as a part of the nation-building agenda for teenagers. The role of gender in the discourse of nationalism is studied. I will do so by looking at '11-shi synyptyn Kazak Adebieti (kogamdyk-gumanitarlyk bagyt)' [Kazakh Literature for 11<sup>th</sup> grade (social-humanitarian studies)] (Orda, Daribayev, and Satylova 2019).

### **About the Textbook**

The literature selected for the textbook mentioned above is mostly written by male authors (e.g. Ilyas Esenberlin, Askar Suleimenov, Kasym Amanzholov, Mukhtar Auezov) about main male characters (e.g. Kenesary, Nauryzbai, Torehan, Mukagali, Abai). I chose to look at two excerpts of the Kazakh literature subject book written for 11 graders by Orda Gulzhahan, Daribayev Samalbai, and Satylova Aiganym in 2019. Gulzhan Orda is a Chief Scientific Officer at the M.O. Auezov Institute of Literature and Art, Doctor of Philological Sciences. She is the leading author who is cited whenever this textbook is mentioned in different sources. Daribaev Samalbai is a Senior Lecturer at the Department of Kazakh Linguistics named after A. Baitursynuly. Aiganym Satylova is a subject expert and moderator of the "Systematic-Methodological Complex" platform, developed by AEO "NIS" for teachers at the country's general education schools. The book starts with Auezov's poetry about friends and the value of friendship in life. Then it continues with Ilyas Esenberlin and his novel

“Kahar” - the third book of “Koshpendiler (nomads)” which describes the history through the stories of Kenesary Kasymuly, Nauryzbai, Iman, Tolebai and other *batyrs* (warriors). Then goes Askar Suleimenov with his “Besatar” novella on the dialogues of Mukagali and Inozemcev & Saruar and Kreigel. This trend of male figures being at the center of the book content continues; although I have found several stories where female figures flicker. For example, the excerpts they choose from “Zhalgan Dunie” (False/Lying World) (p. 108) about “Hansulu” (p. 109) and “Bektorynyn kazynasy” (Bektory’s Treasure) (p. 245) about Bektory are of interest to this work. These women’s parts in the nation-building agenda for 11<sup>th</sup> graders are going to be discussed.

### **Data and Methodology**

This research will focus on the image of these females and will also conduct an analysis on nation-building narratives considering the chapters from the book *Nazarbayev Generation* (2019) and Nazarbayev University (NU) master’s and bachelor’s theses on females in Kazakh literature narratives. The former is Bigozhin’s chapter called “We Love Our Country in Our Own Way” in the book edited by Laruelle. The latter works are master’s and bachelor’s theses of NU graduates Inzhuna Karazhanova (2016) (“Monstrous femininity in Kazakh folklore: delineating normative and transgressive womanhood”) and Aigerim Kanatova (2020) (“*Pa’k* and Prejudice: Theme of Swan and Woman’s Purity in Ongarsynova’s and Makatayev’s Poetry”) from the NU depository.

One of the excerpts is Smagul Elubai’s “Ak boz ui” (White Yurt) trilogy, in particular its novel “Jalghan Dunie” (False/Lying World). This piece describes *asharshylyk* (the famine) and distancing away from spiritual and Kazakh values and tradition. This is one of the tools in the nation-building that this work takes into focus; which Anderson (1983, 6-7, 37) discusses when certain narratives are being heavily used in the print, i.e. Kazakh literature and history curriculum, as a part of the process of imagining the community and, consequently, the modern nation despite the fact that members of a particular community would never even meet their fellow citizens of the same nation but at the same time would belong to one group in their minds. Kudaibergenova (2017, 209) also noted that “modernity and numerous modernization projects completely changed the Kazakh society and culture” and that “mass publishing and mass readership allowed the writers to perform numerous acts of imagining and reimagining... what Kazakhstan is as a nation.” Therefore, if majority of the nation-building in Kazakhstan, due to the 7000-kilometer border with Russia and the socialist past,

is built upon the Soviet identity, then 11<sup>th</sup> graders' Kazakh literature textbook pieces on female main characters considered here use a different approach: the titular nation narrative finding its way to coexist with modernity – the topic which Brubaker (2011, 1785-1786) thoroughly studies.

Moreover, Karazhanova (2016, 100) discusses the concept of *Qazaq Qyzy* (Kazakh girl) which “is a self-described ‘institute of cultural and moral development’...with a mission to bring up proper Kazakh girls.” So, the second story this paper will discover is “Bektorynyn Kazynasy” (Bektory's treasure) about the mystical ring. Here, Bektory is the daughter of a mythical creature. Bektory herself is taken from the “Er Tostik” legend about a warrior-hero in Kazakh folklore. In the textbook narrative she is being re-imagined in a modern world by modern Kazakh author Talasbek Asemkulov. Bektory is being portrayed as a woman who contributes to the heroic male figure's heart being turned to stone, then challenges him to either grow or stay the same. Then, the male main character Kayirboldy goes through his heroic adventures to bring back his heart to make it alive again. In this context, Kanatova's and Karazhanova's theses are quite beneficial contributions for analysing the role of women in mystic literature works and how it resonates with the nation-building agenda.

This paper seeks to find out who a woman is in the nation-building narrative with a qualitative analysis completed through digital research in the libraries and databases. In this regard, pre-existing research on youth and nation-building (Bigozhin 2019) and women in Kazakh literature (Kanatova 2020 and Karazhanova 2016) is used to connect to one topic of female figures in nation-building narratives for the youth. It was found that the topics of ‘nation-building’ and ‘gender’ are popular for research in the Middle East. Works by Liloia (2019) on “Gender and Nation Building in Qatar: Qatari Women Negotiate Modernity” and by Langohr (2014) on “Literature, Gender, and Nation-Building in Nineteenth-Century Egypt: The Life and Works of 'A'isha Taymur” are chosen as references to parallel the role of nation-building process in Gender Studies in different cultures. Lastly, the contradictory ideas are looked at using Karazhanova's and Langohr's papers. Overall, this study is a discourse analysis on power and ideology which looks at language use and literary analysis on interpretations of meaning through the types of themes and characters, and their behaviours.

## **Analysis**

The contents of the textbook are focused on certain figures (mostly writers) in Kazakh or Central Asian culture, and to each such personality the authors of the textbook give a foreword and present their literary works after that. Firstly, the introductions were analysed. “These works of Smagul Elubay describe the hardships the nation went through: lost dreams, days when people were hungry for bread, those who fought for their nation being called as “enemy of the people”, morality and betrayal, the society being separated from spiritual values – the thought that the author wanted to convey to the next generation” (Orda, Daribayev, and Satylova 2019, 107). The language used to describe Smagul Elubay’s works by the authors of the book may be transmitting certain nation-building messages with the use of the ‘common pain’ (the nation had to live through) via words such as ‘hungry for bread,’ referring to other patriots as ‘enemy of the people,’ and their patriotic actions as ‘betrayal.’ Here Brubaker’s (2011, 1788) ideas may be applied to the logic of nationalizing attitude a state takes as the place of and for the ‘core’ nation, and that its survival is at risk of being forgotten or lost. Just like this, the Kazakh Literature textbook discusses the titular nation’s pains and attempts to show the value of the topic. With his stories, Elubay shows a woman’s role as complicated due to many societal, historical, political, and cultural factors, as is shown in the section below. Talasbek Asemkulov’s views are not as clearly portrayed in the introduction part, however, it is noted that Bektory is a fairy, a mystical character from folklore “Er Tostik”, which is re-imagined by Asemkulov in a postmodern style of writing, where a young Kazakh man meets Bektory in an Almaty club. Now, brief summaries of the excerpts chosen for the textbook will be given. It may be important to note that the authors of the textbook decide which excerpts to include, which may also influence the narrative being transmitted to the young reader.

### **“Hansulu” by Smagul Elubay**

Hansulu is an elderly woman, whose husband passed away. She is sick herself, has a daughter and a son, and a few grandchildren from both children. She dreams of meeting her husband Shege after she passes away, and of sharing with Shege, how well she raised them. However, Tugelhan, her son, loses his job in the Party, and suffers from alcoholism; and her daughter’s husband Toktasyn occasionally raised his hand on his wife until his sudden death.



Figure 1. Illustration from the textbook, depicting Hansulu and her children.

Thus, the message which is portrayed about the role of the woman in “Hansulu” is that despite the loneliness, alcoholism, unemployment, domestic violence, which is going on in the society, she stays a caring and loving wife, mother, and grandmother, does the right things, and wishes everybody around her the best, in spite of her own feelings of worry and resentment. This narrative may be connected to Bigozhin’s work in *Nazarbayev Generation* (2019) to look at female students the author interviews, who may be considered as the audience which Kazakh literature is educating. Before entering the Western-style higher institution, these female students were exposed to narratives like that of Hansulu’s. Although the students wished to be modern, they also valued creating a family as their goal in life, even bringing up the importance of being “a good *kelin* (a female who entered the husband’s family – daughter/sister-in-law)” for them. Liloia (2019, 347) in her research on Qatari women writes that although domestic struggles may interfere with personal aspects such as career and education, they “choose to exercise agency through navigating the existing systems rather than question traditional sociocultural norms.” Similar to what Bigozhin (2019, 129) looked at when his female interviewees were trying to find the balance in their western-style global norms together with, and leaning towards, Kazakh traditionality, Liloia (2019, 349) discussed how Qatari females’ own choices indicate “a heterogeneity of desires and concerns.” Therefore, the concerns for Kazakh females may come from narratives like “Hansulu” in the governmental program teaching the youth on what a ‘good’ Kazakh wife, mother, and grandmother should be like: despite the hardships, she goes on to care about her late husband’s wishes and her family’s well-being.

### “Bektorynyn’ Kazynasy” by Talasbek Asemkulov

Kayirboldy comes from a village to Almaty for study and works as a waiter. When time comes to stand up for women who were in danger, Kayirboldy does so, and receives a ring from Bektory for that as a reward. It turns out the ring was very valuable, so he sells it in a pawnshop anonymously for a huge amount of money, which he spends on a 3-room apartment. After some time, Kayirboldy meets her again, feeling angry and surprised at why she would test a decent man like him who comes from a poor family and works honestly. She leads him to a house with an infinite corridor in the basement of the house, finally introducing herself as Bektory, the daughter of a mystic creature, and he remembers that his grandmother had been telling him about her in “Er Tostik” folklore stories since childhood. Then, Kayirboldy has to go through challenges of morality, where Bektory acts as the navigator and wisdom whisperer or as the one who tests him giving way for temptation; this depended on his choice.

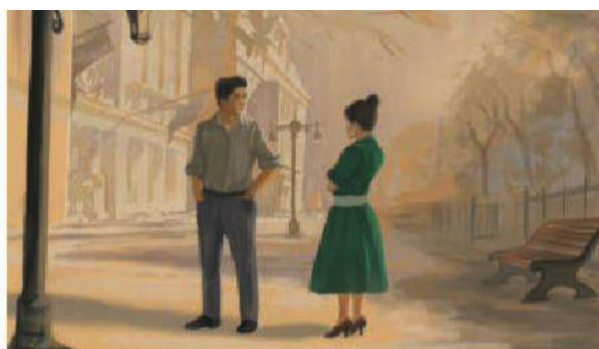


Figure 2. Illustration from the textbook, depicting Kayirboldy and Bektory.

The story concludes that there is no way to know what good is without the evil standing next to it. The author described the two types of *pa'k* (sinless/innocent/virgin): the first is when one is just born, unaware of sin, adultery, abuse, without experience, without character; the second is innocence that has passed through all the stages of this world without being tarnished. It is very interesting that the topic of *pa'kness* is brought up in the conclusion of this story, although it refers to the morality of the character, however, the driver and navigator for morality here is Bektory, a female figure. She helps to show the right path to the main characters although they may be afraid of her or frustrated with her. Kanatova (2020, 18), for example, in her analysis of *pa'kness* in On'garsynova's and Makatayev's poetry, writes that *pa'kness* issue defined women in the past and "the

offender of the traditions was punished ... where a woman as an offender or sinner lost her purity and punished by being undeserving to wear a white wedding dress and being unhappy" (p.18). The direction which Asemkulov takes here is an extraordinary one, where he does not actually use the mundane outlook on purity with regard to a woman's virginity, but shows that purity is related to one's character, and it may come out as a result of the encounter with the 'evil'. Apart from that, he portrays a male figure who gets corrupted due to difficulties, and finds his way to purity, which is shown by the woman. Asemkulov in this sense aligns with Abashin's (2012, 156) thought that for the Kazakh authorities "it is more important to demonstrate the achievements of modernization than of traditionalism, and to show that they are turned towards the future rather than the past." Thus, the complex dynamics in these characters' relationships and the flows of distinct themes and their interpretations are far beyond the common narrative on purity.

### **Discussion and Conclusion**

I would also like to present ideas that may contradict all of the above in a way. Both of these women, Hansulu and Bektory, can somewhat be included into Karazhanova's (2016, 99-100) category:

"The idealised heroine is not a real person with her own needs and desires, instead only existing to prop up and support the male protagonist. She is beautiful, talented, intelligent, wise—also stubborn and unafraid to speak her mind which is not an issue when she is always necessarily correct in her observations and predictions. Above all, she is loyal and devotes her entire self to her husband, with her sole purpose being keeping him alive and doing everything necessary for him to commit his heroic deeds."

Although Hansulu never speaks up, her character arc is dependent on being straightforwardly loyal to everyone around her. Bektory, however, says, as it seems, controversial thoughts throughout the whole story until her words make the perfect sense in the very end. So, if Bektory and Hansulu were judged according to Karahanova's category of 'idealized heroines but not real persons,' then, it might be said that the nation-building narratives are at some points promoting unrealistic narratives in their moral teachings towards females. Langohr (2014, 76) in reviewing the book about Egyptian female author in the late 19-20th centuries, recalls how Taymur questioned

men's right to be the leader next to their wives underlining the quality of "their economic support of their wives," i.e. a man can be the leader as much as how good he provides for his wife. For example, Umit, Hansulu's daughter, following her mother's example in trying to be a 'good wife' did not deserve the treatment (physical abuse) she got from her husband. Moreover, Langohr (2014, 75) adds that Taymur "viewed the cultural education of male children to be the most serious struggle facing the national community," calling for the increase in the encouragement for female education as well. In this perspective, I would like to put this issue under the spotlight, that although Kazakh nation-building is perceived as the one focusing on modernity and development, rather than traditionality (Abashin 2012), the importance of education and self-development for women, apart from within their familial roles, is a far-off concept which is not brought up in the textbooks. Claiming this, I acknowledge that the possible reason for that may have been that in the purposes of re-imagining and re-building the national narrative in a limited time and under pressure since the fall of the Soviet state, there might have been issues of a more extreme and/or urgent importance, and the question of women's development as individuals, rather than parts or representatives of entities, such as family or nation, might have been left behind. However, I would like to stress that I believe that there is a way for female education and self-development to coexist with traditionality, and any one of these is not a threat to another, but both are catalysts, interoperating well together, for progress of the nation as a whole. In this paper, I analysed "Hansulu" and "Bektorynyn' kazynasy" excerpts in governmental textbook by incorporating the language used, the characters, their behavior, and the themes brought up in order to look at how the moral narratives towards women are presented in the nation-building process by the governmental program in high-school textbook.

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## Asian Badger

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*Meles leucurus* is an Asian badger. This report discusses the Asian badger's 1) Classification, phylogenetic relationships, and the history of *Meles* genus emergence; 2) Geographic range and habitat; 3) Physical description; 4) Diet and adaptations related to diet; 5) Ecomorphology; 6) Interactions with/Importance to humans.

**Keywords:** Asian badger; *Meles leucurus*; phylogeny; physical description; geographic range; habitat; diet; adaptations; ecomorphology

## Classification

*Meles leucurus* is an Asian badger whose classification, based on the Animal Diversity Web created by the Zoology Museum at the University of Michigan is:

Kingdom: Animalia

Phylum: Chordata (those that have a notochord)

Subphylum: Vertebrata (those who have a backbone)

Class: Mammalia (those who can milk offspring)

Order: Carnivora

Suborder: Caniformia (according to Koepfli et al. 2017)

Infraorder: Arctoidea (according to Koepfli et al. 2017)

Superfamily: Musteloidea (according to Koepfli et al. 2017)

Family: Mustelidae (badgers, ferrets, weasels, otters, martens, wolverines, ermines)

Genus: *Meles* (Badgers)

Species: *Meles leucurus* (Asian badger)

According to Koepfli et al. (2017), the first representatives of the Carnivora order emerged in the Late Palaeocene or Early Eocene (these epochs refer to the Cenozoic era), and they looked like weasels, but the difference is that these early carnivores were totally arboreal, however well-known modern weasels are not totally arboreal (although they can climb trees). Then, in the early Oligocene in Europe ( $\approx 33$  million years ago), the first representatives of Musteloids appeared (Musteloids is a superfamily, i.e., in the classification chain, the Musteloids superfamily is before the Mustelidae family). In the Early Miocene, savannas became prevalent and rodent populations grew, meaning that carnivores were obliged to adapt to a terrestrial lifestyle (due to savannas where trees are rare and due to hunting for rodents). Mustelidae diverged from Procyonidae 28.5 million years ago (Sato et al. 2003, 253). This date falls under the Late Oligocene/Early Miocene. Within the Mustelidae family, the representative of *Arctonyx* genus and the representative of *Meles* genus separated in Asia  $\approx 4.4$ -3.6 million years ago (Madurell-Malapeira et al. 2009, 963). This date falls under the Pliocene. Finally, *Meles leucurus* and *Meles meles* separated from their ancestor *Meles thoralis* 1.8 million years ago corresponding to the Middle-Late Villafranchian age, i.e., Late Pliocene/Early Pleistocene

(Madurell-Malapeira et al., 2011). Nowadays, according to Koepfli et al. (2017), there are 4 species of *Meles* genus: *Meles leucurus* (lives in continental Asia), *Meles meles* (lives in Europe), *Meles anakuma* (lives in Japan), *Meles canescens* (lives in southwestern Asia).

Koepfli et al. (2017) provided a cladogram that shows the position of Mustelidae in the phylogenetic relationships of Carnivora animals (Figure 1). The ancestor of the whole Carnivora order gave roots to Feliformia (cat-like) and Caniformia (dog-like) suborders. Caniformia is divided into Cynoidea and Arctoidea infraorders based on the difference in morphology of petrosal auditory bulla. Ivanoff (2001) provided a more detailed explanation in the different morphology of petrosal auditory bulla between Cynoidea and Arctoidea: there is no septum (or almost no septum) in Arctoidea auditory bulla, but Cynoidea has the septum (although it is not fully developed). Figure 2 provided by Ivanoff (2001) shows the difference between a fully developed septum, which is marked A, a not fully developed septum (Cynoidea's) which is marked B, and the absence/nearly absence of a septum (Arctoidea's) which is marked C.

The Cynoidea infraorder consists of the Canidae family. The Arctoidea infraorder consists of the Ursidae (bears) family, Pinnipedia superfamily and Musteloidea superfamily. Among Musteloidea superfamily, Procyonidae (racoons) and Mustelidae families are sister taxa, whereas Mephitidae (skunks) is outgroup relatively to the sister taxa, while the Ailuridae (red pandas) is closely related to the sister taxa.

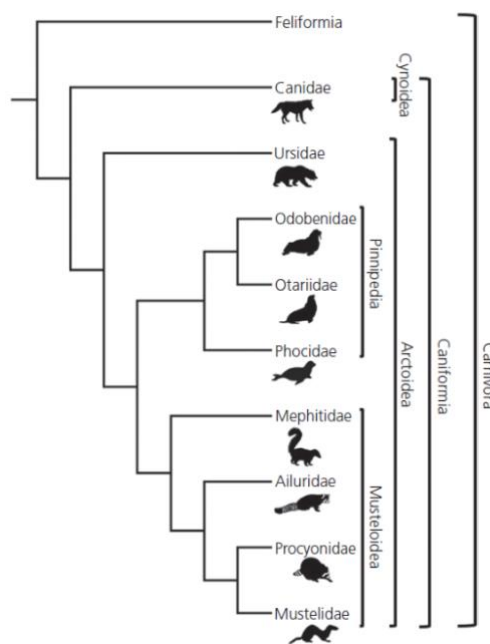


Figure 1. Phylogenetic relationships among carnivorous animals.

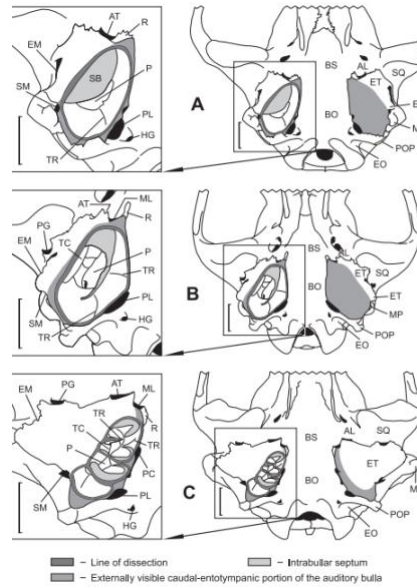


Figure 2. Differences in septum (SB) in petrosal auditory bullae.

### Geographic Range and Habitat

Asian badgers can be met in Russia, Kazakhstan, Kyrgyzstan, Uzbekistan, Mongolia, China, and Korea (Abramov 2015, 2). Figure 3 provided by Abramov (2015) demonstrates the geographic range on the map: from the Volga River covering the Ural and Western Siberia to South Siberia in Russia; the whole Kazakhstan, Uzbekistan, Kyrgyzstan, and Tajikistan; the Northern part of Mongolia; South and North Korea; from Tian Shan to the Eastern part of China without covering Tibet. According to the Animal Diversity Web created by the Zoology Museum at the University of Michigan, along the Volga region (which is the boundary between Russia and Europe) the Asian badger (*Meles leucurus*) is sympatric with the European badger (*Meles meles*).



Figure 3. Geographic range of Asian badger.

Moreover, according to the Animal Diversity Web, Asian badgers' habitat can include various landscapes: steppes, forests, mountainous areas, tundra, semi-deserts. Asian badgers live in shelters/dens called setts which consist of tunnels underground and have many entrances (Bae et al. 2021, 1). The setts are engineered by badgers themselves – they are very skilled diggers and tunnel makers. Moreover, Asian badger's choice of sett's location depends on several factors: 1) the level of access to vegetation; 2) slope; 3) altitude; 4) the type of forest (if a badger plans to create a den in a forest); 5) conditions of the terrain (whether objects that can disguise the den or be an insulator from heat loss are present or not); 6) disturbance by humans (Bae et al. 2021). The study by Bae et al. (2021) showed that Asian badgers prefer to set dens in deciduous forests than in pine (coniferous) forests due to the larger amount of vegetation/ food resources (fruits, for example) that can be found in deciduous forests (although badgers can adapt to various terrains). Also, due to the denser vegetation in deciduous forests than in pine forests, this vegetation can be used as bedding/coverage for the shelter's entrances for disguise and for insulation to avoid heat loss (especially during cold times). Regarding the slope, badgers prefer to set a shelter on the steeper slope because when the snow melts or when the rain goes, the water does not stay on the steep slope, i.e., drainage is better on the steep slopes. Plus, it is easier for a badger to remove soil during the digging process from the slope, so this is another reason for steep slope preference. Asian badgers consider the presence of rocks, trees and other objects on the location that can serve as protection/disguise/bedding for the shelter. In addition, badgers choose an altitude for the den in which human disturbance is absent, i.e., badgers avoid places where people can do their activities: if people are present on low altitude, the badger will set a den on higher altitudes, if people are on high altitudes, then badgers will set a den on lower altitudes.

Dens/setts of badgers are inhabited by generations, badgers adhere to their home and pass it from generation to generation, and the dens are called underground towns because they are engineered cleverly town-like with tunnels, ventilation holes, multiple entrances, and chambers (Abduraupov et al. 2023, 852). Badgers are neat, they clean their home by carrying rubbish out of it.

## Physical Description

Figure 4 below taken from Wikipedia comparatively shows the appearances of 3 *Meles* species: the European badger (*Meles meles*), the Asian badger (*Meles leucurus*), and the Japanese badger (*Meles anakuma*).

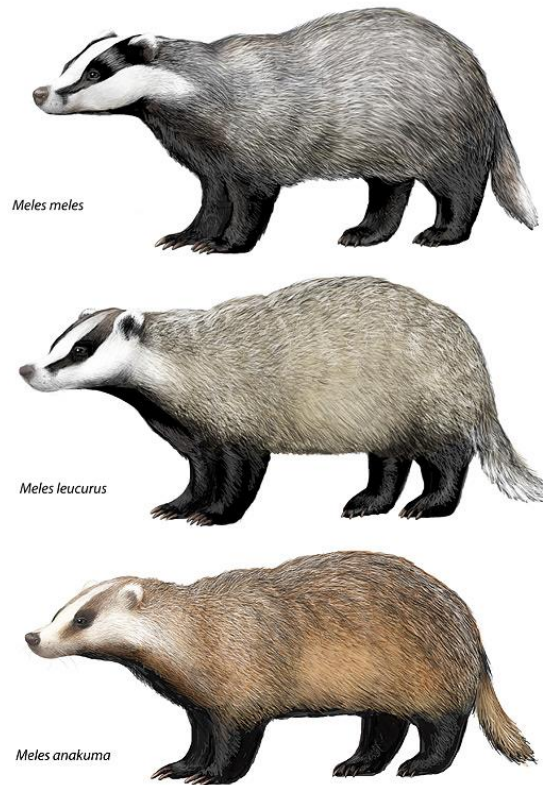


Figure 4. Comparative demonstration of 3 species from *Meles* genus.



Figure 5. *Meles leucurus* (Asian badger).



Figure 6. *Meles leucurus* (Asian badger).



Figure 7. *Meles leucurus* (Asian badger).

Figure 5 (taken from Animal Database<sup>1</sup>), Figure 6 (taken from Animal Diversity Web), and Figure 7 (taken from Animal Diversity Web) show the appearance of *Meles leucurus*. It can be seen that the fur on the head is white with two black stripes that run over the eyes. The ears are covered with white and black fur, and they are small relatively to the trunk size. The trunk is covered with a mix of grey, yellow, and white colours. Paws are covered with black fur, and claws are present. The eyes are small. The tail is a little broom-like, and it consists of white, yellow, and grey colours. According to Abduraupov et al. (2023), the length of badger's body is 60-90 cm; the length of the tail is 20-24 cm; the weight varies up to 24 kilograms, however in fall before hibernation the weight is up to 34 kilograms (852).

In Figure 4, we can see that *Meles leucurus* looks transitional between *Meles meles* and *Meles anakuma*, because the fur of *Meles meles* is grey and white, and the fur of *Meles leucurus* has an additional yellow shade, whereas *Meles anakuma* is much yellower, i.e., the gradation can be noticed. Moreover, it can be noticed that the frontal lobe of the *Meles meles* and *Meles leucurus* craniums is concave, whereas *Meles anakuma*'s frontal lobe is more convex. The paws of all 3 species are black and have claws.

Abramov and Puzachenko (2005) provided a photo of *Meles leucurus* skulls (Figure 8). The first 2a belongs to a male, and the second 2b belongs to a female. It can be seen that the dental formula

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<sup>1</sup> *Asian Badger*. Animal Database.

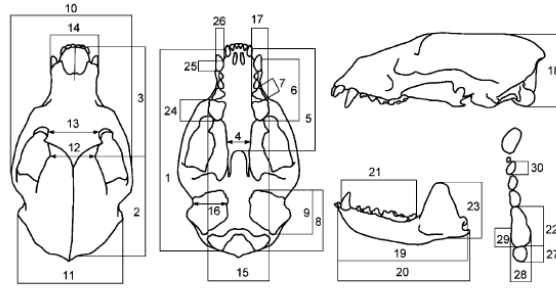
[https://animals.fandom.com/wiki/Asian\\_Badger?file=17084983748\\_5707c478f7\\_b.jpg](https://animals.fandom.com/wiki/Asian_Badger?file=17084983748_5707c478f7_b.jpg).

of the upper jaw is 3:1:2:2. Regarding the lower jaw, from the lateral view, the number of incisors cannot be seen, but the dental formula for the lower jaw can be deduced to be 3:1:3:3. Also, the teeth are carnassial, especially the second and third premolars on the lower jaw, and the second premolar and first molar on the upper jaw.



Figure 8. Skulls of a male (2a) and a female (2b) Asian badger.

Without measuring the sizes of the skulls' elements to define the presence or absence of sexual dimorphism, it can be deduced that there is no sexual dimorphism because the skulls look very similar (only lengths of upper canines cannot be seen from that occlusal view, but the lengths of lower canines look similar). However, Abramov and Puzachenko (2005) measured elements of female and male skulls (not only those on the photo, but  $n=111$  males and  $n=44$  females), and the results show that on average sizes of male skull elements are bigger (not significantly, but bigger). Figure 9 from Abramov and Puzachenko (2005) shows what skull elements were measured. Figure 10 from Abramov and Puzachenko (2005) shows the table of results. However, the number of male individuals was much larger ( $n=111$ ) than the number of females ( $n=44$ ), that is why the mean values of male skull elements are bigger in the results. So, I would not state that Asian badgers have sexual dimorphism in craniological characters.



**Fig. 2.** Measurements taken of the badger skulls: 1: condylobasal length, 2: neurocranium length, 3: viscerocranium length, 4: minimum palatal width, 5: palatal length, 6: maxillary tooth-row length, 7: length of upper carnassial tooth  $Pm^4$ , 8: greatest length between oral border of the auditory bulla and aboral border of the occipital condyle, 9: length of the auditory bulla, 10: zygomatic width, 11: mastoid width of skull, 12: postorbital width, 13: interorbital width, 14: width of rostrum, 15: greatest palatal width, 16: width of the auditory bulla, 17: width of upper molar  $M^1$ , 18: cranial height, 19: total length of the mandible, 20: length between the angular process and infradentale, 21: mandibular tooth-row length, 22: length of lower carnassial tooth  $M_1$ , 23: height of the vertical mandibular ramus, 24: length of upper molar  $M^1$ , 25: length of upper canine, 26: width of upper canine, 27: length of lower molar  $M_2$ , 28: width of lower molar  $M_2$ , 29: talonid length of lower carnassial tooth  $M_1$ , 30: length of lower premolar  $Pm_2$ .

Figure 9. What was measured in skulls.

##	Characters	<i>Meles meles</i>				<i>Meles leucurus</i>							
		European sample		Transcaucasian sample		Siberian sample							
		Male <i>n</i> = 72	Female <i>n</i> = 59	$\Delta S, S$	<i>p</i>	Male <i>n</i> = 48	Female <i>n</i> = 29	$\Delta S, S$	<i>p</i>	Male <i>n</i> = 111	Female <i>n</i> = 44	$\Delta S, S$	<i>p</i>
1	Condylobasal length	131.5, 4.24 119.3–140.1	129.2, 3.43 119.0–136.0	2.2, 0.8	0.044	122.3, 4.61 112.9–132.1	116.3, 3.20 110.7–122.5	6.0, 2.5	0.012	122.9, 4.56 114.0–133.0	120.3, 3.64 112.9–128.4	2.7, 1.1	0.000
2	Neurocranium length	68.9, 2.33 63.1–73.7	67.3, 2.23 63.0–74.0	1.6, 1.2	0.056	65.1, 2.27 61.2–69.4	62.7, 1.90 59.6–67.0	2.5, 1.9	0.009	67.6, 2.70 61.5–74.0	66.1, 2.21 62.0–71.4	1.5, 1.1	0.023
3	Viscerocranium length	84.4, 3.62 76.8–93.7	82.9, 2.81 76.4–91.0	1.6, 0.9	0.114	74.6, 4.76 65.8–87.4	71.1, 3.46 65.5–78.4	3.6, 2.4	0.188	74.5, 3.97 65.7–84.0	71.8, 3.22 65.0–77.4	2.7, 1.9	0.002
4	Minimum palatal width	15.9, 0.95 13.7–18.2	16.0, 0.92 14.1–17.9	-0.1, -0.3	0.486	15.6, 0.97 13.4–17.8	15.3, 0.67 13.9–16.5	0.4, 1.1	0.392	15.1, 1.01 12.8–18.0	15.1, 1.11 12.3–17.7	0.0, 0.0	0.146
5	Palatal length	73.2, 2.32 67.5–78.8	71.9, 2.36 67.0–78.0	1.3, 0.9	0.043	68.2, 3.03 62.2–74.7	65.3, 2.29 62.3–70.8	3.0, 2.2	0.041	67.2, 2.41 61.2–73.0	66.2, 2.25 61.7–72.2	1.0, 0.7	0.000
6	Maxillary tooth-row length	43.8, 1.54 40.0–47.60	43.1, 1.42 39.8–46.5	0.7, 0.8	0.178	41.0, 1.81 37.4–46.2	38.9, 1.51 36.0–42.0	2.2, 2.7	0.041	39.7, 1.39 36.7–43.4	39.1, 1.71 36.2–42.8	0.6, 0.7	0.102
7	Length of upper carnassial tooth $Pm^4$	8.6, 0.45 7.6–9.6	8.6, 0.39 7.7–9.3	0.0, 0.0	0.382	7.9, 0.58 7.0–9.5	7.5, 0.56 6.7–9.1	0.5, 2.9	0.024	7.9, 0.50 6.7–9.1	7.9, 0.52 6.7–9.0	0.1, 0.5	0.489
8	Greatest length between oral border of the auditory bulla and aboral border of the occipital condyle	37.4, 1.51 33.6–41.2	37.4, 1.4 34.0–39.7	0.0, 0.0	0.650	34.8, 1.62 32.0–39.1	33.2, 1.20 31.5–37.0	1.6, 2.3	0.001	36.9, 1.88 32.2–40.4	36.3, 1.50 33.7–39.0	0.6, 0.8	0.310
9	Length of the auditory bulla	28.3, 1.24 25.3–30.6	28.0, 1.27 24.4–30.5	0.2, 0.4	0.207	26.3, 1.41 23.7–29.9	25.2, 1.06 23.0–27.6	1.0, 2.0	0.188	27.9, 1.52 23.5–31.0	27.6, 1.31 25.4–30.7	0.3, 0.6	0.180
10	Zygomatic width	80.9, 4.23 71.9–89.4	77.7, 3.77 68.4–86.2	3.3, 2.0	0.044	75.5, 4.29 65.2–84.0	70.8, 3.81 62.9–80.4	4.7, 3.2	0.188	74.6, 4.45 60.4–85.0	71.4, 3.79 62.9–81.2	3.2, 2.2	0.000
11	Mastoid width of skull	62.7, 2.57 56.8–68.9	61.6, 2.34 55.6–66.8	1.1, 0.9	0.090	60.5, 2.33 56.5–65.2	57.1, 2.53 53.5–62.6	3.4, 2.9	0.041	63.1, 3.23 54.8–70.0	61.6, 2.63 57.7–67.3	1.5, 1.2	0.033
12	Postorbital width	23.9, 1.39 20.7–27.3	23.5, 1.30 21.4–26.5	0.4, 0.8	0.073	23.0, 1.35 19.4–25.4	22.7, 1.54 19.1–26.1	0.3, 0.7	0.947	22.7, 1.63 19.2–26.5	22.3, 1.68 19.3–25.8	0.4, 0.8	0.537
13	Interorbital width	31.2, 1.69 27.8–34.2	30.1, 1.65 27.0–34.1	1.1, 1.8	0.004	27.7, 2.48 23.9–34.7	26.3, 1.56 24.1–30.3	1.4, 2.6	0.188	26.9, 1.61 23.0–30.6	26.4, 1.69 23.6–30.7	0.5, 0.9	0.255
14	Width of rostrum	32.2, 1.49 28.5–35.1	30.8, 1.45 27.0–34.4	1.4, 2.2	0.003	29.4, 1.61 26.0–32.6	27.8, 1.36 25.3–30.6	1.7, 2.9	0.188	29.3, 1.52 25.0–32.5	27.6, 1.45 24.9–32.1	1.8, 3.1	0.000
15	Greatest palatal width	42.3, 1.74 37.4–46.2	41.7, 1.52 36.9–45.2	0.5, 0.6	0.814	40.7, 1.88 35.7–44.0	39.4, 1.41 37.2–43.7	1.2, 1.5	0.188	38.9, 1.57 35.7–43.4	38.2, 1.79 34.0–42.2	0.7, 0.9	0.024

##	Characters	<i>Meles meles</i>				<i>Meles leucurus</i>							
		European sample				Transcaucasian sample				Siberian sample			
		Male n = 72	Female n = 59	$\Delta S, S$	$p$	Male n = 48	Female n = 29	$\Delta S, S$	$p$	Male n = 111	Female n = 44	$\Delta S, S$	$p$
16	Width of the auditory bulla	22.8, 1.31 20.0–25.7	22.2, 1.22 19.5–24.6	0.6, 1.3	0.054	22.1, 1.1 19.8–25.3	21.1, 1.04 19.4–23.1	1.0, 2.3	0.553	22.6, 1.26 19.3–25.2	21.9, 1.01 19.2–23.9	<u>0.7, 1.6</u>	0.044
17	Width of upper molar M <sup>1</sup>	11.7, 0.64 9.9–13.3	11.5, 0.55 10.4–13.0	0.2, 0.9	0.968	11.4, 0.59 10.0–12.7	10.8, 0.75 9.6–13.0	0.6, 2.5	0.550	10.8, 1.05 9.0–14.8	11.3, 1.55 9.8–14.7	-0.5, -2.2	0.569
18	Cranial height	53.7, 2.83 47.9–59.8	52.9, 2.51 47.2–59.4	0.8, 0.8	0.428	49.1, 2.99 43.0–55.8	46.3, 2.79 42.6–53.4	<u>2.8, 2.9</u>	0.041	51.3, 2.98 44.6–59.1	49.7, 2.91 44.4–58.9	<u>1.6, 1.6</u>	0.012
19	Total length of the mandible	91.3, 2.78 84.5–97.0	89.4, 2.60 84.2–94.3	<u>1.9, 1.1</u>	0.014	83.9, 3.77 77.1–91.1	79.9, 3.07 75.8–88.2	4.0, 2.4	0.081	82.7, 3.22 76.0–90.8	80.9, 2.35 75.7–86.3	<u>1.9, 1.2</u>	0.000
20	Length between the angular process and infradentale	92.2, 2.91 85.0–97.7	90.4, 2.69 84.3–95.8	<u>1.8, 1.0</u>	0.014	83.9, 4.08 77.2–93.7	80.1, 3.30 75.7–89.0	3.8, 2.3	0.081	83.4, 3.10 76.5–91.2	81.5, 2.26 78.2–86.8	<u>1.9, 1.1</u>	0.000
21	Mandibular tooth-row length	51.4, 1.58 47.7–54.5	50.4, 1.23 47.6–53.0	1.0, 1.0	0.070	48.5, 1.92 45.0–53.2	45.7, 1.70 43.0–49.5	<u>2.8, 3.0</u>	0.013	47.4, 1.56 44.5–51.6	46.7, 1.58 43.5–49.9	0.7, 0.8	0.208
22	Length of lower carnassial tooth M <sub>1</sub>	13.9, 0.80 12.4–16.0	13.7, 0.72 11.9–15.30	0.3, 1.2	0.263	14.5, 0.81 12.2–16.1	13.7, 0.88 12.0–15.9	<u>0.8, 2.8</u>	0.041	13.6, 0.86 11.8–15.6	12.9, 0.73 11.7–14.4	<u>0.6, 2.3</u>	0.013
23	Height of the vertical mandibular ramus	38.9, 1.83 33.3–43.1	38.1, 1.7 33.4–42.30	<u>0.8, 1.0</u>	0.044	35.8, 2.54 29.1–41.7	33.6, 1.87 29.8–37.5	2.3, 3.3	0.081	33.9, 2.24 28.3–39.7	32.3, 1.66 29.7–35.9	<u>1.7, 2.6</u>	0.000
24	Length of upper molar M <sup>1</sup>	16.3, 0.72 14.8–17.7	15.9, 0.66 14.5–17.6	0.4, 1.1	0.114	15.7, 0.88 14.0–17.3	15.1, 0.80 13.7–16.6	0.5, 1.8	0.138	15.8, 0.92 13.7–17.7	15.6, 0.94 14.0–17.4	0.2, 0.5	0.657
25	Length of upper canine	8.6, 0.49 7.6–9.8	7.9, 0.41 6.7–8.8	<u>0.7, 4.4</u>	0.000	7.6, 0.54 6.5–9.2	6.8, 0.45 6.0–8.0	<u>0.8, 5.8</u>	0.012	7.7, 0.55 6.7–9.0	7.1, 0.53 6.1–8.1	<u>0.6, 4.2</u>	0.001
26	Width of upper canine	6.3, 0.44 5.40–7.30	5.9, 0.39 4.9–7.2	<u>0.5, 3.7</u>	0.000	5.8, 0.40 5.1–6.7	5.2, 0.31 4.5–6.3	<u>0.6, 5.7</u>	0.001	5.8, 0.42 5.0–6.8	5.2, 0.29 4.7–6.0	<u>0.6, 5.9</u>	0.000
27	Length of lower molar M <sub>2</sub>	5.48, 0.44 4.5–6.5	5.4, 0.42 4.4–6.8	0.1, 0.6	0.523	5.8, 0.60 4.8–6.9	5.6, 0.57 4.7–7.0	0.2, 2.1	0.980	5.4, 0.51 4.2–6.6	5.1, 0.49 4.0–6.2	0.4, 3.3	0.145
28	Width of lower molar M <sub>2</sub>	7.4, 0.36 6.4–8.2	7.2, 0.44 6.2–8.2	0.2, 1.4	0.760	7.3, 0.42 6.0–8.0	7.1, 0.36 6.4–8.1	0.2, 1.3	0.332	6.9, 0.41 5.9–7.9	6.6, 0.43 6.0–7.4	0.3, 1.9	0.406
29	Talonid length of lower carnassial tooth M <sub>1</sub>	7.3, 0.52 6.0–8.9	7.1, 0.49 6.1–8.4	0.2, 1.3	0.642	7.5, 0.53 6.3–8.9	7.3, 0.42 6.6–8.0	0.2, 1.3	0.135	6.9, 0.59 5.7–8.2	6.6, 0.55 5.6–7.7	0.3, 2.3	0.388
30	Length of lower premolar Pm <sub>2</sub>	4.6, 0.30 3.9–5.3	4.6, 0.32 3.8–5.1	0.1, 0.8	0.502	4.2, 0.36 3.4–5.0	3.9, 0.39 3.2–4.9	0.2, 2.8	0.081	3.3, 0.38 2.5–4.1	3.09, 0.34 2.4–3.6	0.2, 2.7	0.627

Figure 10. Results for Siberian *Meles leucurus*.

According to Abduraupov et al. (2023), the sexual dimorphism is indeed little: males' height and weight are insignificantly bigger than females', males have wider heads, and the angle of transition from forehead to nose is bigger in males whereas in females, forehead transitions to nose smoothly, upper canines of males are bigger than females' upper canines. Females have fluffier tails, plus their white undercoat is more prominent than in males.

The Figure 11 (taken from Wikipedia and then labelled) demonstrates the skeleton of the European badger (*Meles meles*), and as the European badger is a close relative of the Asian badger (*Meles leucurus*), this skeleton is applicable to the Asian badger (plus on the Figure 4 it can be seen the extent to which these two species look alike).

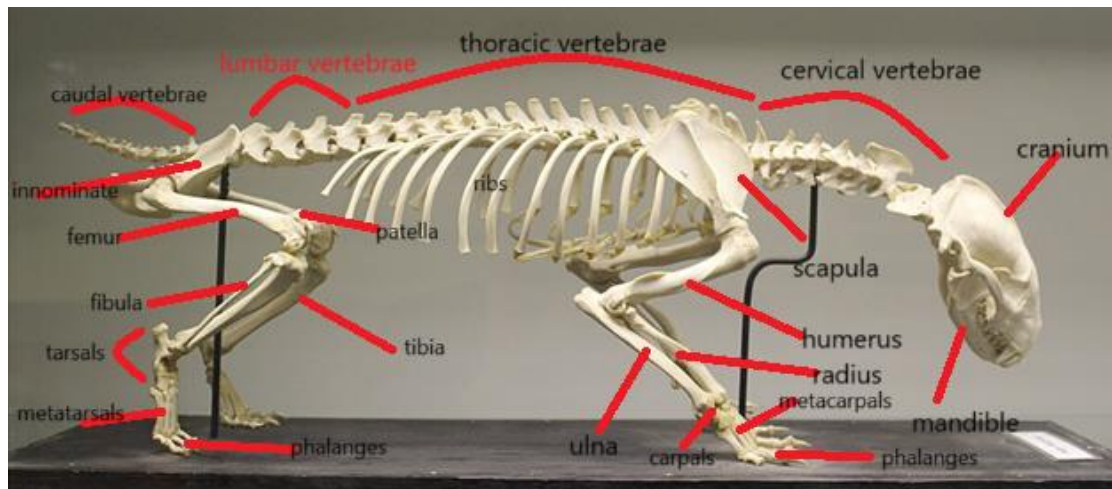


Figure 11. Skeleton of *Meles meles*.

### Diet and Adaptations Related to Diet

According to Zagainova and Markov (2011), badgers are omnivores: they can eat both plants and other animals. The frequency of certain foods in the Asian badger's diet depends on the region in which he/she lives. For example, in Middle Ural, the Asian badger's diet mainly consists of insects, amphibians, mammals; in Southern Ural 72% of the diet consists of earthworms; in Kazakhstan the badger's diet consists of insects, earthworms, fruits, reptiles, molluscs, mammals (Zagainova and Markov, 2011, 414). Zagainova and Markov (2011) conducted their own study about the diet of Asian badgers in the Samarovskii Chugas Nature Park which is located in Western Siberia. The faecal analysis showed the presence of pine nuts (it is the most frequent component of the diet), berries, larvae and adult insects (hymenopterans, beetles), earthworms, reptiles, amphibians, birds, fishes, and mammals (voles, mice, shrews) in the Asian badger's diet (Zagainova and Markov, 2011, 415).

As shown on the Figure 11, badgers have claws that are used for digging (digging/engineering their own setts and digging out earthworms, rodents from their shelters, and other animals who try to hide underground). So, claws are adaptations for digging. Figure 12 (taken from the Internet and then labelled) shows a paw<sup>2</sup> of *Meles meles* (European badger). It can be seen that besides claws, the badger's paw has thick finger pads and a thick metacarpal pad. These pads must be another one adaptation for digging, because they protect the badger's paw from wounds while he/she digs, so the

<sup>2</sup> Badger, paw, Lower Saxony, Germany (*Meles meles*). Alamy Images. <https://www.alamy.com/badger-paw-lower-saxony-germany-meles-meles-image557069581.html>.

paw is like a bulldozer – can effectively dig the soil which can contain rocks. Moreover, Powell et al. (2024) provided a photo that captured Asian badger climbing a tree (Figure 13 taken from that paper is provided below). So, it can also be deduced that the pads on the paws and claws effectively attach to the bark of trees. Highly likely, the wild badger from Figure 13 climbed the tree to catch a bird or to take a bird's eggs from the nest. So, it can be deduced that claws and thick pads on paws are adaptations for digging and for climbing/attachment to surfaces.



Figure 12. Paw of *Meles meles*.



Fig. 2. A still from camera-trap footage of a wild Asian Badger *Meles leucurus* climbing a Korean Oak *Quercus dentata* in Gyeongsangnam-do, South Korea, on 18 May 2022. (Photo: Chad R. Dobson.)

Figure 13. Photo of an Asian Badger climbing a tree.

Moreover, as was mentioned in the physical description section, the eyes of the badger are small. The highly probable reason for that is to decrease the chance of soil getting into the badgers' eyes while digging. Pei et al. (2024) found out that both wild and captive Asian badgers have Firmicutes, Proteobacteria and Actinobacteria in the large intestine in both summer and winter seasons. According to the website of Rupa Health company, the Actinobacteria of the animals' gut help to resist pathogens. This is a good adaptation, especially when an animal is omnivorous. Moreover, Pei et al. (2024) concluded that the gut microbiota of wild badgers in summer is more diverse than in captive badgers (3). This is because captive badgers are fed by farmers with a fixed menu, whereas wild badgers' menu is more diverse, therefore, wild animals need to have more diverse microbiota to digest diverse food.

## **Ecomorphology**

During the winter cold, badgers sleep in their shelters – this is hibernation (Anufriev et al. 2016, 2). According to Anufriev et al. (2016), when sustainable colds end, badgers wake up (but the end of colds does not necessarily coincide with the end of the winter season) (2). Plus, according to Pei et al. (2024), hibernation is an adaptation to survive in the cold season when there is a food shortage and heat loss (6). Anufriev et al. (2016) conducted an experiment – they measured the badger’s body temperature for 7 months (from October till May, including the hibernation period, which lasted from December/end of November till March). The results showed that in October the body temperature started to decrease, and in December the temperature reached its absolute minimum, which is 16,31°C. In February it started to increase, and in May it reached 33,76±0,16 °C. So, during cold times the badger’s body temperature decreases to keep energy/prevent its intensive loss and therefore to survive. Also, the experiment showed that during the hibernation period the badger lost 25% of the body mass (that is more than 3 kilograms). So, although during cold times the badger’s body temperature is decreased to save energy/fat, the weight during hibernation still can be lost (Pei et al. 2024, 6-7). The structure of paws, the small size of eyes, and the presence of certain organisms in the gut microbiota mentioned in the previous section can also be related to the ecomorphology.

Li and Jiang (2014) watched two Asian badgers via infrared cameras and found out that they went out from their sett in the evening between 20:00-23:00 and came back to the sett between 4:00-7:00. This means that Asian badgers can follow a nocturnal lifestyle. However, according to photos that were taken in the daylight (not in Li and Jiang (2014) study, but in Figures 6-8 and other photos on the Internet), Asian badgers can do activities not only at night. So, Asian badgers can do things both at night and in the daytime. Moreover, in the video from Facebook<sup>3</sup> (which was apparently recorded at night) it can be seen that the eyes of the Asian badger shine – this is the action of tapetum lucidum. It helps to better see at night, so it is an adaptation to the nocturnal lifestyle.

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<sup>3</sup> *Video of the Day! This is the Asian Badger (Meles. . .* (n.d.). <https://www.facebook.com/roylesafaris7/videos/video-of-the-day-this-is-the-asian-badger-meles-leucurus-also-known-as-the-sand-/436533084074890/>.

## Interactions with Humans

In the section titled “geographic range and habitat,” it was written that badgers avoid people, however, according to the video<sup>4</sup> on YouTube called “Country house badger. Domestication #23” where the badger visits the particular country house village and is accepting food from the people who live there and is very close to these people, it can be deduced that the domestication of wild badger is possible. The badger from the video is curious and even rises onto the human’s knees to get the food from the human’s hands, so he feels safe and realizes that these people help him by feeding him. The badger is not afraid of these people and is even used to them and to the space of the country house. There are many more videos on this channel where the badger visits this country house and accepts food provided by these kind people. Usually, the badger visits the country house in the evening or at night. It is interesting that the badger got used to these people and knows that they will not bring harm to him. Probably, there were not enough food resources in the wild, so the badger visited the country house from time to time to accept food from the people. Good to know that there are kind people who take care of the badger.

Badgers play a role in symbolism by associating persistence, determination, and confidence (Symbolopedia, 2023). Moreover, according to Symbolopedia (2023), badgers play a role in mythology: in Celtic folklore, badgers represent wisdom and connection with the underworld; in American folklore, badgers represent bravery, determination, strategic thinking, and healing due to badgers’ connection with the soil. People even have totems<sup>5</sup> with badgers’ image. According to the description on the totem shop website,<sup>6</sup> the Badger totem teaches you to: 1) pay no attention to what others say about you; 2) to stop hiding and to start coming out of the shadow (for example, to become more active at work/ to start a new project). Also, according to the description, the Badger will help to stay on feet in any situation, i.e., to stay persistent in any situation, to be a confident, independent, and resilient person. This means that symbolism lets people believe that they can get or improve their qualities of character: based on badgers’ traits and habits, people associate this

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<sup>4</sup> Евгений Демьяненко. 2019. “Дачный барсук. Приручение #23.” Video. *YouTube*.  
<https://www.youtube.com/watch?v=6JSTzsFDfa0>.

<sup>5</sup> Totemica. n.d. “Ювелирные украшения с барсуком купить - Totemica.” Totemica.  
<https://totemica.shop/totem/barsuk/>.

<sup>6</sup> Totemica. n.d. “Ювелирные украшения с барсуком купить - Totemica.” Totemica.  
<https://totemica.shop/totem/barsuk/>.

amazing animal with certain character qualities (persistence, for example), and to be persistent like a badger people wear totems of the badger by believing that the badger will give them power of will or any other trait; this belief instils the acquisition or improvement of the desired quality of character.

Badger's fat is valuable in medicine because it contains vitamin A and vitamin B which help to overcome infections and strengthen the immune system, so the badger's fat can be consumed in the form of liquid or in the form of pills (Abduraupov et al. 2023, 855). Moreover, badger's fat is useful in fighting skin diseases (psoriasis, dermatitis, eczema), burns and wounds because the fat also contains vitamin E and alpha tocopherol which have regeneration and anti-inflammation effects on skin (Abduraupov et al. 2023, 855). Badger meat is of good quality and is used in cookery - it is fried or boiled with vegetables (Abduraupov et al. 2023, 855). According to Abduraupov et al. (2023), the consumption of badger meat is spread in Uzbekistan (855).

Archaeological evidence from the Unikoté Cave in France suggests that people practice badger (*Meles meles*) meat consumption at least from the Mesolithic period, because butchery marks were identified on remains of badgers in the 2nd unit of the site, plus lithic artifacts were excavated on this site (Mallye, 2011, 27). On badger remains from another accumulation, marks left by hyenas were identified, so the Unikoté Cave likely was used by hyenas too (it was their den), but it is stated that hyenas inhabited the site before humans, so humans occupied the site after hyenas (Mallye, 2011). Another accumulation of badger remains does not have marks left by humans or other carnivores, so this accumulation is probably a cemetery of badgers who died due to their natural death (Mallye, 2011, 32). So, there are 3 accumulations of badger (*Meles meles*) remains found in the Unikoté Cave: one of the accumulations has butchery marks, another one has marks from hyenas' teeth, and one has no marks. Figure 14 below (taken from Mallye 2011) demonstrates badgers' remains with butchery marks, and Figure 15 (taken from Mallye 2011) demonstrates badgers' remains with carnivore marks.

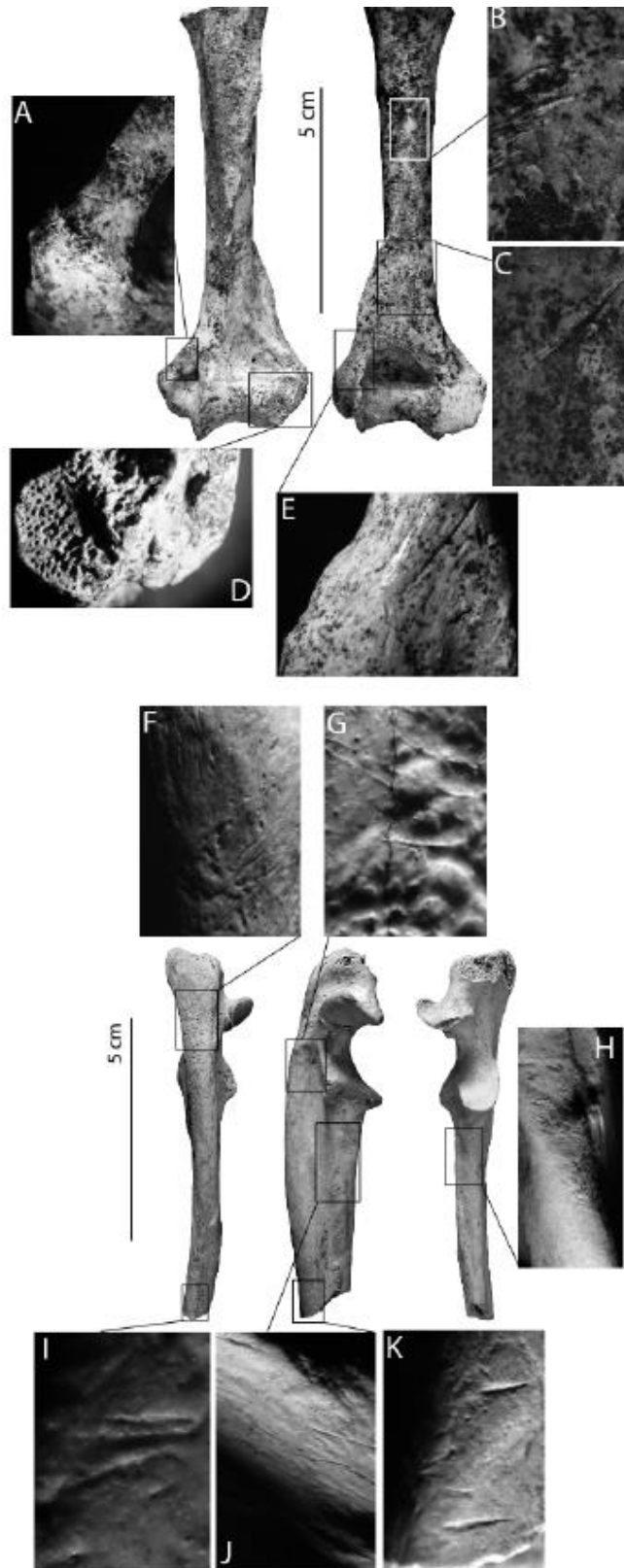


Figure 14. Badger remains with butchery marks.

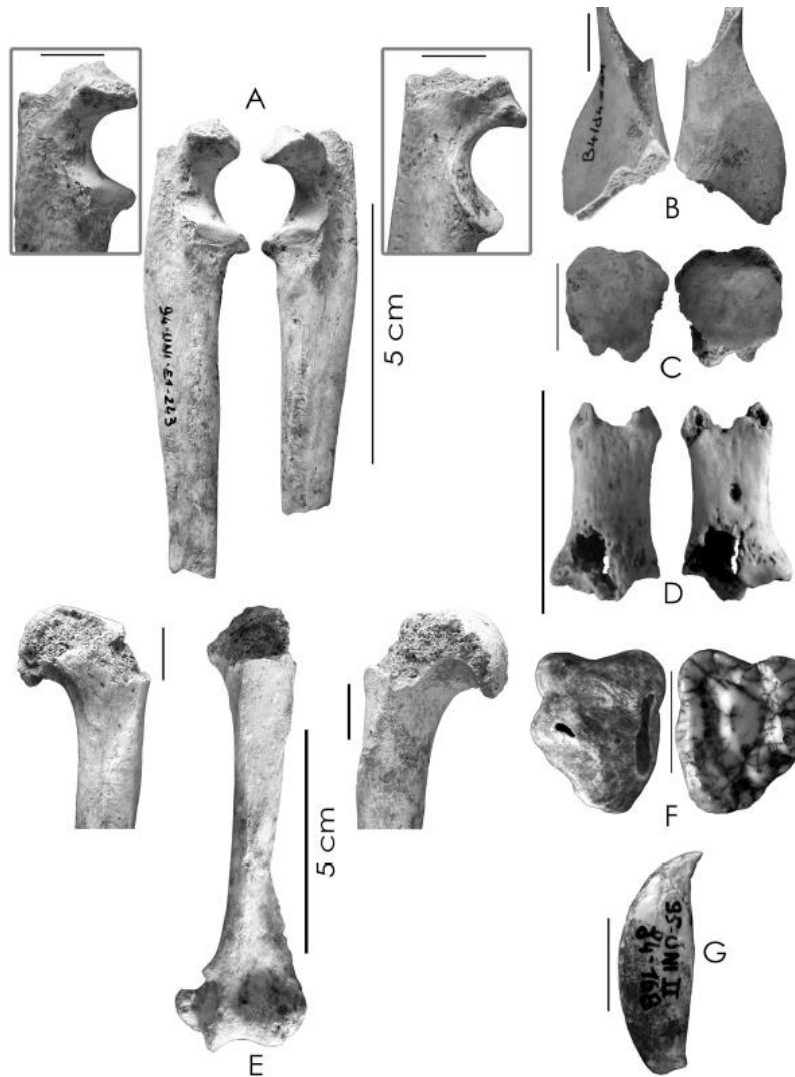


Figure 15. Badger remains with carnivore marks.

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## **The Cost of Progress: Accountability and Aftermath of Nuclear Testing in Semipalatinsk**

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The Semipalatinsk Test Site (STS), the Soviet Union's main nuclear testing site, remains a reminder of the human and environmental costs of Cold War militarization. This article combines scientific, historical, and political perspectives to examine the creation, exploitation, and long-term consequences of STS from an interdisciplinary perspective. The STS serves as an example of how scientific ambitions and the struggle for geopolitical control have neglected the rights and health of local people, creating a legacy of long-term pollution, disease, and socio-environmental injustice. The site still poses danger for public health and land use, which reflects larger conflicts between environmental justice and post-Soviet development.

**Keywords:** Kazakhstan; Semipalatinsk Test Site; nuclear testing; nuclear contamination; Olzhas Suleimenov; civil resistance; anti-nuclear movement; Cold War

The Semipalatinsk Test Site (STS) is one of the most prominent symbols of the nuclear age, a massive Soviet project that not only turned the Kazakh steppe into a testing ground for Cold War experiments, but also left a lasting legacy of environmental, political, societal, and human consequences. This article explores the origins, exploitation, and aftermath of the STS, including the Nevada-Semipalatinsk anti-nuclear movement and the ongoing fight for recognition and rehabilitation in post-Soviet Kazakhstan.

The history of nuclear physics has been extensively researched, ranging from the groundbreaking work of Dalton, Rutherford, and Einstein to the Manhattan Project and related Soviet initiatives (Fergusson 2011, 147; Niaz 2009, 4). The majority of these historical accounts concentrate on either state-level decisions or technical aspects. The Soviet nuclear weapons race during the Cold War and institutional history were detailed in the foundational works of Zuberi (1999) and Yemelyanov and Holloway (1987). The long-term impacts of nuclear testing on local ecosystem and human health have been explored by the ecological research of Bauer and Penter (2022) and the public health assessment of Grosche et al. (2011) and Land et al. (2015). Despite this rich body of scholarship, a comprehensive and interdisciplinary analysis that covers the scientific, social, and political aspects of the Semipalatinsk legacy remains limited.

This essay combines a historical narrative with scientific evidence, political analysis, and the historiography of protest to show that Semipalatinsk is a site of ongoing struggles for development, justice, and memory, rather than a simple memorial of the Cold War. The main focus of this article is how the test site affected the land and its inhabitants as well as Kazakhstan's path to environmental sovereignty and national identity, analysing the transition from scientific discoveries to state violence and, ultimately, civil resistance.

The essay is organized as follows. The first section provides an overview of the geopolitical environment and scientific foundations that resulted in the STS creation. Its exploitation during the Soviet nuclear weapons program is examined in the second section, as well as important tests and their results. Further, the Nevada-Semipalatinsk movement is described in the third section, emphasizing its national nature by situating it within international cultures of protest. Finally, drawing on recent scientific findings regarding soil, water, animal and human contamination, section four assesses the environmental and health impacts of testing. Conclusion considers the long-term significance of STS as a representation of both resistance and degradation.

## **Creation of STS**

The STS was created in the early 1940s. After noticing progress made by western scientists, namely during the Manhattan Project, the Soviet government decided in 1942 to start their own research on atomic energy. Joseph Stalin passed a secret disposition №2352 “On the organization of work on uranium” and in 1943 Molotov, prime minister of USSR, assigned most reliable physicists (one of them was Igor Kurchatov) for the project on creating a nuclear bomb (Zuberi 1999, 1135). For that purpose, a new facility - Laboratory Number Two - was created in Moscow with Kurchatov as a director (Yemelyanov and Holloway 1987, 39). In 1945, the construction of *Mayak* (*lighthouse*) began, “the largest site of nuclear processing, the plutonium production facility” (Bauer and Penter 2022, 3), nuclear programs were institutionalized.

Later on, in 1947, Lavrentiy Beria, the First Deputy Premier of the Soviet Union and a head of the atomic bomb project, selected the future Semipalatinsk Test Site in the steppe area of northeast Kazakhstan and building began. It was situated on the left bank of the Irtysh River, roughly 130 kilometres northwest of Semipalatinsk City - this place was selected due to its minimal population and isolation, which allowed for secrecy (Dabrowski 2021, 4). During that time, the construction of Mayak was finished and Kurchatov himself “produced a sustained chain reaction on June 10, 1948” (Yemelyanov and Holloway 1987, 39), which meant that the first weapon-oriented atomic reactor in the USSR and Europe was created. A year later, at STS, “at the command of Lavrentii Beria . . . the first Soviet nuclear bomb (22 kt TNT eq.) was detonated at the test site, under vast political pressure, during unfavourable weather conditions” (Bauer and Penter 2022, 199).

## **Activity and Exploitation of STS**

The first nuclear bomb test was conducted in 1949 and since then hundreds of such tests have taken place, which were called “RDS” (the meaning of abbreviation is still unknown, the only definition known is “*reaktivny dvigatel specialny*” or “jet engine special”) and an according number next to it. Before describing the tests performed in STS, it is worth mentioning how bombs were delivered to it. After mining, uranium was sent and processed at facilities such as Mayak and also underwent testing at nuclear facilities. Finally, “enriched uranium and plutonium from these facilities were then, after warhead design and assembly in Arzamas-16, brought to the nuclear test sites ... where they were “tested” and detonated” (Bauer and Penter 2022, 4). In particular, all tests ever conducted in

USSR (including STS) are presented in a book “USSR Nuclear Weapons Tests and Peaceful Nuclear Explosions” by Andryshin et al. (1996) and another book by Dabrowski (2021), who takes into an account a period from 1949 to 1962, thoroughly describing every test during that time.

For example, the first test on 29 August 1949 was conducted on the surface (Andryshin et al. 1996, 4) but the next step was to actually test a nuclear bomb from a bomber plane, as it was empirically demonstrated (i.e. during Japan bombing, 1945) that an aircraft and its crew could survive a nuclear blast. Thus, the first air-dropped bomb (RDS-3) was tested on 18 October 1951 in STS, which was a remarkable start for future development not only for bombs, but also for planes that could carry them. Then the first Soviet thermonuclear weapon (RDS-6) was successfully tested in STS in 1953. However, not all tests were successful. On 19 October 1954 during an on-surface test of RDS-9 the nuclear charge failed, and no explosion occurred, but territory was contaminated regardless. A year later, the highest yield nuclear explosion (4 times more powerful than RDS-3) occurred during the test of RDS-37, first Soviet hydrogen bomb, on 22 November 1955 (Andryshin et al. 1996, 12). After that, many tests were conducted but there were periods of suspending nuclear testing, for example in 1959-1961, due to the “moratorium on nuclear testing with the USA and Great Britain” (Andryshin et al. 1996, 9).

After that, in 1961, many tests were “pioneering” - first Soviet underground nuclear test in STS, first Soviet space explosion, and, of course, the highest yield Soviet test (not in STS) of “Tsar Bomba” (AN602 or RDS-202). Eventually, “on 5 August 1963, the Treaty Banning Nuclear Weapon Tests in the Atmosphere, in Outer Space and Under Water was signed in Moscow by the United States, the Soviet Union and the United Kingdom” (Dabrowski 2021, 39), leaving only possible nuclear tests conducted in underground and STS was a perfect facility for that. After hundreds of other tests, the last one in STS was conducted on 19 October 1989 and the site was officially closed in 1991 after Kazakhstan gained independence. Thus, as Bauer and Penter (2022) conclude, “18 nuclear weapons testing amounted to an official total of 456 nuclear detonations between 1949 and 1989, according to numbers published by Russian authorities” (199). Of course, these tests could not have gone without consequences.

## **Nevada-Semipalatinsk Protests**

The Nevada-Semipalatinsk Anti-Nuclear Movement (NSAM) emerged as one of the most significant protest campaigns of the late Soviet period, particularly in Kazakhstan, where the Semipalatinsk nuclear test site became a symbol of environmental degradation, human suffering, and colonial injustice. Founded in February 1989 following a radioactive gas leak at the Semipalatinsk test site, NSAM was sparked by a public statement by renowned Kazakh poet and public figure Olzhas Suleimenov (b. 1936), who called for an urgent meeting at the Writers' Union in Almaty (Toptayeva 2018, 57). This call led to the creation of the largest grassroots movement in the history of the Kazakh SSR. Unlike spontaneous uprisings, the movement was a strategic political response that combined activism with national identity and electoral politics (Toptayeva 2018, 11). The protests were not merely symbolic in nature – radiation exposure was a daily reality for the residents of Semipalatinsk, whose lives were changed forever by four decades of nuclear testing.

While similar protests occurred around the world, such as the Nevada Desert Experience (NDE) in the United States, NSAM distinguished itself by institutional approach and active social and government involvement. While NDE emphasized individual moral and religious arguments, NSAM mobilized scientific evidence, state commissions, and legislative channels to explore “public health and environmental concerns” unfolding in Kazakhstan (Toptayeva 2018, 26). Eventually, a public healthcare commission confirmed that long-term nuclear testing had a “chronic psycho-traumatic factor affecting the psychological health of the population” (Toptayeva 2018, 62), and severely damaged local environment, so the only possible solution was to stop the exploitation of STS. These findings, spread widely through regional newspapers and scientific conferences, reinforced the movement’s core message: the Semipalatinsk test site was not only a local tragedy, but also a crime against humanity.

Important to note, the protests in Semipalatinsk reflected deeper tensions in the late Soviet period - activists and journalists considered the test site an extension of “Russian imperialism and Moscow’s Cold War technoscientific agenda in Central Asia” (Bauer and Penter 2022, 201). Nuclear testing was sometimes described as “genetic genocide,” linking environmental destruction to the longer arc of colonial subjugation and forced modernization. Even though the immediate closing of the test site was an impossible task at first, Nursultan Nazarbayev intended on solving small problems like fixing wells and decreasing the number of tests to reduce the damage dealt by STS activity

(Toptayeva 2018, 60). The eventual closure of the site on August 29, 1991, as Toptayeva (2018) noticed, “40 years after the first atmospheric testing” (2), became a landmark victory, not just for Kazakh environmentalists but for the nation’s independence movement. This achievement, occurring just months before Kazakhstan declared its sovereignty, symbolized a break from Moscow’s violent legacy and the dawn of a new national consciousness. As Bauer and Penter (2022) note, the closure of Semipalatinsk was “a highly symbolic and significant act” (200), closely related to Kazakhstan’s persuasion of independence and its rejection of Cold War militarism.

However, despite the movement’s success, several problems remained in post-Soviet Kazakhstan. For example, the “Law on the Social Protection of Citizens Exposed due to Nuclear Tests at the Semipalatinsk Nuclear Test Site”, passed in December 1992, promised compensation and social protection for victims of nuclear exposure (Bauer and Penter 2022, 156), but its implementation was delayed for several years by economic hardships. The legacy of Semipalatinsk continued to shape Kazakhstan’s politics, memory, and identity. NSAM demonstrated that organized civil resistance - when rooted in national trauma, supported by government, and amplified by authoritative scientists - could challenge even the most entrenched structures of state violence. Finally, the Semipalatinsk affair was not simply the closure of a test site - it was a collective reckoning with the cost of empire, the price of progress, and the power of protest.

## **Aftermath**

The aftermath of the Semipalatinsk test site’s exploitation is an important topic to explore. The need for contamination assessment was the initiative took up even before the Kazakhstan’s independence - various nuclear waste incidents, the Chernobyl disaster in 1986, contamination of Chelyabinsk region (Russia) and Semipalatinsk region - all these events motivated environmental activists from many regions to examine the consequences of nuclear tests (Bauer and Penter 2022, 1). In particular, in Kazakhstan, “radiation exposure is increased over an area of 350,000 square kilometres (one-tenth of the country’s total area) with a population of over one million” (Bauer and Penter 2022, 155). Not only underground explosions served as highly contaminating tests, but also atmospheric ones, conducted from 1949 until 1963, which led to local and even global contamination. According to recent studies, the Semipalatinsk region remains heavily contaminated with radionuclides such as  $^{90}\text{Sr}$ ,  $^{137}\text{Cs}$ ,  $^{239-240}\text{Pu}$  and  $^{241}\text{Am}$ , particularly in soil and plants (Pravalié 2014, 736).

In addition, local water sources also show uranium levels that exceed WHO safety standards. For example, Ground Zero and Lake Balapan are the most affected sites, while significant contamination has also been detected in the Tel'kem and Sary-Uzan areas. Further research has shown that Chinese nuclear tests at Lop Nur, which were conducted from 1964 to 1981, contributed to the radioactive contamination of southern Semipalatinsk in addition to Soviet tests (Yamamoto et al. 2004, as cited in Pravalie 2014, 736). So, radioactive dust from these tests at Lop Nur is believed to be linked to increased cancer rates among the local population. However, as Nazarbayev claimed in 2013, "the territory of the testing site can already be put to use. Scientists, both Kazakhstani and Russian, say there is no radiation, and the lands can be used.... [L]ets make them part of our economy again and use them to our advantage" (Stawkowski 2017, 423). In order to assess these claims, I conducted an analysis of trustworthy sources on examination of contaminated areas of the Semipalatinsk region with regard to soil, water, animals, and people.

To ease the understanding of the analysis, I provide a decoding of main chemical elements that will be used from now on:  $^3\text{H}$  - Tritium,  $^{131}\text{I}$  - Iodine 131,  $^{14}\text{C}$  - Carbon 14,  $^{54}\text{Mn}$  - Manganese 54,  $^{55}\text{Fe}$  - Iron 55,  $^{89}\text{Sr}$  - Strontium 89,  $^{90}\text{Sr}$  - Strontium 90,  $^{91}\text{Y}$  - Yttrium 91,  $^{95}\text{Zr}$  - Zirconium 95,  $^{103}\text{Ru}$  - Ruthenium 103,  $^{106}\text{Ru}$  - Ruthenium 106,  $^{125}\text{Sb}$  - Antimony 125,  $^{137}\text{Cs}$  - Caesium 137,  $^{140}\text{Ba}$  - Barium 140,  $^{141}\text{Ce}$  - Cerium 141,  $^{144}\text{Ce}$  - Cerium 144,  $^{239}\text{Pu}$  - Plutonium 239,  $^{240}\text{Pu}$  - Plutonium 240,  $^{241}\text{Pu}$  - Plutonium 241,  $^{241}\text{Am}$  - Americium 241, U - Uranium (IAEA 1998, 11).

## **Soil and Plants**

Long after nuclear testing was stopped, radioactive contamination from the Semipalatinsk test site exploitation is still present in soil and plants, revealing the legacy of Soviet ambitions during the Cold War. The diverse nature of radioactive contamination at the STS, particularly at the explosion epicentres, is highlighted by recent studies. For example, four distinct species of radioactive particles were detected in soils and sediments by Lukashenko et al. (2020, 18): (1) vitrified spherical particles with transuranic element-rich surfaces and internal porosity, (2) irregular debris-like particles from device-soil interactions, (3) visually unaltered soil particles with actinide inclusions, and (4) amorphous particles in river sediments from the Degelen tunnels. In contrast to  $^{90}\text{Sr}$ , which was more mobile and exhibited a range of behaviours, most of these particles contained isotopes such as " $^{137}\text{Cs}$ ,  $^{241}\text{Am}$ ,  $^{239}\text{-}^{240}\text{Pu}$  in soils were strongly associated with solid phases (90–99%)"

(Lukashenko et al. 2020, 18). These results are important because they demonstrate how radionuclides migrate and are retained over time in soils and sediments that are near water, highlighting the need for more thorough monitoring of contamination levels, particles behavior, and land use strategies.

Indeed, numerous studies have shown that soil, especially near test sites and research facilities, contains hazardous radionuclides, in particular aforementioned  $^{90}\text{Sr}$ ,  $^{137}\text{Cs}$ ,  $^{241}\text{Am}$  and  $^{239-240}\text{Pu}$  (Taira et al. 2013; Larionova et al. 2024a, 2024b; Kozhakhanov et al. 2024; Panitskiy et al. 2023b). The surface layer is the main area of concern from an agricultural perspective, since these radionuclides tend to remain concentrated in the upper soil layer (mainly the first 5 cm) and penetrate slightly deeper into the ground in less concentrations (Panitskiy et al. 2023b, 6). In particular, according to Kozhakhanov et al. (2024, 5), the radionuclides tend to spread from soil to plant in a following pattern – leaves tend to have the highest contamination levels, followed by branches and fruits. This bioaccumulation still poses a risk to people dependent on local food sources, representing an enduring challenge for Kazakhstan's environment.

Aside from mentioned nucleotides, another isotope like tritium ( $^3\text{H}$ ) was detected in soil and plants near the boreholes at the Sary-Uzen site. In some locations, organically bound tritium (OBT) levels reached maximum of 200,000 Bq/kg, indicating significant ongoing soil contamination (Larionova et al. 2024a, 6). Moreover, tritium can be taken up by plant leaves when it is released into the atmosphere as vapor (tritiated water, HTO), particularly in environments with high light and humidity levels. Polivkina et al. (2024, 14) warn that there is potential for internal exposure through food consumption, as some of this tritium is still bound in organic plant tissues.

Moreover, not only Semipalatinsk territory was contaminated by the activity of STS, but also nearby regions. For example, high concentrations of plutonium isotopes were detected in studies conducted in northern and northwestern China. Isotopic ratios and inventory data indicate that some of this contamination likely originated from Semipalatinsk and was transported eastward by prevailing winds (Zhao et al. 2020, 8; Feng et al. 2023, 8). These results highlight the need for long-term monitoring across the region and reveal the broader environmental impacts of STS, which challenges the notion of Semipalatinsk as a local problem and underlines the global consequences of nuclear testing.

All of this highlights why long-term monitoring of the soil and plants in the STS area is so important, demonstrating how its environmental legacy is immediate and far-reaching. Assessing the contamination helps us to understand the risks and plan safe ways to use the land, especially if people are growing food there or are engaged in cattle breeding, thus highlighting the importance of maintaining environmental safety and public health, as well as improving regional diplomacy and national land policies.

## **Water**

In addition to soil and plants, artificial radionuclides and other toxic elements continue to impact drinking water, groundwater, rivers, and lakes at the STS, making water pollution a serious environmental issue and amplifying environmental injustice across Central Asia. In particular, nucleotides like  $^{90}\text{Sr}$  and  $^3\text{H}$  were detected in rivers and streams throughout the site, especially in areas near underground nuclear test sites such as "Degelen" (Karabulak Creek, Shagan River) and "Balapan" (Timonova et al. 2024, 16; Dyussebayeva et al. 2025, 14). Increased concentrations of these radionuclides were associated with water leakage from nuclear test tunnels in Karabulak Creek. Additionally, the water was not appropriate for domestic or agricultural use due to very high concentrations of heavy metals such as uranium, beryllium, and iron (Dyussebayeva et al. 2025, 12). Moreover, according to Krasnopyorova et al. (2023, 29361) study on the Semipalatinsk drinking water sources, numerous locations along the Karabulak and Uzynbulak streams were contaminated with artificial radionuclides and, therefore, were declared unfit for use as water supplies.

With the exception of the confluence with the Shagan River (where tritium was detected continuously throughout the year) the Irtysh River, an important transboundary water body, was more or less within safe limits further downstream. In addition, as stated by Aidarkhanova et al. (2024, 26216), levels of iron, water hardness, and chlorides were measured and exceeding permissible limits have been recorded in the vicinity of Ust-Kamenogorsk, which indicates industrial and radioactive emissions into the river system and highlighting the need for continuous monitoring. The contamination of groundwater, on the other hand, is more localized; wells close to the Atomic Lake and the Shagan River have been found to contain high tritium levels of up to 95,000 Bq/L (Aktayev et al. 2024, 12). However, as Aktayev et al. (2024, 12) conclude, "the source of pollution in

these areas is associated with the influence of the river Shagan, which washes out tritium when filtered through the ‘Atomic Lake’ funnel”.

Finally, at STS, radioactive contamination is also present in natural lakes, particularly in sediments. In some lakes (considered as exceptions),  $^{90}\text{Sr}$  levels in water were higher than in sediments, despite their typically high concentrations of radionuclides. Moreover, as Aidarkhanova et al. (2022, 6) points out, some plants, such as tamarisk (*Tamarix ramosissima*) and saltwort (*Salicornia europaea*), can accumulate large amounts of  $^{90}\text{Sr}$  and  $^{137}\text{Cs}$  suggesting that they could be used as indicators of contamination. Nevertheless, lakes that are not located in the area of test site do not pose a threat and potentially can be used as water sources.

Thus, the available evidence suggests that waterborne radioactive exposure is not just historical, but ongoing and poorly controlled, continuing to impact the local environment. This risk becomes not only ecological, but also socio-political, especially when combined with the lack of access to drinking water. This means that STS is not only an ecological hazard, but also a structural inequity, where political and scientific neglect merge.

## **Animals**

After considering soil, plants and water, it is worth analysing living things, animals and people who consume the grown plants and water. Studies on hoofed animals inhabiting the STS territory show that while these animals are exposed to radioactive contamination in the environment, their meat and milk generally remain within safe consumption limits—at least for standardized radionuclides like  $^{137}\text{Cs}$  and  $^{90}\text{Sr}$ . Panitskiy et al. (2023a, 14) evaluated farm animals such as cows, goats, sheep, and horses, as well as wild species like moose, saigas, roe deer, and argali, and found no exceedances of regulatory thresholds for  $^{137}\text{Cs}$  and  $^{90}\text{Sr}$  in meat or dairy products under natural grazing conditions. Unstandardized radionuclides such as  $^{241}\text{Am}$  and  $^{239+240}\text{Pu}$  were also detected in trace amounts, especially in wild species, but were not hazardous. Activity concentrations of  $^{90}\text{Sr}$  and  $^{137}\text{Cs}$  in wild animals such as roe deer varied greatly between organs and tissues. Bones accumulated the most  $^{90}\text{Sr}$ , which is consistent with its calcium-mimicking behavior, whereas muscle tissue held comparatively low levels (Panitskiy et al. 2024, 5).

Tritium was detected in two forms in the roe deer study conducted in the Degelen test area: HTO (free water) and OBT (organically bound tritium). Tritium concentrations did not show

equilibrium and varied between organs, indicating uneven intake depending on environmental exposure. Importantly, the ratio of OBT to HTO indicated the length of time an animal had been in contaminated areas – higher ratios suggested longer presence (Panitskiy et al. 2024, 8). These results are critical for reducing radiophobia in nearby communities, as well as for assessing the health risks to people who may consume animals' meat. To better understand the long-term environmental impacts and ensure food safety in the area, the researchers recommend that future studies continue to monitor radionuclide levels in wildlife populations using non-lethal sampling methods.

## **People**

Finally, it is important to assess the aftermath of STS activity on people living in Semipalatinsk region and in nearby areas, as they are exposed by consuming water, plants, and animals' products located there. Long-term health studies of populations exposed to nuclear tests at the STS have found persistent risks associated with cardiovascular disease, thyroid dysfunction, cytogenetic instability, and systemic comorbidities. These are not just biological facts, but indicators of a lack of accountability that require recognition in terms of public health and unresolved issues inherited from Cold War secrecy.

Grosche et al. (2011, 663) found no statistically significant dose-response relationship for cardiovascular mortality in their analysis of the Semipalatinsk historical cohort. However, residents who lived closer to the test site had higher rates of cardiovascular disease and stroke mortality, especially at a young age. These findings were confirmed by Sarkulova et al. (2024, 62), who found that exposed individuals had higher rates and more severe cases of hypertension, coronary heart disease, and cerebrovascular disorders. They were often associated with obesity, metabolic syndrome, and thyroid dysfunction, suggesting that the long-term vascular and endocrine system damage may be associated with long-term low-dose radiation exposure.

In this context, thyroid health has been studied extensively. Even at moderate levels of exposure, Land et al. (2008, 380) found a significant correlation between the prevalence of thyroid nodules detected by ultrasound and the radiation dose associated with fallout. Seven years later, Land et al. (2015) found that “the dose response estimated with the Bayesian method for internal exposures (in males and in males and females combined) is higher than reported in the 2008 analysis” (171). Moreover, study of Drozdovitch et al. (2010, 97), showed that internal exposure – especially

through consumption of locally contaminated dairy products and vegetables – played a significant role in the accumulation of <sup>131</sup>I and increasing thyroid radiation dose between 1949 and 1962.

At the cytogenetic level, Kenzhina et al. (2022, 6) found that while background frequencies of chromosomal aberrations were quite low throughout Kazakhstan, they were elevated in the western regions exposed to industrial activity. Cherednichenko et al. (2022, 6), on the other hand, found that residents of Dolon, a highly exposed village, varied significantly in chromosomal aberrations and radiosensitivity. These results highlight the importance of considering biological variability when assessing the long-term effects of radiation exposure, which were shaped by family habits, geography, and government neglect.

Finally, in addition to scientific concerns, local policies and expertise are also important. As Stawkowski (2017, 433) notes, communities like Koyan still rely on coal, meat, and dairy products harvested from contaminated lands. Many areas remain poorly monitored (mainly because of its expensiveness) and local experts worry about “radiophobia”, a collective psychological trauma fuelled by mistrust and uncertainty, despite efforts by the Institute for Radiation Safety and Ecology (IRSE) to reassure the public of current safety conditions. Managing the site’s legacy is complicated because of unclear regulatory framework that prohibits agriculture but allows mining. Interviews with IRSE scientists indicate that the uneven distribution of plutonium and its potentially long-term migration into the environment continue to pose significant challenges. Thus, this striking contradiction where agriculture remains illegal, unlike mining, which still affects people using radioactive coal, in addition to the lack of monitoring leads to “radiophobia”, which becomes not an irrational fear, but a form of trauma rooted in broken trust.

Overall, these studies offer a complex picture of how STS exposure affects human health over time. However, epidemiology alone is insufficient to comprehend the cost of STS activities for human health. It requires a further examination of ways in which nuclear ambition diminished human life, particularly in colonized and peripheral areas. After living not in ignorance but in unawareness during the testing, the people of Kazakhstan deserve transparency, care, and justice.

## **Conclusion**

The Semipalatinsk Test Site serves as a reminder of the profound and long-lasting consequences of choices made for the sake of development. This isolated region of Kazakhstan has seen hundreds of

nuclear explosions over more than 40 years, leaving behind not only radiation but a complex legacy of environmental damage, health problems, and public mistrust. Even today, long after the last test in 1989, the soil, water, plants, animals, and even people still bear the consequences of those experiments. As Luksashenko et al. (2020) highlight, “from 1997 to present, the General Assembly of the United Nations (UNGA) has adopted 9 resolutions on international cooperation and coordination for the restoration of the environment and rehabilitation of the population in the Semipalatinsk region” (3), which shows a serious concern about the aftermath of STS activity.

Scientific research has shown that radioactive elements such as plutonium, caesium, and strontium remain in the ground and sometimes enter the food chain. While some parts of the land may now be considered “safe”, not all nearby residents feel that way. This exposure adds a layer of uncertainty and anxiety to the lives of many locals who still use the land to collect fuel and food, sometimes because they have no other choice. The fact that mining is permitted in some places while farming is prohibited in others raises even more concerns about risk and fairness. What makes STS’s narrative so compelling and moving is that it is about people, not just radiation levels or test dates. The consequences of what was done in their backyard are still felt by people who never asked for it. STS requires more than just rehabilitation – it requires accountability.

Thus, STS stands as a living example of unresolved national trauma, environmental injustice, and contested memory. But it also offers a chance for Kazakhstan, and the world, to do things differently: to listen to science, to listen to people, and to make choices that put safety, honesty, and healing at the center of policy and progress. It is now our responsibility to listen, to learn, and to ensure that neither the consequences nor the people who lived through them are ever forgotten.

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## **An Idealistic Anthropology: Criminological Theory and State Control in Tsarist and Soviet Russia**

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This essay examines how the Russian and Soviet regimes weaponized criminological theory to navigate the tension between modernization and autocratic control. It traces a trajectory through three key phases: the pre-Lombrosian era (Orthodox/Classical ideals), Lombrosian biological determinism (late 19th century), and the post-1917 Marxist approach. Despite claims of progressivism, each phase served the common function of legitimizing state power by redefining criminality to suit contemporary political needs. Analysis of legal codes, debates, and penal practices reveals a consistent shift in the state's conceptualization of the 'criminal,' oscillating between theories of redemption, determinism, and social control. While Tsarist attempts to reconcile legal reform with autocracy largely failed, the Soviet regime cynically adapted Marxist ideology to pathologize dissent as 'social danger,' enabling unprecedented social penetration and control under the veneer of a scientific, progressive criminology. Ultimately, criminology in Russia was persistently subordinated to the political imperative of maintaining control amidst modernization efforts.

**Keywords:** Russian criminology; autocratic modernization; state instrumentalization; Soviet social control; pathologization of dissent

The study of Russian criminology provides a unique perspective on the Russian state's modernization efforts while retaining autocratic control, a tension that shaped Russian and Soviet approach to the theories of crime, criminology and social control. The 'Great Reforms' of Alexander II were driven by the Crimean War's (1853-1856) outcome and exposed the need for modernization, prompting reforms (including emancipation on different levels) to address root causes of weakness. These reforms, most notably the emancipation of the serfs in 1861, initiated a grand yet paradoxical project: to emancipate a vast population, mobilize them for the state's needs, and yet subdue any resulting challenges associated with that to serve the means of absolute power. This created the central political dilemma for the modern Russian state, a necessity to mobilize people for the industrial and military means without thereby undermining the autocratic rule of the monarch. The latter proved to be impossible as people were often turning against the state with the newly acquired limited freedom. Evidently, the reforms were countered by the regime itself, highlighting once again the paradox of autocratic modernization in Russia. This paper argues that the evolution of Russian and Soviet criminology was not a linear scientific progression, but a direct reflection of the state's attempt to navigate through the paradox of autocratic modernization. I argue that from the Great Reforms till the Bolsheviks' rule, the state consistently instrumentalized and even weaponized criminological theory. Each framework of a criminal, whether based on Orthodoxy, biology or sociology was adapted to define crime in the way that served the political needs of the existing state, to legitimize the repression under the enlightened or scientific paradigm. In this paper I primarily focus on the idea of autocratic modernization of the Russian state and its population. While current historiography also offers a colonial lens, most notably Alexander Etkind's concept of "internal colonization," which posits that the state treated its own people as a colony that needs to be 'civilized' first to extract more resources, my chosen framework is more suited as it analyses the criminological discourse. This is because the discourse of crime in Russian state was not about suppressing the colonial holdings but about resolving the paradoxes that modernization attempts had created.

The trajectory of those shifts can be divided in 3 stages: the pre-Lombrosian stage (pre 1860s) based upon the mixture of Orthodox ideals of sin and redemption, with the Classical school of criminology rooted in Enlightenment which regarded the criminal as the rational actor exercising free will. Therefore, demanding a clear system of laws based on the proportionate punishment. This was challenged later by the Lombrosian stage, which is defined by the positivist Italian criminologist

Cesare Lombroso. In line with the positivism theory, he believed that the root causes of every phenomenon can be found in science. Evidently, this ‘new’ scientific approach posited that criminality was not a choice, but rather a form of biological determinism identifiable by the physical factors. Finally, post-revolutionary state (after 1917) based on Marxist ideology brought a different set of ideas. They dismissed both the free-will and biology, attributing crime to the class-based social structures. While each phase claimed to be progressivist, all had one common function: legitimize the state control over the people through the means of redefining criminality to suit political needs of the time. Through the analysis of legal codes, intellectual debates and penal practices, this essay will argue how the Russian/Soviet state’s understanding of the criminal was shifting, ultimately to serve the political goals; criminology was torn between modernization and social control attempts.

Before the emergence of Lombrosian anthropology, Russian criminology was shaped by the mixture of Classical school and authoritarian control on par with orthodoxy. Russian law was heavily influenced by German/Roman law where the hard physical evidence of the crime was committed, 2 eyewitnesses present, and testimony were required to verdict the law.<sup>1</sup> The cases could be made and tried again by the virtue of suspicion only, thus highlighting the state’s perception of crime in the Empire. Almost every crime one way or another was interpreted as the crime against the state, out of 2035 articles from 1845 penal code, only 320 detailed the ordinary petty crimes.<sup>2</sup> In contrast, the Napoleonic Penal Code of 1810 which laid foundations for the future codification of crime for the European states, is largely preoccupied with the issues of private property, offences against individuals. Crimes against the state are also present; however, they are focused on the crimes that disrupt the functioning of the state itself, e.g. committing treason, plotting against the state, encroachment of administrative officials,<sup>3</sup> and thus rendering it as the crimes against public order, civil life. Meanwhile, Russian Penal Code of 1845 does create the image of a state being paradoxically invisible, i.e. divine. In other words, translating every crime committed as the crime against the authority of the monarch himself because he is the one representing the law and order.<sup>4</sup>

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<sup>1</sup> William Burnham, “The Legal Context and Contributions of Dostoevsky’s ‘Crime and Punishment,’” *Michigan Law Review* 100, no. 6 (May 2002): 1234.

<sup>2</sup> Frances Nethercott, *Russian Legal Culture before and after Communism: Criminal Justice, Politics and the Public Sphere*, BASEES/Routledge Series on Russian and East European Studies 39 (London: Routledge, 2012), 47.

<sup>3</sup> “The Penal Code of 1810: Part 1,” The Napoleon Series, accessed July 19, 2025.

<sup>4</sup> Paul Valliere and Randall A. Poole, *Law and the Christian Tradition in Modern Russia*, (London: Routledge, 2021), 267.

The legal system before 1845 criminal code was rather punishing. 87.5% of all trials' verdicts resulted in "under-suspicion" judgment, rather than something more conclusive.<sup>5</sup> Nevertheless, such verdicts were enough to label a person and convict him later. The Russian state then conducted a series of legal reforms in 1845 and 1860s which aimed to increase the transparency and rationalize the process of conviction.<sup>6</sup> The newly added trial by jury was also an attempt to modernize the system by the Western example in accordance with the 'great reforms.'<sup>7</sup> However, those modernizing efforts were undermined by the nature of the state itself, the police were granted powers above the law in order to ensure obedience and/or target the political criminals.<sup>8</sup> For conservatives like Konstantin Pobedonostseff, the possible future of 'rule of law' was regarded by the conservative as anarchy. He saw juries as an ignorant "motley crowd" easily swayed by lawyers, demagogues incapable of understanding the true meaning of justice.<sup>9</sup>

This fear became state policy after Alexander II's assassination. The Empire had enacted the 'martial law,' further transferring the cases to military courts and in general restricting the 'rule of law' itself.<sup>10</sup> The future judicial reforms ceased to exist as jury trials often voted against the state in courts. Therefore, the apparent tension between legal ideals and the autocratic nature of state highlights the tension between legal idealism and autocratic repression, exposing the regime's inability to reconcile modernization with control, and thus provoking intellectual critiques from within. It exposed a fundamental paradox: the bureaucracy desired to socialize the people into the state with the mean of jury by trials for example but could not tolerate its core consequence – the surrender of absolute control over the public. On top of that, the incorporation of the law in the everyday life of *obshchestvennost'* was met with the resistance due to the legal nihilism. The law was regarded as something strictly 'Western' and thus rejected as opposing to the existing order.<sup>11</sup>

Contrary to the strictly legalistic view, the traditional Orthodox Christian viewed criminals not simply as rational actors choosing crime but as souls misguided by sin or material circumstances.

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<sup>5</sup> Burnham, "The Legal Context and Contributions of Dostoevsky's 'Crime and Punishment,'" 1235.

<sup>6</sup> Nethercott, 42.

<sup>7</sup> "Sudebnaia reforma 1864 goda (kolleksiia)" [Judicial Reform of 1864 (Collection)], Prezidentskaia biblioteka imeni B.N. Yel'tsina [B.N. Yeltsin Presidential Library], accessed July 19, 2025, article 6.

<sup>8</sup> Nethercott, *Russian Legal Culture before and after Communism*, 43.

<sup>9</sup> Pavel Pobedonostseff, *Reflections of a Russian Statesman*, trans. Robert Crozier Long (London, 1898), 59–60.

<sup>10</sup> Nethercott, *Russian Legal Culture before and after Communism*, 44-6.

<sup>11</sup> Mikhail Davydov, *Tsena utopii: Istoriia rossiiskoi modernizatsii* [The Price of Utopia: A History of Russian Modernization] (Moscow: Novoe Literaturnoe Obozrenie, 2022), 52.

Such perspective allowed for criminals to be redeemed after the sin was committed, allowing for a degree of compassion which was the central critique of Dostoevsky vis-à-vis Westernization of Russian criminal code. In his and many other traditionalists' view; the soul of the person is in the struggle between individual and common good which sometimes result in the breach of 'law.' One example could be Maslova from Tolstoy's novel *Voskresenie* (1899) which shows the individual suffering from both, own sin and the systemic state's injustice. The implication is that the Orthodox framework did exist in the Russian society and thus the notion of the crime committed due to social conditions was present. Although the trial by jury existed and was codified, it is rather difficult to conclude whether it accounted for all conditions that led to the end of procedure as it was later subjugated by the government plus often criticized as "mob trial" as advocates often appealed to the Orthodoxy ideals rather than focusing on the evidence.<sup>12</sup> Evidently, a criminal was perceived through a dual lens: as moral actor, the architect of one's own suffering with the free will, and simultaneously a soul worthy of redemption. The tension or even a paradox had created the demand for it to be resolved, and the answer appeared to lie in science.

The positivist approach to criminology in Europe significantly impacted the Classical school that put emphasis on free will and rationality. First positivist criminologists began to envision criminals as people pre-determined to breach the law. According to Cesare Lombroso's views, people are born criminals, and the signs lie within physiognomy, particularly in physical anomalies that could be seen on the face of a person: "Habitual murderers have a cold, glassy stare and eyes that are sometimes bloodshot and filmy; the jaw is strong, the cheekbones broad."<sup>13</sup> The framework was heavily criticized for its lack of statistical vigour, however found reflection among some Russian specialists, such as Pavel Kovalevskii, a prominent psychologist and a part of a new class of scientific experts. Similar to Lombroso, he argued for the necessity to divert attention from the crime committed to the criminal itself.<sup>14</sup> Largely influenced by the Italian 'thinker,' Kovalevskii though transformed the framework and concluded that the degradation of one's body and thus the soul were

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<sup>12</sup> Galina Zholobova, "Jury Trial in the Russian Empire: Understanding the First Experience During the Counter-Reform Period of the 1880s—1890s (to the 160th Anniversary of the Judicial Reform)," *Journal of Russian Law* 28, no. 12 (2024): 17.

<sup>13</sup> Cesare Lombroso, *Criminal Man*, translated by Mary Gibson and, Nicole Hahn Rafter, and Mark Seymour (Duke University Press, 2006), 51.

<sup>14</sup> Riccardo Nicolosi, ed., *Born to Be Criminal: The Discourse on Criminality and the Practice of Punishment in Late Imperial Russia and Early Soviet Union: Interdisciplinary Approaches* (Lettre. Bielefeld: Transcript, 2017), 64.

the results of the societal decay within the nation: “Kovalevskii drew the link between modernity and mental health, with civilization the source of the degeneration that began with the body and then moved up through the veins and cells into the brain.”<sup>15</sup> The Lombrosian ideas had appeared in Russia but were transformed, under the influence of Orthodoxy’s compassion and as the result emphasized that it was the society, or changes within one that needs to be blamed, and not the perpetrator. More exactly, the degradation of the body and soul had resulted not of nature of Russian state but of modernity itself. This adaptation proved potentially useful for the autocratic state: it offered a scientific, and thus progressivist lens on crime that could pathologize dissent without blaming the state policies. Meaning, if crime stemmed from the innate nature of some people, it not only deflected the blame from the state, but also justifies the intervention from one to instil control over ‘degenerate’ individuals and groups which can be traced through the emergence of psychiatric clinics. It can be seen in the jury by trials, where advocates now began to persuade the public in one’s innocence by incorporating anthropological factors during the trial, and thus the offender have become seen not as the victim of the state or circumstances, but the ill-born one.

The newly acquired social theory inevitably intersected with the multi-ethnic nature of the Russian Empire. Both Lombroso and Kovalevskii were antisemitic, Lombroso linked Jewish traditions to savagery and primitive acts (circumcising), and thus a reflection of their innate backwardness.<sup>16</sup> The framework of ‘savagery’ appeared in the late 19th century under Lombrosian influence, and it was connected not only to physiology but psychology of the person. With the arrival of ideas regarding the biological predispositions, in the imperial context it was a matter of time until some nations would be seen as born to break the law and affect the societal order. For example, Dr. Ernest Vilgelmovich Erikson, a military physician (1900s) had connected Lombrosian atavism to criminality,<sup>17</sup> where Jews were seen as the group prone to commit crimes, and Russians were the opposite, a ‘healthy nation.’<sup>18</sup> As the connection between the size of the skull and criminality was not found among the Jews, it was concluded that self-mutilation practices (linking them to atavism) are signs of primitivism and thus savagery, therefore those groups are prone to criminality. Thereby it

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<sup>15</sup> Nicolosi, *Born to Be Criminal*, 71.

<sup>16</sup> Nicolosi, *Born to Be Criminal*, 52.

<sup>17</sup> Nicolosi, *Born to Be Criminal*, 47.

<sup>18</sup> Nicolosi, *Born to Be Criminal*, 48.

was established that it was connected to the traditions of those nations rather than individual's degeneracy.<sup>19</sup> The savagery and thus criminality, was then linked to ethnicity rather than to the physiognomy as it was originally stated by Lombroso, and evidently the anthropology of the criminal was lied within societal structures, nations' traditions and not physical attributions.

This mixture of biologism and social theory thus reflects a technocratic vision of crime, it was no longer a moral failure, but a diagnosable pathology that could be cured, given there is the will. The ethnicization of degeneracy provided a modern, scientific rationale for the surveillance and control of minorities that seemed potentially disruptive, thereby reinforcing the imperial authority over them, an answer to the modernization and control paradox. Rather than blaming social instability on the state's policy of modernization, the regime externalized the issue onto minorities using the biological rationale. It reinforced imperial authority by creating a paradigm where minorities were regarded as the internal enemies of the order, and it was the state's function to defend the 'healthy' Russian nation from the criminality and social decay allegedly emanating from these atavistic groups. This fusion of old prejudices and new science reached its apex during the famous *Beilis Affair* (1913). The Tsarist state was pushing the case to prosecute Mendel Beilis for the ritual murder of a Christian boy. Even though such rituals were closer to the medieval times, a newly 'science' allowed for the prosecutors to accuse the entire Jewish group as being criminally inclined. A contemporary observer Vasily Shulgin, a key figure of for the Ukrainian nationalism and a redactor for the *Kievlianin* newspaper,<sup>20</sup> had described the trial in detail. A major part of prosecution relied on the fact that Beilis was a Jew, and thus he committed manslaughter out of religious reasons. The line of defence was deflecting that on the basis that Beilis works as Saturdays and thus he is not a part of the community. The very logic of the trial centred not on individual action, even though it was present to some extent, but on Beilis's group identity and its collective tendencies and the state played a major role in pushing such narrative. The other common newspaper at that time was *Yuzhnaya Kopeyka* (Southern Penny) which was mainly written for the public. It usually contains small feuilletons, humorous writings on political topics. Amidst the revolution, one of them was written by the '8 years old boy' told the public a story about his father being the *okhrannik*, frequently

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<sup>19</sup> Nicolosi, *Born to Be Criminal*, 52.

<sup>20</sup> *Kievlianin*, no. 266, 1913, National Library of Ukraine, 3.

participating in the Jewish pogroms, however now after the revolution he stopped and hiding this fact.<sup>21</sup> While it is written in the humorous style, the content is clear enough to derive that the Tsarist regime employed the *Okbrana* to initiate pogroms to establish a common-sense of the existence of an ‘internal enemy.’

With the 1917 revolution the conception of crime and criminality itself have changed dramatically. Marxist-Leninist ideology became the lens through which the social deviances were viewed, leading to the sociological explanations of them. According to the ideology, people were incentivized to commit a crime due to the systemic inequalities and capitalist order’s flaws.<sup>22</sup> Once society achieves Communism, there would be no incentives for the crimes to be committed and thus order would be reached. Evidently, one conclusion to draw from this is that any criminal is an example of lingering bourgeois consciousness, and it is rather obvious that the law must wither away on the way to the ‘final destination.’ However, during the revolution, civil war and famine, the commonness of crime and disorder necessitated the implementation of law. The codification of the law was not an option as it was a form of bourgeois order and class struggle, and thus anti-revolutionary act. Bolsheviks therefore relied in the beginning on the ‘revolutionary consciousness’, in other words ‘proletarian commonsense’ which served to legitimize violence over perpetrators of the order in the eyes of the state.<sup>23</sup> The issue is that Bolshevism was largely driven by the masses and Marxist’s ideals were often used by the groups to commit petty crimes alongside the executions without trials.<sup>24</sup> The chaotic application of this ‘revolutionary consciousness’ is illustrated in countless local incidents e.g., a report from Kiev on December 21 of 1917, describes soldiers committing a robbery. When a *militционер* came, he was severely beaten by them under the aegis of ‘revolutionary trial.’<sup>25</sup> In a sense, such act should not be considered as a crime in post-October Russia, however the mass public was continuing to report those petty crimes to the local newspapers and militia. The discrepancy between the public perception of the crime and Bolshevik one is apparent. The ‘Bolshevism of the masses’ had unleashed a wave of violence and criminality that the state itself

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<sup>21</sup> Yuzhnaya Kopeyka, no. 2443, 1917, National Library of Ukraine, 9.

<sup>22</sup> Ruth Triplett, ed., *Handbook of the History and Philosophy of Criminology*, First Edition, Wiley Handbooks in Criminology and Criminal Justice (Hoboken, New Jersey: Wiley Blackwell, 2018), 423.

<sup>23</sup> Murray Frame, “Crime, Society and ‘Revolutionary Conscience’ during the Russian Civil War: Evidence from the Militia Files,” *Crime, Histoire & Sociétés*, no. 1 (2013): 131.

<sup>24</sup> Sheila Fitzpatrick, *The Russian Revolution*, 4th ed. (Oxford: Oxford University Press, [1982] 2017), 43-44.

<sup>25</sup> *Kievlianin*, no. 280, 1917, National Library of Ukraine, 2.

could not control through ideology alone because in part it enabled people to commit even more crimes. This forced a critical choice upon the regime: either anarchy of the proletariat or create a codified law to control and reassert the central authority. Therefore, the Bolsheviks' conceptualization of crime oscillated between Marxist ideology and pragmatic authoritarianism, and this tension defined Soviet criminology's trajectory.

With regards to the biological determinism and interpretations of it, Marxists' rule proclaimed it to be a pseudo bourgeois science.<sup>26</sup> Explanations for criminal behaviour were replaced with the socio-economic factors and thus a person misbehaving would be regarded as the victim of the structure itself, therefore eligible for redemption through labour for instance. Early Soviets emphasized that unlike the Tsarist regime, their camps and prisons for example were less oppressive and aimed at educating the person, resocializing and correcting him essentially.<sup>27</sup> Yet, the idea of human's malleability coexisted with the dehumanization of criminals themselves. As everything was seen now through the lens of Marxism, it did erase the free will of the person to the same extent as Lombrosian ideas did. From now on, it was the structure that predisposed some people to breach the societal order and not the agency of the person, therefore reducing the criminal to the passive subject of structure. Furthermore, while rejecting biology, the state embraced its own form of technocratic certainty: just as Imperial criminologists claimed the insights into criminality and degeneration, the Soviets asserted the understanding of crime's origins and causes and believed that it was only the state capable of eradicating social deviances.

Early Soviet state instrumentalized the Marxist perspective to establish its own rule and legitimize its authority through what appeared to be a progressive, scientific approach to crime. Therefore, under such configuration it was evident that only the state can 'cure' the criminals, taking the church's responsibility and at the same time appear more humane than the Tsarist regime. Moreover, once the deterministic view of crime was employed, then the reformation of the structure itself had become dependent on the state only, and thus justifying its intrusion to every aspect of society and life. The shift in the ideology can be seen in the wording of RSFSR penal codes 1922 and 1926 in which "crime" was substituted as "socially dangerous act" and "punishment" with "social

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<sup>26</sup> Triplett, *Handbook of the History and Philosophy of Criminology*, 423.

<sup>27</sup> Mikhail Pogorelov, "Prison Museums in Soviet Russia in the 1920s," *Forum for Anthropology and Culture*, no. 18 (2022), 136-61.

defence.”<sup>28</sup> A person no longer had to commit a major crime to be seen as a threat. Their class origin or even their perceived ‘bourgeois consciousness’ could be enough to label them ‘socially dangerous’ or undesirable. Thus, under the guise of a more progressive and scientific approach, the Soviet state forged a legal tool of unprecedented power, enabling a level of preventative repression and social control that far surpassed the ambitions of the Tsarist regime.

While early Soviets were focused on the ideological enemies, remnants of the old regime, during Stalin’s rule the state’s target list was largely expanded. If according to the Marxist ideology, a beggar is a victim of capitalism and thus needed help, in the 1930s a beggar would be considered as socially harmful and therefore arrested.<sup>29</sup> Not only elements of bourgeois were the threat, but also hooligans, prostitutes and bandits. The Soviet state under Stalin witnessed a pragmatic expansion of the state’s targets due to the ongoing rapid industrialization and collectivization.<sup>30</sup> The ongoing process was framed as the ‘war’ against Russian backwardness and the war does not tolerate ‘internal enemies.’<sup>31</sup> Out of all Gulag prisoners, around 22% were convicted as ‘socially harmful’, a pragmatically broad category that might impede the rapid modernization.<sup>32</sup> This shift illustrates not the philosophical return to Imperial idealism, free will, but the instrumentalization of ideology, and thus criminology. The totalizing approach allowed for the state to achieve social penetration and control that the Tsarist regime wanted to acquire, similarly under the same disguise of modernization. While Imperial Russia’s modernization efforts proved to be incompatible with the autocratic nature, the Soviet system through its adapted ideology got the scientific justification for the control with people supporting the regime. The framework of defining social deviance through the perceived threat to the state echoes back to Tsarism, however now it forged a framework that was seen as legitimate by its own agents, allowing them to act with a certainty and ruthlessness the old regime could never fully muster.

The trajectory of criminology within Russia from the late Imperial era until Stalin’s regime illustrates the persistent tension between modernization efforts and desire to possess control. This

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<sup>28</sup> George V. Starosolsky, “Basic Principles of Soviet Criminal Law,” *North Carolina Law Review* 28, no. 4 (1950): 365.

<sup>29</sup> David R. Shearer, “Social Disorder, Mass Repression, and the NKVD during the 1930s,” *Cahiers Du Monde Russe* 42, no. 2–4 (April 1, 2001): 529.

<sup>30</sup> John Gooding, *Socialism in Russia: Lenin and His Legacy, 1890-1991*, 1st ed (London: Palgrave Macmillan UK, 2002), 118-119.

<sup>31</sup> Gooding, *Socialism in Russia*, 120.

<sup>32</sup> Fitzpatrick, *The Russian Revolution*, 167.

essay argued that regimes on different stages were instrumentalizing theories of crime primarily to legitimize state power. However, the Tsarist's project was difficult to reconcile with the realities of imperial diversity. The technocratic view framing of crimes as nationalities' pathology, although justified intervention, gave space for nationalism, a deadly offering for the Empire. It was only the Bolshevik revolution that brought radical change that allowed technocrats, Marxists in this essay, to instil their lens on the criminology within Russian territory that necessitated control and mobilized people for the common goal, socialism. The logic of this argument lies in the recurring pattern of subordination of criminology to political needs, thus highlighting the interconnectedness of modernization with control in the Russian context.

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## The Last Word of the *Biy*: Land Disputes in the 19th Century Middle *Zhuz* of the Kazakh Steppe

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The 19th century was a period of radical changes in Kazakhstan's traditional social and political culture, primarily related to the colonial policy of the Russian Empire. During this period Kazakhs experienced the destruction of popular institutions, which for centuries served as a support for the authorities and the people. This article examines how exactly these reforms caused the dissolution of institutions such as *adat*, set of unwritten legal customs passed down orally from generation to generation, and *biys*, popularly recognized clan leaders with judicial, administrative, and military authority. Using unpublished land dispute cases from the Central State Archive of the Republic of Kazakhstan and 19<sup>th</sup> century legal codes of the Russian Empire, the article reconstructs the gradual process of decline of these institutions. I argue that the legal and administrative reforms of 1822 and 1868 were the main contributors to the loss of legitimacy and power of *biys*. The findings complement the existing historical and legal literature, especially with the analysis of land disputes, as the most significant indicator of the decline of traditional institutions. The research also helps to better understand and re-evaluate the concepts of legitimacy, legal culture, and the sustainability of local institutions in the face of an encounter between the empire and the colony.

**Keywords:** Kazakhstan; Central Asia; Russian Empire; *adat*; *biys*; land disputes

### ***Adat and Biys Before the 19th Century***

Good pasture lands with sufficient access to water have always been a desired resource for nomadic pastoralists. Given the rigidity of the Kazakh steppe climate and the scarcity of good pastures, the competition for land was a part of routine among locals. To resolve disputes that arose as a result of this rivalry, Kazakhs have worked out their own ways of arbitration of land issues. These practices were incorporated into *adat*, a set of unwritten legal customs passed down orally from generation to generation, which placed *biys*, popularly recognized clan leaders with judicial, administrative, and military authority, as responsible for land allocation and arbitration of disputes. Russian administrative and legal reforms of the 19th century have disrupted traditional ways of dispute resolution, introducing legal procedures unknown to Kazakhs. Specifically, the traditional function of land allocation was transferred partially from *biys* to imperial elected officials called delegates. Moreover, significant administrative and military powers were granted to *volost* administrators, which allowed them to intervene in the process of struggle for the land. In this essay, using the archival documents regarding the land disputes among the Kazakhs of the then Semipalatinsk and Akmolinsk oblasts, I examine the process of degradation of once respected and powerful institution of *biys*, which eventually became the imperial puppet with only limited judicial powers.

Since the formation of the Kazakh Khanate in 1465 and until the 1920s nomadic life was largely regulated by ancient customary practices transmitted orally from generation to generation. The significant part of these practices consisted of customary law, or *adat*. *Adat* regulated much of the nomads' legal and cultural relations, from marriage to land division to cases of murder and theft. The word itself traces roots to the Arabian Peninsula and has a meaning of “wont”, “usage”, and “practice”. According to Virginia Martin, “In its broadest sense, *adat* referred to the guiding principles governing the behavior and interaction of individuals within the nomadic community and its kinship structures, which were upheld and enforced in everyday life by commonly accepted obligations, responsibilities, sanctions and forms of punishment.”<sup>1</sup> It is difficult to estimate when and under what circumstances *adat* emerged at or permeated the Kazakh steppe, as it is equally problematic to determine its initial sources, since the earliest records of Kazakh popular justice were

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<sup>1</sup> Virginia Martin, *Law and Custom in the Steppe: The Kazakhs of the Middle Horde and Russian Colonialism in the Nineteenth Century* (Richmond, Surrey: Routledge Curzon, 2001), 25.

produced only in 1730s by the Russian official Alexey Tevkelev. Martha Olcott argues that Mongol “*Yasa*”, a codified law based on a combination of nomadic customary practices, served as a foundation for Kazakh *adat*.<sup>2</sup> This perspective is also supported by Altaiy Orazbaeva, who assumes that later codified versions of *adat*, such as Khan Tauke’s “*Zheti Zbargy*,” or Qasim Khan’s “*Qasqa Zholy*,” were based on Mongol “*Bilik*” and “*Yasa*.”<sup>3</sup>

To better comprehend *adat*, it is crucial to understand the context in which it existed. *Adat* in the Kazakh steppe as a public justice reflected the nomadic lifestyle, which consisted of three key elements: land, livestock, and kin. The natural features of the terrain, namely, continental climate, arid deserts and semi-deserts, lack of precipitation, and vast steppe lands, for centuries formed the basis of the main economic activity of its dwellers. In this context of harsh natural reality nomadic pastoralism was the only way for Kazakhs to survive. Nomads would follow the livestock to pasture lands depending on the season of the year. Later, livestock would provide nomads with food, shelter, and clothing. Moreover, in the society where metals were not used as a source of monetary exchange, livestock played a role of currency.<sup>4</sup> To be able to lead this kind of lifestyle, Kazakhs lived in small camps, *auls*, consisting of people belonging to the same clan based on kinship ties. Hence, *adat* and nomadism relied on kinship, land, and livestock, which were manifested in the figure of the *biy*.<sup>5</sup>

There are different perspectives in historiography on the emergence of the word *biy* and their role in Kazakh society before the nineteenth century administrative reforms imposed by Russians as a part of colonial policy. According to Useinova, most of the scholars in the field agree that the word *biy* originates from the Turkic word *bek*, which has the same meaning as Mongol *noyon* and Arab *emir*,<sup>6</sup> and implies that individuals bearing the title held leadership positions in their communities. Indeed, only the *biys* (apart from the khan) held judicial, administrative, and military authority within the clans they ruled, giving them unique privileges. This authority afforded the *biys* some political clout, as seen by their participation in resolving national issues along with the sultans and

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<sup>2</sup> Martha Olcott, *The Kazakhs* (Stanford: Hoover Institution Press, 1995), 6.

<sup>3</sup> Altaiy Orazbaeva, *Формула казахской государственности* [The Formula of the Kazakh Statehood] (Moscow: PRESS-BOOK.RU, 2017), 189.

<sup>4</sup> Olcott, *The Kazakhs*, 16-7.

<sup>5</sup> Martin, *Law and Custom in the Steppe*, 17.

<sup>6</sup> K.R. Useinova, “Роль и место института биев в традиционном казахском обществе [The Role and Place of the Institution of Biys in the Traditional Kazakh Society],” *Izvestiia Natsional'noi akademii Respubliki Kazakhstan*, no. 5 (2012): 34.

their joint appearance at the yearly “people’s assembly.”<sup>7</sup> Moreover, khans not only relied on some *biys* as their advisors but also as their direct political supporters. As Mazhitova notes, in a system where the title of khan was elective, support of influential *kara-siuek* (non-Chinggisid) representatives, such as *biys*, was extremely significant for *ak-siuek* (Chinggisid) sultans who claimed the supreme power. This, the scholar argues, was due to the fact that *biys* were in charge of domestic and foreign policy of their clans, which pushed khans to regard their opinion and power highly.<sup>8</sup>

Another political role that modern scholars tend to assign *biys* with is that of diplomats. According to Mazhitova, “*biys* were active in leading diplomatic missions of Kazakhs to the Russian Empire, Jungaria, and China.” Hence, in 1741 Abylai Khan was taken as a hostage to the Jungar Huntaiji Galdan Tsereng. One of the conditions of his release was to leave *batyr* Zhapek as a pledge. The legend has it that this caused resentment of Kazybek-*biy*, a prominent figure in the 18th-century Kazakh politics. Being a brilliant orator and diplomat, the *biy* delivered a powerful speech to Galdan, which resulted in “successful ending of the diplomatic mission.”<sup>9</sup> Of course, only a small group of *biys* have ever enjoyed this kind of trust, authority, and range of powers throughout Kazakh history. In fact, most of the *biys*’ role was restricted to that of a “nomadic clan leader and arbiter of disputes.”<sup>10</sup> Nevertheless, Kazakh customs provided for the fact that in the majority of instances an individual could only win the right to call oneself a *biy*. Particularly, one should have had a popular authority and acclamation to be granted a title of a *biy*. As Virginia Martin argues, the *biy* has historically held his title without any official training or appointment to a position. Instead, he embraced the distinction of being referred to as a *biy* because of his proficiency in Kazakh *adat* and his capacity for impartial dispute resolution. Obviously, there were cases when *biys*’ impartiality and fairness were in question, but it is important to note that their well-being<sup>11</sup> and the reputation of their clan and themselves depended heavily on how just their decisions were.

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<sup>7</sup> Useinova, “Роль,” 35.

<sup>8</sup> Zh.S. Mazhitova, “Место и роль биев в системе ханской власти в оценках российских исследователей (XVIII - первая половина XIX в.) [The Place and Role of the Biys in the System of Khan Authority in the Assessments of Russian Researchers (18th – first half of the 19th century)],” *Vestnik Leningradskogo gosudarstvennogo universiteta imeni A.S. Pushkina* 4, no. 3 (2014): 92.

<sup>9</sup> Zh.S. Mazhitova, “Современная российская и казахстанская историография о функциях биев в казахском обществе [Contemporary Russian and Kazakh historiography on the functions of biys in Kazakh society],” *Uchenye zapiski Kazanskogo Universiteta. Seriya Gumanitarnye Nauki* 157, no. 6 (2015): 3.

<sup>10</sup> Martin, *Law and Custom in the Steppe*, 26.

<sup>11</sup> Olcott, *The Kazakhs*, 15.

The adjudication by *biys* within the framework of *adat* was drastically different from the European justice system based on strict procedure and legal codes. This also meant differences in the goals of judiciary systems. Hence, Clifford Geertz argues that the goal of *adat* as a judiciary system, or the disposition of issues, is to practically move toward social harmony and individual composure rather than away from them toward dissonance and vertigo.<sup>12</sup> It is within this framework of customary law that the purpose of the *biy*'s decision was to maintain strong kinship ties and clan honour in the subsistence-based nomadic economy, not to determine guilt or innocence.<sup>13</sup> A vivid example of this is the use of oath in resolving disputes between nomads. In the cases when a *biy* was not satisfied by the sufficiency of evidence provided by litigating sides, a former would order that the plaintiff chose one respectable representative of the defendant's kin to take an oath that would certify the latter's integrity. It didn't matter to the *biy* whether the defendant was "guilty" or not if a Kazakh took an oath attesting to the defendant's moral character; what mattered was that kinship solidarity had been maintained by a respectable individual so that other manifestations of nomadic kinship relations, like mutual aid or marriage arrangements, could continue to operate as usual.<sup>14</sup>

### **Russian 19<sup>th</sup> Century Legal-Administrative Reforms and the Crisis of the Institution of *Biys***

The gradual process of political, cultural, and economic inclusion of the Kazakh polity to the Russian Empire, that began with the 1731 treaty that placed the Small Horde Kazakhs under Russian protectorate and ended with the collapse of Romanov dynastic rule, has once and forever changed the legal custom that guided Kazakhs for centuries. Generally, the process of legal-administrative reforms in the Middle *zhuz* can be artificially divided into two distinct periods differing in strategies used by the Empire. The first one covers the period from 1822 until mid-1860s, and the second one extends from 1868 until 1898 and onwards. I intend to analyse the differences and consequences brought about by these reforms in the course of the next paragraphs.

Annexation of the Middle *zhuz* by the Russian Empire meant that the new territories needed a governing system that would fulfil the colonial goals of russification, settlement, and further socio-

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<sup>12</sup> Clifford Geertz, *Local Knowledge: Further Essays in Interpretive Anthropology* (New York: Basic Books, 1983), 209.

<sup>13</sup> Martin, *Law and Custom in the Steppe*, 29.

<sup>14</sup> Martin, *Law and Custom in the Steppe*, 29.

economic inclusion of the nomads into the Russian imperial space, and simultaneous prevention of uprisings caused by implementation of the new legal-administrative system. To achieve these imperial goals, colonial administration, particularly the Governor-General of Western Siberia Mikhail Speransky, proposed the idea of ‘civilizing’ the nomads by the means of law.<sup>15</sup> Speransky believed that a culture must be governed by laws appropriate to its stage of development, and it would be incorrect to attempt to impose laws on a culture that did not align with its developmental stage.<sup>16</sup> This implies that Speransky believed that the nomadic culture of Kazakhs was inferior to Russian-European civilization and, hence, the latter had to execute their civilizing mission gradually before Kazakhs adopted Russian culture and were susceptible to more active interference to their way of life.

These ideas were reflected in the 1822 Regulations on Siberian Kirgiz, which laid ground to the future legislative acts in a sense that it promoted the concept of gradual change of Kazakhs by the means of law enforcement. Aside from establishing new administrative divisions, introducing corresponding local administrative institutions, restricting nomadic migration, creating opportunities for Kazakh elites to serve in Russian institutions, and promoting agriculture, these regulations “imposed Russian understandings of crime and punishment on the judicial principles of the Middle Horde Kazakhs.”<sup>17</sup> Namely, all Kazakh disputes were divided into criminal, civil, and administrative cases, which was alien to Kazakhs, as such divisions never existed in traditional legal culture.<sup>18</sup> Moreover, *biys* were restricted in solving cases regarding major violations such as murder, which now fell under the jurisdiction of the Russian administration. But most notably, the act of *barimta*, a *biy*-authorized temporal theft of livestock with the goal of restoring justice, was criminalized, even though it was “a legitimate judicial custom embedded in the Kazakh cultural understanding of wrongdoing, honour, and revenge.”<sup>19</sup> This indicated that Russian lawmakers did not thoroughly explore or exhibited deliberate indifference to the meaning and role of some of the nomadic legal customs and instead imposed their conceptions of justice to a completely different

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<sup>15</sup> Martin, *Law and Custom in the Steppe*, 34.

<sup>16</sup> Martin, *Law and Custom in the Steppe*, 36.

<sup>17</sup> Martin, *Law and Custom in the Steppe*, 35-6.

<sup>18</sup> *Устав о сибирских киргизах* [Statute on Siberian Kirgiz], in *Uchrezhdenie dlia upravleniia Sibirskikh gubernii*, (S.-Peterburg: Senatskaia tipografiia, 1822), 21-3.

<sup>19</sup> Virginia Martin, “Barimta: Nomadic Custom, Imperial Crime,” in *Russia’s Orient: Imperial Borderlands and Peoples, 1700-1917*, eds. Daniel R. Brower and Edward J. Lazzerini (Bloomington, IN: Indiana University Press, 1997), 250.

legal system. Such a superficial approach to the local customs was the main feature of Russian reforms in the steppe throughout the century and not only launched the process of decline of the institution of *biys* but caused inconveniences and troubles to the colonial rule.

During the course of the next four decades Russian administration made several efforts to codify *adat* as a gesture of benevolent rule inspired by Speransky's ideas of toleration of indigenous legal traditions. Nevertheless, none of the versions of codified *adat* gained legal status due to problems concerning both the process by which the Kazakhs were surveyed for information and the way that it was displayed as a code.<sup>20</sup> Moreover, the political situation in the Russian Empire has changed ever since. Uprisings in the Caucasus and in the Kazakh steppe made imperial rulers rethink their approach in empire-building. Instead of trying to legitimize *adat*, Moscow decided to recast *adat* to fit Russian legal sensibilities and to take control of its practices. One of the transformative parts of this strategy was bureaucratization, which "gained its fullest expression in the 1868 Provisional Statute."<sup>21</sup> The most important change promulgated by the 1868 Provisional Statute on the Administration of Uralskaya, Turgaiskaya, Akmolinskaya, and Semipalatinskaya oblasts was articulated in Article 135, which regulated the election of *biys* and made them Russian officials.<sup>22</sup> Under the new legal system, a figure of a newly elected *biy* had to be confirmed by the governor.<sup>23</sup> *Biys* were also restricted in the type of cases and the value of the cases they could hear: according to Article 146 of the Statute, they could hear cases "with a value not exceeding 300 rubles (15 horses, 150 sheep) but their resolutions [were] final only in cases not exceeding 30 rubles."<sup>24</sup> Additionally, *biys* were partially deprived of their power to resolve land issues; these were artificially divided into judicial and economic ones. Disputes concerning overgrazing, seizure of land, or instances of breaching property rights, or judicial disputes, were placed under the jurisdiction of *biys*. Issues pertaining to the allocation of land and the resolution of disputes over distributed lands, or economic issues, were placed on delegates called *vybornye*, chosen from every ten tents in each *aul* and from every fifty tents in each *volost*, a Russian imperial administrative unit within *uezd*.

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<sup>20</sup> Martin, *Law and Custom in the Steppe*, 45.

<sup>21</sup> Martin, *Law and Custom in the Steppe*, 48.

<sup>22</sup> *Временное положение об управлении в областях Уральской, Тургайской, Акмолинской и Семипалатинской* [Provisional Statute on the Administration of the Uralsk, Turgai, Akmolinsk, and Semipalatinsk Oblasts] (S.-Peterburg: Tipografia Ministerstva vnutrennikh del, 1883), 19.

<sup>23</sup> *Временное*, 20.

<sup>24</sup> *Временное*, 20.

The new statute granted tremendous powers to *volost* administrators, who were elected Kazakh officials, chosen by *volost* delegates every three years. *Volost* administrators officially concentrated police and administrative power in their hands; they were responsible for the enforcement of laws and collection of taxes. The authority given to *volost* administrators made them extremely influential figures in the steppe with multiple leverages on judicial power of *biys*. Particularly, they were allowed to interfere significantly in the process of adjudication and appeals. For example, according to articles 149 and 155, appeals and further appeals had to be approved by *volost* administrator or *uezd* commander respectively.<sup>25</sup> Additionally, the traditional role of a *biy* as an enforcer of his own decisions, according to Article 148 of the Statute, was passed to *volost* administrators. These functions created conditions for *volost* administrators to interfere with the judicial processes and land allocation among Kazakhs.

### **Land Disputes Among Middle Zhuz Kazakhs**

Firstly, it is important to establish that the ways that land disputes were resolved in the pre-reform era. In this regard, the materials on Kazakh *adat* published in 1871 by Lev Fedorovich Balliuzek, a Russian official who served as a Military Governor of Turgai oblast are elucidating.<sup>26</sup> According to Balliuzek, Kazakhs never possessed the land on which they grazed their herds, with exception of winter pastures, and all land was in the communal use of nomads. Hence, in the conditions of constant migration, land disputes were an inevitable part of their daily lives. To occupy a plot of land, clans had to leave their tribal signs called *tamgas* in three possible ways: by sticking a pike, by drawing a *tamga* on sand or clay, or by tying knots from tall bush grass. The principle of seniority played a crucial role in land disputes: khans, or Chinggisids, would always win over *kara-siueks*, or Black Bone, the common Kazakhs; *biys* would always win over common Kazakhs too, but would concede before respected elders; between two Black Bone nomads the preference would be given to a senior clan or a senior lineage within this clan; all other things being equal, the elder nomad would get to reserve the right for his clansmen to graze herds on a plot of land. In this context of subtle relations

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<sup>25</sup> Временное, 21.

<sup>26</sup> L.F. Balliuzek, *Народные обычаи имевшие, а отчасти и ныне имеющие, в Малой киргизской орде силу закона* [Folk Customs that Had, and Partially Still Have, the Force of Law in the Small Kyrgyz Horde] (1871), in *Materialy po kazakhskomu obychnomu pravu: Sbornik*, ed. S.V. Iushkov (Alma-Ata: Izdatel'stvo akademii nauk Kazakhskoi SSR, 1948), 212-3.

inside and outside of clans, it was of no surprise that traditionally *biys*, with their knowledge of *adat*, were in charge of negotiating and resolving land disputes between nomads in pursuit of scarce resources, such as good pastures and water.<sup>27</sup>

As it was mentioned earlier, the colonial reforms of the 19th century have abolished the traditional ways the land was allocated among Kazakhs. They had to find ways to secure their winter and summer pastures, which often led to abuse of power and corruption, particularly by delegates, who became the puppets of *volost* administrators. For instance, in 1873 a Kazakh from Pavlodar *uezd* of Semipalatinsk oblast in the petition to the then Governor of the oblast complained about his land, where he has grazed his cattle for more than thirty years, being illegally seized by his fellow *volost* nomads. According to the petitioner, these wealthy Kazakhs were in close relationship with the *volost* administrator, who allowed them to occupy the land. He also reported that he had twice filed a petition to the *uezd* commander but never got any response. In addition, he also filed a petition to the governor. The latter, in turn, passed this petition back to the *volost* administrator, who reported that he had conducted the delegates assembly, which decided that the land was to be passed to the intruders. Nevertheless, the petitioner stated that he or his kin folks have never been invited to this legal procedure, thus suggesting that it was upheld illegally or was not upheld at all. Moreover, to prove his right to the exclusive use of the land, he called for respected members of his community as witnesses, two of which were *biys*.<sup>28</sup> Supposedly, he intentionally specified them to make his claim sound more legitimate. This implies that notwithstanding the legal restrictions and suppression from administrators that *biys* suffered from, they still enjoyed some level of respect and authority in the nomadic community.

Another case from a different *volost* of the same *uezd* also showcases how influential Kazakhs manipulated the system for their own benefit. In 1896, a Kazakh filed a petition to the governor against the division of the *volost* into two parts. The petitioner claimed that this process was initiated by the former *volost* administrator who wanted to regain the office. To do so, the former official, using his influence and power over the delegates, requested the latter to petition the *uezd* commander to separate the *volost* into two parts. Taking into consideration the fact that the 1868 Provisional Statute

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<sup>27</sup> Balliuzek, *Народные*, 212-3.

<sup>28</sup> Tsentral'nyi Gosudarstvennyi Arkhiv Respubliki Kazakhstan [Central State Archive of the Republic of Kazakhstan], f.15, op.1, d.1859, ll.311-314.

provided for the delegates to be in charge of choosing a *volost* administrator,<sup>29</sup> it could be implied that the former administrator enjoyed the support of only some part of the delegates that inhabited a certain territory of the *volost*. Hence, what he engaged in was gerrymandering to win as many votes of the delegates as possible. Per the petitioner, if this division would take place, then this would lead to constant conflicts between neighbouring *auls* for rights to graze livestock and the financial burden of having to support twice as many officials that would fall on the common nomads.<sup>30</sup>

The elevation of power and status of *volost* administrators, as was described in these two cases, inevitably reduced the authority of official *biys* in resolving land disputes. This is clearly seen in the 1891 report of a Russian official to the Akmolinsk governor regarding the land dispute that arose between Munchaktinsk *volost* administrator and Kazakh commoners. According to the report, *volost* administrator's father has secured his right to the land in claim by the 1883 resolution of six *biys* of Munchaktinsk *volost*. Nevertheless, having been presented with the resolution, the neighbouring Kazakhs, that used to own the land before 1883, due to economic hardships, have committed an unauthorized seizure of land in 1890. Consequently, the *volost* administrator informed the *uezd* commander about this case, who in turn initiated the assembly of delegates to resolve the dispute. The assembly then ratified the right of usage of the land by the *volost* administrator's father.<sup>31</sup> Hence, the initial resolution of the *biys* had no legal power de facto as Kazakh commoners have broken it. Moreover, the *biys*' ruling was not enough for *uezd* commander as he had assigned the delegates with the task of revisioning the case. This indicates that official *biys* have lost their authority not only in the eyes of common Kazakhs but additionally lost their weight as a reliable institution in service of Russian colonial interests.

The following case signals this tendency as well. Due to an arbitrary division of Seiten and Bish-Karagai *volosts* of Semipalatinsk *uezd* of Semipalatinsk oblast multiple land disputes arose between Kazakhs inhabiting these territories. As a temporary measure, some of the tracts, including Kos-Mola tract, have been allocated to the Kazakhs of Seiten *volost* by the then *uezd* commander in 1871. Later in 1874, during the demarcation between Semipalatinsk oblast and Tomsk governorate,

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<sup>29</sup> Т.Т. Dalaeva, "Выборные (выборщики) в казахских волостях (вторая половина XIX в. - нач. XX в.): функции и специфика деятельности [Delegates (electors) in the Kazakh Volosts (second half of the 19th - beginning of the 20th centuries): Functions and Role Specifics]," *EDU.E-HISTORY.KZ* 2017, no. 4 (12): 46.

<sup>30</sup> TsGARK, f.15, op.1, d.2078, ll.19-23.

<sup>31</sup> TsGARK, f.369, op.1, d.7640, l.5.

Kos-Mola tract was given away to the Altai Mountain Agency, a transit territory with its own administration, and all Kazakhs of this tract, except *biy* Januzak Mamaev with tribesmen, were forcibly removed from this territory. *Biy* Mamaev claimed that this territory was assigned to him by the resolution of delegates dated 1871. Despite the fact that the *biy* was repeatedly called to move out by the *uezd* administration and being independent from the power of the above-mentioned volosts, he stayed there until 1882. Moreover, Mamaev undertook multiple raids on Bish-Karagai Kazakhs.<sup>32</sup> Thus, regardless of his status as a Russian official, the *biy* caused troubles to colonial administration as well as his fellow Kazakhs in the struggle for scarce land resources. The title of the *biy* did not stop Mamaev from putting his own interests above the interests of the community as a whole.

It is noteworthy to mention that the practical drawbacks of the 1868 Provisional Statute were observed soon after its promulgation. Under the new system, the territories of *volosts*, and *uezds* were not clearly defined but the maximum quantity of tents was determined.<sup>33</sup> Moreover, the rules for allocation of winter pastures were formed; they ruled that the distribution of lands should be delivered in proportion to the “amount of tents and number of cattle”<sup>34</sup> but they never took into account the quality of pasture lands and sufficient access to water. According to the official report regarding the land-device in Akmolinsk oblast made on 19th February 1884, these changes resulted in “the clash of interests of both individuals and entire groups of the population, the resolution of which is very difficult.”<sup>35</sup> Especially significant difficulties in delineating and resolving disputes over land issues are found in *uezds* with flat, steppe terrain, where tracts and lands do not have noticeable natural boundaries; such *uezds* include Pavlodarskiy and Karkaralinskiy, where cases of delineation with the Akmolinsk oblast have been dragging on for many years.<sup>36</sup> Besides that, Russians also acknowledged that the Provisional Statute granted excessive power to the figures of *volost* administrator and *uezd* commander. Indeed, in 1884 then governor of the Akmolinsk oblast in his annual report pointed out that despite being given a broad range of powers to allocate and divide the land properly, *uezd* commanders failed to do so because of lack of time and competence.<sup>37</sup>

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<sup>32</sup> TsGARK, f.15, op.1, d.2052, ll.2-8.

<sup>33</sup> *Временное*, 11.

<sup>34</sup> *Временное*, 28.

<sup>35</sup> TsGARK, f.369, op.1, d.7270, l.3.

<sup>36</sup> TsGARK, f.369, op.1, d.7270, l.3.

<sup>37</sup> RGIA, f. Biblioteka, g.1884, op.1, d.1, l.3.

Hence, we have observed how the traditional ways of land dispute resolution were replaced by the legal norms promulgated by the 1868 reforms that have completely diminished the role of the *biys* as arbitrators. This paramount function of land allocation and negotiation in practice belonged to Kazakh bureaucrats, namely *volost* administrators, who in the context of scarce land and water resources, caused by Slavic resettlement and consequential land expropriation from nomads, abused their power and were interested exclusively in promoting their own interests and of their clansmen in solving land disputes and land allocation. The less prominent officials such as delegates and *biys*, who de jure, were in charge of land issues, became the puppets of *volost* administrators. No wonder that Abai in his word twenty-two noted: “One could also honour the *biys* and parish *volost* administrators, but they did not receive power from God. They bought it or begged for it. How can you make yourself bow your head to such people after that?”<sup>38</sup>

To sum up, one can argue that the main reason for the decline of the *biys* as a long-lasting Kazakh institution was the Russian administrative and legal reforms. Once a unique and distinctive institution with broad administrative and judicial powers, it underwent significant changes and turned into a shadow of itself in the nineteenth century. The loss of independence and authority, reliance on the *volost* administration, and the loss of traditional legitimacy have led to *biys* ceasing to be an effective dispute resolution tool. There were multiple attempts and initiatives from the part of the Kazakh intellectuals, such as Akhmet Baitursynov, Alikhan Bukeikhanov, Barlybek Sytrnanov and others, to reform the institution but their hopes for transformation were destroyed when the Bolsheviks came to power in October 1917. Thus, the ancient institution of *biys*, which for centuries served as a support for the authorities and the people of Kazakhstan, forever ceased to exist.

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<sup>38</sup> A. Kunanbaev, *Word Twenty-Two*, in *Институт волостных в системе управления казахской степью (XIX - начало XX вв.) [The Institution of Volost administrators in the System of Ruling the Kazakh Steppe (19th - beginning of the 20th centuries.)]*, comp. G. Sultangalieva et al. (Almaty: Qazaq universiteti, 2018), 261.

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## **Knowledge Production About *Dzhatak* Kazakhs: Fragmented Imperial Representations of Settled Poor by Russian Ethnographers, Public Writers, and Bureaucrats (1890-1900s)**

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This article examines how the Russian Empire conceptualized and represented *dzhatak* Kazakhs—formerly nomadic individuals who settled due to the colonial dispossession—in the framework of late imperial knowledge production. Drawing on ethnographic surveys, frontier bureaucratic reports, and articles from the *Kirgizskaia Stepnaia Gazeta* (1894–1904), the study explores how these sources with unique expertise and goals framed *dzhataks* as both symbols of progress and objects of disorder. Ethnographic expeditions, particularly the Shcherbina survey, portrayed *dzhataks* as reluctant but ultimately adaptable pioneers of sedentarization, legitimizing Russian colonization through a civilizing mission narrative. In turn, newspaper articles employed “strategic sensationalism” to depict *dzhataks* as impoverished, criminalized urban dwellers, both critiquing and reinforcing the empire’s reformist ideals. Meanwhile, intelligence reports by district chiefs cast *dzhataks* as subversive figures—susceptible to manipulation, Islamic mobilization, and administrative disorder—thereby justifying surveillance and coercive reforms. Rather than offering objective insight, these sources reveal tensions within the imperial knowledge regime, balancing between bureaucratic immediacy of action, emotional public discourse, and scholarly authority. In line with Gregory Afnogenov’s framework, the article argues that late imperial knowledge about the Kazakh Steppe was shaped by overlapping yet divergent aims—strategic governance, intellectual prestige, and ideological legitimation. The figure of the *dzhatak*, thus, illuminates broader contradictions in Russia’s colonial project that sets integration as a goal and yet produces marginalization, struggling to justify Imperial order and rationalize its detrimental consequences.

**Keywords:** Russian Empire; Kazakh steppe; *dzhatak*; sedentarization; ethnography; Shcherbina expedition; colonial knowledge; frontier bureaucracy

One notable consequence of Russian imperial expansion into the Kazakh Steppe, from the establishment of frontier Cossack settlements in the 1730s to the incorporation of the region into the provinces of Semipalatinsk, Akmolinsk, and Turgay in the 1860s, was the steady emergence of *dzhataks* Kazakh communities near Slavic peasant settlements.<sup>1</sup> As Virginia Martin observes, *dzhataks* were formerly nomadic individuals who, having lost their livestock and land claims due to the ongoing colonization pressures, were compelled to settle permanently and take up agricultural labour for wealthier Kazakh relatives, frontier Cossack *stanitsas* (administrative-military settlements), and Slavic villages.<sup>2</sup> Over time, as Yuriy Malikov contends, *dzhataks* and Cossacks became pragmatic participants in a process of mutual assimilation within the steppe borderlands, where emerging and dynamic 'communities of shared interests' were shaped by the practical benefits of cooperation rather than by the dominant narratives of violent conquest.<sup>3</sup> These settled communities often engaged in economic, cultural, and spiritual hybridity, with 18-19th century documents and scholarly accounts indicating the presence of around 20,000 *dzhataks* Kazakhs by 1820 and their rapid growth by the early 1900s.<sup>4</sup>

At the same time, amid the large-scale colonization of the region by 1890s, the growing presence of *dzhataks*, along with other data on local nomads, was increasingly recorded and officially acknowledged in frontier reports by *uezdnie nachal'niky* (district chiefs), scholarly ethnographic surveys, and newspaper articles authored by Russian elites. According to Ian Campbell, alongside cooperation from the Kazakh intermediaries on the ground, conceptualization of the settled Kazakhs within the colonial knowledge regime, albeit flawed, was vital for justification of the Empire's early mission to extend its power and later colonially integrate the region.<sup>5</sup> Hence, this article addresses the following query: How did the Russian Empire understand the phenomenon of poor *dzhataks*, and what could a comparison of the available narratives reveal about the broader tendencies of knowledge production in the late Imperial period?

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<sup>1</sup> Yuriy Malikov, *Tsars, Cossacks, and Nomads: The Formation of a Borderland Culture in Northern Kazakhstan in the 18th and 19th Centuries* (Berlin: Klaus Schwarz Verlag, 2014), 124.

<sup>2</sup> Virginia Martin, *Law and Custom in the Steppe: The Kazakhs of the Middle Horde and Russian Colonialism in the Nineteenth Century* (Richmond, Surrey: Curzon Press, 2001), 98-9.

<sup>3</sup> Yuriy Malikov, *Tsars, Cossacks, and Nomads*, 31-2.

<sup>4</sup> Yuriy Malikov, *Tsars, Cossacks, and Nomads*, 125.

<sup>5</sup> Ian Campbell, *Knowledge at the Edge of Empire: Russian Ethnography in Central Asia, 1860-1917* (Ithaca, NY: Cornell University Press, 2018), 12-3.

Using a case study approach, I focus specifically on works by imperial scholars on the Akmolinsk province (1868–1917), particularly the 1895–1903 Shcherbina Expedition and the writings of Russian elites published in the *Kirgizskaia Stepnaia Gazeta* (Kyrgyz Steppe Gazette). Taken together, these materials serve as key sources for understanding how the Russian Empire acknowledged the impoverishment and pressures underlying the emergence of the *dzhataks*, yet framed these developments as natural, if regrettable, outcomes of modernity and part of a positive historical trajectory that promoted sedentarization in the Steppe as a marker of progress, emphasizing agriculture and Russian tutelage while obscuring the detrimental consequences of colonial policy. Furthermore, by examining frontier reports of the district chiefs within the local Provincial Administration from the 1890s, it is possible to observe how *dzhataks* were often ignored or cast as threats, associated with illicit activities, manipulations by Tatar merchants, and Islamic networks labelled as fanatical, thereby strategically justifying further imperial intervention. Accordingly, while these sources primarily served colonial objectives and, as many scholars have noted, frequently reflected a superficial and biased understanding of Kazakh nomadic society,<sup>6</sup> this article treats them not as objective authoritative accounts but as discursive texts with diverse goals and expertise that reveal imperial perspectives on the phenomenon of the *dzhataks*.

However, most importantly, I highlight the evident divergences within available narratives, which reflect the underlying tensions of the empire’s knowledge regime. As Gregory Afinogenov argues, Russian scholars and ethnographers formed a semi-autonomous and prestigious group within the imperial knowledge economy, motivated by status and participation in a global marketplace of ideas, that did not directly translate into policy, with their publicly available work at times complicit in, and at other times critical of, imperial power.<sup>7</sup> In contrast, frontier bureaucrats’ intelligence was mostly restricted in access, secretive, and operated through what Gregory Afinogenov terms “intelligence as a substitute for war,” driven by a need to do surveillance to respond immediately to threats and compensate for the local administrative or military shortcomings.<sup>8</sup>

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<sup>6</sup> This tendency has been discussed well by Yerik Tungatarov. Please see, Yerik Tungatarov, “Viewing the 19th-Century Kazakh Nomads through the Lens of Russian Ethnographers” (MA thesis, Nazarbayev University, School of Sciences and Humanities, 2023), 28-9.

<sup>7</sup> Gregory Afinogenov, *Spies and Scholars: Chinese Secrets and Imperial Russia’s Quest for World Power* (Cambridge, MA: Harvard University Press, 2020), 139-40.

<sup>8</sup> Afinogenov, *Spies and Scholars*, 257-8.

Similarly, by analysing the *Kirgizskaia Stepnaia Gazeta*, I corroborate Felix Cowen's findings on the Kopeck press (1908–1918), noted for its 'progressive' stance and, more importantly for my analysis of the Steppe press, for its use of 'strategic sensationalism'<sup>9</sup> not merely to attract readers with emotional or shocking accounts of poverty, but to promote discourse on systemic social issues and advocate for reform and modernity. Hence, I argue that these perspectives did not overtly contradict one another but instead embodied distinct functions and forms of authority, revealing how colonial knowledge production was structured to render intelligence reports, newspaper articles, and ethnographic materials complicit in constructing marginalized representations of the Steppe that justified reformist interventions while rationalizing their detrimental consequences, such as the emergence of settled but poor Kazakhs.

### **Ethnographic Surveys on *Dzhatak* Kazakhs**

This section analyses Russian perspectives on Kazakh sedentarization as reflected in state sanctioned ethnographic expeditions led by Fedor Shcherbina and other scholars in the 1890s in the Steppe Provinces, particularly Akmolinsk, to survey land for peasant colonization and assess Kazakh economic conditions. These sources detail the experiences of sedentarized Kazakhs in volosts (rural village collectives), often portraying their hardships as unfortunate but necessary consequences of state policy and the transformation of the steppe under Russian tutelage. The Kokshetau district survey, for example, frequently emphasized the perceived benefits of Russian influence, highlighting how Kazakhs learned, or, more intriguingly, re-learned, agriculture, including the revival of 'ancient' *aryqs* (irrigation canals) said to have been abandoned during earlier periods of historical instability.<sup>10</sup> Ethnographers argued that Kazakhs, or their ancestors, had practiced agriculture in the past and were reengaging with it by the 1890s, sometimes more successfully than newly arrived Russian peasants.<sup>11</sup> Interestingly, as Alexander Morrison notes, networks of irrigation canals such as *aryqs* existed across Central Asia as early as 500 BC, particularly around Turkestan and the Ferghana Valley, and were

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<sup>9</sup> Felix Cowan, *The Kopeck Press: Popular Journalism in Revolutionary Russia, 1908–1918* (Toronto: University of Toronto Press, 2025), 7, 13, 64.

<sup>10</sup> Fedor Shcherbina, *Materialy po kirgizskomu zemlepol'zovaniiu. Ekspeditsiia po issledovaniiu stepnykh oblastei. Akmolinskaia oblast'. Kokchetavskii uezd*, t. 1 [Materials on Kyrgyz Land Use. Expedition for the Study of the Steppe Regions. Akmolinsk Oblast. Kokchetav Uezd], (Voronezh: Tipografiia V. V. Isaeva, 1898), 134.

<sup>11</sup> Shcherbina, *Akmolinskaia oblast', Kokchetavskii uezd*, 136.

overwhelmingly built by local populations, with their construction becoming even more active in the 18th and 19th centuries, continuing to rely primarily on local initiative rather than Russian efforts.<sup>12</sup>

However, crucially, ethnographers openly acknowledged the link between the revival of *aryqs*, and the economic pressures caused by Russian colonization and the devastating *zbut* (livestock die-offs), using these crises to frame semi-sedentary agriculture as a historically 'appropriate' lifestyle for Kazakhs, one that conveniently legitimized Russian settlement as a civilizing and benevolent force. As Virginia Martin observed, *zbut* and famine events, such as the 1882 crisis in Karkaralinsk *uezd* (district) and in the *uezds* of Akmolinsk, Kokchetav, and Atbasar, which led to the loss of over 200,000 head of livestock, as well as further episodes in 1894 and 1896–97, consistently “produced more and more *dzbatak* Kazakhs.”<sup>13</sup> This interpretation echoes scholarly claims, such as those by Maya Peterson, that the Russian imperial gaze was often directed toward “lost civilizations,” animated by a desire to revive an imagined past civility rooted in romanticized visions of decline and recovery.<sup>14</sup> Indeed, ethnographers noted that Kazakhs were 'relearning' how to sow, grind, and bake bread under Russian guidance, often quoting Kazakh informants who repeated, “that’s how the Russians taught us,” with one ethnographer remarking that “necessity serves as the most potent engine for change.”<sup>15</sup>

Still, although the reduction in available grazing land compelled nomadic Kazakhs to hire experienced *batraki kyrgyzy* (Kazakh labourers) from Russian households, many likely *dzbataks* themselves, ethnographers generally portrayed Kazakhs as unprepared to become fully self-sufficient farmers.<sup>16</sup> They emphasized Kazakh dependence on Russian peasants and Cossacks for tools, expertise, and infrastructure, including ploughs, windmills, ovens, and fertilization methods. Moreover, statistical data from these surveys showed that farming activity among Kazakhs varied by volost, often correlating with access to fertile land, livestock, and, most importantly, according to the ethnographers, proximity to Russian settlements. Kazakhs living near Russian villages were more

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<sup>12</sup> Alexander Morrison, *Russian Rule in Samarkand 1868-1910: A Comparison with British India* (Oxford University Press, 2008), 201-2.

<sup>13</sup> Martin, *Law and Custom in the Steppe*, 98.

<sup>14</sup> Maya Peterson, *Pipe Dreams: Water and Empire in Central Asia's Aral Sea Basin* (Cambridge: Cambridge University Press, 2019), 14-5; 116; 130.

<sup>15</sup> Shcherbina, *Akmolinskaia oblast', Kokchetavskii uezd*, 148.

<sup>16</sup> Shcherbina, *Akmolinskaia oblast', Kokchetavskii uezd*, 151.

likely to engage in agriculture, having learned by emulating their neighbours.<sup>17</sup> In contrast, quite intriguingly, wealthier Kazakh communities, more focused on herding and trade, were often described as lacking the technical skills necessary for 'craftsmanship' or productive farming. Thus, engagement with agriculture was portrayed not merely as a matter of land and economic necessity but of artisanal and technical knowledge, allegedly in short supply among the 'complacent' nomadic Kazakhs, thereby reinforcing the perceived need for continued Russian guidance and support.

Surprisingly, while familiar narratives appear in surveys of Atbasar, a dry, southern *uezd*, these texts also, at times, expressed sympathy for Kazakh adaptations and hardships, and offered implicit critiques of the colonization. For example, Yuriy Schmidt's 1894 survey closely examined Kazakh economic practices, including northward spring and southward autumn migrations, and their adaptation to the region's hot, dry summers and short, severe winters, while also expressing concern over the disruptions posed by the expanding Trans-Siberian railway.<sup>18</sup> Moreover, Schmidt argued that *dzhataks* often outperformed Slavic settlers in irrigated farming, effectively cultivating wheat, millet, and barley with traditional *aryq* systems—succeeding where earlier Russian sedentarization efforts, like the Ulytau Cossack outpost, had failed.<sup>19</sup> Rather insightfully, Schmidt noted that *dzhatak* agriculture was fragile and often depended on support from wealthier Kazakhs, who shared land and draft animals to sustain small-scale farming among poorer households.<sup>20</sup> Accordingly, Shcherbina's expedition in Atbasar revealed that expanding Slavic settlements displaced Kazakhs from the north into southern Atbasar, intensifying summer pasture competition, prompting hostility, erection of grazing barriers, and fragmenting communities into smaller kin groups.<sup>21</sup> As a result of these disruptions, as Shcherbina emphasized, by the 1900s, 92% of Atbasar Kazakhs remained nomadic and only 8% were sedentary, as poorer Kazakhs, struggling with a harsh climate, competition from wealthier neighbours, and isolation from Slavic settlers, relied mainly on

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<sup>17</sup> Shcherbina, *Akmolinskaia oblast', Kokchetavskii uezd*, 158.

<sup>18</sup> Yuriy Schmidt, *Ocherk kirgizskoi stepi k iugu ot Aralo-Irtyshskogo vodorazdela, v Akmolinskoi oblasti* [Essay on the Kyrgyz Steppe South of the Aral-Irtysh Watershed in Akmolinsk Oblast], *Zapiski Zapadno-Sibirskogo Otdela Imperatorskogo Russkogo Geograficheskogo Obshchestva*, kn. 17, vyp. 2 (Omsk: Tipografiia Okruzhnogo Shtaba, 1894), 44.

<sup>19</sup> Schmidt, *Ocherk kirgizskoi stepi k iugu ot Aralo-Irtyshskogo vodorazdela*, 47.

<sup>20</sup> Schmidt, *Ocherk kirgizskoi stepi k iugu ot Aralo-Irtyshskogo vodorazdela*, 52.

<sup>21</sup> Fedor Shcherbina, *Materialy po kirgizskomu zemlepol'zovaniiu. Ekspeditsiia po issledovaniiu stepnykh oblastei. Akmolinskaia oblast'. Atbasarskii uezd. 2-i tom* [Materials on Kyrgyz Land Use. Expedition for the Study of the Steppe Regions. Akmolinsk Province. Atbasar District], (Voronezh: Tipografiia V.V. Isaeva, 1898), 11-15; 21-24.

hay collection or small plots for subsistence, limiting the viability of settled agriculture and eliciting sympathy from ethnographers.<sup>22</sup>

Crucially, in addition to the difficulties of living among nomadic Kazakhs, scholars also detailed how *dzhataks* faced displacement due to colonial land speculation by incoming Cossacks and Slavic settlers. V. Ostafev's survey of Akmolinsk Province is particularly revealing, despite a land commission's attempt at equitable distribution, the Cossack administration prioritized officer land grants, awarding prime territory intended for pensions to military elites.<sup>23</sup> Initially undervalued, these lands became increasingly desirable with rising migration in the 1890s and the looming construction of the Trans-Siberian Railway. Ostafev extensively criticized Cossacks for fraudulently renting or selling land, noting that *dzhataks* with limited livestock, particularly tenants near the Irtysh River, were swept into land speculation they had little power to influence.<sup>24</sup> As prices soared, many were pushed south, demonstrating their vulnerable and marginalized position under Russian settler-colonialism in this period.<sup>25</sup> Still, while Ostafev acknowledged the harm caused by such exploitative practices, his critique did not question the civilizing mission itself, but merely advocated easing the shock and suffering experienced by *dzhataks*. Overall, like others, this account reflected the visible freedom ethnographers had to express critical observations that may have conflicted with the empire's modern and benevolent self-image; yet even sympathetic portrayals of *dzhatak* hardships rarely challenged the dominant consensus on the civilizing mission's necessity.

This point is most visible in how Shcherbina expedition materials aimed not only to statistically assess the steppe and document Kazakh lifeways through ethnographic methods, but also to rationalize the emergence of *dzhatak* Kazakhs through a lens of historical change underpinned by the imperial reforms and colonization. Several chapters of the Akmolinsk *uezd* survey emphasized earlier conflicts, particularly with the Zhungars and Kalmyks, that led to the region's temporary abandonment; although repopulation resumed under Russian suzerainty, agricultural development and the mass emergence of *dzhataks* were delayed by Kenesary's rebellion, harsh winters, *zhuts*, and

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<sup>22</sup> Shcherbina, *Akmolinskaiia oblast'. Atbasarskii uezd*, 32-5.

<sup>23</sup> Vladimir Ostafev, *Zemlevladienie i zemledelie Sibirskogo kazachego voiska*, [Landholding and Agriculture of the Siberian Cossack Host], vol.2, kn.4, (*Trudy Imperatorskogo Vol'nogo Ekonomicheskogo Obshestva*, 1897), 32.

<sup>24</sup> Ostafev, *Zemlevladienie i zemledelie Sibirskogo kazachego voiska*, 37-41.

<sup>25</sup> Ostafev, *Zemlevladienie i zemledelie Sibirskogo kazachego voiska*, 53-6.

persistent instability well into the 1890s.<sup>26</sup> Simultaneously, as Russian authorities restructured the steppe into auls and volosts after 1868, Kazakhs were compelled to claim land individually or in small kin groups, fragmenting traditional tribal structures; Russian scholars estimated that competition over pasture drove a more than thirtyfold increase in the number of auls between the mid-18th century and 1895.<sup>27</sup> Russian ethnographers interpreted this shift from large, clan-based migrations to smaller, individualized movements as a pioneering progress of *dzhataks* toward a rational and sedentary, peasant-like identity.<sup>28</sup> Nevertheless, while the surveys sought to rationalize Kazakh land use through environmental explanations, they acknowledged gaps in understanding pre-colonial lifeways, ultimately preferring to frame sedentarization and agriculture as inevitable and beneficial outcomes of population pressure, land scarcity, and Russian settlement.<sup>29</sup>

### **Stories of *Dzhataks* from the *Kyrgyzskaya Stepnaya Gazeta***

The *Kyrgyz Steppe Press* (1894–1904), established by General-Governor Kolpakovskii and later overseen by his successor General Taube, aimed to familiarize the native population with imperial directives, provide practical information, and promote discourse on bridging the imagined primordial wilderness of the steppe with European civilization through state intervention.<sup>30</sup> At the same time, in line with Felix Cowen’s observations on the Imperial press’s use of ‘strategic sensationalism,’ it featured numerous emotional stories about *dzhataks* from urban centres in Akmolinsk Province, reflecting critical Russian intellectual perspectives that belittled the urban poor, linked them to crime or portrayed them as unprepared for the rapidly changing conditions of the steppe, thus indirectly critiquing colonization. For example, the 1895 article “Gorodskie Dzhataki” in *Kirgizskaya Stepnaya Gazeta* offers a vivid portrayal of impoverished Kazakhs in Akmolinsk, a city largely inhabited by Tatars and Russians.<sup>31</sup> While Tatars dominated trade and accumulated wealth, often at the expense of “inexperienced” Kazakhs, those who settled in the city

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<sup>26</sup> Fedor Shcherbina, *Materialy po kirgizskomu zemlepol'zovaniiu. Sobrannye i razrabotannye Ekspeditsiei po issledovaniiu stepnykh volostei. Akmolinskaia oblast', Akmolinskii uezd*, t. 3, ch. 2 [Materials on Kyrgyz Land Use. Collected and Compiled by the Expedition for the Study of the Steppe Volosts. Akmolinsk Oblast, Akmolinsk Uezd] (Chernigov: Tipografiia G. M. Veseloi, 1909), 97-100.

<sup>27</sup> Shcherbina, *Akmolinskaia Oblast', Akmolinskii uezd*, 115-20.

<sup>28</sup> Shcherbina, *Akmolinskaia Oblast', Akmolinskii uezd*, 132-3.

<sup>29</sup> Shcherbina, *Akmolinskaia Oblast', Akmolinskii uezd*, 132-3.

<sup>30</sup> Campbell, *Knowledge at the Edge of Empire*, 96-7.

<sup>31</sup> N.a., “Gorodskie Dzhataki” [“Town Dzhataks”], *Kirgizskaia Stepnaya Gazeta*, no. 14 (16 April 1895): 3.

out of necessity struggled to adapt. According to the author, they were typically idle, compelled to work only under economic duress, and lived in dire conditions in dark, damp, and overcrowded earth huts. A few succeeded in emulating Tatar business practices to become petty merchants, but most remained in poverty. Some reportedly turned to “deceitful” means of survival, such as gambling and cheating fellow steppe Kazakhs.<sup>32</sup> One common scam involved staged card games like three-card monte, where conspirators posed as drunkards to swindle newcomers in clandestine venues. Overall, the article painted a bleak picture of urban Kazakh life, one marked by hardship, dislocation, and exploitation, far from the idealized image of brave pioneers embracing settlement.

Curiously, the *Steppe Newspaper* aimed to assist Kyrgyz in improving agricultural practices, encouraging literate readers to share tips, such as storing snow in ground pits for summer water or preparing fertilizers, hay, and tools.<sup>33</sup> At the same time, it highlighted how *dzhataks* were often scorned by their nomadic kin and worked in fields or even gold mines, such as in Kokshetau, largely in hopes of acquiring enough grain or livestock to return to nomadic life.<sup>34</sup> Yet when employed by Cossacks, Tatars, or townsmen in Russian settlements, they earned meagre wages, barely covering food, clothing, and taxes.<sup>35</sup> Notably, the press criticized how, despite laws exempting *dzhataks* from taxes if they owned no livestock or land, steppe officials frequently extorted their last kopecks under various pretexts. Most likely, aforementioned conditions explained why most *dzhataks* were said to live in *kara-lashyk*, likely hovels or mud huts, often rented within Cossack enclosures, while others lived in makeshift shacks propped up with stakes.<sup>36</sup> These living conditions, characterized by dampness and cold, lead to health deterioration and premature deaths due to a lack of medical care. Still, surprisingly, regardless of the challenges, the Steppe press articles suggested that there were many *dzhataks* who recognized the benefits of a settled life and, upon saving enough, formally petitioned for land—suggesting a modest but growing trend toward permanent agriculture.<sup>37</sup>

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<sup>32</sup> N.a., “*Gorodskie Dzhataki*” [“Town *Dzhataks*”], *Kirgizskaia Stepnaia Gazeta*, no. 14 (16 April 1895): 4.

<sup>33</sup> N.a., “Po voprosu o khlebopashestve v kirgizskikh stepiakh” [“On the Question of Agriculture in the Kyrgyz Steppes”], *Kirgizskaia Stepnaia Gazeta*, no. 3 (16 January 1894): 2–3.

<sup>34</sup> N.a., “O zolote i rudakh v Akmolinskoi oblasti” [“On Gold and Ores in the Akmolinsk Province”], *Kirgizskaia Stepnaia Gazeta*, no. 5 (30 January 1894): 2–3.

<sup>35</sup> N.a., “Korrespondentsiia iz Kapala” [“Correspondence from Qapal”], *Kirgizskaia Stepnaia Gazeta*, no. 44 (6 November 1894): 3.

<sup>36</sup> N.a., “Korrespondentsiia iz Kapala”, *Kirgizskaia Stepnaia Gazeta*, 3.

<sup>37</sup> N.a., “Deshevye postroiiki dlia kirgiz” [“Cheap Buildings for the Kyrgyz”], *Kirgizskaia Stepnaia Gazeta*, no. 23 (12 June 1894): 3.

Additionally, in a curious travelogue about the town of Akmolinsk titled “*Ocherk iz Zametok Turista*” (An Essay from a Tourist’s Notes), published in the contemporaneous journal *The Traveler in Siberian and Asiatic Russia*, Russian author A. Sherstobitov briefly mentioned *dzhataks* as unfortunate, marginal figures of urbanization, portrayed more as curiosities for Russian readers than as subjects of serious inquiry.<sup>38</sup> Initially, he criticized the average European Russian’s ignorance of Siberia, arguing that persistent misconceptions, imagining the region solely as a land of frost, bears, and gold, stemmed from its remoteness and outdated medieval fantasies about mythical lands beyond “Yugra.”<sup>39</sup> While such myths may have faded, Sherstobitov observed that confusion about Siberia and its people remained widespread, prompting him to recount the story of Akmolinsk, tracing its transformation from a mid-19th-century military outpost established to control nomadic Kazakhs into a promising, prosperous, and diverse colonial center inhabited by Russian, Tatar, Kazakh, and Bukharan merchants.<sup>40</sup> Towards the end, however, with the references to the articles from the Kyrgyz Steppe Press in a moralizing and sensational tone, he concluded that no account of the city would be complete without mentioning the *dzhataks*, whom he divides into two groups: a small number of successful merchants and artisans who had integrated well into urban life, and a much larger impoverished majority, depicted as desperate proletarians surviving through petty labour and deceit, living in overcrowded earth huts alongside livestock.<sup>41</sup> Remarkably, above all, the author’s tone encouraged pride in the Empire’s civilizing reach, presenting Akmolinsk as a distinctly Asiatic yet unmistakably Russian domain, one to be embraced by readers along with its *dzhataks*, who were cast as symbols of the ambiguities and tensions of sedentarization.

### **Intelligence Reports of District Chiefs regarding *Dzhataks***

Unlike ethnographies or newspaper articles, bureaucratic reports often portrayed *dzhataks* in a very prescriptive and interventionist way, frequently calling for action, operating within a broader bureaucratic “information panic.”<sup>42</sup> A pertinent example of this is a December 1898 report by

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<sup>38</sup>Alexander Sherstobitov, “Akmolinsk (Ocherk iz Zametok Turista)” [“Akmolinsk (An Essay from a Tourist’s Notes)”], *Dorozhnik po Sibiri i Aziatskoi Rossii* [*The Traveler in Siberian and Asiatic Russia*], no. 2 (March-April 1899): 56–8.

<sup>39</sup>Sherstobitov, “Akmolinsk (Ocherk iz Zametok Turista),” 65–6.

<sup>40</sup>Sherstobitov, “Akmolinsk (Ocherk iz Zametok Turista),” 69.

<sup>41</sup>Sherstobitov, “Akmolinsk (Ocherk iz Zametok Turista),” 73.

<sup>42</sup>This term was coined by Alexander Morrison. Please see, Alexander Morrison, “Sufism, Pan-Islamism and Information Panic: Nil Sergeevich Lykoshin and the Aftermath of the Andijan Uprising.” *Past & Present* 214 (2012): 255–300.

Akmolinsk district chief Troitskii, addressed to Governor-General Sannikov, that offered a grim account of moral and administrative decay partially linked to *dzhataks*. It recounted an October incident involving Assistant Magistrate Ramazanov, who obstructed police authority and publicly assaulted a local police chief in the city of Akmolinsk.<sup>43</sup> Moreover, Ramazanov and his associate Gerlovich, a penniless Polish gambler, was accused of drunkenness, brawling, and gambling with state funds at his position as a Forester.<sup>44</sup> In turn, their behavior extended into brothels and, most notably, “Kazakh *dzhatak* slums”, described as lawless zones beyond imperial control, where Gerlovich played billiard for money and bartered fake gold watches for horses alongside *dzhatak* Kazakhs.<sup>45</sup> Furthermore, within the district chief’s report, a brothel labelled a “soldier-*dzhatak* den” was singled out as a hub of disorder, frequented by both marginalized Kazakhs and imperial officials.<sup>46</sup> One such official, Lieutenant Yazykov, unlawfully wore his officer’s uniform while visiting such an establishment and got into a conflict with a local merchant’s son, being publicly assaulted. He later called a local police officer for help, who upon failing to support Yazykov was publicly beaten by the Lieutenant.<sup>47</sup> The matter was quietly settled, revealing the impunity of officials and their complicity in the disorder.

Later, during the New Year celebrations, Troitskii again reported the growing disrespect toward government officials, including district chiefs, which he attributed to the influence of a local veterinary doctor, Shesterikov. On January 1, at a public masquerade, Shesterikov addressed a crowd of merchants, Kazakh youth, including Tatars and *dzhataks*, with a provocative joke: “The police! Their job is to hang around the threshold and wait until they’re called to act—acting themselves? No-no! The district chief? He’s in charge of the district. Acting in the city? No-no! He should march to the door and stand there, otherwise, we’ll handle him in Kazan student-style, kick him out and toss him down the stairs!”<sup>48</sup> Despite the inflammatory nature of his joke, according to Troitskii, neither the judge nor the investigator that was present at the event took any action against Shesterikov. On the contrary, both laughed, mocked the imperial officials, and even provided vodka

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<sup>43</sup> TsGARK, F..369, op.1, d.3680, 2-4.

<sup>44</sup> TsGARK, F..369, op.1, d.3680, 5.

<sup>45</sup> TsGARK, F..369, op.1, d.3680, 7.

<sup>46</sup> TsGARK, F..369, op.1, d.3680, 8-9.

<sup>47</sup> TsGARK, F..369, op.1, d.3680, 10.

<sup>48</sup> TsGARK, F..369, op.1, d.3680, 26.

to the *dzhatak* Kazakhs.<sup>49</sup> This lack of response led to bitter complaints from Troitskii, with him suggesting that the disregard for authority and the judicial system called for administrative exile for these officials. Troitskii condemned the actions of the local administration and urged the General Governor to dismiss these figures, who had come to symbolize the collapse of imperial authority.<sup>50</sup> From the tone of the reports, it is plausible to argue the illegal activities associated with *dzhatak* Kazakhs were not viewed as the root cause of the disorder, but rather as opportunistic responses to a deeper institutional failure, namely, the empire's inability to uphold its own norms and maintain administrative legitimacy.

In another case from the Kokshetau district, *dzhatak* Kazakhs were portrayed as a potentially dangerous group, easily manipulated into resisting Russian authority. In a report dated 12 September 1902, the Kokchetav district chief raised concerns to the military governor of Akmolinsk province about a petition submitted by Shaiyrden Koshyegulov, an educated Kazakh resident of the city.<sup>51</sup> Koshyegulov's petition, which claimed the support of many poor and uneducated *dzhataks*, demanded equal rights for Muslims alongside the Orthodox clergy, the establishment of a formal Islamic hierarchy, and state support for Muslim religious life.<sup>52</sup> To the district chief, these seemingly outrageous demands reflected a broader boldness in subversive attempts to undermine imperial authority in the region. He expressed particular alarm at the mobilization of *dzhatak* communities, whom he feared were being encouraged to take illegal oaths in mosques and sign the petition, actions that could confer legitimacy on an unauthorized Islamic institution.<sup>53</sup> The chief described the *dzhataks* as naive and easily influenced, susceptible to manipulation by Muslim leaders seeking to build a parallel structure of authority. Although the case was ultimately dismissed by order of the General Governor, who wished to avoid provoking instability, the district chief's report offered insightful and detailed observations on the *dzhataks'* ambiguous legal position: they existed outside the formal legal order and lacked official representation in the city. As such, he called for legal reforms to bring them under stricter administrative control and to prevent further political agitation.

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<sup>49</sup> TsGARK, F..369, op.1, d.3680, 28.

<sup>50</sup> TsGARK, F..369, op.1, d.3680, 33.

<sup>51</sup> TsGARK, F..369, op.1, d.3822, 16.

<sup>52</sup> TsGARK, F..369, op.1, d.3822, 17-17b.

<sup>53</sup> TsGARK, F..369, op.1, d.3822, 18.

With regard to religion, it is worth taking a detour to examine the motivations behind *dzhataks*' support for Koshegulov's petition advocating the institutionalization of an Islamic Kazakh Muftiate in the Steppe provinces—particularly in light of widespread but contradictory narratives that *dzhataks* were superficially Muslim<sup>54</sup> and compelled to convert to Orthodox Christianity in order to formally enter the peasant estate.<sup>55</sup> According to Yuriy Malikov's research, conversions to Orthodoxy were more common among orphaned Kazakhs lacking family or clan ties, children sold to Russian peasants by impoverished parents, or adults seeking to “start life from scratch” due to irreparable conflicts with their clans or issues with the traditional justice system.<sup>56</sup> However, for the vast majority of *dzhataks*, conversion was highly undesirable due to significant social and economic deterrents, making continued adherence to Islam a more practical and culturally resonant choice. Similarly, Pavel Shabley's findings on Semipalatinsk show that large urban populations of poor Kazakhs actively participated in mosque imam elections, supporting candidates who could offer moral leadership, spiritual guidance, representation before imperial authorities, and access to charitable aid.<sup>57</sup> Thus, it is not surprising that *dzhataks*, faced with marginalization, would pragmatically support initiatives such as Koshegulov's petition to secure religious representation and protect their interests within the imperial system.

## Conclusion

In conclusion, this article has examined the striking disparity in how Russian ethnographic studies, newspaper periodicals, and imperial bureaucratic reports conceptualized *dzhatak* Kazakhs, individuals marginalized by both society and the state. Ethnographic surveys, such as those led by Shcherbina and Schmidt, often cast *dzhataks* as symbols of the empire's civilizing mission: pioneer Kazakh agriculturalists and adaptable figures who embraced sedentarization under Russian guidance, occasionally even surpassing Russian settlers in agricultural productivity. Although this

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<sup>54</sup> Tungatarov, “Viewing the 19th-Century Kazakh Nomads,” 77.

<sup>55</sup> Yuriy Malikov, “Disadvantaged Neophytes of the Privileged Religion: Why Qazaqs Did Not Become Christians,” in *Islam, Society and States across the Qazaq Steppe (18th – Early 20th Centuries)*, ed. Niccolò Pianciola and Paolo Sartori (Vienna: Austrian Academy of Sciences Press, 2023), 202.

<sup>56</sup> Yuriy Malikov, *Disadvantaged Neophytes of the Privileged Religion*, 199; 202; 208.

<sup>57</sup> Pavel Shabley, “Rossiiskaia imperiia i musul'mane Semipalatinska: disbalans vlasti i neodnorodnye obshchestva v kontse XIX veka [The Russian Empire and the Muslims of Semipalatinsk: Power Imbalance and Fragmented Societies at the End of the 19th Century],” *Ab Imperio*, no. 3 (2019): 50; 60; 74.

vision rarely materialized on the ground due to the widespread poverty experienced by actual *dzhataks*, such portrayals served to legitimize colonial expansion by framing sedentarization as a natural and ultimately beneficial historical progression. In contrast, other perspectives, including those from Atbasar or voiced by officials like Ostaf'ev, highlighted the harsher consequences of imperial policy: land dispossession, economic marginalization, and the breakdown of traditional Kazakh social structures. Accordingly, newspaper narratives from the Kyrgyz Steppe Press often intensified this pessimistic portrayal, casting *dzhataks* as morally suspect and rootless, symbols of failed integration and collapsing economic structures. Yet such emotional or sensational accounts likely operated within a framework of 'strategic sensationalism,' not to discredit sedentarization outright, but to reaffirm the Russian civilizing mission by prompting discourse on how to modernize the steppe, promote Slavic settlement, and more fully integrate the region into the empire.

At the same time, bureaucratic reports reveal how *dzhataks* became proxies for deeper anxieties about governance, religious authority, and imperial legitimacy. They were variously portrayed as unruly and easily manipulated, as participants in potentially subversive Islamic movements, or as disruptive elements within urban life. In each case, the figure of the *dzhatak* functioned both as a perceived threat and as a pretext, justifying legal reforms, administrative exile, and increased surveillance. Their ambiguous status laid bare the contradictions of the empire itself: its reliance on legal ambiguity to govern the Kazakh steppes, its limited administrative reach, and its mounting struggle to assert control over a rapidly changing society. Imperial functionaries often used reports to fill in these 'blind spots,' compensating for their inability to fully accommodate groups like the *dzhataks* within the existing system. Viewed through this lens, imperial discourse on *dzhataks* offers insight not only into the social disruptions of colonization, but also into the underlying fragility of the imperial project.

Lastly, returning to the question of knowledge production in the Russian Empire, this article broadly affirms Gregory Afinogenov's argument that by the mid- to late nineteenth century, scholars and ethnographers had become a contingent and competitive group operating within a broader imperial knowledge marketplace.<sup>58</sup> Hence, rather than serving the state exclusively, many of these figures sought to impress academic audiences and bolster Russia's intellectual legitimacy on the

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<sup>58</sup> Afinogenov, *Spies and Scholars*, 258-9.

global stage—an ambition that aligned with the empire’s evolving “modern” self-image.<sup>59</sup> Institutions such as the College of Foreign Affairs and the Academy of Sciences increasingly codified the distinction between strategic (state-serving) and scholarly (academic) knowledge.<sup>60</sup> Within this context, as evidenced by narratives about the *dzhataks*, Russian intellectuals often operated as semi-autonomous actors: at times complicit in colonial enterprises, occasionally critical of imperial policy, but most often aligned with frontier bureaucrats in portraying Russian dominance over the Kazakhs as both inevitable and historically justified. Despite their divergent perspectives and individual ambitions, the collective output of these scholars and officials contributed to a distinctly Russian model of imperial knowledge—one that supported the extension of imperial power while blurring the lines between academic inquiry, public discourse, strategic governance, and colonial ideology.

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<sup>59</sup> Afinogenov, *Spies and Scholars*, 60-1.

<sup>60</sup> Afinogenov, *Spies and Scholars*, 63.

## **Comparative Study on the Differences in Climate Change Mitigation Between Systems with Different Sizes of the Winning Coalition: CO2 Emissions in Focus**

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The scholarly opinion on how autocracies, democracies, and other factors within those systems affect environmental performance appears to be controversial but promising for future research. Applying the selectorate theory, we attempt to examine the difference in the provision of a clean environment as a public good in systems with larger and smaller sizes of the winning coalition. We found no significant empirical evidence to support the notion that systems with larger winning coalitions are less likely to adopt a policy, and we argue that they are associated with lower carbon dioxide emissions than those with smaller coalitions. This might be because in the former systems, the policy enforcement mechanisms and thus their implementation are expected to be more efficient. Also, we notice that the regime subtypes of democracy and autocracy can suggest other answers to the question of what specific institutional system is associated with a certain level of emissions. Though the results shown by autocracies generally support the theory, those of democracies show some deviance; specifically, liberal democracies do not show an expected reduction in CO2 emissions with increases in the winning coalition. However, in general, our findings align with the selectorate theory, meaning that the theory's underpinnings could be extended to another public good - clean air.

**Keywords:** CO2 emissions; selectorate theory; winning coalition; democracies; autocracies

Climate change is a significant challenge of this century, requiring global action and national policies to mitigate its impact. The reduction of greenhouse gas (GHG) emissions, specifically carbon dioxide (CO<sub>2</sub>), has been a central mitigation effort to combat climate change. Along with other factors, political regime, institutional capabilities and government structure influence the effectiveness of mitigation policies.

An ongoing debate focuses on whether democracies have shown more promising results in addressing environmental challenges. While democracies are credited with a strong commitment to international policies and treaties as well as the provision of public goods, there is mixed evidence on whether democracies can achieve a substantial decrease in CO<sub>2</sub> emissions (Fredriksson & Wollscheid, 2007). Some studies name democracies as better performers of tackling climate change, but others simply state that the mere regime of the country cannot be a reliable factor in illustrating performance (Wurster, 2013; Fredriksson & Wollscheid, 2013; Iwinska et al., 2019; Chou et al., 2020). Some studies even stated that both democracies and autocracies show similar outcomes in mitigating climate change (Bättig & Bernauer, 2009). Notably, while the intersection of environmental politics and democracies is well studied, that of autocracies is not. The latter is predominantly researched in comparison to democracies, but not independently.

As the regime type is not the most reliable predictor for a clean environment, for this paper, we decided to take up a different approach based on the Selectorate theory created by Bueno de Mesquita et al. (2003) and investigate the relationship between the size of the winning coalition (*W*) and the CO<sub>2</sub> emission level. It is questionable that the regime type and the size of a winning coalition can be used interchangeably, but still, democracies are associated with larger winning coalitions, and autocracies with smaller ones. As Bueno de Mesquita and Smith (2022) state that *W* is not regarded as the best institutional measure, we do not intend to disregard the regime type in this paper, but test that minor differences in *W* can reveal important discrepancies in resource allocation.

Few studies similar to ours exist in academia concerning the effect of the winning coalition size in the polity on the distribution of various public goods (Deacon & Saha, 2005; Bueno de Mesquita & Smith, 2015; Cao & Ward, 2015; Choi, 2023; Choi & Heo, 2024). Focusing on sulphur dioxide and particulate pollution, Cao and Ward (2015) attempted to modify the selectorate theory to study the link between regime type and emissions. They concluded that democracies with better state capacity and regime stability perform better than autocracies in terms of long-term reduction

of the two pollutants. As an extension of this study with the most recent data available, we aim to examine and investigate the causation between winning coalition size and the level of CO<sub>2</sub> emissions. Hence, our research question is as follows: “How do political systems with different sizes of the winning coalitions differ in the implementation of climate change mitigation policy? Which systems are associated with lower CO<sub>2</sub> emissions?”

The implementation process of mitigation policies involves measures aimed at reducing greenhouse gas emissions, such as a carbon market and tax, voluntary agreements, transitioning to renewable energy, land use regulations, and more (IPCC, 2007, p. 17). While the ratification of relevant climate change treaties is not a necessary prerequisite for states to adopt these policies, it can symbolise the states’ intention to follow cooperative climate action, and be part of the implementation process, for these treaties impose certain obligations and provide a structured framework of potential actions and climate targets to achieve; for example, aimed at maintaining certain changes in the global temperature, legally binding Paris Agreement mandates states to submit and periodically update Nationally Determined Contributions (NDCs) (Paris Agreement, 2015). Depending on the sector, such as energy, economy, transport, etc., the mentioned measures’ ultimate mitigation goal is to reduce the level of emissions.

According to the Selectorate Theory, systems with larger winning coalitions tend to prioritise public goods that include environmental sustainability over private goods, therefore leaving room for a potential advantage in tackling climate change. More specifically, Siebert (1998) stated that since private property rights cannot be determined for environmental goods, these cannot be distributed by the market, and thus the state regulation acts as a provider. Sekera (n.d.) also stated that, as the provision of clean air cannot create profit and be obtained within the market system, it is categorised as a public good. Thus, we define clean air as a public good that can be provided by either not harming the environment or, if harmed, then restored by targeted actions, including the establishment of policies and regulating mechanisms.

This research examines the relationship between the winning coalition size, regime type, and carbon dioxide emissions; it also considers other factors such as corruption, government effectiveness and institutional capacity. It draws on a merged panel dataset of 169 countries from 2011 to 2017 to investigate how regime characteristics and winning coalition sizes influence two key outcomes: participation in treaties on combating climate change and CO<sub>2</sub> emissions. The research

uses a two-way fixed-effects model to test two hypotheses: (1) when the size of the coalition increases, the likelihood of adopting the climate change mitigation policies decreases, and (2) greater winning coalitions enhance the effectiveness of these policies, leading to reduced CO<sub>2</sub> emissions.

## **Literature Review**

The existing body of literature is mainly concerned with climate change mitigation policies rather than adaptation, focusing on the reduction of greenhouse gas (GHG) emissions or the enhancement of the sinks that remove those GHGs (United Nations Framework Convention on Climate Change, 1994). One of the possible explanations of policy effectiveness is informed by domestic institutions, regime type in particular. For example, Povitkina (2018) argues that some features of democratic institutions, such as freedom of the press, freedom of expression and fair elections, can facilitate climate change mitigation policies, which is explained by a higher level of commitment to address environmental issues. Similarly, Weiss and Jacobson (1999), and Battig and Bernauer (2009) argue that democracies tend to sign and ratify international agreements and treaties to cope with environmental problems and are more eager to comply with them because of adherence to the rule of law. Chou et al. (2020) concluded that the stronger the democratization effect, the lower the CO<sub>2</sub> emissions were observed.

However, there is a body of literature that argues that certain democratic institutions, in contrast, hamper the commitment to international environmental agreements. Mulligan et al. (2003) concluded that democracies and non-democracies do not show a significant difference in the variation of the adopted public policies in social and economic domains. According to Congleton (1992), political leaders in a highly competitive electoral environment tend to opt for short-sighted policies that could result in immediate outcomes rather than allocate funds to the implementation of long-term but effective policies that aim to mitigate environmental problems.

Furthermore, even though evidence from an extensive number of studies points to the positive correlation between democratic institutions and environmental outcomes, there are a few exceptions stating that the regime type alone cannot explain the effectiveness of mitigation policies and environmental outcomes (Midlarsky, 1998; Skocpol, 1985). Some studies found that a simple and broad difference in the regime type is insufficient in explaining the policy outcome, implying that the variation and the institutional context within those regimes can be more explanatory

(Wurster, 2013). Recognising this, Fredrikson and Wollshceid (2013) concluded that within democracies, proportional systems have designed stricter environmental policies than the majoritarian ones, and both are better than the policies in dictatorships; however, presidential-congressional democracies have not been that different from autocracies. Chou et al. (2020) also claimed that the explanations of why different democratic mechanisms had an impact on the environment were not determined but should be restudied in the future.

The institutional factors though may not be the only ones affecting the policy outcomes. Covering 153 countries, Lisciandra and Migliardo (2016) argued that corruption has a significant negative association with the environmental performance index. Lower levels of corruption and control of corruption were also associated with lower carbon dioxide emissions. (Povitkina, 2018; Wang et al., 2018). This conclusion, however, could not be fully supported by Læg Reid and Povitkina (2018), who stated that the relationship between democracies, low levels of corruption and the reduced level of CO<sub>2</sub> was weak. Iwinska et al. (2019) argued that control of corruption has little effect on the environmental performance of democracies. Their results also showed that the relationship between democracy and environmental performance is significant for high-income countries. This supports the Environmental Kuznets Curve theory within which Sinha et al. (2021) studied the effect of economic growth as well as the elections on carbon dioxide emissions and argued the level or the turning point of economic growth that was sufficient for economic benefits to be underweighted by the environmental quality was higher in closed autocracies compared to electoral ones; even lesser point was necessary for liberal democracies.

Among other factors examined that could potentially affect the environmental outcomes, the rate of CO<sub>2</sub> emissions, in particular, is the level of economic growth of a country. The findings of the research by Onofrei et al. (2022) argue that there is a cointegrating relationship between economic growth and the level of CO<sub>2</sub> emissions. Using the reduced-form regression models, Grossman and Krueger (1994) found that while an increase in GDP may result in the worsening of the environment in poor economies, the overall level of air and water quality tends to increase with the growth of GDP after exceeding a certain threshold of income level. Finally, the level of energy consumption may hold a clue to explaining the variation in CO<sub>2</sub> emissions across countries. According to Tiwari (2011), energy consumption facilitates an increase in CO<sub>2</sub> emissions. Another research findings by Reema (2024) state that there is a strong causation between energy

consumption and the level of carbon dioxide emissions, indicating that every increase in energy consumption results in an increase in CO<sub>2</sub> emissions.

## **Main Arguments and Hypotheses**

### **1) Theoretical Framework**

Our hypotheses for this study would be mainly based on Bueno de Mesquita et al.'s (2003) selectorate theory. According to the authors, what all leaders aim to achieve, the extension of their political survival, depends on the states' winning coalition (W) and selectorate (S) sizes or the W/S proportion; W and S are the subsets of a larger polity with W being the subset of the selectorate whose support for the incumbent is essential, and S representing those eligible for voting within a state. W and S are continuous reflections of traditional nominal classification of regime types; that is, systems with larger winning coalitions are categorised as democracies and those with smaller winning coalitions as autocracies. As the size of W and S affects leaders' behaviour, the selectorate theory states that systems with larger W and S or a larger proportion of W/S are better at public good provision, and systems with smaller W and S or a smaller proportion of W/S are better at private good provision. This is because leaders in small W systems have to maintain the loyalty and favour only of a small group of people, and thus an efficient way of doing so is the provision of private goods. Meanwhile, leaders in large W systems are accountable to a greater number of essential population than those in small W systems, and thus an efficient way to support that population's loyalty and favour is the provision of public goods. The core public goods, such as education, health, etc., examined by Bueno de Mesquita et al. (2003) do not include clean air or environmental quality. That is why we can extend the selectorate theory by testing its applicability to another public good - clean air.

### **2) Selectorate Theory and Climate Change Policy**

Based on the selectorate theory, we argue that systems with larger winning coalitions tend to be better at providing clean air as a public good. First, being accountable to a larger group of people, leaders of these systems are subject to greater pressure or impediment to their incumbency. Second, once they adopt a certain policy, there is a need to be committed to its efficient enforcement. Third, having had such enforcement, it is expected to achieve policy outcomes. In our case, we focus on

policies targeting greenhouse gas emissions, particularly carbon dioxide; the expected successful policy outcome is to have lower CO<sub>2</sub> emissions.

Based on literature, we develop our main hypotheses as follows:

**H1.** As the size of the winning coalition ( $W$ ) increases, the likelihood of adopting a climate change policy decreases.

Policy adoption and implementation are interdependent but distinct components of the policy development process (Fowler, 2019, 2022), and thus confidently stating that our expectation of systems with a larger winning coalition being more prone to policy adoption might be misleading. We argue that, as democracies are expected to have large winning coalitions, in these  $W$  systems, it is hard to achieve either a majoritarian or common consensus necessary for policy adoption or treaty ratification. That is why it would require more effort and time to initiate the policy adoption processes.

**H2.** As the size of the winning coalition ( $W$ ) increases, the performance of climate change policy improves. Thus, we expect fewer CO<sub>2</sub> emissions in countries with a larger winning coalition.

We argue that though it is harder to adopt a policy in systems with larger winning coalitions, once adopted, it has to be implemented. That is, the pressure of the winning coalition would make that system achieve the policy outcomes. In particular, as democracies generally have larger winning coalitions, they are expected to have lower emissions than autocracies.

## **Research Design**

### **1) Data Description**

The dataset employed in the study is a longitudinal panel dataset that covers observations from 169 countries from 2011 to 2017; this dataset was merged based on the variables' availability in different datasets, as further outlined for each variable. The data illustrates a diverse set of political, economic, and geographic contexts. Overall, the data consists of 1182 observations, with each observation having the value of a specific country for each year. For testing our hypotheses, we use two dependent variables: the volume of CO<sub>2</sub> emissions by a country in a given year, and whether a country participates in international climate treaties in a given year. Among the independent variables, there are the winning coalition size and regime type. We also control the level of

corruption, population and GDP size, state capacity, energy consumption, and law transparency based on Cao and Ward's (2015) recommendation to include more control variables.

## **2) Dependent Variables**

CO<sub>2</sub> Emissions. The variable displays the total annual carbon dioxide emissions measured in metric tons and produced by each country, encompassing emissions from energy generation, industrial processes, and fossil fuel combustion. The data is sourced from the Our World in Data database, a widely recognised and authoritative repository for global environmental and socio-economic indicators.

Treaty participation. It represents the proportion of international climate treaties a country has ratified relative to the total number of treaties available in a given year. The values for the data range from 0 to 1, with 0 implying the absence of ratified treaties and 1 indicating countries that have ratified or signed all key treaties under consideration. To calculate the ratio, data were sourced from Bellelli et al.'s (2023) Ratification Data, a comprehensive dataset tracking whether a country has ratified specific international environmental treaties. First, the dataset is sorted by treaties that are related to climate change. After finding out the number of total treaties each country ratified for each year, the number is divided by the number of total existing climate change treaties available for that specific year.

## **3) Independent Variables**

Winning Coalition Size. It is a continuous variable that ranges from 0 to 1, illustrating the estimated proportion of the winning coalition whose support is essential for a leader's survival in power. The values for the variables were derived from De Mesquita and Smith's (2022) paper, which represents the results of the winning coalition size according to institutional dimensions and governance characteristics.

Regime. This is a categorical variable that illustrates the country's belonging to one of the four different regime types (0 Closed Autocracy, 1 Electoral Autocracy, 2 Electoral Democracy, 3 Liberal Democracy). The values for the VD are sourced from Our World in Data.

#### 4) Analytical Framework

The analysis is divided into two models, relying on a panel regression model. Panel data was structured for the given study because it permits detailed and comprehensive information on the data by considering both cross-sectional and temporal variations. Given the structure of the data, which includes time-variant variables such as winning coalition size, corruption, energy use, and others, the two-way fixed effects model is a more appropriate method of analysis, as it accounts for both unobservable country-specific effects and time-specific shocks. This way, we only focus on how our main variables influence the outcome. The general model specification for the models in the study is as follows:

$$y_{it} = \beta + \beta_1 X_{it} + \alpha_i + \lambda_t + \epsilon_{it},$$

where  $y_{it}$  is the dependent variable,  $\beta$  is the coefficients of interest,  $X_{it}$  is the independent variables and controls,  $\alpha_i$  is an individual fixed effect,  $\lambda_t$  is a time fixed effect, and  $\epsilon_{it}$  is an error term. Model variants are as follows:

##### Model 1

The first model analyses the relationship between participation in the treaty ratio and winning coalition size. To capture more accurate results and isolate the effect of the IV on DV, several controls are included: GDP per capita, law transparency index, population size, state capacity, energy consumption, and political corruption. The following equation controls unobserved differences between countries (country-level heterogeneity) and time-specific effects that may result from global trends:

$$\text{treaty}_{it} = \beta_1 W4_{it} + \beta_2 X_{it} + \alpha_i + \lambda_t + \epsilon_{it}$$

The model considers the independent variable of winning coalition size ( $W4$ ) as a key predictor. Based on the model, we aimed to find whether there is a possible relationship between these two variables. If H1 is supported, the expected results should be a negative value for  $W4$ . It will demonstrate that the higher the value of the winning coalition, the lower the chances for the ratification or adoption of treaties that cope with climate change.

## Model 2

The second model shifts its focus to the carbon dioxide emission level by investigating the influence of two independent variables, regime type (regime) and winning coalition size (W4), on the dependent variable of CO<sub>2</sub> emissions (emiss). It aims to extend the selectorate theory by using clean air as a public good. According to the model, there are two hypotheses:

**H2a:** As the size of the winning coalition (W) increases, the performance of climate change policy improves. Thus, we expect to see fewer CO<sub>2</sub> emissions in countries with a larger winning coalition. The following equation reflects the conditions outlined in H2.

$$\text{emiss}_{it} = \beta_1 W_{4it} + \beta_2 X_{it} + \alpha_i + \lambda_t + \epsilon_{it}$$

**H2b:** democracies are expected to have fewer CO<sub>2</sub> emissions. This hypothesis is similar to the previous one, but as we do not treat the regime and winning coalition as the same, we include it as a separate, related hypothesis.

The second model, covering its first hypothesis, investigates the relationship between the level of emission caused by carbon dioxide and the winning coalition size. The analysis covers panel data that contain variables of emiss, W4, energy\_use, pol\_cor, trnslw, popsize, gdp and capacity. Similarly to the first model, the second accounts for country-level heterogeneity and time-specific effects.

If H2a is supported, we expect to see a negative trend in the coefficient of  $\beta_1$ , representing that the larger size of the winning coalition is associated with lower emissions due to their emphasis on public goods. The second hypothesis (H2b) relies on the following equation that also uses two-way fixed effects to control for  $\alpha_i$  and  $\lambda_t$ , which in turn reduces the risk of omitted variable bias:

$\text{emiss}_{it} = \beta_1 \text{regime}_{it} + \beta_2 X_{it} + \alpha_i + \lambda_t + \epsilon_{it}$ , where  $\text{emiss}_{it}$ : the level of CO<sub>2</sub> emissions for country at time  $it$ ; regime: Regime type, with 4 categories;  $X_{it}$ : Vector of control variables;  $\alpha_i$ : individual fixed effect;  $\lambda_t$ : time fixed effect;  $\epsilon_{it}$ : Error term.

By using the function of relevel, we change the reference of the regime variable across the four categories discussed above. For example, by setting the re-leveling to closed autocracy, which is the category of 0 (regime = 0), the rest of the coefficients, electoral autocracy (regime = 1), electoral democracy (regime = 2) and liberal democracy (regime = 3), are measured. It helps to compare the relative effects of each regime type on CO<sub>2</sub> emissions. As a result, this will provide detailed information on how each regime type influences DV.

If H2b is supported, we expect to observe the negative and significant trends for electoral democracy (regime = 2) and/or liberal democracy (regime = 3), while a positive or less negative one should be noticed for closed autocracy (regime = 0) and/or electoral autocracy (regime = 1).

## Results

### Model 1

Regarding Model 1, our results indicate that the size of the winning coalition (W4) has no statistically significant relationship with the probability of adopting a climate change policy. As shown in the table, the coefficient for W4 is -0.0648 with a standard error of 0.1293, a t-value of -0.5015, and a p-value of 0.61616. Since the p-value is far above the conventional significance thresholds (e.g., 0.05), this result is not statistically significant, and thus our first hypothesis (H1) is not supported.

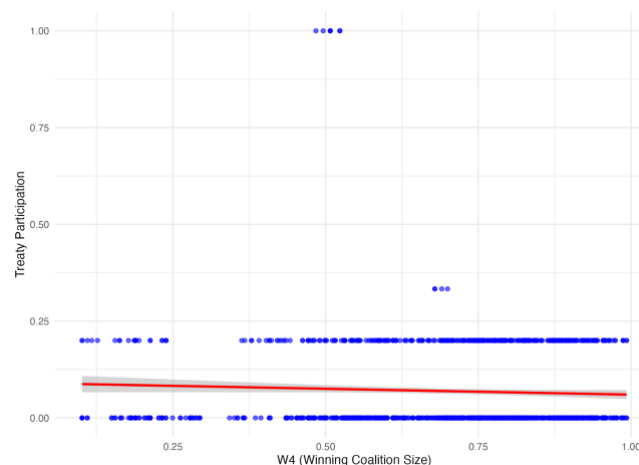


Figure 1. Illustrates the relationship between Winning Coalition Size (W4) and Treaty Participation.

Previous studies have not directly tested this hypothesis, so our finding neither supports nor contradicts existing literature. However, studies such as Neumayer (2002) have found that democratic regimes are more likely to ratify and commit to environmental treaties. If regime type is proxied by the size of the winning coalition, then our results challenge those conclusions. Although the coefficient is not significant, the negative value suggests a slightly downward trend: as the size of the winning coalition increases, the likelihood of adopting climate change policy appears to decrease.

## Model 2

The results of the study provide empirical evidence that aligns with the selectorate theory. Below, we discuss the findings of Model 2 with the visualisation of the two main variables.

As discussed earlier, the first hypothesis (H2a) of Model 2 states that since the size of the winning coalition (W) increases, the performance of climate change policy improves. Thus, we expect to see less CO<sub>2</sub> emissions in countries with a larger winning coalition. The results of the two-way fixed effects model confirm the statement by showing significant negative coefficients. In other words, the significant negative association in the two main variables of winning coalition size (W<sub>4</sub>) and the carbon dioxide emissions (emiss) matches strongly with the theory.

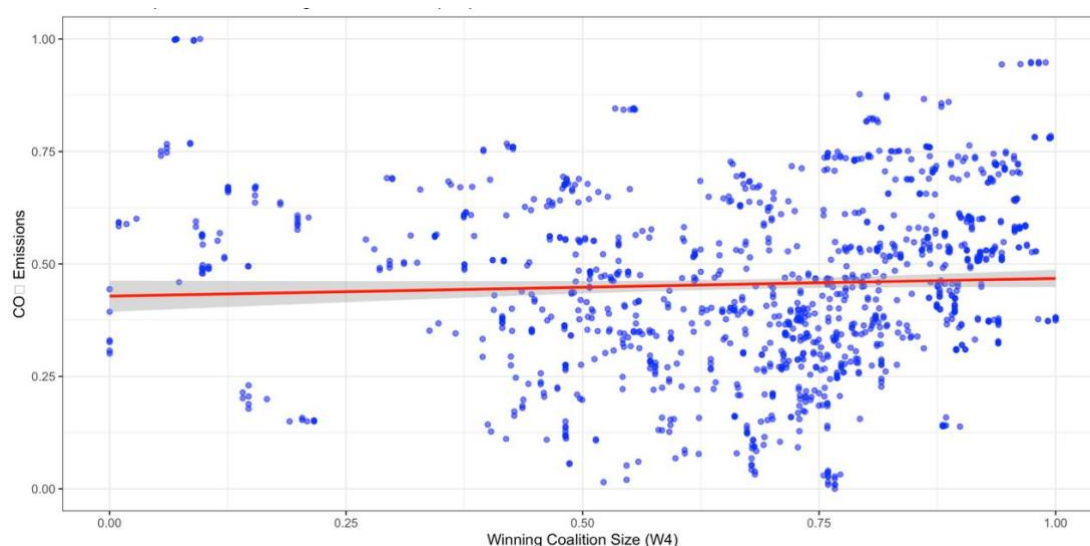


Figure 2. Illustrates the relationship Between Winning Coalition Size (W<sub>4</sub>) and CO<sub>2</sub> Emissions.

Table 2 illustrates the negative relationship between W<sub>4</sub> and emiss variables with a slope line of - 90 392 889. This coefficient of the slope, along with the standard error of 40 628 497 and p-value of 0.0263, which shows the significance of the variable, implies that as the size of the winning coalition rises, the level of emission declines. Specifically, the coefficient of the W<sub>4</sub> suggests that its one-unit increase leads to the reduction of carbon dioxide emission by approximately 90.39 million metric tons. The negative trend confirms Bueno de Mesquita et al.'s (2003) assertion that larger winning coalitions will prompt the leader to worry more about public goods, such as clean air, than about private goods. In such a framework, since the leader is held responsible for a large number of people, the individual has to prioritise the policies and actions that will benefit the masses.

Regarding the second hypothesis (H2b), which states that democracies are expected to have lower emissions than autocracies. According to the selectorate theory, democratic countries characterised by a large winning coalition size are better prepared to provide public goods. However, the winning coalition size does not influence policy outcomes in the same way for all regime types. Even though the theory assumes democracy with a larger winning coalition and vice versa for autocracy, the importance of the regime shaping the relationship between W-size and environmental performance is one of the major issues raised by the difference. By investigating these regime-specific dynamics, we will be able to understand the reason behind democracies outperforming autocracies in achieving long-term environmental goals.

As mentioned earlier, the larger the winning coalition, the stronger the incentive for leaders to focus on public goods, such as clean air in this study. The empirical results support the second hypothesis of the second model by illustrating the significant negative findings between electoral democracy and emission level variables. Compared to closed autocracy, according to the coefficients of electoral democracy regime type, -25,642,710, being significant at the p-value of 0.013, and liberal democracy regime type, -21,194,333, with the p-value of 0.09 being marginally significant at the 10% level, they show considerably lower emissions. For example, electoral democracies have 25.64 million metric tons less CO<sub>2</sub> emissions than closed autocracies produce. Similar to the first analysis, when the results of closed autocracy were used as the reference for the analysis, the outcome of electoral democracy still represents lower emissions of carbon dioxide and vice versa. Generally, the closed autocracy (regime = 0) illustrates a higher number of emissions compared to the other 3 regimes. For example, when the electoral democracy and liberal democracy were there references one for each analysis, the results for closed autocracy illustrated higher emission.

According to the results above, we see that only electoral democracy aligns with the predictions of the theory when compared to the autocratic countries. This is shown in relatively lower levels of carbon dioxide emissions of these electoral democracies as opposed to electoral autocracy and closed autocracy. However, when comparing liberal democracy with an electoral one, we can observe the negative trend, with the former increasing its emission amount. Figure 3 represents the overall positive upward trend, as the winning coalition size rises or the regime switches from electoral to liberal. These results suggest the importance of the structure and strength of the

institutional consideration that goes beyond identifying the winning coalition size. Thus, considering the variables of institutional characteristics is important for further studies.

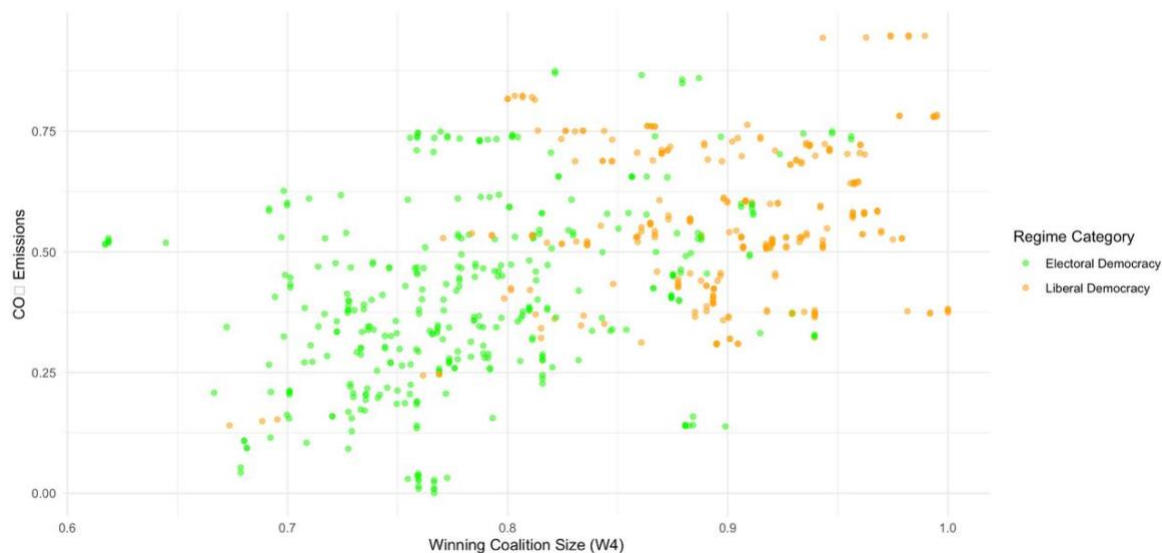


Figure 3. Relationship Between Winning Coalition Size and CO<sub>2</sub> Emissions in Democracy.

An interesting variation was observed within the autocratic regime subtypes regarding their environmental provision. One of the explanations is the regime's durability, which makes the pursuit of long-term goods more likely. Royal dictatorships were found to positively contribute to achieving environmental outcomes (Eichhorn & Linhart, 2022). This might explain the tendency for "Closed autocracies" to have a negative relationship between  $W$  and emissions, illustrated in Figure 4 above. The results for "Electoral autocracies" show that there is almost no association between emission levels and changes in the size of  $W$ . This might be because the size of the winning coalition in an electoral autocracy overestimates the actual number of voices considered in decision-making. Within this coalition, there is a leader whose preference has a large effect on the whole group's vote. That is, an increase in the coalition size does not necessarily mean having more decision-makers and changes in certain outcomes (Bueno de Mesquita et al., 2003). This imitation of an increase in the  $W$  size and thus continuous small  $W$  makes the provision and pursuit of short-term goals more attractive than climate goals which require long-term action.

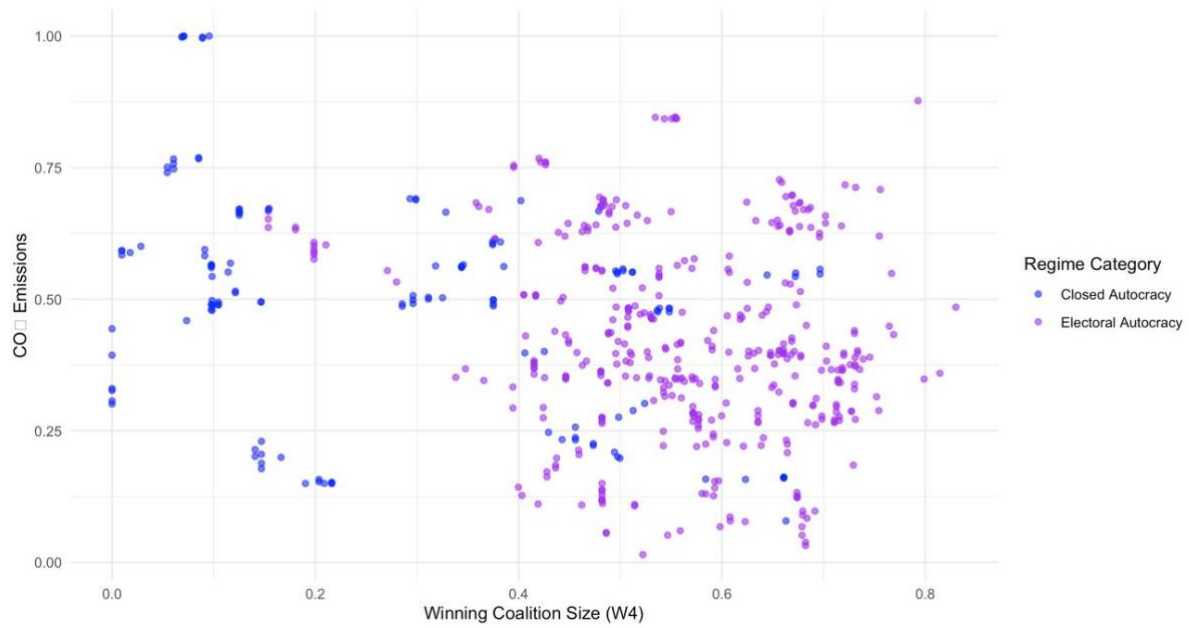


Figure 4. Relationship Between Winning Coalition Size and CO<sub>2</sub> Emissions in Autocracies.

## Conclusion

Our analysis applies the selectorate theory to investigate the relationship between the sizes of the Winning coalitions of democracies and autocracies, climate change policy adoption, and the amount of CO<sub>2</sub> emissions. Previously, the theory was tested to explain the provision of general public goods, such as education, health, etc. Meanwhile, our study applies the theory by considering the environmental provision as a public good to test the causation between climate change policy adoption, along with CO<sub>2</sub> emission level and the Winning coalition size. Our statistical results show that the size of the winning coalition does not affect the likelihood of adopting a climate change policy, though we expected a negative relationship. In general, the increase in the size of the winning coalition had a statistically significant negative relationship with the levels of CO<sub>2</sub> emissions. From a policy perspective, these results reflect that enriching political inclusion and accountability will promote desired outcomes even in an environment, which implies that for international climate agreements, democratic nations support large coalitions because that would scale up the contribution of collective actions towards mitigating global emissions. However, this was not true for one democratic regime's subtype - liberal democracy - which showed a deviant tendency between the changes in the size of the winning coalition and the emission level. We also observed the different tendencies in autocratic regime subtypes, specifically closed and electoral autocracies.

In conclusion, by providing empirical data on the correlation between the winning coalition sizes, political regimes, and climate change mitigation results, this study adds to the knowledge on environmental governance. It reveals the new domain of the selectorate theory and calls for further exploration of factors such as corruption, governance quality and institutions to shape policies regarding climate change. Policymakers attempting to strike a balance between environmental sustainability and accountability in politics may find these findings useful in furthering the global effort to prevent climate change.

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## Appendix

The dataset contains 10 key variables: pol\_cor (corruption), gdp, popsize (population size), capacity, emiss (the amount of present carbon dioxide emission), regime, energy\_use, treaty (the ratio of participation in treaty), trnslw (the level of enforcement) and W4 (size of winning coalition). The following variables are treated as control ones:

Political Corruption (pol\_cor): it measures the level of overall political corruption, ranging from 0 to 1. The data was sourced from Varieties of Democracy (V-dem) dataset.

GDP (gdp) measures a country's economic output per capita, which was taken from the World Bank's dataset collection. During the analysis, the variable was rescaled using the formula of (Original Value - Minimum Value) / (Maximum Value - Minimum Value). It was done to adjust each value relative to the minimum and maximum values in the column.

Population size (popsize) for each year. Similar to gdp variable, it was also rescaled. Since the population numbers for each country were large. The values for the variable were taken from Our World in Data’s dataset collection.

Capacity (capacity): This index, which measures the level of the government’s ability to maintain authority and integrity, was derived using the loadings from the original article by O’Reilly and Murphy (2022).

Energy consumption (energy\_use): Similar to popsize, the information for the variable was derived from Our World in Data’s dataset collection. According to the website, “it is measured in terawatt-hours, using the substitution method”.

Law transparency index (trnslw): Similar to pol\_cor, the data was derived from Varieties democracy’s dataset. The variable examines factors like clarity, stability, and enforcement of laws.

## Statistical Output

### Model 1

Variable	Coefficient	Std_Error	t_value	p_value	Significance
W4	-0.0648215	0.129266	-0.5015	0.61616	-
Energy Use	0.5005165	0.2895158	1.7288	0.08415	.
Political Corruption	-0.2171331	0.1018162	-2.1326	0.0332	*
Law Transparency	-0.0196349	0.0142153	-1.3812	0.16751	-
Population Size	7.8058296	0.6809149	11.4637	<2.2e-16	***
GDP per Capita	0.0109578	0.0018464	5.9345	4.051e-09	***
State Capacity	-0.1548175	0.1310106	-1.1817	0.2376	-

Table 1. Results of the regression analysis for Model 1.

**Model 2**

<b>Variable</b>	<b>Coefficient</b>	<b>Std_Error</b>	<b>t_value</b>	<b>p_value</b>	<b>Significance</b>
<b>Regime 1</b>	-8234632	7838253	-1.0506	0.29371	-
<b>Regime 2</b>	-25642710	10264615	-2.4982	0.01264	*
<b>Regime 3</b>	-21194333	12493072	-1.6965	0.09011	.
<b>Law Transparency</b>	244875	4503987	0.0544	0.95665	-
<b>Energy Use</b>	461461787	91747274	5.0297	<0.001	***
<b>Political Corruption</b>	24805134	33391482	0.7429	0.45774	-
<b>State Capacity</b>	2133482	41574644	0.0513	0.95908	-
<b>GDP per Capita</b>	-163884	662606	-0.2473	0.8047	-
<b>Population Size</b>	146836594	290477022	0.5055	0.61332	-

Table 2. The results of the regression analysis for Model 2's H2b hypothesis, with the reference for closed autocracy.

<b>Variable</b>	<b>Coefficient</b>	<b>Std_Error</b>	<b>t_value</b>	<b>p_value</b>	<b>Significance</b>
<b>Regime 0</b>	8234632	7838253	1.0506	0.293711	-
<b>Regime 2</b>	-17408078	6195477	-2.8098	0.005054	**
<b>Regime 3</b>	-12959701	9076408	-1.4278	0.15365	.
<b>Law Transparency</b>	244875	4503987	0.0544	0.956652	-
<b>Energy Use</b>	461461787	91747274	5.0297	<0.001	***
<b>Political Corruption</b>	24805134	33391482	0.7429	0.457743	-
<b>State Capacity</b>	2133482	41574644	0.0513	0.959083	-
<b>GDP per Capita</b>	-163884	662606	-0.2473	0.804702	-
<b>Population Size</b>	146836594	290477022	0.5055	0.613318	-

Table 3. The results of the regression analysis for Model 2's H2b hypothesis, with reference to electoral autocracy.

Variable	Coefficient	Std_Error	t_value	p_value	Significance
Regime 3	4448376	7528018	0.5909	0.554715	-
Regime 1	17408078	6195477	2.8098	0.005054	**
Regime 0	25642710	10264615	2.4982	0.012644	*
Law Transparency	244875	4503987	0.0544	0.956652	-
Energy Use	461461787	91747274	5.0297	<0.001	***
Political Corruption	24805134	33391482	0.7429	0.457743	-
State Capacity	2133482	41574644	0.0513	0.959083	-
GDP per Capita	-163884	662606	-0.2473	0.804702	-
Population Size	146836594	290477022	0.5055	0.613318	-

Table 4. The results of the regression analysis for Model 2's H2b hypothesis, with reference to electoral democracy.

Variable	Coefficient	Std_Error	t_value	p_value	Significance
Regime 1	12959701	9076408	1.4278	0.15365	.
Regime 0	21194333	12493072	1.6965	0.09011	.
Regime 2	-4448376	7528018	-0.5909	0.55472	-
Law Transparency	244875	4503987	0.0544	0.95665	-
Energy Use	461461787	91747274	5.0297	<0.001	***
Political Corruption	24805134	33391482	0.7429	0.45774	-
State Capacity	2133482	41574644	0.0513	0.95908	-
GDP per Capita	-163884	662606	-0.2473	0.8047	-
Population Size	146836594	290477022	0.5055	0.61332	-

Table 5. The results of the regression analysis for Model 2's H2b hypothesis, with reference to liberal democracy.

## **Why Did Successful Developmental States Emerge in East Asia but Not Latin America?**

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This paper explores why successful developmental states emerged in East Asia but not in Latin America, despite both regions experiencing rapid industrial growth in the mid-20th century. Drawing on Peter Evans' concept of embedded autonomy, colonial legacies played a critical role in shaping state capacity and developmental trajectories. Through a comparative analysis of South Korea and Brazil, this paper finds that the ability of colonial empires to generate bureaucratic compliance with the Crown's goals and to establish cooperation with local societal groups laid the foundation for embedded autonomy. In South Korea, Japanese colonial rule facilitated a centralized, disciplined bureaucracy and integrated the local colonized classes into economic development, forming the basis of the post-independence developmental state. In contrast, Portuguese colonial administration in Brazil failed to maintain bureaucratic discipline or align local elites with state objectives, leading to a failure to generate embedded autonomy and, hence, turn the country into a developmental state. The paper challenges existing explanations focused on resource endowments, policy choices, and external influences as a cause for the emergence or failure to found developmental states by emphasizing the formative impact of colonial institutions.

**Keywords:** East Asia; Latin America; developmental states; embedded autonomy; colonialism

Despite the poor economic conditions and vulnerable state capacity after World War II, many East Asian and Latin American states saw rapid industrial growth in 1960s, which attracted the interest of the world. (Auty, 1993; Auty, 1995; Lin, 1988; Dietz, 1992; Evans, 1995; Fishlow, 1989; Gregorio et al., 2004; Grinberg, 2013; Kay, 2002; Kohli, 2004; Lauria et al., 2025; McGuire, 1994; Ranis, 1985; Razmi, 2022; Sachs, 1999). Some examples from East Asia include Singapore, South Korea, and Taiwan, while Mexico, Argentina, and Brazil represent the Latin American region. Nevertheless, while these states attempted successful economic transformations led by state intervention in the market during the 1960s and 1970s, record shows that the East Asian countries developed more successfully than their Latin American counterparts (Auty, 1993; Auty, 1995; Lin, 1988; Dietz, 1992; Evans, 1995; Fishlow, 1989; Gregorio et al., 2004; Grinberg, 2013; Kay, 2002; Kohli, 2004; Lauria et al., 2025; McGuire, 1994; Ranis, 1985; Razmi, 2022; Sachs, 1999). To make sense of this international puzzle, the next rational thing to do is to find the answer to the following question: Why did successful developmental states emerge in East Asia but not in Latin America?

The formation of successful developmental states in East Asia and the failure to form such states in Latin America have been a relevant and acute matter of discussion among scholars. Noteworthy, over decades of inquiry, there is still no scholarly consensus on precisely what explains the prosperity of developmental policies in East Asia and not Latin America. The academic literature explains the successful emergence of developmental states in East Asia and not in Latin America through the contrasting levels of state capacity as a tool to successfully carry out developmental strategies (Fishlow, 1989; Kay, 2002; Kohli, 2004, Razmi, 2022), Latin America's overreliance on external credit (Lin, 1988; Fishlow, 1989; Ranis, 1985), innate extensive resource endowments (Auty, 1993; Auty, 1995; Sachs 1999), and the difference in the extent of investing in the state's human capital (Gregorio et al., 2004; McGuire, 1994). Additionally, scholars offer Latin America's adoption of neoliberal policies (Dietz, 1992; Lauria et al., 2025) and their failure to adopt export-oriented industrial strategies (Grinberg, 2013; Kay, 2002) as a rationale for the absence of developmental states.

However, there are a few limitations in the literature. Firstly, some scholars regard neopatrimonialism as a component of low state capacity, to justify the failure of development within countries (Kay, 2002; Grinberg, 2013). Nonetheless, thriving East Asian developmental countries also engaged in neopatrimonialistic behavior (Kohli, 2004) but achieved developmental prosperity,

which points to the inconsistency with the scholarly proposition. Secondly, some studies suggest that the failure to execute export-oriented economic policies in Latin America is the reason for the absence of developmental states. However, other non-developmental states, such as Thailand and the Philippines, actively carried out export-oriented initiatives but did not achieve East Asia's developmental success (Doner et al., 2005). Thirdly, while a plethora of articles explains the difference in developmental characteristics of East Asia and Latin America (Auty, 1993; Auty, 1995; Lin, 1988; Dietz, 1992; Fishlow, 1989; Gregorio et al., 2004; Grinberg, 2013; Kay, 2002; Kohli, 2004; Lauria et al., 2025; McGuire, 1994; Ranis, 1985; Razmi, 2022; Sachs, 1999), scholars do not pay enough attention to the origins or the preconditions of formation of developmental states.

My project aims to contribute to existing knowledge on the origins of prosperous developmental state formation in East Asia, specifically focusing on South Korea, and contrast it with Latin America, with an emphasis on Brazil. This study explores how colonial bureaucratic structures generated the preconditions for the formation of Evans' (1995) embedded autonomy, which in turn explains the successful industrial transformation and subsequent emergence of developmental states in East Asia, and the failure of such development in Latin America.

To better understand the arguments presented in this study, it is important to first clarify the key concepts that underpin the analysis, which are central to the arguments and framework of this paper. Colonialism is the maintenance of political, economic, social, and cultural domination over people by a foreign power for an extended period (Bell, 1991). Whereas state autonomy is the separation of the state and its bureaucracies from societal demands, which allows it to fulfill its goals independently (Czuba, 2025), embedded autonomy refers to an autonomous state that is integrated into a network of ties that binds it to the society (Evans, 1995, p. 248). To be specific, in my project, I will primarily refer to Evans' (1995) original formulation of embedded autonomy as "dense links not with society in general but specifically with industrial capital" (p. 17). The term "local colonial classes" refer to societal groups that existed in the colonized region before it was taken over by a specific foreign power. In other words, people who were already part of the local society before colonization by that power. Developmental states are "organizational complexes in which expert and coherent bureaucratic agencies collaborate with organized private sectors to spur national economic transformation" (Doner et al., 2005, p. 328).

Returning to my argument, I propose that the simultaneous presence of two factors—the colonial empires' ability to generate compliance from the bureaucracy with state goals and their cooperation with local colonial elites—lead to the emergence of successful developmental states. While this is not the only way for such states to emerge, it provides an insightful framework for understanding the development of specific countries from East Asia and Latin America, based on Evans' (1995) work and my analysis.

### **Theoretical Framework**

My argument draws on Evans' (1995) theory of embedded autonomy, which asserts that embedded autonomy is essential for a developmental state. However, while this theory identifies embedded autonomy as a necessary quality, it does not explain how this autonomy emerges in the first place. Therefore, according to Evans (1995), the theory alone cannot account for why East Asian countries succeeded in their development while Latin American countries did not.

My thesis argues that embedded autonomy requires two conditions: the bureaucracy's compliance with the state's goals and its collaboration with local colonial groups. I propose that the presence of these explanatory factors together in the colonial state apparatus serves as an inchoate form of embedded autonomy, which is then evolved in the independent states. I base my proposal directly on Evans' (1995) conceptualization of embedded autonomy. According to Evans (1995), embedded autonomy requires, first, state autonomy and, second, the immersion of that autonomous state into the network of ties to societal groups (p. 248).

Firstly, the colonial empire's success in making the bureaucracy adhere to the empire's goals reflects a high level of centralization and robustness in the colonial power's state apparatus, which in turn leads to state autonomy (Evans, 1995; Kohli, 1994). To illuminate, by making the state servants compliant with the Crown's objectives, the state creates a centralized bureaucracy. The formation of this bureaucracy means that the empire is autonomous because it can implement decisions independently without consulting the interests of societal classes except its own (Evans, 1995, p. 248). Thus, there is the first prerequisite for embedded autonomy: state autonomy.

Secondly, when the colonial empire manages compliance with its goals from the bureaucracy, or, in other words, when the state autonomy is established, the integration of local colonial societal groups represents the autonomous state's incorporation into a network of ties that connects it to the

society, that Evans (1995) talks about (p. 248). Thus, there is a second prerequisite for embedded autonomy: the autonomous states embedded in a network of social links. In this sense, state autonomy allows the ruler to implement decisions independently, while embedded autonomy underlines that the external interests—derived from the state’s ties to societal groups—are also considered in the decision-making process.

Decolonized, the two factors that were established during colonial rule—the bureaucracy’s compliance to the state’s goals and integration of colonial societal groups—serve as an embryonic form of embedded autonomy that is then “inherited” by independent states in their path to developmental success (Evans, 1995; Kohli, 1994). In other words, the colonial empires’ ability to generate compliance of the bureaucracy to the state’s goals and cooperation with local colonial classes leads to the emergence of embedded autonomy, which, in turn, fosters the emergence of prosperous developmental states.

### **Scope**

In the framework of the project’s question, I test my thesis using the examples of South Korea and Brazil. Hence, the geographical scope of my essay focuses on the East Asian and Latin American regions. My essay’s conceptual scope emphasizes industrial development but also encompasses the internal structure of the state and the state-society relations. Since my arguments require the inspection of the cases’ colonial histories, I will examine the period from 1500 until the start of the 21st century, which covers events from the establishment of Portuguese rule in Brazil and Japanese rule in South Korea to the active industrialization of countries up until the late 1980s. Despite differences in political regimes, independence durations, and other factors, this time frame is chosen because my argument centres on identifying specific colonial conditions that influenced the formation of state structures and their subsequent development. By examining the entire colonial period, I can better understand how these conditions shaped the trajectory of development in both countries.

### **Independent and Dependent Variables**

As mentioned previously, in the context of my thesis, the two variables are derived: the colonial empires’ ability to generate compliance with the bureaucracy to the state’s goals and their

cooperation with local colonial classes. However, these factors are not isolated from each other, and the presence of both is necessary for the successful emergence of the outcome. In other words, these two factors should be considered jointly as an independent variable.

For the clarity of the concepts, the colonial empire's ability to generate compliance of the bureaucracy to the state's goals refers to the imperial state's ability to establish a bureaucracy that rules over the colony and acts in accordance with the empire's interests and goals. Cooperation with local colonial groups refers to the imperial state's decision to allow or facilitate the participation of colonized societal groups in the state's economy. The dependent variable is successful industrial development, which is the extent to which the state has successfully implemented economic policies that spur growth and transform the market.

### **Case Selection**

Since the scope of my essay focuses on East Asia and Latin America, I chose South Korea as a representative of the prosperous developmental state of the former region and Brazil as the non-developmental state representative of the latter area.

Firstly, South Korea and Brazil are newly industrialized countries (NICs). These countries rank between developing and highly developed classifications in terms of their economic prosperity (Majaski, 2020). NICs are states that transformed from an agriculture-based economy into an urban industrialized one (Gomide, 2022, p. 87). In this case, South Korea is an example of a newly industrialized country transformed into a prosperous developmental state (Evans, 1995). South Korea serves as a representative for the rest of the East Asian Tigers—South Korea, Taiwan, Singapore, and Hong Kong—for the reason that all of these countries engaged in active state economic intervention, export-oriented economies, and experienced rapid industrial growth since the 1960s (Bloomenthal, 2023). At the same time, it is representative of East Asian developmental states because it encompasses crucial characteristics that define such type of state: high state capacity and autonomy, collaboration of the state with the private industrial sector, state's intervention in the market, and participation in extensive regulation and planning (Czuba, 2025).

As South Korea to East Asian Tigers, Brazil is also representative of Latin American NICs, encompassing the innate qualities of such states. Moreover, whereas this state undertook a successful industrial transformation, Brazil went through a debt crisis and experienced “a lost decade” in the

1980s caused by heavy state intervention directed to Import Substitution Industrialization and the severe financial crisis of 1997-1998 experiences that are, to a larger extent, representative of Latin America (Grinberg, 2013, p. 172). Brazil's struggles with ISI thus serve as a fitting case study for Latin American NICs, highlighting the common challenges faced by many countries in the region in their path to industrialization.

This comparison also makes sense, because it is important to account for the initial similarity in industrialization paths between the two. South Korea and Brazil both adopted a similar development strategy between 1945 and 1985: Import Substitution Industrialization (ISI) followed by Export-oriented Strategies. In both cases, the transition from the former economic strategy to latter was carried out under similar conditions (Vieira, 2014, p. 1). However, as previously noted, whereas South Korea faced growth, Brazil faced stagnation. Given these factors, my focus on Brazil as an NIC was driven by its status of a "large enough and advanced" country to carry out a variety of economic production (Evans, 1995). Such characteristics highlight Brazil's broad potential for becoming a developed country. According to Evans (1995), Brazil possesses factors that, at least on the surface, make it capable of economic transformations but have not made it developmental.

Secondly, since I use colonialism as an integral component of my explanation, I chose the two countries with an extensive colonial history. Japan colonized South Korea (Evans, 1995; Kohli, 1994). Brazil was under the colonial rule of Portugal (de Carvalho, 1982; Schwartz, 1970). Vieira (2014) offers a useful perspective here, noting that while the Japanese colonial experience in South Korea was shorter, it represented a critical juncture in the country's state-building process. The concept of a critical juncture refers to situations of uncertainty in which the decisions of important actors are causally decisive for the selection of one path of institutional development over other possible paths (Capoccia, 2016). In this sense, despite the differences in the duration and immediate goals of Japanese and Portuguese colonialism, both represent critical junctures in state formation that influenced their post-independence developmental outcomes.

Lastly and importantly, my focus on South Korea and Brazil was motivated by Evans' (1995) theoretical framework of embedded autonomy. While embedded autonomy is used to explain the emergence of developmental states, Evans (1995) argues that the presence of a highly merit-based selection of officials into the bureaucracy and the presence of informal ties among the recruited bureaucrats leads to the formation of a coherent and autonomous state that, in turn, is essential for

the occurrence of embedded autonomy, once this state is connected to a network of societal ties (p. 12). Evans (1995) compares South Korea as an efficiently embedded autonomous state and Brazil as an intermediary case of embedded autonomy, which determines the difference in their developmental success.

The author uses the fact that South Korean bureaucracy implements exam-based recruitment for bureaucratic officials, most of whom are graduates of leading Korean universities, and encourages informal ties between them due to their shared educational background (Evans, 1995, p. 51). Notably, Evans (1995) writes that the emergence of embedded autonomy should be traced from the state's history, which implies looking into the period of colonialism. Following Evans' (1995) argument, the conditions of merit-based recruitment and the occurrence of informal ties due to the flow of bureaucrats from the same universities are present in the case of Japanese colonial rule in South Korea (Kohli, 1994), which serves as an explanation for the formation of embedded autonomy.

On the other hand, Evans (1995) refers to the colonial past of Brazil to explain the failure to foster embedded autonomy. Still, the author does not account for the fact that during the Portuguese colonial rule over Brazil, exam-based selection of bureaucratic officials, in the forms of magistrates who undertook the recruitment, and the existence of informal ties explained by the shared experience of attaining education at Coimbra University were existent in the state's bureaucracy, too (de Carvalho, 1982; Paquette, 2013; Schwartz, 1970). Hence, my analysis of South Korea and Brazil is also driven by the puzzle of why, despite the satisfaction of two necessary factors that promote embedded autonomy (Evans, 1995) in the colonial bureaucracies of both countries, only one was able to become a successful developmental state.

### **Research Design**

I will engage in within-case and cross-case analysis of two countries: South Korea and Brazil. I will first use data to examine each state's independent and dependent variables of interest during its colonial period and since independence. Next, I will compare and pinpoint differences between cases. Since the project aims to investigate the emergence of developmental states in one region over another, comparative qualitative data analysis across those areas provides the most extensive, reasonable, and sufficient research mode for the topic. The project uses secondary scholarly articles,

books, and peer-reviewed journals that analyse historical records and contemporary state characteristics to assess explanatory and outcome variables in both countries of interest.

### **Case Study: South Korea**

South Korea was Japan's colony from 1910 until 1945 (Evans, 1995; Kohli, 1994). Specifically, in the course of the establishment of the Meiji system, the Japanese saw substantive development of state capacity, economic growth and industrialization (Kohli, 1994). The Meiji Restoration marked a shift from Japan's feudal system to a centralized, constitutional monarchy, which impacted Japan's governance, including its colonial policies in Korea (Dziak, 2022). These reforms, including the Meiji Constitution of 1890, which gave more power to the emperor and created a parliamentary system, aimed to modernize Japan and improve its international position (Dziak, 2022). According to Kohli (1994), it is the policies implemented by Japanese colonial power during the Meiji restoration that contributed to South Korea's developmental path (p. 1270).

Firstly, Japan, in its rule over South Korea, successfully fostered strict compliance of the bureaucracy with the empire's goals (Kohli, 1994). While higher levels of officials appointed into bureaucracy were primarily Japanese officials who committed to their state's interest (Kohli, 1994, p. 1273), the main challenge was to generate such adherence to national objectives from lower-level servants. Apart from exercising authoritarian power, Japan implemented decisions towards bureaucrats' compliance with the state. For instance, the Japanese Crown increased the state servants' salaries if caught in corruption, aiming to improve their satisfaction and commitment to their role (Kohli, 1994, p. 1274). Additionally, the empire required civil servants to wear a special uniform 'replete with swords' (Kohli, 1994, p. 1274) to symbolize the power of the state and ensure compliance throughout society. The uniform acted as a visible reminder that the officials were always under surveillance, discouraging them from pursuing personal interests or acting outside the state's directives and, thus, prevented the officials from disobedient pursuit of individualistic goals (Kohli, 1994, p. 1274). If none of the additional measures to control compliance were efficient, then the state dismissed such workers and appointed others-unemployment served as a compelling threat to commit to one's bureaucratic role (Kohli, 1994, p. 1274). As a result, Japan solidified its autonomy in South Korea by creating a highly compliant bureaucracy with imperialistic goals and not dependent on personal interest or the interest of socially associated actors (Kohli, 1994, p. 1273).

Secondly, the Japanese colonial authorities collaborated with the local South Korean class of landowners (Kohli, 1994, p. 1276) in the economy and integrated them into ruling elites to enhance Japan's control over the agrarian sector of South Korea (Kohli, 1994, p. 1278; Nakajima & Okazaki, 2018). This collaboration, however, was carried out through rigid bureaucratic channels through the official appointment of landowner officials to the bureaucracy to ensure compliance with the state's goals that also were profitable for the local elite class to follow (Kohli, 1994, p. 1277; Nakajima & Okazaki, 2018). Consequently, a highly autonomous bureaucracy and cooperation with local groups led to the successful implementation of industrial reforms in South Korea that complied with Japanese interests and benefitted the regional actors. For example, during Japan's project to increase rice production in South Korea in the late 1910s, local South Korean landowners sold or rented land for seed growth to the state, thus following imperial interest and profiting personally while contributing to the successful execution of economic policies (Kohli, 1994, p. 1278). Remarkably, the existence of the landed elites in Japanese and South Korean society undermines the claims that the presence of landowners impedes the formation of a developmental state (Kohli, 1994). This establishment of state autonomy and integration of colonial groups in the market intervention portrayed the successful economic growth of Korea during the Meiji Restoration Japan. It served as a basis for developing embedded autonomy, that is, state autonomy tied to the industrial private sector-in independent Korea.

The highly centralized organization of the Korean bureaucracy right after its independence can be interpreted as having evolved from the similarly highly rigid and comprehensive bureaucracy during the Japanese rule over the state (Cheng et al.,1998, p. 108; Vieira, 2014). Specifically, according to Kohli (1994) the Japanese transformed the Korean state from a corrupt and ineffective institution into a highly authoritarian organization capable of undertaking control and major transformations (p. 1270). With extensive experience operating in a centralized, coherent, and autonomous bureaucracy that controlled close compliance to imperial goals formed by Japanese colonial power, South Korea could not escape the influence of such an autonomous bureaucracy during its independence (Eckert, 2014, p. 255). In the course of Park Chung-Hee's presidency, independent Korea formed the Economic Planning Board, also a coherent and autonomous agency that overlooked the Korean economic sector, promoting compliance with the state's goals (Evans, 1995, p. 52).

Most contemporary chaebols, South Korean corporate conglomerates (Aldag, 2025), originated from local societal groups, which the Japanese empire integrated into the colonial bureaucracy and, importantly, used to implement industrial goals (Kohli, 1994, p. 1280). Formed during colonial rule (Kohli, 1994, p. 1280), chaebols maintained and became an integral part of the independent Korean market (Evans, 1995, p. 53). The diversity and size of the largest chaebols formed their interests as “encompassing” (Olson, 1982 as cited in Evans, 1995, p. 54) of the industrial sector (Evans, 1995, p. 53).

Today, Korea’s state autonomy, its strong economic agency, and its connection to the private sector in the example of chaebols show its embedded autonomy (Evans, 1995, p. 52), which resulted in significant industrial transformations such as chaebols’ successful performance as “main export generating global competitors” in the 1960s after South Korea’s decision to nationalize banks but integrate the conglomerates’ interests by granting them credit privileges (Doral & Patrono, 2011, p. 93-94). This shows how, while having the power to execute decisions independently, South Korea considers the interests of private entrepreneurs, which together result in successful economic transformation and developmental success: a practice of embedded autonomy.

In other words, the proposed evidence shows how after South Korea’s independence, the legacy of a centralized bureaucracy and state-business cooperation persisted, as seen in the creation of the Economic Planning Board and the continuing role of chaebols, which had evolved from these colonial-era relationships (Evans, 1995). Thus, embedded autonomy in South Korea can be attributed to the colonial period, where the state’s autonomy was first established through centralized administration and integrated with the private sector, forming the embryonic form of embedded autonomy that contributed to the country’s subsequent developmental success.

### **Case Study: Brazil**

Despite its extensive potential to become a prosperous developmental state (Evans, 1995, p. 11), Brazil’s failure to produce proficient industrial transformations that spur development is attributed to the inefficient or periodic implementation of embedded autonomy (Evans, 1995, p. 60). For example, after 1985, in the next two decades Brazil’s gross domestic product (GDP) per capita increased by only 18%, whereas South Korea’s GDP grew by 201% in the same period (World Bank,

2008 as cited in Vieira, 2014, p. 2). As per the theoretical basis of my argument, such an outcome can be explained through specific actions of Portuguese authorities during its colonization of Brazil.

Firstly, Portuguese colonial power was unsuccessful at fostering compliance with the imperial goals of bureaucracies established to rule over colonial Brazil. In 1621, Portuguese territory was divided into two administrative units: the States of Maranhao and Brazil (Schwartz, 1970, p. 718). Each unit was divided into multiple captaincies ruled by a particular bureaucracy, the Governor-General, Captains, and lower-level civil servants, among which were magistrates, who were supposed to check and balance the administration of governors (de Carvalho, 1982; Schwartz, 1970). However, the empire could not stop the bureaucrats from pursuing personal, familial, or the interests of other closely related societal groups (Myrup 2011; Schwartz 1970).

Here, I believe it is relevant to refer to my strategy of case selection and note that, similar to Japanese rule over Korea, the appointment to Portuguese bureaucracies in Brazil was made through exams, with most officials admitted from the Coimbra University (de Carvalho, 1982; Paquette, 2013; Schwartz, 1970). Nonetheless, while bureaucrats in South Korea benefited from the emergence of embedded autonomy, which was reinforced by the informal ties gained from studying in one university, the Portuguese state apparatus in Brazil was saturated with patrimonial, decentralized, and flexible links (Myrup, 2011; Schwartz, 1970).

According to Schwartz (1970) and Myrup (2011), the Portuguese colonial authorities attempted to carry out policies that isolated the magistrates from individualistic or local Brazilian “class interests” (Myrup, 2011; Schwartz, 1970, pp. 724-725). They made them compliant with the Crown’s objectives by limiting their residence in Brazil, prohibiting marriage with colonial locals, and increasing salaries to prevent corruption (Myrup, 2011, p. 2012; Schwartz, 1970, pp. 724-725). Unlike their East Asian counterparts striving to foster bureaucratic compliance who implemented similar measures—as a case in point, rewarding the officials to generate compliance and diminish corruption—the Latin American Crown failed at controlling and centralizing the bureaucracy because the Portuguese empire did not rigidly adhere to their own formulated policies. For example, the colonial authorities eventually lifted the prohibition of appointing Brazilians in the captaincies to royal positions and ignored Portuguese magistrates’ marriages to Brazilians (Schwartz, 1970, p. 729). Generally, it is noticed that the royal bureaucracy did not engage in extensive controlling and oppressive behavior towards Brazilian elites, a societal group from the local Brazilians, who involved

themselves in the bureaucracy through marital and patrimonial linkages, even before the lifting of the ban (Schwartz, 1970, p. 729). Failure to facilitate bureaucracy's compliance and adherence to the Portuguese empire's goals meant that the Crown failed to establish a centralized and autonomous bureaucracy, implying the inefficiency of state autonomy. That is, the critical prerequisite for the emergence of embedded autonomy is absent.

Secondly, the inability of the bureaucracy and the state to fulfill its goals independently from societal demands suggests that the imperial state's collaboration with the local societal class will not yield successful economic transformation. Brazil was an essential player in Portugal's economy with its agricultural sector (Bresser-Pereira, 2017; Paquette, 2013, p. 20). However, the Portuguese state technically involved the local class of Brazilian landowners to participate in the state's economy, but in a way that allowed "absolute power of the landowner" (Bresser-Pereira, 2017, p. 32), thus not checking their compliance with the royal interests. This conclusion is supported by occurrences where the local Brazilian landowners publicly opposed and attacked the emperor and governors when the latter implemented policies that went against the formers' ideals (de Carvalho, 1982, p. 394; Evans, 1995, p. 62). Consequently, such practices did not yield the successful execution of economic policies (Bresser-Pereira, 2017, p. 32). The actors were not united by one goal.

Brazil entered independence with incoherent and non-autonomous bureaucracy, unproductive involvement, and unchecked power of the local socioeconomic class that persisted after colonial rule, which undermined attempts for reforms (Evans, 1995, 63) and, therefore, no basis for the emergence of embedded autonomy, which explains its failure in the successful developmental path. Such a situation can be observed during Brazil's military regime in the 1960s, which is characterized by "greater corporate coherence" (Evans, 1995, p. 63) but also "bureaucratic rings" (Cardoso, 1975 as cited in Evans, 1995, p. 63) sets of individual industries tied to particular individual bureaucrats (Evans, 1995, p. 63), which favoured interests based on patronage rather than diversity of views.

Nonetheless, it is essential, once again, to refer to my case selection strategy and Brazil's title of Newly Industrial Economy. Despite the mentioned failure to foster embedded autonomy and the consequential inability to become a successful developmental state, it would be wrong to ignore Brazil's cultivation of growth and industrialization throughout its history (Evans, 1995, p. 65): 6 percent annual growth of GDP after World War II until the 1980s (Bacha & Bonelli, 2016), and a

shift from agriculture to the industry through a surge in manufactured exports from the 1970s to 1980s (Bacha and Bonelli, 2016; Ōhara, 2007). Incapable of reforming the bureaucracy, government leaders attempt to generate “pockets of efficiency” in the state apparatus, which allows them to modernize the bureaucracy “by addition” (Geddes, 1986 as cited in Evans, 1995, p. 61). As a case in point, the development of the auto industry in collaboration with a transnational corporation under the supervision of the highly coherent and autonomous bureaucratic agency of the Grupo Ejecutivo para Indústria Automobilística is an example of a practice close to embedded autonomy, which resulted in prosperous industrial development (Evans, 1995, p. 65). Nonetheless, the transformation of the state structures only by additions will likely result in “uncoordinated expansion” (Evans, 1995, 62) and failure to attain the success of East Asian developmental states.

## **Conclusion**

In conclusion, this essay explores the colonial legacies of East Asia and Latin America to explain why successful developmental states emerged in one region but not the other. By employing Evans’ (1995) concept of embedded autonomy as an inherent quality of developmental states, this paper examines the cases of South Korea and Brazil to pinpoint the differences in their colonial rule that led to the variation in the emergence of developmental success.

Contrary to Evans’ (1995) claim that merit-based recruitment and informal ties within the bureaucracy are needed for the formation of embedded autonomy, this essay shows that these conditions were present in both South Korea and Brazil during their respective colonial periods. However, they alone do not account for the divergent outcomes in state development. Instead, I propose that the ability of colonial empires to ensure bureaucratic compliance with state goals and foster cooperation with local colonial classes is what leads to successful industrial development.

More research is needed to explore the reasons behind the failure or success of generating compliance of the bureaucracy to the state’s goals between the East Asian and Latin American cases, building on my proposed framework. Moreover, this project recommends a more extensive evaluation of Evans’ (1995) theoretical claims to better understand the emergence of embedded autonomy and its role in influencing industrial state development.

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## **Recognising an Entrepreneurial Opportunity: Experiences of Kazakhstani Startup Founders and Co-Founders**

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As Kazakhstan aims to move towards a digital, knowledge-driven economy, startups have become the centre of attention locally. Examining how these ‘innovative’ businesses are created, it is hard to overlook the entrepreneurial opportunity recognition process, which is the process of seeing how and when new products and/or services can generate profits. The question arises as to what factors may affect this process. This research aims to find an answer to this question by exploring the entrepreneurial opportunity recognition experiences of Kazakhstani startup (co-)founders. To gain a context-specific understanding of this multidimensional phenomenon, which consists of both individual and structural aspects, this study takes a qualitative form, with six semi-structured interviews conducted. Relying on the individual–opportunity nexus and social structure and organizations frameworks, three broad categories of factors are considered: internal, intermediary, and external. The analysis of the data reveals that the Kazakhstani startup (co-)founders, who were interviewed, connect their entrepreneurial opportunity recognition experiences with factors internal to their personalities and/or business ideas. The results presented in this research are expected to have policy implications in the sectors of the local economy that deal with startups. Knowing which factors are important in recognizing entrepreneurial opportunities can help develop more effective support programs for ‘innovative’ businesses that contribute to a locally targeted digital economy.

**Keywords:** Kazakhstani startups; opportunity recognition; innovative businesses; entrepreneurial opportunity

Among Central Asian countries, Kazakhstan is considered as having a specifically suitable environment for startups. The country is ranked first in the region based on the latest Global Startup Ecosystem Index (Lasch et al., 2009; Seitkazin, 2020; Dodd, 2021; StartupBlink, n.d.). Known for its rich reserves of natural resources, Kazakhstan initially developed its economy based on the extraction and export of mineral deposits. But now, it is undergoing a transformation aimed at switching to a digital, knowledge-driven economy (StartupBlink, n.d.). This way, as startups are often closely connected to digitalisation, they become an important part of the new target economy.

Entrepreneurship includes many stages: from recognising a business opportunity, evaluating it, gathering necessary resources, launching a venture, to making a profit (Shane & Baron, 2008). However, examining how ventures are initially created, it is difficult to overlook entrepreneurial opportunity recognition – the process of seeing how and when new products and/or services can generate profits (Shane & Venkataraman, 2000). The question arises as to what factors may affect it. This research aims to answer this question by exploring the entrepreneurial opportunity recognition experiences of Kazakhstani startup (co-)founders. The research objective forms the main research question: “What factors do Kazakhstani startup (co-)founders consider most important for entrepreneurial opportunity recognition?”.

The relevance of this study stems from the fact that the number of startups and programs supporting them in Kazakhstan has been constantly growing, but startups remain under-researched in the local academic field. Much of what we know comes from Western business- and market-oriented sources, evaluating and describing the projects. This research strives to fill this gap by approaching the phenomenon of entrepreneurial opportunity recognition from a methodologically and theoretically grounded perspective in the context of contemporary Kazakhstan. The results presented in this research are expected to have policy implications in the sectors of the local economy that deal with startups. Knowing which factors are important in recognizing entrepreneurial opportunities can help develop more effective support programs for “innovative” businesses.

To gain a context-specific understanding of the entrepreneurial opportunity recognition, this study takes a qualitative form, with 6 semi-structured interviews conducted. Rather than focusing on individual and structural aspects of opportunity recognition separately, this research takes a holistic approach that draws on both the individual–opportunity nexus and social structure and organizations frameworks. While the research design is formed to reflect both frameworks, the

analysis of the data reveals that the interviewed Kazakhstani startup (co-)founders largely connect their entrepreneurial opportunity recognition experiences with factors internal to their personalities and/or business ideas. The sections below analyse the existing literature on opportunity recognition with a focus on individual and structural factors, present the chosen methodology for this research, outline the main findings, and summarise the contribution of this study to the emerging startup landscape in Kazakhstan.

### **Literature review**

For a long time, entrepreneurship was approached from economic, market, and business-oriented perspectives. However, due to the lack of a unified conceptual framework, the field was not viewed as worthy of distinct academic research (Venkataraman, 1997; Shane & Venkataraman, 2000; Venkataraman, 2019). To differentiate entrepreneurship as a separate field of research, the individual–opportunity nexus framework was introduced, aimed at studying “how, by whom and with what effects opportunities [...] are discovered, evaluated, and exploited” (Venkataraman, 1997 as cited in Shane & Venkataraman, 2000, p. 218). The framework presents that there is a constant interaction between individuals and entrepreneurial opportunities (Shane & Venkataraman, 2000). As a result, individuals’ decisions related to the exploitation of opportunities are mainly affected by two things: (1) by characteristics of entrepreneurs (e.g. prior knowledge, cognitive skills, etc.) and (2) by characteristics of opportunities (e.g. potential profit, market value, etc.) (Shane & Venkataraman, 2000). The individual–opportunity nexus framework places individuals at the centre of entrepreneurial opportunity recognition and states that individual traits affect the process (Shane, 2003 as cited in Casson, 2005). It presents that even though opportunities exist, not everyone can identify them because entrepreneurs are different from other people as they possess certain distinctive traits (Shane, 2003 as cited in Casson, 2005). Thus, it offers to consider internal factors (e.g. personality traits, knowledge, prior experience, etc.).

In contrast, the social structure and organizations framework presents that external factors that exist outside of individuals: the political environment of the place where the startup develops, the availability of resources for development, etc. – influence their motivations to start an organization (Stinchcombe, 1965). To clarify, within this framework, an organization is conceptualised “as a set of stable social relations deliberately created, with the explicit intention of

continuously accomplishing some specific goal or purpose” (Stinchcombe, 1965, p. 142). This definition can also be applied to startups, making it possible to refer to social structure and organizations framework in the context of entrepreneurial opportunities.

Traditional approaches to the study of entrepreneurship focused on individuals (i.e. internal factors) or larger structures (i.e. external factors) separately, and these were their limitations that did not allow for acquiring a broader perspective (Thompson et al., 2020). This study aimed to contribute to overcoming this limitation by using both frameworks to examine the process of entrepreneurial opportunity recognition more broadly.

Although some scholars claim that all factors should be examined together to reach a holistic understanding of the phenomenon, others propose that in different stages of entrepreneurship (nascent vs. established), different factors play a role (George et al., 2014; Nikolova, 2024). Younger businesses are usually associated with being more dependent on the external environment as various institutions (e.g. banks, legal system, government, etc.) may significantly affect their operation; on the other hand, established ventures do not just worry about survival, but also think about the growth and expansion, so personal characteristics of entrepreneurs begin to play a bigger role (Nikolova, 2024, p. 2).

Building upon the aforementioned frameworks focusing on individual and structural aspects of entrepreneurship, many factors that positively influence entrepreneurial opportunity recognition were identified. With the aim of spotting patterns, George et al. (2014) conducted one of the first systematic literature reviews to classify the factors affecting entrepreneurial opportunity recognition. Examining 180 articles, the scholars identified 6 factors that are important for recognizing entrepreneurial opportunities: (1) prior knowledge, (2) social capital, (3) cognition/personality traits, (4) environmental conditions, (5) alertness, and (6) systematic search (George et al., 2014, pp. 310-327). Such findings made it possible to state that these 6 factors can potentially answer the main question of this research. Hence, an expectation that participants of this research, startup (co)-founders from Kazakhstan, would mention at least one of the abovementioned factors while talking about their opportunity recognition experiences was formed.

Inspired by the theoretical frameworks and existing studies, an original three-part classification of factors influencing entrepreneurial opportunity recognition was developed: (1) internal factors, (2) intermediary factors, and (3) external factors. To explain, in this research, internal

factors are understood as everything that can characterise an entrepreneurial idea (e.g. profitability, need from the market, timeliness, etc.) and a person (e.g. personality traits, knowledge, prior experience in startups, etc.); intermediary factors are understood as factors that are outside the entrepreneurial idea and human body and/or mind, but not too distant (e.g. companies' inside networks, the social capital of its team members, incubators, accelerators, initiatives for startups etc.); external to startups factors are understood as factors that are quite far from entrepreneurial idea and human body and/or mind and may not be so easily accessible (e.g. the political environment of the place where startup develops, banking and tax system, etc.). This categorization was used because it was expected that the research participants would find it easier to understand these groupings and, as a result, provide more structured responses.

Overall, the analysis of literature reveals that very few publications approach the phenomenon of entrepreneurial opportunity recognition from the perspective of Central Asian business enterprises, such as startups. Many scholars examined opportunity recognition in foreign contexts. For example, Politis and Gabrielsson (2005) demonstrated that internal factors, such as previous startup experience and cross functional experience, influence the success of Swedish entrepreneurs in recognising opportunities, and Drori et al. (2009) presented the role of external factors, such as institutional and cultural contexts, in business making by entrepreneurs who relocated from northern Europe to Hong Kong. However, few have explored the phenomenon in Central Asia, and none have examined it in the specific context of Kazakhstani startups. This, in turn, indicated that local startups need to be researched, which is what this study aims to do.

## **Methodology**

Since there is very little or even no research on entrepreneurial opportunity recognition among startup (co-)founders in Kazakhstan, there is a need to conduct qualitative research to obtain thick data. This way, semi-structured interviews became the main data collection tool of this study (Bryman, 2016; Galletta, 2013). This format was chosen because it is flexible but also provides the necessary structure. Whilst a structured format would not allow adjusting the question list if new insights emerged during the process, an unstructured format might have led to the loss of the interview track.

The research was conducted specifically with startup (co-)founders because typically the leaders of businesses are the ones who recognise opportunities and bring other team members together. Participants aged 18 to 40 were recruited because younger and middle-aged adults are usually associated with starting innovative, risky, and uncertain business models, such as startups. On the one hand, the research excluded people under 18 because it was assumed that younger people are less likely to have the necessary experience in startups due to their young age and limited opportunities to participate in various programs for startups. On the other hand, adults aged over 40 were excluded because it might have been more difficult to access older individuals via planned snowball and convenience sampling procedures. The research involved those who live(d) or develop(ed) their startups in Astana and/or Almaty, two leading cities of the country, where support centres for startups are widely available. The study involved minimal risks because it did not violate anyone's personal boundaries, as the topic was general in nature. It was similar to discussing people's work routines, and this information usually does not carry any emotional background.

In total, 6 startup (co-)founders of various backgrounds participated in the interviews. Each interview lasted an average of 45 minutes. They were conducted individually offline in Astana and online via Google Meet. The priority was not to generalize findings, but to gain a much deeper contextual understanding of how local startup (co-)founders perceive and engage in opportunity recognition. This study did not target any specific startup sector as it was not expected to be crucial to the results. The startup sectors represented in this research simply resulted from using snowball and convenience sampling methods to find participants. That is why the interviewed (co-)founders owned startups from various sectors, such as EdTech, MedTech, MentalHealthTech, and EcoTech. The interviewed startup (co-)founders came from different regions of Kazakhstan, namely from Astana, Karaganda, Kokshetau, and Uralsk. However, all of them developed their startups in Astana and/or Almaty either remotely or on-site as they currently reside or resided at the time of working on their startup projects in these two cities. Both deductive and inductive coding were used to analyse the data. Combining these two approaches was beneficial to this research because, on the one hand, theoretical frameworks' suggestions were addressed, and on the other hand, the research remained open to new insights and findings that were not expected initially. The main themes that emerged from the interviews were individual factors, the role of government (external factors), entrepreneurship as a process, and opportunity recognition in different stages of entrepreneurship.

## Findings and Discussion

### 1) Individual Factors

During their lifetime, each participant of this study was involved in at least 2 startup-related projects, usually as a (co-)founder in one of them and a member in the second. Some highlighted that their previous experience and work in startups as team members and/or (co-)founders gave them the knowledge and expertise that were important in succeeding in their subsequent business projects:

The more you know [from your previous experience], the more you understand, and the more you will recognize opportunities (startuper #3).

[Having experience in startups], you learn to understand how to assess the market, understand whether it exists, roughly estimate the project implementation timeframe, and see who might be interested in the product (startuper #4).

While showing the participants' multiple startup experiences and their importance, these quotes contribute to understanding the opportunity recognition process. They demonstrate that professional experience positively influences startuper's ability to develop themselves and their business projects. These quotes link to George et al.'s (2014) and Politis and Gabrielsson's (2005) publications because they also showed a positive correlation between opportunity recognition and prior experience.

Let us recall that the key aim of this research was to understand how Kazakhstani startup (co-)founders connect their entrepreneurial opportunity recognition experiences with internal, intermediary, and external factors. As expected, given the nuanced nature of the phenomenon, startup (co-)founders' experiences of recognising opportunities were different, but a common pattern could still be observed. Internal factors, which were defined in this research as everything that is within the human body and/or mind or within the entrepreneurial idea itself, were identified by all startuperes as factors that influenced their entrepreneurial opportunity recognition experiences. Among the internal factors that were frequently mentioned by the interviewed startup (co-)founders were cross-field or previous startup experience, knowledge of programming, personal grit and motivation, watchfulness (*насмотренность* in Russian), the right timing, awareness of the investment landscape for the idea, and ease of implementation of a startup. While interviewees mentioned different factors, yet recurring ones, they can all be classified as internal.

This finding has a connection with the individual–opportunity nexus framework suggested by Shane and Venkataraman (2000), which emphasises the importance of the nexus between entrepreneurs and characteristics of business opportunities in the opportunity recognition process. This is because usually, personal motivation, experiences, and knowledge have to be combined with the prospects or quality of the business ideas they were considering implementing to achieve the opportunity’s successful recognition. Thus, the startup (co-)founders who participated in this research experienced the importance of an interaction between “an entrepreneur as a person” and “the quality of opportunities” (Shane & Venkataraman, 2000, p. 218).

## **2) The Role of Government (External Factors)**

Following Stinchcombe’s (1965) social structure and organizations framework, it was hypothesized that local government may affect startupers’ eagerness to recognise entrepreneurial opportunities in particular sectors that are supported by the government of Kazakhstan. According to the definitions of factors influencing opportunity recognition, this factor was classified as external. Nonetheless, among all startup (co-)founders who were interviewed, there was a similar pattern that their opportunity recognition experiences were not directly influenced by the government of Kazakhstan, as they did not pay much attention to it, although they all noted that the local government demonstrates a supportive attitude towards startups in general. The participants said that this attitude manifests itself in the form of assistance to startups from Astana Hub, subsidies, hackathons, educational-investment programs financed by the state, and many more. There was also another similarity related to the role of the government in entrepreneurial opportunity recognition: when the interviewees were asked how entrepreneurial opportunity recognition could be facilitated and encouraged, most of them mentioned government-related suggestions. This implies that even if the government supports startups, there may be room for further improvement.

## **3) Entrepreneurship as a Process**

It was always a combination of factors that affected startup (co-)founders’ involvement in opportunity recognition because none of the interviewees mentioned only one aspect. As one interviewed startuper highlighted it directly, “[opportunity recognition] depends on many factors” (startuper #1). On top of this, akin to the suggestions of Shane and Venkataraman (2000) about “the

processes of entrepreneurship which occurs through discovery, evaluation, and exploitation of opportunities”, interviewees of this research mentioned several times that opportunity recognition is more of a process than a single one-and-done action (p. 218):

[Opportunity recognition] is a never-ending process that lives throughout the entire time of the startup, as long as it exists (startuper #3).

You will always be in search of your goal [i.e. opportunity] throughout the startup because the startup never ends (startuper #1).

Having achieved the desired result or even having failed, all interviewed startup (co-)founders continued their journeys. Such a finding can imply that opportunity recognition is a nuanced process that depends on many factors throughout the life of a startup. Thus, it is unlikely that one factor alone can influence the recognition of entrepreneurial opportunities and answer the main research question of this study.

#### **4) Opportunity Recognition in Different Stages of Entrepreneurship**

Intermediary and external factors were also mentioned during the interviews, but they seem to be more relevant not to opportunity recognition but to the opportunity development stage. Examples of intermediary factors that were repeatedly mentioned were incubation and acceleration programs, state or privately financed initiatives (e.g. startup competitions, hackathons), networking, and team members, while examples of external factors were usually related to the government, the economic situation of Kazakhstan, and the role of various social institutions that promote or facilitate business mindset (e.g. state educational system). These further highlights that opportunity recognition is a process by which an initially recognized opportunity is shaped and modified to achieve its best quality:

Every time you create something new inside your startup. You will add something, remove something, change something (startuper #1).

This finding is in line with the argument of Nikolova (2024), who presented that in different stages of entrepreneurship, different factors play a role. However, although Nikolova (2024) argued that younger businesses that have just recognised their opportunities and started developing them are more dependent on external factors, and established ventures think about entrepreneurial growth, so personal brand and characteristics of entrepreneurs start playing a role, the results of this

research revealed the opposite. This is mainly because most of the interviewed startup (co-)founders noted that it was their ambitions, interests, and experiences that enabled them to recognise opportunities when their startups were in their “infancy” stage. Considering the abovementioned definition of internal factors, it is possible to conclude that the entrepreneurial opportunity recognition experiences of the interviewed Kazakhstani startup (co-)founders were influenced by internal factors inherent to themselves and/or their projects.

## **Conclusion**

Entrepreneurial ideas do not come out of nowhere; they are recognised by people. That is why most entrepreneurs, unless they borrow or buy business ideas from others, go through the process of opportunity recognition. But what factors are important in this process? This is exactly what this research was about. This study explored the experiences of Kazakhstani startup (co-)founders in recognising entrepreneurial opportunities to understand what factors they consider significant for this process. Three broad categories of factors were considered, namely internal, intermediary, and external, and the analysis of the collected data revealed that the Kazakhstani startup (co-)founders connect their entrepreneurial opportunity recognition experiences with internal factors to their personalities and/or business ideas. The findings presented in this paper overlapped with suggestions of previous research done in this direction. Nonetheless, the closest match was with Shane and Venkataraman’s (2000) unified framework about recognising entrepreneurial opportunities because, similarly to these authors’ ideas, interviewed startup (co-)founders’ experiences in recognising opportunities were largely influenced by their characteristics, accumulated knowledge, experiences, and the characteristics of the business ideas they were pursuing.

Although the methodology chosen for this research provided the necessary data to answer the research question, if this research is to be developed, an additional category of participants can be added. While in this research, only startup (co-)founders were interviewed, interviewing mentors from incubation and acceleration programs for startups would also be beneficial because these people often see how entrepreneurial opportunities are recognised. Startup (co-)founders could share their opportunity recognition experiences firsthand, and mentors from incubation and acceleration programs would share their experiences of observing this process from the outside.

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## Violence Against Women in Kazakh Cinema: Cultural and Structural Aspects

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The film "Kelinka Sabina" (2014) by Kazakh director Nurtas Adambai serves as a significant cultural artifact for analysing violence against women within a national context. The study examines how various forms of violence — direct, structural, and cultural — manifest themselves in the film using the violence triangle method proposed by Ioan Galtung, as well as the theoretical prism of intersectionality. The focus is on a young woman from a wealthy urban family who is forcibly sent to a rural area where patriarchal traditions, financial dependence, and a language barrier limit her life. The film reflects the real social problems of Kazakhstan, where traditional family roles and stereotypes make it difficult to combat domestic violence. This research contributes to a deeper understanding of the complex nature of violence and highlights the need for a systematic approach to this problem. Considering not only visible acts of violence but also hidden structural and cultural mechanisms that support gender inequality is an essential step to reduce the level of domestic violence in Kazakhstan.

**Keywords:** Kazakh cinema; violence against women; overlapping social factors; Galtung's violence triangle; cultural violence; structural violence; gender inequality

Cinema is one of the most influential forms of art, so it plays a significant role in shaping cultural and social perceptions. Cinema reinforces gender norms through recurring portrayals of women, influencing how real women are perceived (Nayak et al., 2003, as cited in Ruangnapakul et al., 2018). However, representations of women in a large number of films are distorted and repeated, such as the "mother versus prostitute" dichotomy (Carroll, 1990). These stereotypes limit women's roles and influence viewers' emotional reactions. This shapes the perception of women as passive objects for visual pleasure (Yergebekov, 2023). Another example, negative images, such as the "woman as an object of harassment," can be the basis of structural violence, supporting patriarchal thinking in society (Carroll, 1990). Violence in cinema contributes to the development of stable cognitive scenarios in which aggression is perceived as an acceptable and effective behavior strategy, especially in situations of male dominance and control over women (Flood & Pease, 2009). Moreover, repeated viewing of violence in media reduces emotional reactivity and empathy, contributing to a decrease in the sensitivity of viewers. As a result, it increases the likelihood of aggressive actions in real conflicts (Krahé et al., 2010). Thus, cinema becomes not just a mirror of cultural attitudes, but a powerful tool in maintaining and legitimising gender-based violence. Thus, representations of women and violence in cinema especially affect societies with patriarchal attitudes and low levels of gender criticism, which facilitates the transfer of on-screen violence into reality. Therefore, investigating how Kazakh films can become a source of violence is crucial. The research will examine how different types of violence (direct, cultural, and structural) are depicted in film and how these representations can contribute to the normalization of gender-based violence.

## **Methods**

For this research, I will analyse the film *Kelinka Sabina* (2014) by a qualitative content analysis method. The film *Kelinka Sabina* (2014) was chosen based on three criteria. First, it has significant cultural influence in Kazakhstan and addresses important issues related to violence against women. Second, the film reveals different forms of violence—ranging from cultural and structural to direct violence—and allows an exploration of how these forms of violence interact within the context of Kazakh society. Finally, the film was chosen due to its popularity and ability to spark discussions about the role of women in Kazakh culture and the violence they face. The method of qualitative content analysis was chosen because it allows us to explore not only the content, but also the context,

subtexts and ways of representing violence, which is important for understanding its cultural significance. Of particular interest were scenes of various forms of violence, including dialogues, visual images, and symbols that emphasize violence in the context of traditional norms. The analysis is aimed at identifying mechanisms for normalizing violence through cultural and social practices. To diagnose violence in the films, I will rely on Galtung's definition, which includes three types of violence: direct, structural, and cultural (Galtung, 1990).

## **Literature Review**

### **1) National Context**

After gaining independence, Kazakhstan underwent a cultural revival, which contributed to a return to conservative family values, particularly regarding women (Joshi & Childress, 2017). Unlike the Soviet era, when women's gender roles were softened, the post-Soviet period in Kazakhstan led to a restoration of stricter traditional roles for women. Today, cultural and social institutions support conventional gender roles, including the role of women as mothers and wives. Young girls are encouraged to embrace the role of "kelin" (daughter-in-law), embodying patriarchal expectations where they must perform domestic duties, serve, and care for the family. These roles not only emphasize female subordination but also make women vulnerable to various forms of violence, both from their spouses and other family members, including the husband's parents (Zhussipbek & Nagayeva, 2020).

Married Kazakh women, particularly victims of domestic violence, find themselves isolated, as traditional norms, such as the stigmatization of divorce and the obligation to preserve marriage for the sake of the family, continue to be important elements of Kazakhstan's social structure (VAW Report, 2017). As a result, many women prefer to hide the fact of violence, fearing condemnation and isolation from their family and community (Childress et al., 2023). Issues of violence against women are especially relevant in the context of cultural and structural isolation, where access to justice is limited. Women often face legal barriers in protecting their rights (Childress et al., 2023; Joshi & Childress, 2017). According to the Kazakhstan VAW Report (2017), violence against women remains a significant social problem in the country. Among women aged 15 to 49, 15.5% have experienced physical violence, 3.8% have experienced sexual violence, and 13.8% have experienced emotional violence. The report emphasizes that, despite the existence of legislation and

policies aimed at protecting women from violence, access to justice remains limited. Women hide the fact of violence due to fear of condemnation or lack of awareness of their rights (Zhussipbek & Nagayeva, 2020).

## **2) Female Characters in Kazakh Cinema**

The previously listed social problems are reflected in Kazakh cinema, which continues to portray women through the prism of conservative roles. For example, the films "The Daughter-in-Law is Also Human" (2017) by Askar Uzabaev and "Appak Kelin" (2023) by Evgeny Palamarchuk, where women play the role of keepers of family values, whose life and function are limited mainly by household duties. Such films focus on the conflict between a woman's desires and public expectations, reflecting the real situation of women in Kazakhstan who face various forms of violence within traditional family structures (Zhussipbek & Nagayeva, 2020).

Even in films where women strive to modernize and transcend established roles, patriarchal values often remain dominant. Examples of such works are the films *Caution, Cow* (2014) by Askar Uzabayev and *Vanity* (2007) by Sabit Kurmanbekov. In these films, the main characters are women who strive for ambitious goals. In the first film, the main character wants to become a famous actress, and in the second — the village mayor. However, despite their aspirations and active societal position, they have to rely on men to achieve these goals. At the film's end, both heroines become wives of men who pull the girls out of difficult situations (Yergebekov, 2023). Such a plot supports patriarchal norms, emphasizing that no matter how vigorously a woman may participate in public life, her primary role is still to be a wife and mother. This approach imperceptibly reflects the continuation of traditional ideas about "women's happiness", where female value is determined by family roles rather than personal achievements in professional or social life.

## **3) Violence Against Women According to Galtung's Violence Triangle**

Joan Galtung suggested three key types of violence: direct, structural, and cultural. Applying this model to the abuse of women gives a deeper understanding of how these forms of violence intersect and support existing patriarchal and gender structures. Direct violence includes physical and emotional violence, as well as other aggressive acts directed directly at a woman. In films, direct violence against women is often depicted through sexual violence, beatings, moral humiliation, and intimate partner violence (Ruangnapakul et al., 2018). These films provide a clear depiction of direct

violence, where physical violence is portrayed as an explicit reality. However, more hidden forms of violence — cultural and structural violence — often go unnoticed. This proves the need for research that considers all forms of violence.

Structural violence is associated with inequalities embedded in social and economic structures. For example, restrictions on women's access to education, rights, or health services, especially in rural areas or among women with low socioeconomic status. Galtung emphasizes that structural violence is less noticeable, but it has a devastating effect, creating barriers for women who try to transcend traditional roles (Galtung, 1996). In Central Asia, women with low socioeconomic status or from rural areas lacking resources and support may experience violence and are less likely to seek help (Joshi & Childress, 2017).

Cultural violence legitimizes both direct and structural violence through cultural, religious, and social norms (Galtung, 1990). For example, patriarchal attitudes justifying domestic violence remain the norm. Women who experience violence may consider it part of a "normal" family life, which confirms harmful cultural features as a mechanism supporting violence.

## **Results and Discussion**

The film "Kelinka Sabina" (2010) by Kazakh director Nurtas Adambai tells the story of a young girl named Sabina, who is forced to become a daughter-in-law (kelin) in a traditional Kazakh family. In the film, she is confronted with various forms of violence, from psychological pressure to more explicit forms of control. Initially, Sabina tries to escape and return to Almaty, but over time, she adapts to her new life and accepts her role in the family.

### **1) Direct Violence**

The film lacks "domestic violence" in the widespread sense — with the use of physical abuse; however, if domestic violence is considered as "any behaviour aimed at gaining power and control over a family member," then such elements can be observed throughout the film (Zhussipbek & Nagayeva, 2020). The film begins with the main character being abducted. This is an example of direct violence, as Sabina is deprived of her freedom and isolated from the outside world. She cannot call, seek help, or even leave the house. In one scene, she says, "They [her husband and his relatives] took away my passport, snatched my phone, and have not allowed me to leave the gate." The main

character is under the control of her father-in-law and mother-in-law, who ignore her feelings and force her to do housework. It is important to note that such an act of violence violates not only her physical freedom but also her personal boundaries, which leads to significant psycho-emotional damage to the victim (Childress et al., 2023). This case vividly illustrates the mechanisms of controlling behaviour - manipulation and control over another person's actions, thoughts and emotions, depriving her of the opportunity to make independent decisions (Childress et al., 2023; Zhussipbek & Nagayeva, 2020).

Moreover, the direct violence in the film is expressed through emotional pressure from her husband's family members. This is emphasized through aggressive behaviour and humiliating treatment from her husband and other family members, who perceive her as a subordinate figure whose actions and decisions are controlled. In the film "Kelinka Sabina," the husband's relatives constantly show a condescending, disdainful attitude towards her daughter-in-law. Throughout the picture, Sabina's father-in-law and husband can be seen giving her orders, talking rudely to her, and raising their voices. For example, in one of the scenes, when Sabina is sweeping the yard, her husband Zhanybek, eating a tomato, comes up to her and says in an instructive tone: "Sweep normally, mamashka (mother) will swear." This scene also demonstrates the presence of structural violence, where the female role in the family is rigidly defined and limited by cultural and social expectations (Zhussipbek & Nagayeva, 2020). In this case, Sabina is represented as an object doing all the housework, which is a manifestation of gender stereotypes about a woman's place in a traditional family. This approach to a woman from a position of power control exposes patriarchal foundations where a woman must serve and obey.

## **2) Cultural Violence**

In the film *Kelinka Sabina*, cultural violence is normalized and perceived as part of Kazakh practices and norms. Cultural violence works through cultural normalization mechanisms, where actions that in other contexts might be condemned as violence are perceived as natural and even desirable within a certain tradition (Childress et al., 2023). For example, the film shows a scene in which Sabina says, "She (her husband's mom) took away her clothes and forced her to wear a robe and a headscarf." Control over a woman's appearance and actions becomes part of subordination in the family structure, which is generally perceived as part of tradition.

Cultural violence is also demonstrated in the film through the use of traditions such as "Kelin tea" (serving husband's relatives, pouring tea for everyone) and "salam beru" (worship husband's relatives). These practices are justified as part of a cultural repression in which women are perceived not as equal subjects but as objects for fulfilling traditional obligations, limiting their individuality and self-expression opportunities (Zhussipbek & Nagayeva, 2020). Thus, cultural violence, rooted in traditions, contributes to the continuation of gender discrimination, consolidating the subordinate position of women in society and the family.

Moreover, the tradition of "alyp-kashu" (bride theft) is portrayed as an ordinary part of Kazakh culture, which makes violence related to the kidnapping of girls perceived as the norm. Mixing violence and comedy in the film leads to legitimization and even justification of such practices. A woman who has been a victim of "alyp-kashu" is portrayed as an object of comic action. This distorts the essence of the authentic tradition, turning a serious act of violence into something ordinary and acceptable. In 2021, there were 560 cases of women being abducted and forced into marriage. Of these, only 82 have reached trial (UNDP, 2022). In real life, "alyp-kashu" is not only a violation of a woman's freedom but can also be associated with other forms of violence, such as psychological and sexual violence. The problem is that the kidnapping of women as brides is often not perceived in society as violence but rather as part of a tradition, which makes it difficult to combat this practice. This is compounded by the fact that victims often do not seek help due to public pressure and stereotypes that justify such actions (Bellizzi & Nivoli, 2023). Nevertheless, the main character of the film "Kelinka Sabina" submitted an application to the police officers, and it was not accepted.

### **3) Structural Violence**

In "Kelinka Sabina", violence against women manifests itself not only in cultural and emotional abuse by her husband and family but also in the inability of law enforcement agencies to respond effectively to these violations. Sabina tries to file a police report, but they refuse to accept this statement. This point highlights the existing structural violence associated with the inability of law enforcement agencies to effectively protect women from violence in the family and communities. In real life, many women who become victims of violence do not receive the necessary help due to the inefficiency of the justice system and the lack of proper response from law enforcement agencies. For

example, statistics show that in Kazakhstan in 2019, 60% of administrative cases involving domestic violence were terminated due to reconciliation between the parties, which in turn illustrates the problem of weak government response and their preference for reconciliation, even when it comes to abuse and violence (Kazakhstan VAW Report, 2017).

This approach to violence resolution shows how structural violence permeates not only family relationships but also government institutions, including the police and the courts. As a result, this deprives victims of the opportunity to receive protection and restore their rights (Bellizzi & Nivoli, 2023). In this context, structural violence continues to support traditional patriarchal norms and gender inequality, making the fight against violence more difficult at the legislative and cultural levels.

## **Conclusion**

The film “Kelinka Sabina” is an example of how violence against women can be hidden under the guise of traditional norms and customs. Using Galtung’s triangle of violence and the intersectional approach, it is possible to analyse how different forms of violence — direct, structural, and cultural — interact and reinforce each other in the context of Kazakh society. Direct violence, presented through the abduction and physical isolation of the main character, is a vivid example of the violation of personal freedom. Structural violence manifests itself through a system of traditional values and expectations that limit women in their rights and opportunities, and cultural violence justifies and normalizes these forms of violence, presenting them as part of a cultural tradition. Thus, the film contributes to normalization of abuse. The violence against women depicted in the film is presented as part of everyday life, which makes it less perceived as a crime. This highlights the importance of a comprehensive approach to addressing violence in society, which must consider not only direct violence, but also the structural and cultural mechanisms that support gender inequality.

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## **Intersectional Analysis of Cross-Border Marriage Trafficking in China: Case Study of Vietnamese, Myanmar, and North Korean Women**

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Marriage trafficking is a relatively new form of abuse that has been increasingly popular in China. In this paper, I conducted a comparative case study of women's marriage trafficking to China from neighbouring countries of Vietnam, Myanmar, and North Korea. The secondary source analysis and the application of intersectionality theory by Crenshaw will help to explain the unique experiences of victims. The case study has found similar patterns of trafficking routes among all three countries, and the shared motivations of victims to agree on migration to China. The common strategy used by traffickers was to lure victims with job opportunities in China, and force women into bride trafficking, with several cases of women being trafficked with their consent. The intersectional analysis revealed that all the victims' experiences are shaped by their intersecting identities, such as gender, socioeconomic status, migration status, and age, and as a result, all of them struggled to seek help and escape their abusive husbands.

**Keywords:** China; Vietnam; Myanmar; North Korea; marriage trafficking; intersectionality

Marriage or bride trafficking is a form of human trafficking that implies women being forced into a marriage with a man. It is “a more complex and multilayered matrix of abuse, encompassing sexual exploitation, reproductive slavery, and forced domestic servitude” (Quek, 2018, as cited in Liang, 2022, p. 553). This form of Violence against Women (VAW) is not given recognition as a separate type of abuse but rather misinterpreted as DV, human trafficking, or another term that does not fully capture its meaning (Liang, 2022).

In recent trends, China has demonstrated a unique and growing trend of marriage trafficking of women, especially from neighbouring countries such as Vietnam, Myanmar, and North Korea. The root cause of the demand for marriageable women beyond China is the gender imbalance, where men outnumber women by 31.64 million people (China Industry Information, 2019, as cited in Lhomme et al., 2021). Such a striking sex ratio is a result of the 1979 one-child policy in China that restricted women’s reproductive rights, and families usually decided to keep a boy due to strong patriarchal values (Barr & Kamler, 2019).

Most of the women become the victims of bride trafficking through deception, and they do not initially agree to marry a Chinese man. They usually search for a better life with better job opportunities in China, having no clue of being forced into marriage. After being trafficked, however, they find themselves in a liminal position, an intersection of multiple identities that complicates their experience of VAW (ibid.).

In this paper, I will shed light on this concerning and growing trend of marriage trafficking, which remains underrepresented in academia. I will examine the case studies of the marriage trafficking of women in China from Vietnam, Myanmar, and North Korea, and deeply analyse each case, focusing on finding similar patterns or differences in victims’ experiences.

There is also a gap in the literature on the topic of bride trafficking, and Crenshaw’s intersectionality can be applied to explain the victims of this type of abuse. I will also expand on how intersectionality theory can explain the unique experiences that have been created because of the intersection of victims’ multiple identities, such as migration status, age, gender, and socioeconomic status. Thus, the main research question guiding this paper is: “How do intersecting identities shape vulnerability and distinct experiences of Vietnamese, Myanmar, and North Korean women in cross-border bride trafficking in China?”

## Literature Review

According to the UN's Palermo Protocol (2000, Article 3), the term "trafficking" is defined as an act of exploitation (e.g., sexual exploitation) against a human being through deception or abuse of power, resulting in "sexual exploitation, forced labour services and practices similar to slavery." However, this definition of human trafficking fails to capture violence occurring in a domestic setting, such as that of marriage trafficking. Marriage trafficking is "a more complex and multilayered matrix of abuse, encompassing sexual exploitation, reproductive slavery, and forced domestic servitude" (Quek, 2018, as cited in Liang, 2022, p. 553). Connectively, it not only touches upon one type of abuse that occurs during marriage trafficking but rather encompasses 3 distinct components. Another key aspect of marriage trafficking is its endurance: compared to other forms of trafficking or abuse, which might end earlier, it can last for the whole life of the victim. Also, their case can be ignored by the government as a "private matter" rather than a human trafficking case (Quek, 2018, as cited in Liang, 2022). Lack of a clear definition in academia leads to the real number of trafficked women being unknown to the public (Zhang, 2022). Thus, marriage trafficking remains heavily under-researched and underreported, being subject to misinterpretation or misuse (Liang, 2022). This reflects the core of the issue and will be used for navigating the research paper.

To better contextualize the issue, it is worth mentioning that the phenomenon of marriage trafficking in China is not arbitrary and can be explained through the historical background of the country. The central contributor is the one-child policy, which was introduced in 1979 as a reform to control the dramatic population growth in China. The government restricted women's reproductive rights to give birth to one child only, and the preference was always given to bear a boy, and abort a girl, due to strong patriarchal norms embedded into society (Barr & Kamler, 2019). Consequently, the huge gender gap and imbalance in sex ratio were created, having a long-lasting impact on modern Chinese society. According to statistics of National Economic Data, the one-child policy has led to an excess of males by 31.64 million compared to females in China (China Industry Information, 2019, as cited in Lhomme et al., 2021). There's a noticeable shortage of women and men, who significantly outnumber the women in the population, have faced the reality of struggling to find a female partner. However, at its core, the one-child policy is not a root cause of marriage trafficking but rather an example of the extent to which Chinese society's patriarchal conventions can penetrate people's lives, eventually leading to the exploitation and trafficking of women.

On the individual level, it is crucial for the household to continue the family line, which can only be done by male descendants (Mei, 2024). Consequently, a Chinese man's family expects him to get married, emphasizing the importance of a bride bearing a boy (Stöckl et al., 2017). The woman's role is usually to perform all the household chores and in a more inferior position in relation to the man, which can be an indicator of women being mistreated and exploited by the household members (Liang, 2022). The marriage itself is considered a must-have action, an essential part of every Chinese person, and inability to conform with the societal expectations of marrying might be considered a deviation from the social norms, so men are pressured to marry not only by their families, but the whole society as well (Zhang, 2022). Thus, the endurance of these patriarchal belief systems is the root cause of marriage trafficking in Chinese society.

## **Methods**

For this paper, I employed a comparative case study of women from Vietnam, Myanmar, and North Korea, who have been marriage trafficked to China. Secondary data, such as academic studies, NGO reports, and news articles, were used for this study. NGO reports are rich in ground-level findings based on qualitative data that capture victims' individual experiences, while academic articles often include quantitative data that reveal the scale of the problem in numbers. Combining qualitative and quantitative findings helps to construct a picture of the problem, both rich in width and depth.

Data showcase that women from Southeast Asian countries and North Korea become the victims of marriage trafficking in China more prevalently compared to other regions (Lhomme, 2021; Mei, 2024). Usually, the region's proximity to China, victims' low socioeconomic status, and the expected high income in China lured women to migrate there for work, and the scheme led them to be marriage trafficked with little possibilities for help-seeking, due to the interaction of their multiple identities.

The data collection method is a literature review of secondary sources on the related topic of marriage/bride trafficking, forced marriage, cross-border migration, VAW, and case studies about victims from Vietnam, Myanmar, and North Korea. The comparative case study helped to identify similarities and differences in experiences endured by the victims, and it allowed for the application of intersectionality theory for a better understanding of the victims' status quo. Earlier studies have shed light on this issue, yet they did not apply an intersectionality lens and did not fully acknowledge

the multilayered nature of this type of abuse in their analysis. Therefore, a comparative case study of secondary data is a methodology that will be used to deeply examine marriage trafficking, with the emphasis on the intersecting identities of the women that increase their chances of being trafficked and exacerbate their opportunities for help-seeking.

The next section will reflect the results of case studies from Vietnam and Myanmar on the demographics of victims and their experiences after being trafficked. The analysis of case studies will start from the recruitment routes of trafficked women, continuing with the demographics of victims, and ending with the intersectionality of their multiple identities.

### **Theoretical Framework**

Intersectionality theory by Kimberle Crenshaw explains the experiences of oppressed women as a result of the intersection of multiple identities (Crenshaw, 1991). In her paper, she focused on black women and how the intersection of their gender with race influenced their experience of violence against women (VAW). She separated intersectionality into 3 categories that demonstrate how women are exposed to vulnerability from different angles: structural, political, and representational intersectionality. Structural intersectionality showcases how black women with intersecting identities endure VAW differently compared to white women; political intersectionality reveals how the instances of VAW are often overlooked over other discourses, such as racism; representation intersectionality explains how women of colour's portrayal in the media reinforces certain stereotypes and disadvantages them in the cases of VAW (Crenshaw, 1991, p. 1245).

I applied this theory to examine marriage trafficking as a type of VAW that Vietnamese, Myanmar, and North Korean women are subject to, and the intersection of their multiple identities, such as gender, migration status, socioeconomic status, and age, shapes their experiences. Only the structural intersectionality was applied in this study, of how multiple identities of women from specifically these countries (Vietnam, Myanmar, and North Korea) become the victims of marriage trafficking, unlike women from other regions. Political intersectionality will not be applied due to the lack of recognition of this problem and the lack of media coverage of victims' cases in Chinese media due to high censorship, so the insufficiency of related data constrains the analysis of this problem from a political angle, such as a VAW against trafficked women being politically recognized as a subject of racism (Dickson, 2021). Representational intersectionality was not applied due to the

irrelevance of certain racial stereotypes in the case of marriage trafficking victims, as victims' other identities play a role in them being bride trafficked, which will be fully covered in the structural intersectionality analysis.

## **Results**

High demand for brides among Chinese men laid a foundation for the formation of cross-border trafficking routes and the flourishing of the marriage trafficking industry. Annamalai (2024) highlighted that mostly women from Asian countries such as Vietnam, North Korea, or Myanmar are the victims of marriage trafficking. In the case of trafficking Vietnamese women to China, it was executed easily due to markets on the border of China that have been developed as a result of the economic migration of Vietnamese to China seeking employment (Maochun & Wen, 2014). The availability of the labour force and the lack of proper salaries in Vietnam, and extensive job offers with more prosperity in landing a better-paid job in China, created a favorable condition for work immigration (Wang, 2019). Most women who were promised employment in China crossed the border to be trapped in marriage trafficking, they did not foresee coming (Liu et al., 2020, as cited in Liang, 2022). Vietnamese official data showed that about 3000 women became victims of trafficking to China (Vu, 2018).

According to Barr and Kamler (2019), the heated conflict between the government and the Kachin Independence Organisation, which advocated for the separation of Kachin state from the country, has resulted in social instability and hunger among the Kachin population. The majority of men were a part of an army, and women who were left with kids sought to find a job to provide for their families. The reasonable and feasible option was crossing the borders of China and finding employment there. Similarly to Vietnam's case, women were lured with job opportunities and were trafficked as "brides" for Chinese men instead (ibid.).

The last case is the North Korean women becoming victims of marriage trafficking in China. The difficult situation in the country worsened by the hunger forced people to run to neighbouring countries, such as China. According to Davis (2006), 100,000 women also irregularly migrated to China seeking better job opportunities, but 80% of them end up being trafficked. Their pursuit of a better life turned into the harsh reality of human trafficking.

Stöckl et al. (2017) conducted a research study on 51 Vietnamese women and girls who were trafficked to China and have already been rescued. They have taken the standardized surveys on their background, experience of being trafficked, and what they plan to do in the future. In their findings, the authors indicated that 50 out of 51 women were deceived into marrying Chinese men. They were recruited through false pretences to visit China, such as meeting the parents of their partner, seeking job opportunities, or going shopping. After being trafficked, about 90% of women have endured VAW from their partners, such as sexual, physical violence, which led to serious mental health issues. The results also showed that around 95% of women under 35 and almost half were single when marriage trafficked, which indicates the demand for younger and single females. Among the participants, no woman received higher education than the secondary school, and almost 80% were employed in the agricultural sector.

An interesting finding of the study was that 6% of women were released by their husbands, which rarely occurs in marriage trafficking. The core reason is the exploitative goal that husbands wanted to achieve- to have a baby. After the woman had given birth to a child, she could be released back home, as if she had completed her mission in that household (Stöckl et al., 2017).

A similar exploitative pattern was traced in the Myanmar case. In 2017, Robinson and Branchini (2018) conducted research in collaboration with Kachin Women's Association Thailand on trafficking Myanmar women to China. It was a mixed methods approach, where they employed in-depth, key informant interviews and surveys. Findings revealed that an estimated 5000 Myanmar women in China had become victims of forced marriage, and 2800 reported that they were coerced to give birth to children (Robinson & Branchini, 2018, p. 10). One of the interviewees shared that those women who were not able to bear a child were resold, and that is why the demand predominantly fell on young women between 16-25 years old (Robinson & Branchini, 2018, p. 13).

## **Discussion**

In Vietnam's case study, the intersectional analysis reveals that all the victims were from the lower socioeconomic class, of similar age and marriageable women, which showcases that it was the intentional recruitment tactics. Women's low socioeconomic status is shaped by young age, lack of education, and financial resources, making them suitable for bride tracking and later limiting their chances to escape. Similarly, in Myanmar, the age of the trafficked women mattered in terms of their

ability to bear children, and it is considered that younger women have more chances to give birth to children. This high demand for younger women has become a reason for marriage trafficking of underage girls, as young as 14 years old (Stöckl et al., 2017). In this case, the intersection of age and gender had played a role in creating increased vulnerability for women and their experiences of bride trafficking. There were insufficient data regarding the victims from North Korea, but the assumption is that a similar pattern of recruiting younger women due to their high vulnerability is most likely to be true as well.

Apart from age, gender, and socioeconomic status, the most significant factor that affects trafficked women is their migrant status, which often becomes a central reason constraining victims' help-seeking options, unlike earlier-mentioned cases of women being released by their husbands after bearing children. According to Barr and Kamler (2019), the law enforcement in addressing marriage trafficking is weak since the Chinese police are reluctant to deal with crimes committed against undocumented migrants, who are the trafficked women. It aligns with Crenshaw's structural intersectionality, which stands for the institutional and structural factors limiting victims' chances to escape VAW (Crenshaw, 1991). In this situation, migration status marginalizes trafficked women by failing to provide a support platform to seek help. Particularly, migrant women are perceived as irregular migrants without legal status in the country, therefore deprived of the social and legal protection from the government. Instead of reporting the crime, women are discouraged from contacting the police out of fear of deportation.

In Myanmar, multiple trafficked women who escaped their husbands did not receive adequate support from the police and were eventually deported from China. Their kids from the husband, on the other hand, remained in China as the citizens of the country, leading to the loss of contact between the mother and the child. One of the victims, Mai Nu, shared that the Chinese policy deported her, but the abusive family and husband did not take any responsibility for their actions and were not legally prosecuted (Barr & Kamler, 2019, p. 79). It reveals the prevalence of injustice and impunity of offenders.

Similarly, North Korean women faced difficulties in seeking help due to the fear of being deported back to their country of origin. In North Korea, escapees who come back to the country are severely punished for leaving the state and often are tortured or put in jail (Zheng, 2015, as cited in Mei, 2024). Husbands of victims, aware of brutal punishments that they might face in North

Korea, intentionally terrorize women by threatening to report them to the police. Completely trapped, women are forced to endure excessive controlling behavior and ongoing abuse from their husbands (Davis, 2006). Thus, it is evident that structurally, migrant women are marginalized and their violence against them is completely ignored by the government, exacerbating their already vulnerable position.

## **Conclusion**

To conclude, marriage trafficking is a form of VAW that is still not fully recognized as a distinct form of violence, which cannot be generalized to domestic violence or human trafficking. It is a trend that has disadvantaged women, since they were not acknowledged as the victims of marriage trafficking by the government. Particularly, it is highly prevailing in China, due to deeply embedded patriarchal norms that have an enormous impact on how Chinese society operates. The one-child policy created a gender imbalance in the country due to households' decision to prioritize keeping boys over girls, facilitating the growth of the cross-border marriage trafficking industry.

Women from Southeast countries such as Vietnam and Myanmar, or neighbouring countries such as North Korea, have turned into the top suppliers of brides for Chinese men. The poor socioeconomic status of women encouraged them to search for a job in China, and the majority were deceived by the recruiters who promised them employment, but in reality, trapped in marriage trafficking. Since they all come from poor backgrounds, their vulnerability constrained them from escaping the trafficking. The demographics of women also consisted of predominantly young girls who are marriageable and able to bear children, which is one of the core goals of forced marriage for Chinese men. The exploitative nature of this practice can also be revealed as an intersection of multiple identities. Lastly, the migrant status was examined through the lens of structural intersectionality by Crenshaw, and its intersection with gender has significantly constrained their help-seeking options.

Since this problem is not being adequately addressed yet, intervention programs should be developed and implemented as soon as possible to avoid future cases of women being deceived and trafficked to marry Chinese men.

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