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CHANGING BOUNDARY ENVIRONMENT: GEOGRAPHIC IMPACTS ON LINGUISTIC, RELIGIOUS, AND POLITICAL DOMINANCE IN INNER ASIA

MICHAL SCHWARZ

ABSTRACT:

This paper explores the underlying reasons that have caused the significant differences in the geopolitical and cultural exchanges occurring between two geographic macro-areas of East Asia. The first such area comprises the vast zone in northern and Inner Asia where repeated East-West exchanges along the Eurasian Greenbelt connected the social and physical ecosystems of Central Asia, southern Siberia, Xinjiang, the Mongolian areas, Manchuria, North China, and the Korean Peninsula. The second zone, as its socioeconomic and political counterpart, is found to the south in Inner China and Southeast Asia. The natural environments, the wide range of ethnicities, not to mention their various languages and religions, have all played specific roles in the interactions between these two macro-areas. North-Central China lies at the confluence of power between the steppe populations from the north and the ethnic groups – whether Sinitic or other – interacting from the south. After Section 1), clarifying the methodological approach and introducing the relevant barriers and migrations, the paper focuses on 2) explaining the environmental factors that create unequal stabilities between population units, 3) basic rules of tributary relations, 4) principles and interdependencies in an evolutionary perspective that lead to linguistic, religious, and political dominance, and 5) individual case studies of systemic exchanges. Section 6), the conclusion, comments on the costs of dominance in Asian practice and the participation of religions in this process.

ZUSAMMENFASSUNG: WANDELNDE GRENZRÄUME: GEOGRAFISCHE EINFLÜSSE AUF SPRACHLICHE, RELIGIÖSE UND POLITISCHE DOMINANZ IN INNERASIEN

Diese Arbeit untersucht die Gründe für die signifikanten Unterschiede im geopolitischen und kulturellen Austausch zwischen zwei geografischen Makroregionen Ostasiens. Die erste Region umfasst die ausgedehnte Zone Nord- und Innerasiens, wo wiederholte Ost-West-Beziehungen entlang des Eurasischen Grüngürtels die sozialen und physischen Ökosysteme Zentralasiens, Südsibiriens, Xinjiangs, der Mongolei, der Mandschurei, Nordchinas und der koreanischen Halbinsel miteinander verbanden. Die zweite Zone, ihr sozioökonomisches und politisches Gegenstück, liegt südlich davon in Innerchina und Südostasien. Die natürlichen Gegebenheiten, die ethnische Vielfalt sowie die verschiedenen Sprachen und Religionen spielten jeweils eine spezifische Rolle in den Interaktionen zwischen diesen beiden Makroregionen. Nordzentralchina liegt im Schnittpunkt der Machtverhältnisse zwischen den Steppenvölkern des Nordens und den ethnischen Gruppen – ob chinesischer oder anderer Herkunft – aus dem Süden. Nach Abschnitt 1), in dem der methodische Ansatz erläutert und die relevanten Barrieren und Migrationsbewegungen vorgestellt werden, konzentriert sich die Arbeit auf 2) die Erklärung der Umweltfaktoren, die zu ungleichen Stabilitäten zwischen Bevölkerungsgruppen führen, 3) die Grundregeln tributärer Beziehungen, 4) Prinzipien und Wechselwirkungen aus evolutionärer Perspektive, die zu sprachlicher, religiöser und politischer Dominanz führen, und 5) Fallstudien zu systemischen Austauschprozessen. Abschnitt 6), die Schlussfolgerung, kommentiert die Kosten der Dominanz in der asiatischen Praxis und die Rolle der Religionen in diesem Prozess.

KEYWORDS: frontiers, environmental impacts, Inner Asia, linguo-religious complexes, political dominance

SCHLÜSSELWÖRTER: Grenzgebiete, Umweltauswirkungen, Innerasien, sprachlich-religiöse Komplexe, politische Dominanz

1. Approach, barriers, and migration

This paper has been derived from several interdisciplinary research projects, yet its main inspiration arose out of regular travels and almost eight years spent in Asia in China, Mongolia, Vietnam, Korea, Central and Southeast Asia. Understanding these diverse environments and their interconnections requires an approach capable of

handling complex systems; more specifically, a focus on the patterns and dynamics of how languages and religions interact with other components of the environment (see parts two and four).

Among the symbolic barriers within East Asia, the most iconic human construction is the Great Wall of China, seemingly dividing the cultures of the steppe from China. However, its proper understanding is better grasped outside of the consideration of cultural and ethnic differences, drawing instead upon a knowledge of environmental history. In Inner Asia, stone walls hold a vital role for mobile pastoralism in mountain areas, e.g., the Altai Range¹ in Western Mongolia (Fig. 1), where scarce grass and arid conditions necessitate strict regulations on the access of cattle to the small, isolated pastures in remote mountain valleys. The best grass along the mountain streams requires walls to protect it and allow it to regenerate (Fig. 2 and 3). Walled fences (in Mongolian *khashaa*) also protect newborn calves against nocturnal attacks by predators, keeping them overnight in fully closed shelters.

In human culture, walls also have a protective function, yet more significantly a symbolic one in marking social prestige and elite status. Archaeological investigations of Bronze Age date have confirmed the existence of extremely small walled micro-towns in Central Asia. Yet in the absence of an army, the function of the walls is less for protection and more for the announcement of the status of the ruler or governor residing inside them. In the steppe or on the Silk Road, the threat of robbery led the inhabitants to seek larger residence areas and oases for refuge, the protective status of serfdom, or economic survival. Another possible way of organizing Inner Asian space, considering the high cost of building walls, is the construction of symbolic gates. In some areas in China, villages or spiritual places like cemeteries often lack an outer wall but have a symbolic entry in the form of a gate standing freely in open space, to satisfy the needs of the spirits of the place.



Fig. 1. Map of the Bulgan River Valley in western Mongolia from Google Earth, prepared by Ondřej Srba, with marked locations of photographs of walled fences (Fig. 2 and Fig. 3). Position of this locality is indicated on the map of Eurasia (Fig. 6, point 1).

All the same, the Great Wall of China (Fig. 4), through its long construction history (Di Cosmo 2002; Waldron 1999), represented a different case. This no longer effective network of walls has parallels on a smaller scale in Mongolia, like the Wall of Chingis Khan, or even far older projects; possibly, such walls may not even be a Chinese invention. Regardless of its history, the Great Wall of China manages to obscure the closeness of relations in the deep past, when the Chinese and their northern neighbors had a very similar semi-pastoral economy since both the high-rainfall North Chinese plains and the Gobi region prior to desertification allowed for analogous practices of agriculture (Fig. 5). Moreover, in the preliterate period, the Sinitic presence extended further to the north, while

¹ The Altai Mountains are in the regional focus of this paper and research projects funded by the Czech Science Foundation. In this sense, the term “Altaic” is used in its areal perspective and in connection with the regular conferences PIAC and SIAC (cf. also forthcoming Schwarz 2026), without making direct claims about language relationships and Altaic theory.



Fig. 2. Bayan-Ölgii province (Mongolia) – Dund Tömört Valley is a side valley of the main Bulgan River Valley near the Chinese border (Fig. 6, point 1). The locality is now the most elevated spring pasture in the valley, and a walled fence protects the grass, which is greener and wetter thanks to the mountain stream and longer snow cover (photo: author; May 2024). The area is inhabited by Jamishiin Tömörbat and his family, who is an informant of Ondřej Srba, head of the project Changing Adaptive Strategies in Mongolia.



*Fig. 3. Bayan-Ölgii province (Mongolia) – main Bulgan River Valley (Fig. 6, point 1) with walled fence of Chadraabaliin Ganbaatar, key informant of Ondřej Srba, head of the project Changing Adaptive Strategies in Mongolia. An around one-meter-high fence is dividing rocky pasture on the left side from the protected section of the Bulgan riverbank with naturally grown Sea buckthorn (*Hippophae rhamnoides*), used as an important crop in Mongolia (photo: author; May 2024)*



Fig. 4. Jiayuguan, Gansu province (China), reconstructed western part of the Great Wall – view on reconstructed final section leading to the top of the hill (photo: author, May 2007). For the position in Eurasia, see Fig 6, point 2.

conversely the Altaic tribes could be found among the Sinitic groups more in the south, with over a thousand years of tributary exchanges (So and Bunker, 1995). However, the climatic shift to arid conditions forced the northern populations to switch to mobile pastoralism, thus reinforcing the dichotomy set by the prevalence of arid vs. non-arid conditions, where the divergence between mobile and sedentary population units was marked with specific types of migration exchanges. Besides the individual cases of attested migration, such as traders, religious missionaries, wives and servants in royal marriages, or diplomatic envoys in tributary relations, resettlement of ordinary populations usually found its enforcement through war in the extreme case, regulation by an outer power or administration, or the self-regulating practice of nomadic pastoralism, which also made use of religious calendars with related symbolism (e.g., Dulam 2015, 104-117). A final category for migration can be that of spontaneous or economically conditioned movement: for instance, the attracting force of large cities in the sections below, or, on the contrary, densely populated areas allowing deliberate violations of the law to avoid taxes.

2. Environmental factors contributing to unequal stabilities between population units

However, the usual dividing obstacles for human populations are not walls, but instead natural barriers: deserts, mountains, and waterways. Rivers can serve both for purposes of transport and the natural definition of a political border: e.g., Mt. Pektusan and the rivers Yalu and Tumangang creating the natural northern border of the Korean Peninsula. As geographic boundaries separate people and languages, they also have a strong influence on the diffusion of religions: e.g., in the steppe zone, the Altai Mountains divide the influence of Islam in the west from Tibetan Buddhism in the east. Or even within a single ethnic group, geography can lead to a religious split: e.g., among the Buryats, the barrier of Lake Baikal kept the spread of Christianity to the Cis-Baikal area, while the Trans-Baikal Buryats remain today predominantly Tibetan Buddhists. In turn, political questions of power and authority are themselves shaped by geographic conditions and available resources. In arid regions, for example, the amount of available water and the corresponding size of oasis settlements influenced state alliances, where large oases like Kucha, Turfan, Kashgar, and Khotan consistently held more power than the more dependent oases of Yarkand or Niya and Loulan of ancient Kroraina (Hansen 2012, 42-43).



Fig. 5. Jiayuguan, Gansu province (China), reconstructed western part of the Great Wall - view from tower on the top of the hill with sight of the village in oasis landscape in desert area (photo: author, May 2007). For the position in Eurasia, see Fig 6, point 2.

On a broader level, the vast inland steppe area of the Eurasian greenbelt differs from the southern parts of the Eurasian continent thanks to climatic processes in the atmosphere and hydrosphere, particularly the role of solar energy in creating an energy deficit above the poles vs. the energy surplus above the equator. These differences bring about the counterbalancing monsoon cycles in the atmosphere, matched by the ensuing large-scale mobility patterns in the biosphere, such as the transcontinental migration flyways of birds. In fact, migratory bird flyways also play a balancing role in the Eurasian greenbelt ecosystem. Since the core for all bird-flight lies in Central Siberia, the monsoon processes ensure that the birds' routes extend to three specific transcontinental areas and back: Southeast Asia as far as Java, India, and North Africa (Cunningham and Cunningham 2008, 184).

Despite the regularity of cyclical processes during the year, the natural world is anything but homogeneous. The existence or emergence of local disparities always stimulate interactions that display an oscillatory pattern of development, such as the population of the biosphere registering cycles of growth and shrinkage depending on the immediate physical conditions. Human prehistory was marked by the changes between glacial and interglacial periods, e.g., the archaeological evidence revealing the expansion and the decline of the Pazyryk culture, accompanied by the emigration of people from the steppe (Linduff and Rubinson 2022, 24). Similarly, the modern expansion of the Manchus followed the Little Ice Age, which had a profound effect on the Korean Peninsula (Bae 2023, 4-5). In parallel to the higher precipitation in the North Chinese plains and the Gobi in the past, the same development occurred in the Tarim Basin, where rainfall was once far heavier: confirmed, e.g., by the archaeological sites of Niya and Endere in the southern Tarim Basin, now lying deep in the Taklamakan desert. Rising aridity is reported in Inner Asian texts from the third to the fourth centuries CE, a process that continues today, e.g., the final disappearance of Lake Lob Nor during the 20th century. However, around the beginning of the Common Era, the links between the northern and southern oases of the Tarim Basin were more intense than usually considered, thanks to the influx of glacier-fed rivers from the Tianshan and Kunlun Mountains.

Interactions between the natural environment and human societies resulted in multiple east-west migrations across Eurasia; the chief observable pattern is of population drift from the steppe belt southward to regions with higher

precipitation rates and settlement density, though on the Pacific coastline, the waterways of Japan, Korea, East China, and Vietnam also register a high population density themselves (cf. map in Cunningham and Cunningham 2008, 381). In inland Asia, precipitation increases moving to the south, as far as the equator, with a corresponding north-to-south increase of biodiversity, socio-economic variation, and linguistic diversity (cf. push and pull factors of immigration, and maps in Cunningham and Cunningham 2008, 334; Green 2008, 7; Groombridge and Jenkins 2002, 91, 95, 101, 107, 171).

As theoretical studies have shown, a high population density allows for certain approximate predictions (CARTO contributors 2016): it is an attractor stimulating immigration (Bowman et al. 2002), trade (Kopczewska et al. 2024), a factor of higher interactive capacity, and a condition for the emergence of cities (Alhazzani et al. 2021) and the rise of the state (Roscoe et al. 2021). Higham (1996, 320) adds that this framework is less applicable to Southeast Asia, where the role of social hierarchies proved crucial even without developed statecraft. At the same time, such an analytical approach could return the Pazyryk culture and other archaeological complexes of the Central Asian steppe belt to the network of the largest world civilizations - though requiring a summary of the relationship between the natural environment and economic conditions.

In the past, East Asia had observable dichotomies where persistent inequalities existed between the macro-areas of sedentary vs. non/semi-sedentary groups and between the populations in mountains vs. lowlands in frontier and contact zones. One well-known, perhaps even stereotypical, instance is the medieval divergence between the Mongolian plateau and the lowlands of Inner China. Even today, these differences persist in traditional economic sectors like pastoral animal husbandry. In the past or even today, high altitudes in inland areas imply economic disadvantages for agriculture due to lower precipitation, yet higher altitudes also bring biological advantages to their residents: the lower oxygen concentration in the air, with decreasing air pressure and density at higher altitudes (Lutgens et al. 2018, 16), requires more red blood cells or higher oxygen extracting capacity, making mountain populations more effective fighters than their lowland rivals. Still, the physical impact of high altitudes is limited, as biological advantages or disadvantages can be acquired or lost due to adaptation after resettlement to a higher or lower elevation: these contrasts, essentially, hold true only for short-term military campaigns.

For pastoralists, another health-related factor is the physical activity required for tending cattle or other herd animals – contrasting, for instance, with sedentary jobs. In this area, we should recall how even the Korean kings had compulsory office work without opportunity of physical exercise, reportedly with adverse effects on their health (Shin 2004, 78-79).

Regarding high altitudes, increased exposure to sunlight also has an intense psychoactive influence, stimulating the production of vitamins and immune-supporting hormones. Modern medical research confirms that hospital patients recover more quickly in rooms with direct sunlight. Contrastingly, such climatic phenomena as the winter in Mongolia conjoin two sources of physiological stress: the shortage of sunlight during the winter months and the risks of *white zud* if the cattle die without access to grass after extensive snow.

Other socio-economic factors relate to the unequal conditions facing pastoral versus sedentary groups. Pastoralists have greater exposure to zoonotic influences (Toxoplasmosis, etc.) via microbial metabolites that influence the human nerve system. One result can be aggressive and risky behavior, which nonetheless can prove necessary for predatory activity and evolutionary selection in wildlife; cf. the pastoral practice in which young cattle who survive the attacks of predators like wolves or Snow leopards are not slaughtered but allowed to heal, enabling zoonotic transmission. As historical reports about raiders from the Mongolian plateau (So and Bunker, 1995) do not mention any differences in aggressivity which might relate to ethnicity, the aggressive behavior thus must be conditioned by the environment, though equally supported by the community-induced warrior-lifestyle of soldiers during expansions.

In contrast, agricultural groups might be more exposed to *Bacillus cereus* or other zoonotic diseases like salmonella or listeria (controlled by *Escherichia coli*), which can have the opposite impact. Yet the reach of these differences is itself limited, since the inhabitants of the Mongolian plateau practiced small-scale agriculture, bought grain from Chinese merchants, or collected edible roots of wild plants (like *Polygonum viviparum*) from rodent burrows (attested by Poucha 1957, 143), making phyto-zoonotic influences both in pastoral conditions and in sedentary agriculture significantly complex, largely due to the presence of rodents in the fields and cities.

At the same time, regular mobility across wide distances moderates long-term microbial exposure. Mobility was a significant factor for Mongolia and Siberia, once the retreat of the Ice Age glaciers (e.g., Groombridge and Jenkins 2002, 34-35) left behind open plains of pastureland and soil unsuitable for the vegetative growth of complex forests (Green 2008, 33). The presence of broad plains and pastures across the East Eurasian steppe (Fig. 6, Point 3) allowed greater scope for human migration, changes in population density and circulations between past archaeological complexes confirmed as more densely populated sites. Higher rainfall and warmer temperatures provided better resources and allowed higher population density with stimulated immigration. By contrast,

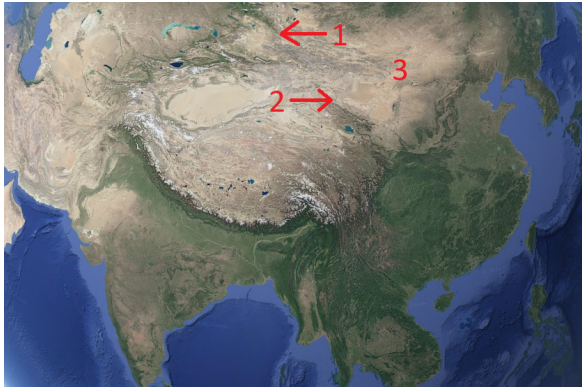


Fig. 6. Map of Eurasia from Google Earth, with marked locations of photographs, prepared by Ondřej Srba:

1 – location of Bulgan River Valley in western Mongolia (Fig. 1) with photos of fences (Fig. 2 and Fig. 3),
2 – Location of Jiayuguan with reconstructed western end of the Great Wall of China (photos at Fig. 4 and Fig. 5).
3 – Central position of temperate and subtropical climatic zone of deserts, semideserts, steppes, forests, and mountains. This trans-Eurasian belt connects the Near East with northeast China. Temperate and subtropical conditions create a similar type of biomes (Pines et al. 2021, 25), enabling more flexible east-west migrations and exchange. In comparison with the political map of Mongol Eurasia (Fig. 7), the southern border of the Mongol Empire is delimited by the Persian Gulf coast and the great Rivers Indus and Brahmaputra. Still, the main different biomes are constituted by the tropical climatic zone of India and Southeast Asia.

any shifts to more arid or colder periods reduced the flora, fauna, and cattle, making other areas with better conditions more attractive for the affected populations. These environmental differences created dichotomies and stimulated unequal conditions between the Altaic ethnicities of the north and the sedentary groups in the south. In turn, cultural patterns further contributed to the deepening of unequal conditions in both macro-areas (Fig. 7). While sedentary groups tend not to move and internalize pressures, more flexible and mobile pastoralists tend to externalize the pressures. Because sedentary groups are less exposed to zoonotic microbes from wild

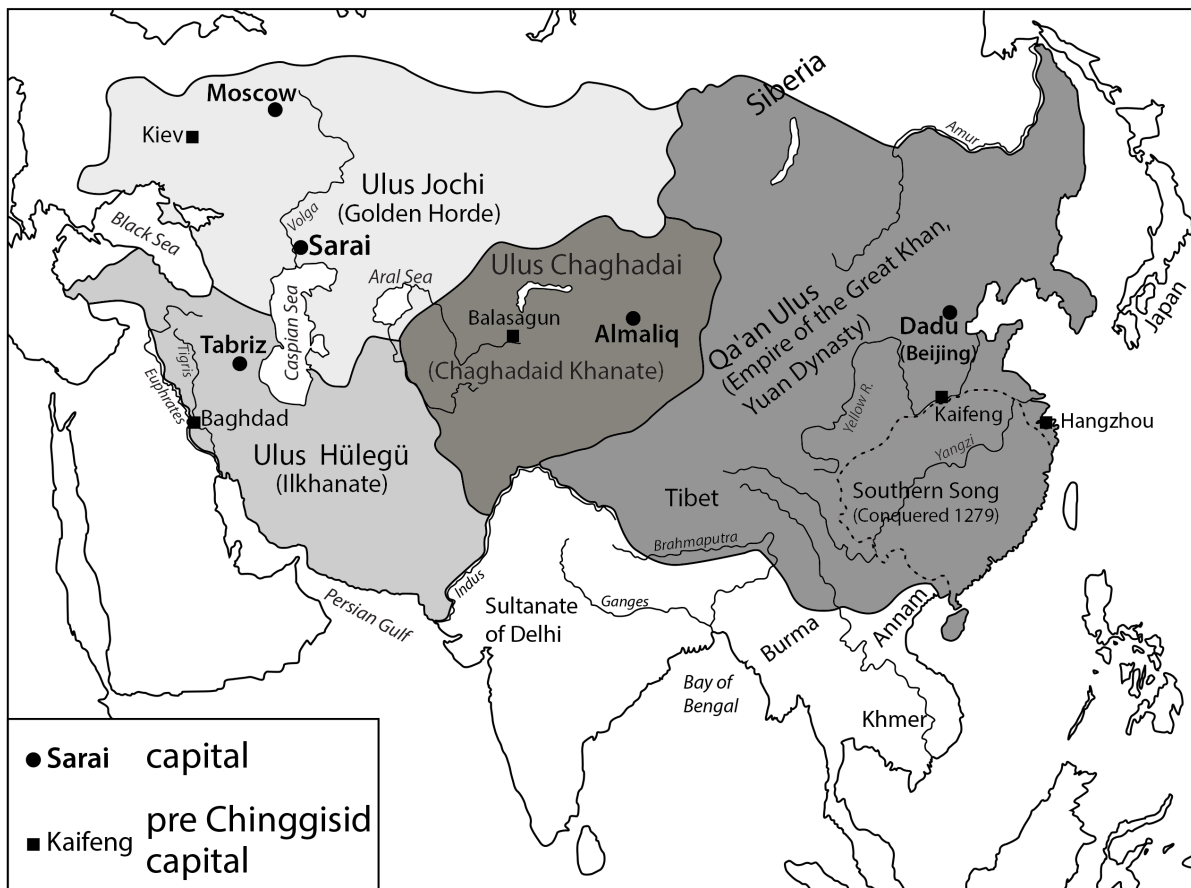


Fig. 7. Political map of the Mongol Empire after 1260, published with kind permission from Michal Biran (2021, 238, Map 6.4). In its largest extent, the Mongol empire is already divided into four units (Mongolian ulus) administered by four sons of Chinggis Khan. In this extension, the Mongols expanded into all temperate and subtropical zones of Eurasia (see Fig. 6, point 3), with northern limits in almost uninhabited Siberia and southern limits in different tropical zones of India and Southeast Asia. Unusual is the largest eastern ulus – its eastern half has extreme north-to-south extension given by a more wet coastal climate and maritime waterways. However, administrative division and rule over diverse subregions have led to later geopolitical changes.

predators, they developed a higher tolerance for social pressures; in turn, culturally based factors rendered them more compatible with submission to the rule of more dominant groups. Occurring in simultaneous effect, these processes could contribute to the stimulation of ethnic resistance, internal distancing, and better preservation of individual languages. At the same time, the resettled people often might not interact freely or could remain isolated for centuries. And since smaller groups and population sub-units are likely to display a lower chance of relocating after disasters, the socio-biological dominance of upland mobile groups over sedentary elites in the lowlands is often followed by acculturation and linguistic assimilation.

The differences between the two cultural spheres with unequal stabilities became more relevant during the first millennium B.C., when “colder and drier climatic conditions forced the northern tribes to turn more emphatically to herding and hunting” (So and Bunker 1995, 17). This shift increased the socioeconomic differences between both macro-areas, since the authors indicate that in the previous period, both the Chinese as well as their northern neighbors lived a similar sedentary farming life thanks to the equally high precipitation in the north Chinese plains and the Gobi.

Although the viewpoint of unequal conditions tends to be quantitative, there are many factors that it cannot measure. For this very reason, these approaches cannot be said to rely on natural determinism. Even though this study enumerates the roles of formative factors, their influence, degree, and minimal combinations leading to change cannot be fully predicted. The human groups actively participate in these processes, not under constant but instead cyclical influences of the coinciding conditions. As a result, brief “instant” descriptions are impossible; while equally the historical climate shifts of East Asia have not been fully described for the last three millennia (for ancient Pazyryk, e.g., Linduff and Robinson 2022, 47-50).

3. The rules of tributary relations

The social practices known as tributary relations are a long-term established practice in Inner Asian politics, first registered in connection with the Sino-Altaic, or more specifically Xiongnu-Han policy termed “harmonious kinship” (in Chinese *heqin*), written down in 198 B.C. The practice comprised basic rules for management of relations between the Chinese and the steppe people. The rules comprised principles like 1) the equality of “brotherly” nations, 2) the Great Wall delimiting the boundary, 3) the sending of luxurious cloths (silk), foodstuff (grain, wine) and precious goods (gold), 4) the access of steppe dwellers to Chinese markets, 5) the sending of a princess in marriage to the *Chanyu* or later to the Turko-Mongol *khagans*, 6) regular renewal of peace agreements, and 7) their publication, with any violation to be punished (Chang 2007, 141).

However, the relations were more connected to the preservation of the real power balance. Thus, for example, the marriage negotiations with Turko-Mongol tribes provided successful results in less than half of the requests (Skaff 2012, 210-218), depending on the power position of the actors. Furthermore, the relations were not bilateral but multilateral, because integration of the hierarchy with other interacting populations is behind the politics of *yi yi zhi yi*: “to rule over alien through (another) alien (people).” This expression comes from the Chinese context, but as a practice, it has been used worldwide since prehistory.

It is essential to consider that tributary relations prevailed not only between China and the steppe but also, in fact on a more universal and frequent level, in Central and Southeast Asia. Their primary role is in the prevention of state violence: for example, in mainland Southeast Asia, small chiefdoms (like the Sha, Lu, or Karen peoples) would pay tribute to three to five overlords (Luang Phrabang, Vientiane, Tonkin, Guangzhou, and Bangkok), needing to be safe from violent attacks, as insufficient subordination or a change in the alliance partner was always punished in international politics (Thongchai Winichakul 1997, 98-99; for more detailed analysis of upland Southeast Asia see Scott 2009). A similar development was found between the Tarim Basin oases, China, and all their neighbors. The tributary relations practices are on the highest political level and at lower intra-state levels, as well as relations between clans, families, or other kinship groupings. These processes and the degrees of their application brought about the shaping of present-day Asian states’ different ethnic profiles. For example, despite great past variation, the Korean Peninsula is now ethnically unified, while Vietnam has a coexistence between ethnic diversity and its unified Vietnamese population. Mongolia was subjected repeated integration and disintegration of Turko-Mongolian populations in connection with its ties to Xinjiang, China, southern Siberia, and Manchuria.

The tributary relations have obvious socio-biological grounds and analogies in nature. Later in this paper, I use the term “tertiary rulers” as an analogy to the biological levels of producers (plants, bacteria), primary consumers (herbivores), secondary consumers (carnivores) and tertiary consumers (“top” carnivores, in Cunningham and Cunningham 2008, 38). An analogous application of this division to political governance suggests a possible stratification into producers (ordinary population, i.e. families and households under tax system), primary rulers (local administration), secondary rulers (government), and tertiary rulers (“top” tributary or “superpower” government).

4. The concept of linguo-religious complexes and patterns of linguistic, religious, and political dominance

The topic of linguo-religious complexes (LRCs) has been addressed in my conference papers in 2024 and 2025. The first inspiration came from focusing on the movements of the first pioneer speakers in Inner Asian history; more recent inspirations have emerged from research on the interferences between religion and governance in Inner Asia, comparing Mongolia, Korea, and Vietnam. Mutual exchanges between these three areas and the main power center in north China are, in turn, linked to the previously outlined dichotomy between sedentary and mobile communities and various forms and degrees of mobility.

While LRCs are a natural part of other complex systems, detailed attention to languages and religions reflects how linguistic codes and religions systematically influence each other and interact with different components and the environment. In the scholarly literature, the concept of LRCs follows the study of Asian tributary relations, where Inner Asian history (e.g., Sinor 1998), trans-national comparison (e.g., Womack 2009; Wang 2018), and mutual impacts between genetically unrelated languages (Lim 2010; Phan 2013) have a connection to environmental pressures on interacting societies.

Languages and religions mutually co-evolved across human history. The invention of the earliest scripts occurred in a relationship with religious institutions, and the emergence of written cultures changed the development of human civilizations (Schmandt-Besserat 1982 and 2012). Language and religion tend to support each other, with especial force in written cultures. If in preliterate eras and traditions, it appears that religions had low institutionalization due to the entirely oral basis of religious rituals, literacy brings higher institutionalization and more rituals, including individual work with texts, reading, prayers, etc. As Yoo (2024) shows, religious texts are essential ritual items in Korean culture. Literate LRCs are also more stable, because written laws are more effective tools for control. And as a related general principle, a vital support for diffusion is the imitation of others, forming a social strategy for the integration and socialization of group members.

However, every LRC has a unique set of formative factors and external relations. Asian communities were especially multilingual and multireligious, not only because multilingualism is a condition of conflict processing (for bilingualism, Hernández et al. 2018, 167-173). Literacy became an indirect factor for natural selection (cf. Bickerton 2018), even if it was not active in monastic life.

Regarding functional principles, while language is the basic communication condition, religion regulates human groups' emotional and hormonal settings on the levels of the individual and the immediate members of the group. These regulations aim to diminish environmental, economic, and social stress. Yet in turn, one language or religion can replace another language or religion, covering the same communicative and regulative functions. While language shifts and gradual replacements of one linguistic code by another can be spontaneous, the conversions of past ruling families to another religion were intentional. In the conversions of ruling elites, the new religions usually support the polity's political and economic reorientation, strengthen new alliances, provide better alternatives in balancing interests, and temporarily reduce socio-economic pressures and environmental stress.

An example might be the state adoption of Manichaeism by the Uyghur khan *Bögü xayan* in Luoyang in 762, where the intent was to join another religious tradition independent of Chinese Buddhism (Ch'en 1964 /1973; Ecsedy 1990). This change strengthened ties with Iranian trade and secured Turkic interests in Inner Asia as far as Tibet (Widengren 1983; Melikian-Chirvani 2016). Nonetheless, the general influence of Manichaeism among all Turkic ethnicities remained limited because in the Tarim basin, the pragmatic Uyghur kings sponsored a significant range of religions (Kasai 2020, 74–75, 77). In other words, such an inclusive policy or what might be termed “religious tolerance” contributes to the development of a multi-religious state.

In turn, the spread of religions can be mapped onto linguistic traditions of translation, further deepening multilingual complexities when new religious systems interact with earlier layers of the previous religions.

The concept of LRCs applies to both preliterate and literate societies. In the former societies, the interferences between religion, governance, and language are more flexible. However, the introduction of scripts and written texts into a society displays significant differentiation in its higher institutionalization, supported by written rules and codified legitimization of power. Due to these connections, languages, religions, and scripts support each other, and populations usually insist on their combined use even in situations of decreasing homeostasis, where the growing instabilities bring about changes. However, religions can regulate politics and stimulate contradictory behavior; cf. the suppression of violence among the strictly Buddhist Pyu in Myanmar leading to the ensuing collapse of their power (Sar Desai 2013). In other instances, though, a Buddhist justification of power could support the application of violence in the spread of enforced protection over neighboring polities, like the action of the Buddhist kings of Siam (Thongchai Winichakul 1994, 83 regarding the concept of the king as Sanskrit

cakravartin). An Altaic analogy might be the spread of Tibetan Buddhism to Eastern Mongols under Manchu protection, which was related to the suppression of shamans and shamanism.

Individual components of any given LRC can be replaced through geopolitical demands, actors' interests, and environmental impacts on socio-political relations. The following trends are generally observable in interacting LRCs of past Asia: effects of the natural environment that influenced migration patterns, interethnic contacts, and complex interactions among languages and religions. In the past, multilingual and multireligious communities were more characteristic in Central and Southeast Asia. In the northern macro-area, it was mainly due to Altaic tolerance of religions. In turn, while the clan-based nature of society is a determining element across Asia, the emergence of a multireligious Southeast Asia was possible due to more variable geographic conditions. Paralleling the gradual population drift from north to south, we can cite, for example, A) general Altaic influences on the simplification of North Chinese (Lim An-King 2010), B) the influence of Chinese on Vietnamese, Malay and Indonesian (Phan 2013; Jones 2009), C) the spread of the Vietnamese population and language to the south (Goodman 2015), or D) the cultural shift connected to the spread of Malay language to insular Indonesia.

For explanatory methods, the terminology of syncretism is sometimes outdated. Sociobiology and ethology, though, offer additional scales of the previously cited symbiotic/parasitic processes wherein an interethnic hierarchy might be contributive or exclusive. Examples of symbiotic processes are the partial coexistence and amalgamation of Buddhism and Confucianism in medieval Korea and Vietnam. Another example is the use of infrastructure for other religions, cf. the Buddhist monastic tradition inspiring the buildings of Manichaean temples. In a general sense, symbiotic connectivity reveals the tendencies of main religions to tolerate other systems and incorporate previous folk religions and animism. For example, the intellectual continuity of Manichaean beliefs significantly influenced Central Asian texts (e.g., Manichaean or Iranian motifs of light are present in the *Secret History of the Mongols* and even in *Samguk Yusa*, cf. Bira 1990; Onon 2001; Ha and Mintz 2007). Similarly, they occur in Kazakh culture (Silamkul 2009), where the Turkic personal names are often related to planets and terminology of light (Yu Wonsoo 2017), even though the motif of light is in all religions, including Buddhism (Kloetzli 1997). Examples of contributive dominance on the language level are the preservation of ethnic languages of groups politically isolated in tributary relations. An example of religious interaction is the hierarchic tolerance of Islam toward Judaism and Christianity, though granted a lesser status. An example of exclusive hierarchy or dominance on the language level is the authority of Sanskrit replaced by Tibetan in Inner Asian Buddhism (van Schaik 2016, 68, 81). For another instance of exclusion from the area of religions: while Islam was gradually erasing Buddhism in Central Asia, similar tendencies were to overlook or erase folk religious practices and shamanism in Korea, cf. the ban on shamans participating in state-sponsored rain rites with the prohibition of entering the capital (Walraven 1999, 171–172).

5. Case studies of systemic exchanges

5.1. Turfan, the Tarim Basin, and Mongolia

The first case study of the Turfan and Tarim Basin oases shows interactions among its densely populated areas with higher absorption capacity, attracting traders and incursions from western Mongolia and the Gobi. Relative proximity caused the appearance of human skeletons with Mongoloid profiles in Turfan (Han 2009, 491–502) and the influence of Altaic groups in the history of Turfan governance (e.g., Gabain 1961). A pragmatic religious policy, in turn, led to openness and immigration. As a result, the geographic diversity in the oasis network stimulated multilingual and multireligious development: local Indo-European communities persisted in this network for hundreds of years alongside Indian traders, Chinese influences, and Altaic groups. The Uyghurs' systemic adoption of Buddhism in the Tarim Basin (see Wilken's comments on Uyghur Buddhist Stupa inscriptions from the 10th and 11th centuries) occurred about one century after they left the Mongolian plateau, with their gradual settlement in the Tarim Basin and Gansu. A significant religious turning point in Asian history is the period between the ninth and 11th centuries: according to Christopher Beckwith (2009, 158), the transitional period emerged from the ninth century onward with the collapse of the early medieval world order and the influx of new ethnic groups (Tibetans, Uyghurs, Tanguts, and later Mongols) to Central Asia. In parallel, the migration launched another change: while Uyghurs and Tanguts adopted Buddhism with certain Tibetan influences, the old sites of Indic Buddhism, like Khotan and Kucha, "declined in influence or began to convert to Islam" (van Schaik 2016, 81). While Islam gained stronger positions in West and Central Asia, the East and Inner Asia had larger steppe expansions with Mongolic and Tungusic speakers. Relations among powers generated a vast continental network, as the world population started with non-linear growth since the second millennium AD, and changes across the steppe belt incorporated the Tarim Basin oasis settlements into new supra-regional hierarchies, where Indo-European speakers gradually assimilated themselves to the more attractive Turkic strata. While the speakers of Tocharian languages, other

Indo-Europeans, and Turks contributed to the transmission of Buddhism, in later supra-regional development, Islam made better offers in terms of trade or the transmission of astrology, science, and medicine (Elverskog 2016; Yoeli-Tlalim 2016). An interesting example of complex interactions in Mongolia was the power replacement by the Kirghiz from the north (i.e., north-to-south drift). However, the Tang emperors did not confirm the Kirghiz as legitimate rulers. Once the Kirghiz requested the official Chinese granting of the Turkic title component *tāγri* (for semantics see Bold 2022) for their claims of power over Central Asia (Wilkens 2016, 192), the intentional refusal by the Tang dynasty reduced their authority, which necessarily led to the collapse of power in a wider international network.

In a more detailed explanation, Asia in the fifth century had three main population centers: in Iran, north India, and Northeast Asia. The Altaic people, namely the Turks, stimulated connectivity between these centers because, in addition to the population flows from the West (Iran), South (religion and trade from India, Tibet, and Kashmir), and Northeast (the unifications of China and the corresponding rise in Chinese influence), the Altaic people occupied the position behind the direct east-west connectivity across the steppe belt. After the Xiongnu and the Avars, the Turks Turkicized governments in Central Asia, where they became tertiary rulers, and prepared conditions for better political connectivity for later Altaic expansions. The world population growth was co-influenced by this Altaic input to transcontinental exchanges.

World population growth started in the sixth/seventh century CE and remained linear till the plague epidemic in the 14th century. Buddhism served as a significant stabilizing factor in this period, because it moderated the interplay between the *sangha* and benevolent rulers in Buddhist centers (Meinert and Sørensen 2020, 2–3). However, after the sudden population decrease of 30–40% in the 14th century (cf. maps in Cunningham and Cunningham 2008, 76, 78), Islam became more successful, and non-linear population growth started with new technologies and the industrial revolution.

5.2. Altaic-Sino-Korean interactions and Vietnam

Another case study of Inner Asia-Sino-Korean interactions demonstrates that Confucian ideas came to Korea in the fourth century together with Buddhism, when Korea started to import written texts and administrative techniques from China (Baker 2007, 21). At that time, Korean Peninsula was subordinated to the power dynamics and exchanges between the steppe influence represented by Koguryo, China (represented by Sui/Tang), and the South Korean kingdoms of Silla and Paekche, leading to a complex series replacements accompanied by the Liaodong campaigns. The collapse in China-Koguryo relations led to Sui attacks on Koguryo, after which the Sui were replaced by Tang rule in China. After the collapse of Koguryo under the attacks of the Tang and Silla alliance, the Tang-Silla alliance broke, and Korea, i.e., unified Silla, restored its suzerainty with the Tang.

The weakening of Tang power resulted in the emergence of Vietnam as a suzerain but independent polity. As the power vacuum in the north gave rise to the political power of northern tribes and families, the Korean Peninsula also became reunified from the north under Koryo. However, nomadic confederations further north led to the period of the Jurchen, Khitan, and Mongol invasions, when suzerain Korea was integrated into the Mongol Empire as a distinct nation. As Mongolian influence weakened, the resulting changes led to the establishment of the Chosŏn state. The Chosŏn kings created a new alliance with Ming China, but the provision of substantial assistance in the war against Japan in the 16th century weakened the Ming dynasty, allowing both Manchu expansion (Map: Li and Cribb 2014, 23, 37) and the spread of a Tibetan Buddhist religious and administrative model among the eastern Mongols – particularly since before this date, Buddhism lacked strong support in the steppe culture. Still, the connection to the Tibetans improved the security of the Manchu (Qing) empire's borders, preventing insurrections during the Yellow River Valley disasters which, for example, ended previous Mongolian rule in China.

In contrast, religious change occurred in the Korean Peninsula in significantly different frameworks. Already in the Koryo period, Buddhism became too expensive as an established ritual practice and in new political conditions was less connected to Korean cultural identity, when also Koreans had to pay tribute (Muller 2007; Anh 2018, 55). The Chosŏn administration only supported Buddhism on an official level, and the role of Neo-Confucian ideology started to grow (Deuchler 1992). Later, established institutions created a more stable religious profile of Korean society till the influence of Christianity and modern globalization (for state symbols and royal ritual, Shin 2004). Earlier, post-Koryo Korean society did not generate conditions for change, even during severe climate shifts and wars. According to Kim Changshu (in Bae 2023, 4) and climatic studies, the 17th century was a period of the Little Ice Age when cold weather resulted in decreased areas of field crops: the population declined by 54 percent, and arable land diminished by 65 percent compared to the mid-16th century (Kim Changshu 2023, 5).

In Manchuria, in turn, the Little Ice Age was stimulating expansion. The Manchu populace adopted Sinitic values and the Chinese language for politics. This step enabled improved communication with the Koreans, and despite

their political surrender, the Korean elites kept their status quo since no restructuring, economic improvement, or religious change could be possible even during extreme economic regress after climate shifts and wars.

Surpassing the Ming dynasty, its Manchu successor was the first to link Mongolia, Korea, and Vietnam as suzerain entities; perhaps only a mixed form of “Altaic-Chinese governance” can properly designate these established Inner Asian ways of rule. Koreans and ethnic Vietnamese support this thesis through the analogies in their LRCs with Buddhist and Confucian content, even if employing differing script traditions. Both nations started to claim their Han cultural supremacy over the Manchus because neither Koreans nor Vietnamese could mentally accept Manchu rule as a real part of Chinese culture (for Korea: Haboush and Deuchler 1999, 5). As a reaction, Yu Hyŏngwŏn (1622–1673) advocated the adoption of Chinese pronunciation for the Chinese characters in Korean (Bae 2023, 64); later, Phan Bội Châu (1867–1940) advocated the use of Chinese for writing modern Vietnamese. On the other side, the Sinocentric approach of many historical publications (e.g., Reischauer and Fairbank 1970; Chang 2007) overlooks the much longer dynamic exchange between the Altaic and Chinese border zones, and the confluence of power followed imitation as a fundamental principle of “political socialization.” Both sides actively contributed to the emerging results: e.g., the Chinese emperors adopting extensions by Turko-Mongol titles and Turko-Mongol rulers adopting extensions by Chinese titles (Skaff 2012, 115-133). With this in mind, we should note that even the result of the Ming Dynasty was not simply a purely Chinese polity but a macro-organism with Sino-Altaic DNA metaphorical and literal. For Vietnam, though, the Chinese remained nothing more than “northern invaders” after the brief Ming occupation of Vietnam.

This listing of exchanges implies that tributary relations and the politics of *yi yi zhi yi* “to rule over alien through (another) alien (people)” is by no means exclusively Chinese, but in principle a universal practice used worldwide in human history (cf. British rule through Indian administration in Burma), which has analogies in symbiotic processes in nature. And the Manchus used this principle in the same way as their predecessors and ancestors. As tertiary rulers, they stood at the top of the political pyramid, ruling through the Sino-Altaic political body and Chinese literacy, Mongolian literacy in Mongolia, and Tibetan literacy in the Tibeto-Mongol areas. And even the administrative reorganization of the Mongolian regions itself formed an external context of the indirectly mediated influence of Chinese culture on Mongolian Buddhism (Jerryson 2007, 25).

The power dependencies between the steppe area and Inner China resemble the patterns of cyclical oscillation known in biology. It was only the massive wave of technological and electronic globalization that eroded this balance when the Sino-Altai areas entered other patterns of world politics, including a change of secular governance, even if the new state symbols continue to be “sacred” and symbolic, like the schematic map of state borders related to the latest national identity.

In fact, it is precisely the area of religion that shows how the Sino-Altaic religious experience became encoded into Chinese religious policy. Ethnically Chinese dynasties never adopted any religion as a real state religion. Buddhism played a vital integrating role in the rule of the Sui emperors, but never on the level of Buddhism in India under Ashoka. Outside of the ordinary believers, the Chinese government practiced a balanced distance from institutionalized religions, even though they had to incorporate symbolic and other religious features into state rituals and doctrines legitimizing power.

6. Concluding comments on the costs of dominance in Asian practice

Regarding the gains and expenses of alliance processes in the conditions of the Eurasian steppes, the Altaic languages gradually dispersed across Eurasia, and Altaic tributary relations stimulated interferences even in Southeast Asia. To be sure, the older linguistic strata of Inner Asian languages are poorly attested because Inner Asian expansions led to the effective spread of genes on one side and the gradual loss of ethnic languages on the other side. As modern examples show, some expanding Altaic groups like the Manchus were gradually Sinicized. Thus, expansion is always a “risky business” for expanding speakers, as the contact with regional languages causes their linguistic variation or assimilation (cf. the small Gansu-Qinghai Mongolic languages). Yet the result should not come as a surprise, because the intermarriages of Manchu elites with their Chinese and Mongolian counterparts were a fully intentional practice. The concept of LRCs fully complies with these Inner Asian traditions, confirming the nature of expansion as a multilingual matter: considering that the previous Mongolian western expansions became possible with Turkic military forces and Turkic speakers, the Manchu expansion was made possible through the Mongolian army and Mongolian speakers.

With this expansion, Manchu hierarchic protection then contributed to the use and vitality of the Mongolian language because of the wide geographic distribution of Mongols and their established economic influence in transportation. Under these circumstances, the Mongolian language had to be used in administration even under the ethnically Manchu Qing Dynasty. As interethnic hierarchies have a high influence on linguistic dynamics and

diversity, this example demonstrates how the language of the subordinate group, but in more stable economic settings, can set the conditions for preservation. Simultaneously, the subordinate position brings several negatives, while even the religious harmonization by rituals has a limited role. While rituals can positively influence the stress level in peaceful conditions, they do not mitigate the negative impacts of direct attacks and wars. History shows that long-term emotional experiences in inter-ethnic hierarchies with abuse from the top have better social codification by collective knowledge in literary societies (e.g., the diary with memories of Na Man'gap, edited and published by Kallander in 2020).

To conclude, it is exciting to map how religions and religious actors attempt to participate in all power processes, waging influence over international relations and forming connections with the primary, secondary, and tertiary power levels. A good example is found in traditional Vietnamese culture, where the following stratification applies: the primary level of families and the private sphere is connected to animism combined with shamanism; the governance of villages is traditionally more associated with Buddhism; while state governance, along with international relations, is shaped mainly by Confucianism. The interactions between these three levels and orientations have long been changing over the course of history. However, these changes only attest that religions actively participate in the dominance processes, influence hierarchical stratification, and contribute to the autoregulation of societies. The continuity of multireligious profiles and the historically intense intrastate and international migrations bring advantages to how Vietnamese society interacts with the environment, successfully mitigating enormous pressures and minimizing their negative impacts.

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Abbildungsverzeichnis

Fig. 1. Karte des Bulgan-Flusstals in der Westmongolei (Google Earth, erstellt von Ondřej Srba) mit markierten Standorten der Fotos von Mauerzäunen (Fig. 2 und 3). Die Lage dieses Ortes ist auf der Karte von Eurasien eingezeichnet (Fig. 6, Point 1).

Fig. 2. Provinz Bayan-Ölgii (Mongolei) – Das Tal Dund Tömört ist ein Seitental des Bulgan-Flusstals nahe der chinesischen Grenze (Fig. 6, Point 1). Die Weide ist heute die höchstgelegene Frühlingsweide im Tal. Ein Mauerzaun schützt das Gras, das dank des Gebirgsbachs und der längeren Schneedecke grüner und feuchter ist (Foto: Autor, Mai 2024). Das Gebiet wird von Jamishiin Tömörbat und seiner Familie bewohnt. Er ist Informant von Ondřej Srba, dem Leiter des Projekts „Veränderte Anpassungsstrategien in der Mongolei“.

Fig. 3. Provinz Bayan-Ölgii (Mongolei) – Haupttal des Flusses Bulgan (Fig. 6, Point 1) mit der Mauer von Chadraabaliin Ganbaatar, einem wichtigen Informanten von Ondřej Srba, dem Leiter des Projekts „Veränderte Anpassungsstrategien in der Mongolei“. Ein etwa ein Meter hoher Zaun trennt links eine felsige Weide von dem geschützten Abschnitt des Bulgan-Ufers mit natürlich wachsendem Sanddorn (*Hippophae rhamnoides*), der in der Mongolei eine wichtige Nutzpflanze ist (Foto: Autor, Mai 2024).

Fig. 4. Jiayuguan, Provinz Gansu (China), Rekonstruierter westlicher Teil der Großen Mauer – Blick auf den rekonstruierten letzten Abschnitt, der zum Gipfel des Hügels führt (Foto: Autor, Mai 2007). Zur Lage in Eurasien siehe Fig. 6, Point 2.

Fig. 5. Jiayuguan, Provinz Gansu (China), Rekonstruierter westlicher Teil der Chinesischen Mauer – Blick vom Turm auf dem Hügel mit Blick auf das Dorf in einer Oasenlandschaft in der Wüste (Foto: Autor, Mai 2007). Zur Lage in Eurasien siehe Fig. 6, Point 2.

Fig. 6. Karte von Eurasien aus Google Earth mit markierten Fotostandorten, erstellt von Ondřej Srba: 1 – Lage des Bulgan-Flusstals in der Westmongolei (Fig. 1) mit Fotos der Zäune (Fig. 2 und 3), 2 – Lage von Jiayuguan mit dem rekonstruierten westlichen Ende der Chinesischen Mauer (Fotos in Fig. 4 und 5), 3 – Zentrale Lage der gemäßigten und subtropischen Klimazone mit Wüsten, Halbwüsten, Steppen, Wäldern und Gebirgen. Dieser trans-eurasische Gürtel verbindet den Nahen Osten mit Nordostchina. Gemäßigte und subtropische Bedingungen schaffen ähnliche Biome (Pines et al. 2021, 25) und ermöglichen so flexiblere Ost-West-Migrationen und einen regeren Austausch. Im Vergleich zur politischen Karte des mongolischen Eurasiens (Fig. 7) wird die Südgrenze des Mongolischen Reiches durch die Küste des Persischen Golfs und die großen Flüsse Indus und Brahmaputra gebildet. Die wichtigsten unterschiedlichen Biome bilden jedoch die tropische Klimazone Indiens und Südostasiens.

Fig. 7. Politische Karte des Mongolischen Reiches nach 1260, veröffentlicht mit freundlicher Genehmigung von Michal Biran (2021: 238, Karte 6.4). In seiner größten Ausdehnung ist das Mongolische Reich bereits in vier Einheiten (mongolische *Ulus*) unterteilt, die von vier Söhnen Dschingis Khans verwaltet werden. In dieser Ausdehnung besiedelten die Mongolen alle gemäßigten und subtropischen Zonen Eurasiens (siehe Fig. 6, Point 3), mit nördlichen Grenzen im nahezu unbewohnten Sibirien und südlichen Grenzen in verschiedenen tropischen Zonen Indiens und Südostasiens. Ungewöhnlich ist der größte östliche *Ulus* – seine östliche Hälfte erstreckt sich aufgrund des feuchteren Küstenklimas und der Meereswege extrem von Norden nach Süden. Die administrative Aufteilung und die Herrschaft über verschiedene Teilregionen führten jedoch später zu geopolitischen Veränderungen.

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