Chapter 47

Language dispersals and the "Secondary Peoples' Revolution":

a historical anthropology of the Transeurasian unity

Mark James Hudson

Abstract

Population growth and demic diffusion help explain the early Neolithic expansions of agriculture and Transeurasian languages in Northeast Asia. By the Bronze Age, alluvial agrarian states had come to possess considerable political and economic dominance over their subjects in the civilizational centers of Eurasia. At the same time, however, Bronze Age economies offered new opportunities for trade and secondary expansion into areas outside state control. This chapter argues that the resulting population movements—here termed the "secondary peoples' revolution"—were of great significance in the post-Neolithic dispersals of Transeurasian languages. Four examples are briefly discussed: steppe nomadic pastoralism, Sakha horse and cattle husbandry, northeast Asian hunter-gatherers, and agriculture associated with trade/piracy networks in the Ryukyu Islands.

Keywords: Eurasia, Neolithic, Bronze Age, nomadic pastoralism, hunter-gatherers, trade, piracy

47.1 Introduction

Transeurasian languages are spoken over a very large part of northern Eurasia, mostly in areas above about 36° N, although their distribution has, of course, changed during

history and at its eastern edge the Transeurasian family extends down to sub-tropical Yonaguni Island at 24° N (see Figure 1 in Introduction, this volume; Bellwood 2013: 164). The Transeurasian zone is not only large but also diverse in terms of ecology, human biology, and human culture. Despite its size and diversity, however, the Transeurasian zone does display certain geographical, cultural and social unities. East-west movements across Inner Eurasia were facilitated by broadly uniform ecological "corridors", in particular the steppe grasslands. Asian grasslands have a very long history reaching back to the Miocene and were important to early hominin dispersals into Eurasia (Dennell 2010). In the Holocene, new subsistence adaptations developed which resulted in a wide range of ethnohistoric economic patterns, including pastoral nomadism, reindeer hunting and herding, fishing, long-distance trade, and settled agriculture (Levin 1963; Zgusta 2015). There was no one-to-one correspondence between ethno-linguistic groups and subsistence and, for example, "various Turkish-speaking and Mongolian-speaking populations have adapted themselves to the entire [subsistence] spectrum from intensive cultivation to strict steppe pastoralism" (Fletcher 1986: 12). Although the farming/language dispersal hypothesis (Bellwood and Renfrew 2002) provides a point of departure for explaining Transeurasian expansions, it is perhaps the *post*-Neolithic subsistence niche constructions that above all characterize Transeurasian population dynamics.

This chapter sketches a broad historical anthropology of human population and language dispersals across the Transeurasian language zone. Within Indo-European studies, there is a large and sometimes contentious literature on the social processes behind population movements out of Inner Eurasia (e.g., Goodenough 1970; Renfrew

1987; Mallory 1989; Anthony 2007; Pereltsvaig and Lewis 2015), but there has been much less work of this sort for Transeurasian. Earlier discussions of possible homelands for Transeurasian were rarely based on serious consideration of processes of human ecological adaptation (e.g., Austerlitz 1970; Miller 1989, 1990). The farming/language dispersal hypothesis did stimulate a new interest in the role of agricultural expansions for some Transeurasian languages (Hudson 1994, 1999, 2002; Whitman and Hudson 2017; Robbeets 2017b, 2017f) and a number of linguists have used approaches from archaeology and linguistic geography to discuss language change in prehistoric Northeast Asia (Janhunen 2010; Unger 2008). However, there is still considerable scope for new interdisciplinary research in the linguistic archaeology and anthropology of Transeurasian.

Geographical designations for the Transeurasian region have been much debated (cf. Hann 2016). This chapter uses Christian's (1994) terms "Inner Eurasia" and "Outer Eurasia". Inner Eurasia forms the central heartland of the continent but ecologically it is Outer Eurasia which is more productive. Inner Eurasia is drier with a continental climate and lower ecological productivity. As a result, human population densities in Inner Eurasia were always relatively low and remain so today. This low density of both people and languages across the Transeurasian zone corresponds with expectations from previous research in language geography (Nichols 1992, 1997; Nettle 1999). As far as its earliest roots can be reconstructed, the Transeurasian language family appears to have originated in northeast Outer Eurasia but later spread into the Inner Eurasian zone. Notwithstanding its lower ecological productivity, the relative ease of east-west communication gave Inner Eurasia an important strategic function (Mackinder 1904;

Frank 1992). In the historic era, Inner Eurasia has been home to very large political empires—Turkic, Mongol, Russian, and Soviet. Those empires were especially vibrant on the steppes but the Russian and Soviet empires also included the taiga forest zone.

47.2 The Neolithic, agrarian states and language dispersals

Late Palaeolithic societies in Northeast Asia were the first to adopt features of Neolithic culture, notably pottery and sedentism (Jordan and Zvelebil 2009; Kuzmin 2013; Gibbs and Jordan 2016; Uchiyama 2017). Agriculture developed later, with full-scale farming spreading across Northeast Asia mainly from centers of domestication in China (Stevens and Fuller 2017; Fuller et al. 2017; Li, this volume: Chapter 46). While agriculture was traditionally seen as a progressive step on the high road to civilization, the Neolithic in fact led to poorer human health and well-being and resulted in state societies which increasingly attempted to control and tax the production of their subjects (Larsen 2006; Scott 2017).

Since the 1980s, the dispersal of language families in the Neolithic has been discussed in terms of "demography/subsistence" models, especially the farming/language dispersal hypothesis (Renfrew 1987; Bellwood 2005). Transeurasian, however, has rarely been analyzed using such models. It has often been assumed that Transeurasian expansions were due to horse-based pastoralism (e.g., Diamond 1997: 369). Bellwood (2005) makes only a brief mention of Altaic, which he admits is "difficult to interpret". However, Bellwood's basic interpretation of Altaic/Transeurasian follows the farming/language dispersal hypothesis in arguing that early dispersals in Manchuria were circumscribed by climatic factors and that it was

only with the arrival of pastoral nomadism in the first millennium BC that Turkic speakers began large-scale expansions across the steppes (Bellwood 2005: 230–231).

Robbeets (2017b, 2017f; this volume: Chapter 44; Robbeets et al., this volume: Chapter 43) and Miyamoto (2016) have recently published analyses of early Transeurasian expansions using the farming/language dispersal hypothesis. My own previous research has explored the expansion of Japonic into the Japanese archipelago in association with the spread of agriculture. Rather than repeating those results here, in the remainder of this chapter I would like to discuss the *post*-Neolithic dispersals of Transeurasian in the context of what might be called "farming avoidance" or at least "agrarian state avoidance language dispersals". Premodern agrarian states in East Asia and elsewhere were concentrated on parcels of land that could support intensive agriculture. The power of those states derived from their ability to retain and tax the populations living under their control. That control was easiest where the state could concentrate people and crops on lands with good soil and water. By contrast, states found it difficult or impossible to rule mountainous and other rugged terrain and these latter areas provided zones of refuge through what Clastres (1974) termed "secondary primitivism". According to Scott (2017: 232), "The longer states existed, the more refugees they disgorged to the periphery. Places of refuge where they accumulated over time became 'shatter zones,' as their linguistic and cultural complexity reflected that they were peopled by various pulses of refugees over an extended period." Unlike highland Southeast Asia—which was a typical "shatter zone" as defined by Scott—the areas where Transeurasian languages were spoken contained what Nichols (1992, 1997) has termed "spread" and "accretion" zones. For Nichols, the steppe grasslands of Inner Eurasia are a typical spread zone, "a region where a single language family spreads out widely, genetic diversity of languages is low, and one language family replaces another over most of the area every few millennia" (Nichols 1998: 220–221). An accretion zone is "an area where genetic and structural diversity of languages are high and increase over time through immigration. ... Languages appear to move into these areas more than they move out of them" (Nichols 1997: 369). While the geography and terrain of Inner Eurasia facilitated very large language spread zones, I want to suggest that a major process behind post-Neolithic language movements in that region was the agrarian state avoidance strategies described by Scott (2009, 2017) and others.

Scott (2017: 222) uses the term *barbarian* as "an ironic shorthand" for non-state peoples, calling the period from the Bronze Age until as late as around AD 1600 or even 1800, the 'Golden Age of the Barbarians'. Speakers of Transeurasian languages were the world's barbarians *par excellence*. With a nod to Clastres, we might call this phenomenon, whereby peoples escaped state control by moving into areas that were ecologically more marginal for grain farming, the "secondary peoples' revolution".

These peoples were not secondary in terms of power. The great rulers of Inner Eurasia such as Chinggis Khan and Tamerlane used profits from trans-Eurasian trade to finance huge barbarian "world empires" (Beckwith 2009; Honeychurch 2015). The possibility of such empires only slowly began to break down from the 15th century as Europeans developed maritime trading networks and brought gunpowder into wider use, and as the Qing dynasty secured large areas of Inner Eurasia under its colonial control (Braudel 1981: 97; Rossabi 1990; Purdue 2005; Darwin 2007).

Nor were these "barbarians" secondary in terms of health and well-being. Pereltsvaig and Lewis (2015: 209–213) summarize evidence that pastoralists have certain advantages over settled farmers which could enable them and their languages to expand. Better nutrition (especially more protein) and the ability to move away from disease causing garbage appear to have given pastoralists a demographic stability. Beckwith (2009: 76) writes that, "Nomads were in general much better fed and led much easier, longer lives, than the inhabitants of the large agricultural states." In the north, reindeer pastoralists have been described as the most healthy, prosperous and resilient of all Siberian peoples (Krupnik 1993: 86–87). Despite this, a combination of ease of communication and domesticated livestock has been argued to have resulted in the rapid spread of epidemic diseases across Inner Eurasia (McNeill 1976; Diamond 1997; cf. Nichols 2011). A recent study found that movements by steppe pastoralists may have been responsible for the arrival of plague in Europe as early as the late Neolithic/Bronze Age (Valtueña et al. 2017). The Mongol impact on Inner Eurasian trade routes is often said to have contributed to the Black Death of the 14th century (but cf. Beckwith 2009: 195). However, in addition to the steppe route, epidemic disease was spread by maritime contact across Outer Eurasia. New research on ancient DNA has suggested that tuberculosis may have been transmitted to humans from pinnipeds (Bos et al. 2014) and several of the earliest finds of tuberculosis in Northeast Asia are, in fact, from coastal sites with pinniped remains (Suzuki and Inoue 2007; Suzuki et al. 2008; cf. Choy and Richards 2009). At the same time, the relative isolation of some Transeurasian populations before the 17–18th century colonial expansions is suggested by the history of smallpox, a disease which is known from at least the Bronze Age and probably has a greater antiquity (Crawford 2007: 106–107). Rare amongst Mongol and Manchu populations, the Mongols in particular tried to avoid contact with Han Chinese to prevent exposure to smallpox and other epidemic diseases (Purdue 2005: 46–48). The Russians brought smallpox to the taiga, killing 80 percent of Northern Tungus and Yakuts in the late 17th century (Purdue 2005: 91). At the eastern end of Eurasia, the insularity of Japan seems to have prevented these diseases becoming endemic there until medieval times (Farris 1995).

47.3 Some caveats to the "secondary peoples' revolution"

There are three major caveats to the idea of a Transeurasian "secondary peoples" revolution". The first is that the boundaries between states and non-states were always porous and thus it is not always easy to separate "secondary" from "primary" peoples. Secondly, agriculture still played a significant role in the economies of many "secondary" non-state peoples. Finally, in several cases, pastoral nomads returned from the steppes to control agrarian states of their own. These three caveats will be briefly discussed below.

47.3.1 States and porous borderlands

While the distinction between areas controlled by states and areas largely outside of direct state control was a crucial one for the populations concerned, that distinction was never watertight. All states were "leakey" in the sense that—although they did their best to prevent such leakage—some individuals and groups were nevertheless able to move from inside to outside state control, often shifting aspects of their subsistence

economy as they went. For settled farmers who have exhausted their geographic limits of expansion, when population grows production can be intensified through increasing labor inputs—an approach perfected by the alluvial states of China and Japan. But pastoralists and pirates on the "outside" have the new option of raiding farmers and then escaping to the steppes, mountains or open sea. As argued below, the Transeurasian language zone was a superstar region for pastoralists but also for piracy—both of the sea and mountains (for piracy and banditry in Japan, see Amino 2012; Smits 2018; Oxenbøll in press). Neither pastoralism or piracy were completely independent of settled agriculture; rather they formed a mutualistic system, the nature of which has been much debated by modern historians since at least Lattimore (1940). In China, the particular nature of premodern steppe-sown interactions was further influenced by the need to obtain horses from the nomadic areas to the north. In East Asia, one extreme response to barbarian pressures was to withdraw inwards and to reject all or most foreign commercial relations (Darwin 2007: 88). This eventually unsustainable course of action was chosen by the Ming dynasty in China and by the Tokugawa shogunate in Japan. In most periods, however, a more mutualistic system developed between states and their barbarian peripheries (Khazanov 1983).

47.3.2 Agriculture

The second caveat to the idea of a Transeurasian "secondary peoples' revolution" is that agriculture was by no means unknown in the Inner Eurasian escape zones beyond state-controlled agricultural hearths. Millet was often associated with pastoralism due to low water needs (Miller et al. 2016). Broomcorn millet had spread west from

Northeast China to eastern Kazakhstan by the end of the third millennium and even to eastern Europe by the second millennium BC (Miller et al. 2016;

Motuzaite-Matuzeviciute et al. 2013). Isotopic evidence shows that the cultivation of millet became widespread in Inner Eurasia in the Bronze Age and especially in the Iron Age (Ventresca Miller and Makarewicz in press). Although Higham (2002) and others have argued that rice spread to India from Southeast Asia with Austroasiatic languages, Dorian Fuller has proposed an alternative route of transmission across Inner Eurasia to Pakistan and northwest India after 2000 BC (Fuller 2011; Fuller et al. 2017: 715). According to Fuller (2011: 81), rice was part of a "Chinese horizon" of crop introductions which included broomcorn and probably foxtail millet, peach, apricot, and Cannabis sativa. The small but growing archaeological record of early cereals in Inner Eurasia is confirmed in later historical sources. For instance, when a rabbi named Petakhyah from Regensburg visited the Turks (Kedar) east of the Dnieper river in the 13th century, he reported that, "They eat no bread ... but rice and millet boiled in milk, as well as milk and cheese" (Benisch 1856; Frenkel 2005: 213). Ibn al-Faqīh, a medieval Arab geographer, described how the Turks would make a pact with millet seeds, swearing that if the pact was broken, then they could be cut into small slices the size of those seeds (Frenkel 2005: 217). Historical texts also show how cereal agriculture could be combined with pastoralism. In the early 20th century, for example, a report from northern Mongolia noted that, "However many crops the Dörbed sow, they do not abandon their nomadic way of life. At sowing time, they transhume as a group; and immediately after sowing, they seek a distant and cool camping ground and off they move. At harvesting time they return, and as soon as they have completed the

task of cutting and harvesting their crops, they leave again..." (de Rachewiltz and Krueger 1995: 68).

Domesticated animals were of crucial importance across Inner Eurasia where desert regions were first occupied on a permanent basis with the use of camels and trading oases (Dennell 2012). Such oases "accounted for the primary concentrations of agricultural and commercial wealth in [the] vast landscape of Central Asia" (Purdue 2005: 25). Domesticated sheep and cattle spread east from West Asia in the Neolithic, reaching China by the fourth to third millennia BC (Lu et al. 2017). The domestication of the horse has been much debated (Levine 2004), but recent research suggests some domestication had already taken place by the time of the Chalcolithic Botai culture in Kazakhstan around 3500 BC (Outram et al. 2009). The two-humped Bactrian camel became a common livestock animal in Inner Eurasia in the Bronze Age (Benecke 2017). Secondary products from these domesticated animals were of enormous importance in the "secondary peoples' revolution". Although Sherratt's (1981) original idea of the "secondary products revolution" has been complicated by evidence for the staggered appearance of key elements such as milking (e.g., Evershed et al. 2008), it is nevertheless the case that the settlement of many key Inner Eurasian environments by Transeurasian speakers relied heavily on cheese and other dairy-based secondary products.

Notwithstanding the presence of agriculture and domesticated animals, Inner Eurasian societies did not develop into the concentrated grain states known from Outer Eurasia. Inner Eurasia had few cities, except in desert oases and on the margins, such as in Turkmenistan where cities such as Altyn Tepe were founded as early as the fourth

between the Urals and northern Kazakhstan is known to have possessed fortified towns that were as large as 35,000m² (Baumer 2012: 65–77; Cunliffe 2015: 130–138). While the Sintashta is often linked with Indo-Iranian speakers, Bellwood (2013: 161–165) suggests an association with Turkic or Yeniseian groups. In later periods there were also cities in western Siberia (Haywood 2010). Unlike in Outer Eurasia, however, religious sites in Inner Eurasia rarely developed into urban centers. For example, the Tibetan Buddhist monastery that later became Urga—called Ulan Bator since 1924—was founded in 1649, but this monastery had no fixed location or permanent buildings until 1778 (Rupen 1957).

Finally, despite the importance of agriculture in Inner Eurasia, steppe nomads could be extremely destructive of agricultural settlement. The Seljuk advance into Anatolia "made farming there both dangerous and often unprofitable" (Rice 1967: 180). The Mongol invasions have been estimated as leading to an area of agricultural abandonment of some 309,000 km² (Pongratz et al. 2011: 2). This destruction of agriculture may seem paradoxical but it shows to what extent the great steppe empires relied on trade—and the control of trade—to finance their power. In this respect, Inner Eurasia's medieval history was very different from the land-based feudalism of Europe or Japan (Darwin 2007: 37). In complete contrast to the agrarian states surrounding them to the south, the barbarian empires of Inner Eurasia were usually more interested in raiding and trading than in taxing farm products—except when they themselves became rulers of the sown.

47.3.3 Barbarian states

In a number of well-known cases, the barbarians of Inner Eurasia returned back to the lands of the agrarian states and attempted to rule those states, the once "secondary" peoples becoming "primary" again. Thus, the Jurchen Jin, the Mongols, Manchus and Turks were all peoples who spoke Transeurasian languages and who shifted their originally more nomadic lifestyle to become rulers of agrarian states. Culturally speaking, such shifts were never easy. Under the Jin emperor Shizong (r. 1161–1189), "Aristocrats were compelled to leave Peking and literally go and camp in Inner Mongolia or Manchuria, where constant hunting was supposed to develop their skills in riding, shooting, and generally becoming less dainty" (Crossley 1997: 23). In a similar vein, Khubilai Khan—who reigned from 1260 or 1270 until 1284 (Beckwith 2009: 191) —is said to have planted a patch of steppe grass in his garden in Beijing (Morgan 1990: 120).

Many Transeurasian barbarian states were multi-ethnic. For example, although the ruling lineage of the Qing dynasty was Manchu, the rulers of that empire also comprised numerous other ethnicities (Crossley 1997: 9). Under Chinggis Khan, the ratio of Mongols to subject peoples has been estimated at 1:100 (Vernadsky 1953: 130–131). In western Inner Eurasia, Islam worked as a basin of attraction for Turkic and other populations, providing a globalizing ideology which helped ethnic and political integration. In many cases, Turkic groups left more lasting cultural impacts and often became more assimilated into the local societies they conquered as compared with other Transeurasian groups such as the Mongols (Liu 2001). By the 10th century, Seljuk Turks had already converted to Islam and were able to take top positions in

Muslim society, basically taking over the remains of the Abbasid caliphate. By around 1100, the Seljuk empire stretched from Samarkand and the Oxus to Baghdad, Damascus and down the east coast of the Red Sea as far as Mecca. The Seljuks were eventually defeated by the Mongols but there were many Turks in the Mongol army in the 13th century (Roberts 1984: 361). The Mongols moved back to the Qipchaq steppe and stayed there as the Golden Horde. This was an area with more Turks than Mongols and the latter seem to have been assimilated by the former; at least Mongolian was replaced by Turkish on coins as early as the reign of Töde-Möngke (1280–1287) (Morgan 1990: 142). This was in part a religious transformation, Töde-Möngke having converted to Islam. By "becoming Muslims the Mongols of the Golden Horde conspicuously identified themselves with their Turkish subjects and with the peoples to the south" (Morgan 1990: 144). According to Fletcher (1986), the Turks in the Middle East had been pushed west by stronger nomadic groups in the eastern steppes. Exploiting much drier areas for pastoralism, the Turks came into close contact with settled farmers and their adoption of Islam made it even easier for them to take on a pattern of control that had already been used by the Bedouins in the early medieval Arab conquests. This, argues Fletcher, was a fundamentally different pattern from that found in the eastern steppes where there was little incentive for nomads and farmers to interact in a peaceful way. The speed of the Mongol conquests of the Middle East left them little time to adapt to a "Turkish" pattern of accommodation with the settled world; instead they simply transferred eastern steppe raiding and looting on a massive scale.

47.4 Some 'barbarian' sketches

47.4.1 Nomadic pastoralism

Since most historical sources for premodern Eurasia were produced by agrarian states, they invariably regard the nomadic empires of the steppes as dangerous and beyond the pale of understanding. As noted by Chaudhuri (1990: 265), "Whereas settled agriculture is mostly treated as being given ... nomadic communities practicing pastoralism seemed to defy all through the ages rational analysis." New research, especially in archaeology, has significantly improved our understanding of the rise of pastoral nomadism in recent years, but many controversies remain.

The traditional view of the origins of Eurasian pastoral nomadism is that it developed in the western steppes by the fourth millennium BC and then spread in the Bronze Age with Indo-European languages (Anthony 2007). The expansion of Indo-European speakers is explained as deriving from a suite of technological advances centered on horses and chariots (Anthony 2007; Beckwith 2009). Horse pastoralism was found in Mongolia by the Bronze Age (c. 1300–700 BC) (Taylor 2016; Taylor et al. 2017). Transeurasian expansions based on steppe pastoralism were thus post-Neolithic developments which used new technologies from Inner Eurasia and from further west. Nomadic attacks on China are known from at least the Shang period (ca. 1600–1046 BC). The Xiongnu, who are first mentioned in Chinese sources in 244 BC, developed the first steppe empire which lasted until the 1st century AD, although they were also engaged in agriculture in areas such as Buryatia and the Transbaikal (Baumer 2014: 9).

Khazanov (1983) argued that originally more sedentary herders developed horseback riding and seasonal migration as a way to cope with prolonged drought

during the late second millennium BC, a conclusion supported by some other studies (Bai and Kung 2011; Pei et al. 2015). Recently, however, it has been suggested that there was a link between wet, productive grasslands and the success of nomadic empires (Houle 2010; Putnam et al. 2016). While this is not the place for an extended discussion of these issues, the idea that nomadic pastoralism was not just a reaction to adverse environmental conditions but rather a social strategy whereby Inner Eurasian peoples negotiated their position vis-à-vis premodern states is certainly consistent with the overall approach adopted in this chapter.

47.4.2 Sakha sub-arctic horse and cattle husbandry

In northeast Siberia, the Sakha (also known as Yakuts) have practiced what is a highly unusual subsistence adaptation for their sub-arctic ecosystem—horse and cattle husbandry. The only other group to have attempted the same ecological adaptation were the Norse settlers of medieval Greenland (Crate 2006: 2). Based on a range of linguistic and ethnographic data, it is widely accepted that the Sakha had once lived to the south of their present home and that they migrated north in relatively recent history (Crate 2006; Pakendorf 2007). Specifically, "The most accepted contemporary theory attests that Sakhas' Turkic ancestors migrated between the 6th and 7th centuries from Central Asia to the Lake Baikal regions of southern Siberia, then fled north in the 13th and 14th centuries to the middle Lena after their defeat by Genghis Khan" (Crate 2006: 46). Sakha today live in an area of more than three million km², but in the 17th century, they seem to have been concentrated in a relatively small area of central Yakutia, expanding more widely after Russian contact in the 17th and 18th centuries.

The area newly settled by the Sakha was already home to Tungusic foragers and reindeer herders, but the latter populations were gradually driven out or assimilated with the Sakha pastoralists. The "Sakhas' agropastoralist practices, including controlled burning and the creating of new hay pasturelands, destroyed lichen groundcover and wild animal habitat, both crucial resource bases for foraging, reindeer-herding Tungus" (Crate 2006: 50). The Sakha were one of the most "energetic and adaptable colonizers" of Siberia (Forsyth 1992: 56). There was, however, at least one case where Sakha abandoned horse and cattle husbandry and took up reindeer herding as a result of contacts with Tungusic Evens (Takakura 2010: 37). Sakha who moved to the lower Olenk River in the late 17th century have undergone several shifts in subsistence emphasis between wild reindeer hunting and the herding of domesticated reindeer. A study of Sakha mtDNA also found significant genetic admixture with Evenks (Pakendorf et al. 2003; Pakendorf and Stapert, this volume: Chapter 26).

47.4.3 Transeurasian hunter-gatherers

It cannot be assumed that Northeast Asian hunter-gatherer groups were residual leftovers from the Pleistocene. At the very least, all such groups seem to have developed major new adaptations to post-Neolithic contexts. The diversity of Northeast Asian hunter-gatherers is striking and included groups utilizing the very different environments of the tundra, taiga and coasts (Shnirelman 1999). The history of research on these peoples, during Soviet times in particular, means that our knowledge of many groups is not as detailed as might be hoped (Schweitzer 2000). Hunter-gatherers who speak Transeurasian languages include the Even, Evenki, Nanai, Ulchi, Orochi, Orok,

Negidal, and Udege.

The Evenk (or Evenki) people were formerly simply called the "Tungus". Very widely distributed from the mouth of the Yenisei to Baikal to the Okhotsk coast, the Evenk are hunters who also herd domesticated reindeer (Turov 2010). They are thought to have first harnessed wild reindeer in the Lake Baikal region; this skill then moved north from about AD 1000, reaching the Arctic Ocean by the 17th century (Anderson 1999: 142).

The Even, who were previously known as the Lamut, a name said to be derived from the Tungusic word for 'sea' (*lamu*) (Arutiunov 1988), occupy the western part of the Chuckhi peninsula from the northern Sea of Okhotsk. The Even are closely related to the Evenk, having probably separated in medieval times (Pakendorf 2007: 15–16). From the 17th century, the Even expanded along the northeastern Okhotsk coast, reducing the territory of the Maritime Koryaks (who spoke a Paleoasiatic language) and forcing a shift from hunting and fishing to reindeer breeding. Firearms were an important reason for Even expansion in the 18th and 19th centuries, enabling them to take over central Kamchatka and the basin of the eastern confluents of the Kolyma river previously occupied by Yukaghir hunters. By the end of the 19th century, wild reindeer had become so depleted that the Even shifted to herding reindeer for meat and hides (Krupnik 1988; Levin and Vasiliev 1964).

The Oroqen (or Orochen, Orochon) are a Tungusic-speaking group living in China in eastern Inner Mongolia and Heilongjiang Province. Often seen as a sub-group of the Evenki, the Oroqen moved south from the Amur in the 17th century in search of new hunting grounds, perhaps as a result of pressure from Russian colonial expansion.

Over the last two millennia, three major developments have affected hunter-gatherer dispersals in Northeast Asia. The first was the introduction of iron technology. Hunter-gatherers from the Amur, Sakhalin and Hokkaido began to move south in search of trade and other opportunities to obtain iron (Hudson 2017). The second development was the medieval economic revolution of Song China (Elvin 1973). The increasingly commercialized nature of economic transactions in East Asia led to greater specialization by hunter-gatherers (Hudson 1999). The third change came with actual colonization of hunter-gatherer lands by the Chinese, Japanese and Russians. The beginning of the Russian colonization of Siberia is traditionally dated to the 1580s with the military defeat of the Turco-Mongol Khanate of Sibir. From the 17th century, the Russian colonization of Siberia was achieved at an extremely fast rate given the distances involved. In many cases, small, scattered populations of native peoples could offer little resistance against Russian firearms. However, until at least the 18th century the Russian expansion was mainly limited to the taiga forest zone. Military opposition by the native inhabitants of western Siberia is discussed by Forsyth (1992: 45–46) who also notes that Soviet historiography played down the significance of such resistance. Tungusic groups around the northern Sea of Okhotsk also put up a strong resistance against the Russians until the 1690s (Gibson 1969: 10). Although not a Transeurasian-speaking people, the Chuckchi were also very warlike.

The Russian colonization of Siberia was not a classic example of a farming/language dispersal where demographic growth led to a more or less gradual expansion of farmers in search of new lands for agriculture. Instead, the initial stimulus for moving into Siberia was wealth from the fur trade, as well as from gold, silver and

mammoth and walrus ivory. It was only after the Russians arrived in Siberia that the problem of providing food became more and more acute. Hunting and especially fishing were important activities but as the population grew, there was an increasing demand for agricultural products. Such products were shipped by land and sea but local agriculture became more important from the 17th century. Some peasants were forcibly resettled to Siberia, others were voluntary migrants often with state assistance (Gibson 1969: 155).

Finally, it can be noted that many expansions of hunter-gatherers in eastern Siberia occurred in the 17th century, the peak of the Little Ice Age and a time of great social disruption in many parts of the world (Parker 2013). There is evidence that reindeer (and, further afield, Alaskan caribou) herds decreased substantially in size during the medieval warm phase but then rebounded during the Little Ice Age (Krupnik 1993: 147). There is also ethnographic evidence that it is easier to increase reindeer herds during cold periods (Sasaki 2010). Further research is required to investigate the role of the Little Ice Age on Transeurasian dispersals.

47.4.4 The Ryukyu Islands and farming expansions beyond the state

The farming/language dispersal hypothesis posits population growth and demic

diffusion as the most important process behind expansions of agriculture and languages.

While I agree with this assessment for the Neolithic, in Bronze Age and later societies

many other factors stimulated such expansions. In this chapter I have argued that the

desire to escape state control and taxation was a major factor in Transeurasian language

dispersals, often through the creation of new subsistence niches such as pastoral

nomadism, sub-arctic horse and cattle husbandry, and professional hunter-gathering.

Agricultural expansions could also fall into this category and one example of a farming/language dispersal which was probably caused, not by over-population, but by attempts to keep state control at arm's length by developing new economic niches based on trade and piracy was the medieval expansion of Ryukyuan from Kyushu into the islands to the south.

Ryukyuan and Japanese are normally seen as the two main sub-groups of Japonic (Pellard 2015; Niinaga, this volume: Chapter 13; Bentley, this volume: Chapter 14). Various lines of evidence suggest that the spread of the Ryukyuan language into the Ryukyu Islands occurred from around the 10th century AD and was associated with agriculture and with the medieval culture known as Gusuku in Okinawa (Pellard 2015). Takamiya et al. (2015) have published a list of the oldest directly-dated cultivated cereals from the northern and central Ryukyu Islands. These remains, which comprise barley, wheat, foxtail millet and rice, appear from the 10th century AD, with one earlier find of barley dating back to the 9th or even 8th century. In my earlier work, I assumed that the spread of Ryukyuan could be explained in terms of the farming/language dispersal hypothesis (Hudson 1994, 1999). Several archaeologists and historians have, however, argued that trade and piracy were important in the medieval settlement of the islands (Asato and Doi et al. 2004; Kinoshita 2003; Smits 2018; cf. Pellard 2015: 28). While, as noted by Pellard (2015: 28), debate continues over the exact nature of this trade, in view of the approach to post-Neolithic language dispersals sketched in this chapter, I believe this Ryukyuan trading/piracy scenario to be worthy of further consideration.

There have been three main theories about the origins of Ryukyuan on the island of Kyushu. The oldest theory, which goes back at least to Uemura (1977), sees Ryukyuan as a dialect spoken by the Hayato in Kagoshima and southern Kumamoto. As the Hayato were a "tribal" people who opposed the expansion of the ancient Japanese state (cf. Hudson 1999), it would make both historical and geographical sense to associate them with a secondary movement out of southern Kyushu into the Ryukyu Islands. Linguistically, however, Serafim (2003) argues that it is difficult to see southern Kyushu dialects as a starting point for Ryukyuan. A second hypothesis has focused on northwest Kyushu, proposing that merchants from the Nagasaki area were instrumental in trading soapstone pots and kamui-yaki ceramics to the Ryukyus in exchange for sulphur and shells (Asato and Doi 1999; Asato 2013). Within this "Nagasaki merchants" approach, there has yet to be any real analysis of language dispersal models, but Serafim again finds a northwest Kyushu origin unlikely on linguistic grounds and makes a third proposal that "if any specific Kyushu dialect is a later form of the dialect from which Ryukyuan descends, it is the dialect in the northeastern part of Kyushu adjacent to the strait opposite from Yamaguchi prefecture" (Serafim 2003: 471). This proposal has been supported by Vovin (2015a: 202). Geographically speaking, northeast Kyushu is the most distant location from the Ryukyu Islands and seems an unlikely source for a "wave of advance" type of agricultural expansion. If, however, the medieval mercantile city of Hakata can be included in Serafim's linguistic framework then it might be possible to make a link between traders from north-central Kyushu and the movement of Ryukyuan.

47.5 Conclusions

The oldest, baseline dispersals of Transeurasian occurred through agricultural expansions which appear to have been associated with population growth and demic diffusion in Northeast China and surrounding regions. By the Bronze Age, alluvial agrarian states had evolved in several regions of Eurasia. While such states possessed considerable political and economic dominance over their subjects, Bronze Age economies offered new opportunities for trade and expansion into areas outside state control. This chapter has argued that the resulting secondary population movements into Inner Eurasia were of great significance in the post-Neolithic dispersals of Transeurasian. Of course, the term "secondary peoples' revolution"—used as a broad label for these transformations—covers a huge diversity of historical episodes and circumstances. Even from the four case studies briefly discussed in the second half of this essay, it will be clear that the detailed historical sequences are complex and no claim is made that the approach adopted here provides a general model to understand all Transeurasian language dispersals. Nevertheless, it is hoped that the present attempt to reevaluate the historical dynamism of premodern "barbarian" peoples in Eurasia will suggest one way to frame future studies on the dispersals of Transeurasian languages and peoples.

Acknowledgements

The research leading to these results has received funding from the European Research Council (ERC) under the European Union's Horizon 2020 research and innovation programme (grant agreement No 646612) granted to Martine Robbeets. I am grateful to

Martine Robbeets and Tao Li for comments on an earlier version of the essay.

This is a draft version of a chapter that appears in Robbeets, M. and A. Savelyev (eds). *The Oxford Guide to the Transeurasian Languages* (OUP, 2020), see https://global.oup.com/academic/product/the-oxford-guide-to-the-transeurasian-la nguages-9780198804628. The research leading to these results has received funding from the European Research Council under the Horizon 2020 Program/ ERC Grant Agreement n. 646612 granted to Martine Robbeets.