Linguistic Vitality, Endangerment, and Resilience

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The concept of "resilience" originated in both ecology and psychology, and refers to the propensity of a system or entity to "bounce back" from a disturbance. Recently, the concept has found increasing application within linguistics, particularly the study of endangered languages. In this context, resilience is used to describe one aspect of long-term, cyclical changes in language vitality. Proponents of "resilience linguistics" argue that understanding long-term patterns of language vitality can be of use in fostering resilience in, and therefore maintenance of, endangered languages. This article takes a critical look at these proposals, based on the examination of long-term trends in the Monguor and Saami languages.

1. Introduction: Resilience linguistics[1] How do languages become endangered? Among the languages that have become endangered or gone extinct, are any general patterns discernible that would enable us to predict and intervene in the process? An emerging linguistic discourse – resilience linguistics – suggests that such patterns exist, and can be both known and intervened in, in order to support endangered languages. In this article, I critically examine resilience linguistics as a framework for understanding language endangerment and for providing practical support for endangered languages. To begin with, I look at the concept of resilience.

The concept of "resilience" originated in both ecology and psychology, and refers to the propensity of a system or entity to "bounce back" from a disturbance. Since resilience linguistics has drawn primarily on ecological resilience, I will concentrate on that here, returning to psychological resilience later in my discussion. A key aspect of ecological resilience drawn on in resilience linguistics is "resilience thinking," a framework for analyzing complex systems that portrays sustainability as a dynamic rather than a static state, and places emphasis on adaptively responding to, rather than avoiding or resisting, disturbances to the system (Walker & Salt 2006; 2012).

The emergence of resilience linguistics can be viewed as part of a rapid spread of resilience thinking to a wide range of disciplines within the social sciences, particularly since the start of the twenty-first century (Xu & Marinova 2013). Disciplines that have recently explored resilience thinking include rural studies (Scott 2006), urban planning (Davoudi & Porter 2012), resource management (Matarrita-Cascante &

Trejos 2013), development studies (Yamamoto & Yamamoto 2013), security studies (Bourbeau 2013), climate change studies (Barua et al. 2013), disaster management (Lambert et al. 2013), transition studies (Wilson 2014), Indigenous studies (Kirmayer et al. 2009), trauma psychology (Bonanno et al. 2006), cultural anthropology (Roche & Wen 2013), archaeology (Broadbent 2010), and Sinology (Perdue 2005), among many others.

Resilience thinking was first applied to the study of language maintenance and revitalization by Daveluy (2007),[2] who used resilience thinking to examine changing language choices across the lifespan, and suggested that some individuals who cease speaking their home language may "bounce back" to it after having children. Since Daveluy, the idea of applying "resilience" within linguistics seems to have arisen independently several times. Bradley (2010a, 2010b, 2011), without drawing on Daveluy's work, explores the practical applications of resilience theory for language maintenance and revitalization, based on two case studies of endangered Tibeto-Burman languages. Austin (2010:29) seems to have independently hit upon the same idea, suggesting that an understanding of resilience may "help strengthen fragile communities and groups so they can weather threats." Meanwhile, Chapel et al. (2010), independent of Daveluy, Bradley, and Austin, use a resilience approach in their mathematical modeling of stable bilingualism. Then, again in 2012, Daurio reinvents the concept of linguistic resilience, with an examination of how the maintenance of the Kaike language of the Tarali people of Nepal has been "dependent upon the resilience afforded by … sustained engagement with a place-based livelihood system" (Daurio 2012:7). Sallabank (2013) reviews the application of resilience theory to language endangerment with specific reference to Bradley's work, summarizing the main argument of resilience linguistics by stating that "language planning that does not respond to new contexts and users is not resilient" (Sallabank 2013:209).

This paper aims to contribute to the development of a resilience framework for the theorization and practice of language maintenance and revitalization. The study's primary contribution is a critical examination of a foundational concept in resilience thinking – the adaptive cycle (Gunderson & Holling 2002, Holling 2001). Although not essential to all resilience thinking (as shall be seen in the discussion §), the adaptive cycle has been central to the concept of linguistic resilience, particularly as developed by Bradley. The adaptive cycle is a temporal scheme that posits that all complex systems, natural and human, move cyclically through four phases: exploitation, conservation, release, and reorganization (Folke et al. 2010). The mechanism underlying this dynamic is the accumulation of "potential" ("capital" or "resources") and increasing connectedness within the system. As capital and connectedness rise in tandem, a system becomes dysfunctionally complex, leading to collapse. This is followed by reorganization of the system, which then proceeds to accumulate capital, thus continuing the cycle. Bradley (2010a:126) demonstrates how this model can be applied to languages:

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[2]Goldin-Meadow (2005) and Tse (2001) use resilience in other linguistic studies not related to language endangerment, revitalization, and maintenance.

> A resilience approach may help a community to move towards a reorganization phase which does not lead to the disappearance of the language, or to avoid the release phase altogether, maintaining their traditional language and culture alongside dominant languages within larger political entities.

The adaptive cycle model belongs to a suite of historical visions that date back, at least, to Gibbon's *History of the Decline and Fall of the Roman Empire*.[3] Such models posit that large social collectivities move through phases of growth, stagnation, decline, death, and (sometimes) rebirth, and also that the dynamics driving such cycles are primarily internal to the system. Gibbon, for example, argued that the fall of Rome was due to the Romans' weakness, rather than the barbarians' strength. Similar arguments about cyclical history driven by internal dynamics have been made, for example, by economists (see Wallerstein 2000 on the work of Nikolai Kondratiev), anthropologists (Kroeber 1919),[4] historians (Spengler 1926; Toynbee 1963),[5] demographers (Turchin & Nefedov 2009),[6] and archaeologists (Tainter 1988). Supposedly, even Mao Zedong's "notion of episodic revolution to prevent accumulation of power by elites … is congruent with the adaptive cycle" (Walker & Abel 2002:298).

Do languages change in cyclical patterns? Is language endangerment one part of such cycles? Does the adaptive cycle reveal anything that can aid language maintenance and revitalization? To answer these questions, I examine the history of two unrelated, geographically distant groups of endangered languages: the Saami languages of farthest northern Europe, and the Monguor languages of the northeastern Tibetan Plateau. The selection of language groups was foremost a convenience sample. I have previously conducted ethnographic research with speakers of the Monguor languages, and undertook this study in Sweden; the representativeness of the sample is discussed below. Using secondary literature, I reconstruct the vitality of these languages over ~750 years to their present predicament of endangerment. Each history is divided into phases representing distinct configurations in the vitality of the languages. Covering ~750 years of linguistic history in ~2,500 words obviously requires a reduction in detail and nuance, and readers should interpret the histories accordingly; the earlier periods are particularly speculative, though every effort has been made to ground them in well-attested historical events and trends. A second caveat is that examining the vitality of *language groups* rather than *languages* elides the diversity of social and historical contexts between the languages. Nonetheless, this strategy also allows the extension of the temporal frame beyond records of individual languages, and to thus seek long-term patterns in language vitality that would otherwise be inaccessible.

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[3]Canadine (2013) provides a useful summary of some of the most important such models.

[4]Kroeber's 1919 study of cyclical patterns in women's fashion later led him to emphasize the role of structure over that of the individual in the formation of cultural patterns.

[5]Spengler calls his approach a morphology of history and suggested that "civilizations were like living organisms, which meant that they were born, grew up, and flourished, but also that they were destined to decay and die" (Canadine 2013:234).

[6]Turchin calls his study of cyclical history "cliodynamics" and proposes "secular cycles" that last several centuries and consist of expansion, stagflation, crisis, and depression phases.

Language vitality is an indicator of a language's sustainability, and of the extent to which intervention is needed for its maintenance. Vitality is not a property of a language itself, nor of a population that speaks a language, but rather a description of the relationship between a language, its speakers, and its wider linguistic, social, and political context. It therefore reflects how the overall language ecology impacts an individual language and its speakers (Stanford & Whaley 2010).[7] Several measures of language vitality exist. Many measure vitality on a unilinear continuum from safe (or some variant) to extinct, e.g., Fishman (1991), Wurm (1996), Krauss (1997, 2007), Lewis & Simons (2010), and Grenoble & Whaley (2006). Such models were rejected for the present purposes, as they do not capture subtle but important shifts in vitality. Instead, I use a multi-factorial model that reflects the complexities of language vitality. Again, several models are available. Two models – the UNESCO Ad-hoc Experts Group on Endangered Languages' (2003) nine-factor model, and the ELDIA (European Language Diversity for All) model[8] – were rejected, as the incompleteness of the historical record made it impossible to provide estimates for so many factors. Instead, Bradley's (2010a) five-factor model was used, as it enabled sufficient detail to be developed from the available historical data. I therefore focus on these factors in my language vitality histories: policy;[9] setting (absolute and relative number of speakers, prestige); reproduction[10] (intergenerational transmission, speakers' attitudes towards their language); identity; and domains.

To reduce bias and incompleteness in these historical reconstructions, my summaries were reviewed by five experts: two on the Monguor languages and three on the Saami languages. To aid visualization of these histories, vitality was also quantified by distributing the histories to ten volunteers,[11] who provided numerical estimates of language vitality. Averages of these scores were used to minimize bias, and these numbers were used to construct radar diagrams and bar graphs of the vitality histories. These graphs should be read as general indications of broad patterns, rather than precise measurements of vitality.

My diachronic study of language endangerment suggests that cyclical historical models, exemplified by the adaptive cycle, do not adequately capture the processes of language endangerment. Such models are therefore of limited use in assisting language maintenance and revitalization. Furthermore, I suggest that beyond their inadequacy, such models can be harmful to language maintenance and revitalization efforts. Nonetheless, I concur with Bradley's (2010a, 2010b, 2011) assertion that resilience thinking has the potential to enrich our conceptual and practical toolboxes for language maintenance and revitalization. I therefore also discuss the different ways in which resilience can be conceived of without recourse to the adaptive cy-

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[7]This definition of vitality can be contrasted with definitions that focus on speakers' subjective perceptions of the status and prestige of a language, see Giles and Byrne (1982) and Dorian (2014).

[8]http://www.eldia-project.org/. The model is called the European Language Vitality Barometer – EuViLaBa.

[9]For the present purposes, policy is defined broadly, including not only explicit statements of strategy, but also implicit attitudes and their social consequences.

[10]Bradley originally used the term "vitality," but I have changed it here to "reproduction" to avoid the confusion of having "vitality" as a factor of vitality. Reproduction here refers to social reproduction, both within the family and the community (Williams 2005).

[11]Volunteers were a convenience sample recruited via Twitter.

cle, and suggest new directions for developing a resilience framework for language maintenance and revitalization.

2. Case 1: The Saami languages   The Saami languages are a group of Uralic languages spoken across four countries in farthest northern Europe in Norway, Sweden, Finland, and Russia. At present, the nine spoken languages are divided into two groups: a western group containing the Southern, Ume, Pite, Lule, and North Saami languages; and an eastern group containing the Skolt, Inari, Ter, and Kildin Saami languages (Nelson & Toivonen 2007).[12] Additionally, two extinct varieties of Saami are attested: Akkala and Kemi Saami. The geographical setting of these languages is a multilingual region, which Saami speakers call Sápmi, and which is otherwise known as the North Calotte (Pietikäinen et al. 2010). In addition to the Saami languages, this region is home to various dialects of Norwegian, Swedish, Russian, and Finnish, two other Finnic languages – Kven (Lane 2011; Ryymin 2001) and Meänkieli (Wande 2011; Huss 2003) – and the Finno-Ugric Komi language.

The last fluent speaker of Akkala Saami, Marja Sergina, passed away in 2003 (Mustonen & Mustonen 2011).[13] All remaining Saami languages are endangered, as suggested by the following population figures:

Table 1. Speaker numbers for Saami languages

Language	No. of Speakers	Source
Ter Saami	6	Salminen (2007)
Ume Saami	<20	Salminen (2007)
Pite Saami	<30	Valijärvi & Wilbur (2011)
Skolt Saami	~300	Salminen (2007)
Inari Saami	~350	Olthuis et al. (2013)
South Saami	~600	Lewis et al. (2014)
Kildin Saami	~700[14]	Scheller (2011)
Lule Saami	1,000–2,000	Salminen (2007)
North Saami	20,700	Lewis et al. (2014)

The following vitality history traces the changing collective vitality of these languages since the 12th century. I focus primarily on Sweden, especially during the first two periods (1120–1751), but also include perspectives from other countries, especially as the history moves closer to the present day.

2.1 1120–1523: The beginning of assimilation   Although language shift among, and displacement of, the ancestors of today's Saami populations in Scandinavia likely date back to before the twelfth century, 1120 marks a substantive turning point, with

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[12]Rydving (2013) has critiqued this classification for prioritizing historical relationships over mutual intelligibility. See also Larsson (2012).

[13]There were two elderly speakers with some competency in 2011 (Scheller 2011; 2013).

[14]Scheller also reports that of ~700 speakers with varying competencies, some ~100 speakers actively use the language on a regular basis.

the founding of the first Catholic bishopric of Sweden (Kent 2008) and a new impetus for the colonization of Sápmi. Farther east, in what later became Russia and Finland, the Orthodox Church began making inroads into Saami territory at this time (Sergejeva 2000). During this period, populations in most of Sápmi were managed according to a system of Lappmarks, 'Saami territories,' which the Saami inhabitants divided into *siida* (Karppi 2001) – territorial subdivisions of the Lappmarks that could be utilized by several Saami communities. The Saami were taxed from southern Sweden by *birkarls*, intermediaries who also had exclusive rights to trade with the Saami (Wheelersburg 1991). At this time, the emerging Scandinavian states were focused primarily on the Baltic realm and had limited impact on the Saami (Kent 2008).

Broadbent's (2010) archaeological investigations show that Saami populations in the Scandinavian peninsula retracted northward and inland during this period, continuing a trend that likely began in the tenth century. Although it is impossible to study spoken languages in the archaeological record, Broadbent's investigations suggest there was significant intermingling of the Saami and Norse populations, including cultural exchange. A linguistic remnant of this process today is the presence of a significant number of Saami loanwords in the old Swedish dialects of northern Sweden (Dahl 2007). So, despite an overall demographic shift throughout this period, it appears to have been gradual enough that relations between the Saami and Norse colonizers were relatively egalitarian and resulted in mutual exchange more than unidirectional assimilation. Meanwhile, initial attempts at conversion to Catholicism were made. The new status of the Catholic Church, and hence the Latin language, likely impacted the prestige of languages in Scandinavia, including the Saami languages. One area where the Church's linguistic impact can be seen is in the extinction of Scandinavia's indigenous runic writing and its replacement with the Latin alphabet (Kent 2008).[15] The Saami languages possibly also lost some prestige vis-à-vis Latin, contributing to their gradual minoritization across this period.

In terms of domains, the Saami languages may have lost ground to Christianity as a unique domain of Latin, but the impact would have been limited compared to the widespread conversion that occurred after the Reformation.[16] Trade and taxation via the *birkarls* is potentially a domain in which languages other than Saami were used.

The reproduction of the Saami languages was probably strong during this period, with positive speaker attitudes and uninterrupted intergenerational transmission.

Little information is available about Saami identity during this era, but it was likely based on the Lappmarks and *siida*. Such an identity system likely contributed to the diversification of Saami varieties, with unique speech forms traceable to individual *siida* (Sergejeva 2000).

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[15]A variety of runic alphabet, which incorporated a large number of Latin characters, persisted in Dalarna until the early twentieth century (Jansson & Lundberg 1987).

[16]Conversion to Protestant Christianity was a gradual process that involved a significant degree of mutual accommodation. Mustonen & Mustonen 2011 contains a helpful discussion on the complexities involved with creating a stark demarcation between "shamanic" and "Christian" practices among the contemporary Saami.

2.2 1523–1751: Swedish state and church   1523 marks the end of Sweden's union with Denmark, and the beginning of a Swedish empire, bolstered by a state Lutheran Church (Kent 2008), and the start of deliberately expansionist policies. Starting from 1526, taxation via the *birkarls* ceased, and Saami were taxed directly by the Swedish crown. 1602 marks the start of a sedentarization policy, designed to territorially fix Saami populations and render them more legible to the state (Wheelsberg 1991; Scott 1998). Policy therefore brought the Saami into closer contact with the Swedish state and its language.

This new proximity brought exposure to new domains, and the exclusion of the Saami languages from those domains. Swedish became the official language of law (Granqvist 2004) and education (Lindmark 2006). And though these institutions likely had a significant linguistic impact, more successful in bringing about language shift was the increasing rate of conversion to Lutheranism, which used Swedish as its official language (Rydving 2004).

Although the reproduction of the Saami languages likely remained strong throughout this period, it would have decreased relative to the prior period, with language shift increasing, as the Saami languages continued to be minoritized within Sápmi.

In terms of identity, this period is significant as the beginning of full-time reindeer herding (in the early seventeenth century; Wheelsberg 1991). This, coupled with conversion to Lutheranism, must have resulted in a shift in Saami identity away from the primarily territorial identities of the previous period.

2.3 1751–1919: Closing the borders   During these two centuries the Swedish empire broke up, and national borders were created and sealed across Sápmi. Important landmarks include the 1751 border between Norway and Sweden (Lindmark 2013); the creation of Finland as a Russian protectorate in 1808–9 (Sergejeva 2000); the sealing of the Russian-Norwegian border in 1826; the sealing of the Russian-Finnish border in 1829–30; the sealing of the Norwegian-Finnish border in 1852 (Leinonen 2007); the dissolution of the Norwegian-Swedish union in 1905; the Russian revolution and Finnish independence in 1917; and the subsequent re-sealing of the Finnish-Russian border in 1920 (Sergejeva 2000). The main impact of these closures was the fragmentation of the Saami speakers into several populations. Inspired by colonial paternalism, deliberate policies to manage the Saami and their language and culture also appeared at this time. In Norway, this began in 1852, with the establishment of a dedicated fund for the assimilation of the Saami (Minde 2003). In Sweden, a series of "reindeer acts" – the first in 1896 – sought to define Saami exclusively as reindeer herders (Axelsson 2010). This was reinforced by the establishment of an "agricultural limit" in Sweden in 1865, which, in effect, delineated Saami and Swedish ethnic territories (Lantto & Mörkenstam 2008; Axelsson 2010). Compulsory Swedish-medium schooling was also implemented in 1888 (Pietikäinen et al. 2010). Probably the most significant impact these policies had, however, was the stigmatization and assimilation of non-reindeer herding Saami.

Throughout this period, the demographic position of the Saami languages declined; whilst Saami populations would have remained relatively stable, increasing

immigration aimed at consolidating national frontiers minoritized Saami populations within Sápmi (Karppi 2001). In Russia, the demographic shift at this time was particularly pronounced (Sergejeva 2000); while the Saami population declined from 1,582 in 1926 to approximately 1,000 today, the overall population of Russia's Murmansk region increased from 230,000 to over one million (Mustonen & Mustonen 2011).

Domain changes within the languages were complex in this period. Inspired by Protestant Pietism, Saami scripts were developed in order to facilitate Bible-based religious practice, and so the Saami languages to some extent regained a lost domain (Minde 1998).[17] Biblical study remained the chief use for the Saami scripts, but a Saami newspaper also began publication in the early twentieth century (Lehtola 1997, in Pietikäinen 2008b). At the same time, however, increased penetration of colonial states into Sápmi saw the emergence and increasing importance of a number of domains in which non-Saami languages dominated.

The reproduction of the Saami languages declined during this period, particularly among non-reindeer herding Saami. At the same time, language attitudes of Saami speakers would have become increasingly negative as state-led stigmatization of the languages intensified (Minde 2003).

Finally, Saami identity would have suffered, firstly, as it competed with national identities, and secondly, as Saami identity was stigmatized by nationalist governments and their assimilationist agendas.

2.4 1919–1975: High nationalist assimilation During this period of high nationalism, the policy measures put in place in the previous period allowed each of the new nation states to pursue their own assimilationist agendas. In Norway, an 1888 policy defined citizenship along ethno-linguistic lines, effectively denying Saami citizenship and reinforcing the ongoing Norwegianization policy (Lane 2011; Rasmussen & Nolan 2011). Sweden continued its assimilationist policies with the 3rd Reindeer Act in 1928, which effectively dispossessed all sedentary Saami from their land; such policies were continued with the 1971 Reindeer Farming Act (Axelsson 2010). In Russia, Soviet policy was initially progressive and supportive of the Saami, but in the late 1930s, Stalinist purges were implemented, followed by a nationalist assimilation program that replicated developments that had occurred earlier elsewhere in Sápmi (Mustonen & Mustonen 2011; Scheller 2011, 2013).

The general linguistic setting continued to be unfavorable. All Saami populations experienced continued decline in relative numbers, especially in Russia (Mustonen & Muston 2011; Sergejeva 2000), as migration into Sápmi continued to accelerate.

With the emergence of mass print media and radio, the increasing spread of compulsory education, and the growing penetration of state bureaucracy during this period, the Saami languages were for the most part relegated to the status of home languages, representing a significant loss of domains.

Concordant with the loss of domains, declining relative speaker numbers, and assimilationist policies, the Saami languages saw increasingly negative speaker at-

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[17]According to Rydving (2013) the first Saami texts date back to the seventeenth century.

titudes, such that intergenerational transmission of the languages was severely disrupted (Minde 2003).

The stigmatization of Saami identities throughout this period under the various nationalist regimes (Minde 2003), contributed to the declining overall vitality of the Saami languages.

2.5 1975–now: Indigenous revival Despite the overwhelmingly negative nature of the preceding period, it also saw the emergence of a nascent Saami movement, dating back to the first Saami congress in Trondheim in 1917, but with most developments taking place much later. In Norway, 1956 saw the founding of a Norwegian Reindeer Herding Union and a Saami Committee. Three years later, Norway lifted its ban on the use of Finnish and Saami in schools (Lane 2011). In Sweden, the Svenska Samernas Riksförbund (Swedish Saami National Association) was established by the Saami in 1950, and this organization's work was supplemented in 1980 by the Landsförbundet Svenska Samer (Country Association of Swedish Saami), an organization of non-herding Saami (Lantto & Mörkenstam 2008). This was mirrored by developments in Norway, in the late 1970s and early 1980s, which saw the emergence of distinct identities within the Saami, particularly the Lule Saami (Evjen 2004). These gradual developments were all catapulted onto the national and international stages by events surrounding the construction of the Alta Dam in northern Norway (Paine 1982), which saw the emergence of a united transnational Saami movement that was connected to international Indigenous peoples' rights movements.[18] Improvements in Saami policy continued through the 1980s, 1990s, and early 2000s. In 1987, the Norwegian Saami Act made Saami languages equal in law to Norwegian within six municipalities, and in 1988, the Saami were recognized as a "people" in Norway (Rasmussen & Nolan 2011). In 1990, Norway ratified ILO 169, thus recognizing the Saami as an Indigenous people of Norway. The national Saami parliaments were founded in the 1990s (Rasmussen & Nolan 2011; Selle & Strømsnes 2010). Two educational acts in Norway in 1995 and 1999 acknowledged Saami rights to mother-tongue medium education (Rasmussen & Nolan 2011), following Norway's ratification of the European Charter for Regional and Minority Languages in 1993. Finland ratified the charter in 1994, and Sweden in 2000. In 2009, Sweden announced a new policy that included several measures to support minority and Indigenous languages.[19] These national-level developments were also mirrored by an increased number of community-led initiatives, for example, the establishment of Árran, a center for Lule Saami language and culture, in 1994 (Evjen 2004), and Duoddárá, a Pite Saame center, in 2000 (Valijärvi & Wilbur 2011). Policy developments in Russia were less positive; while the breakup of the Soviet Union allowed the establishment of Saami community organizations and the devolution of *obschiny* (Indigenous-controlled communities), policy remained indifferent at best (Mustonen & Mustonen 2011).

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[18]The impact of the Alta conflict for recognition of Saami Indigenous rights has been greatest in Norway, lesser in Sweden and Finland, and very slight in Russia.

[19]A factsheet regarding the policy is available, in English, from http://www.government.se/s-b/d/11503/a/136758.

Despite these positive policy developments, the setting of the Saami languages continued to negatively impact their vitality. Saami speakers remain demographically minoritized, and asymmetrical bilingualism remains the norm (e.g., Saami speakers are bilingual in Swedish, but rarely vice versa). Furthermore, European integration and globalization have increased the prestige of English, creating a new demographic context of minoritization for languages across Sápmi.

The new policies of this period have supported the increased use of Saami languages across a variety of domains, including education (Hirvonen 2004) and numerous forms of media (Pietikäinen 2008a; 2008b).

The reproduction of Saami languages is also being supported through linguistic activism, such as the organization of summer camps and language nests, efforts that are aimed at not only maintaining intergenerational transmission, but also reversing language shift (Olthuis et al. 2013).

Alongside these policy developments has been a reclamation and revalorization of Saami identity, or rather, identities (Evjen 2004).

Many developments in the past thirty years have provided significant support for the Saami languages. However, the predicament of these languages largely remains bound by national contexts. Olthuis et al. (2013:16) claim that "[t]he situation of the Saami in Norway is now arguably better than the conditions of any other indigenous people in the world." They then rank Finland, Sweden, and Russia in order of performance regarding the provision of Saami linguistic and cultural rights. Despite the achievements in this regard, serious challenges remain for the Saami languages. Most are critically endangered, if not irreversibly moribund. Furthermore, implementation of supportive, pro-Saami policies remains problematic (see Peura et al. 2014 for the case in Sweden).

3. Case 2: The Monguor languages   The Monguor languages belong to the Shirongolic cluster of Mongolic languages, all spoken on the northeastern Tibetan Plateau (Janhunen 2003): Mangghuer (Slater 2003), Mongghul (Faehndrich 2007), Bonan (aka Bao'an; Robert Fried 2010), and Santa (Kim 2003).[20] The first three languages – Mangghuer, Mongghul, and Bonan[21] – constitute what I here refer to as the Monguor languages, which are united by their historical affinities and present predicament, with all speakers officially grouped in the Tu "nationality" (*minzu*).[22] The area where the Monguor languages are spoken, the northeastern Tibetan Plateau, is also referred to as the Amdo Sprachbund (Janhunen 2005; variants of this name are found in Dwyer 2013 and Slater 2003) and in addition to the Monguor languages, is also

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[20]This group might also include two additional Mongolic languages: Kangjia (Siqinchaoketu 1999, Nugteren 2011) and Eastern Yugur.

[21]Bonan, also known as Bao'an, is spoken by two distinct speech communities: a Muslim population in Gansu, and a Buddhist population in Qinghai. In this paper, I deal exclusively with the Qinghai population. The Qinghai Bonan refer to their language as Manegacha 'our language,' while local Tibetans refer to it as Dorké (Dor skad).

[22]I avoid the use of the term Tu because of its potentially offensive connotations (Roche 2011). In addition to these three languages, another population of Monguor in Rebgong speak the Wutun (aka Ngandehua) language.

home to various forms of Amdo Tibetan (Makley et al. 1999) and Northwest Mandarin Chinese (Dede 2003), among other languages (see Janhunen et al. 2007; Roche et al. 2010; and Dwyer 2013 for more on the languages of this area).

The vitality of the Monguor languages is presently undergoing rapid decline. Both Mangghuer (~30,000[23] speakers) and Mongghul (~50,000 speakers, Limusidhiden and Dede 2012; Georg 2003) are shifting towards Chinese,[24] whereas Bonan (~4,000 speakers amongst the Monguor) is shifting towards Amdo Tibetan. The language vitality history presented below ranges from 1226 until the present, and rather than following more familiar Chinese or Tibetan periodizations, has been adapted to reflect changes in the local context that impacted the vitality of the Shrinogolic languages. In addition to secondary sources, this section also draws on my own ethnographic and collaborative research with Monguor communities (Roche & Lcag mo tshe ring 2013; Roche & Wen 2013; Roche 2011; Roche 2014a).

3.1 1226–1578: Imperial privilege

1226 marks the origin of the Monguor languages with the appearance of Mongols on the northeast Tibetan Plateau, as part of the broader Mongol expansion under Chinggis Khan and his successors (Roche 2015). Imperial authority throughout the Yuan Dynasty (1271–1368) vested considerable power in the Mongol generals who settled in Amdo, who became *tusi* 'local chieftains' (Sperling 1997), hereditary positions that were continued into the Ming Dynasty (1368–1644) (Schram 2006).

This imperial privilege conferred considerable power on the *tusi* and prestige upon their language. Nonetheless, the Monguor would have been both an ethnic elite and a demographic minority in Amdo. The surrounding population was primarily Tibetan, and Amdo Tibetan served as a *lingua franca* to the extent that it can be identified as the substrate language of the regional sprachbund (Dwyer 2013). However, the Han Chinese and Hui (Chinese Muslim) populations of the region steadily increased from the Ming onwards (Dede 2003; Lipman 1998), as the Tibetan population proportionally decreased (Sperling 1990).

The transition from nomadic pastoralism to agro-pastoralism would have initially constituted a dramatic shift in domains for the Mongol chieftains and their subjects, but it is unknown if this challenge was met by lexical borrowing or innovation. Mongolian may have facilitated communication between local Mongols and the broader empire during the Yuan, but afterwards, Chinese would have served this function as a native Chinese dynasty replaced the Mongol Yuan.[25] It is likely during this period that Monguor speakers began practicing *shenjiao* 'Shenism, or Chinese folk religion,' which required ritual specialists to use Chinese (Roche 2011; Roche 2015; Roche

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[23]Slater 2003 cites a Mangghuer population of 37,900. Based on my fieldwork experience, this figure is too high, and so I have rounded it down to 30,000, though this number must be treated as approximate.

[24]Although Mangghuer and Mongghul constitute two distinct speech communities, they are still classified as a single language – Tu – within such catalogues as the Ethnologue (Lewis et al. 2014). Language shift among Mongghul speakers is presently much more advanced than among Mangghuer speakers; approximately two-thirds of those classified as "Tuzu" in the area where Mongghul was spoken do not currently speak Mongghul.

[25]In their discussion of education among the Mangghuer, Zhu & Stuart (1999) describe local *tusi* taking imperial examinations, suggesting that these individuals were proficient in literary Chinese.

& Wen 2013). Although Tibetan Buddhism was present in the region at this time, it likely did not have a prominent position. Other domains would have been dominated by Monguor varieties.

We can assume that the reproduction of these varieties remained strong throughout this period. Given the small Monguor population, intermarriage may have led to language shift in some cases, probably following a pattern of "father tongue" dominance, where children raised in bilingual households tend to become monolingual in the paternal language (van Driem 2013). Intermarriage also probably contributed to the convergence of non-related languages of the region. The prestige and power conferred upon Monguor speakers by their association with imperial authority through the *tusi* can be seen in the high rates of language shift among non-Monguor speakers who migrated to *tusi* territories (Roche 2011; 2015).

The identity of Monguor speakers at this time is difficult to determine; it may have been pan-Mongol, Chinggisid, Chinese-imperial, local, or something altogether different.

3.2 1578–1723: Buddhist efflorescence

During this period, Amdo became part of a regional Tibetan Buddhist ecumene resulting from the Mongol Altan Khan's patronage of the Gelukpa (*dge lugs pa*) sect of Tibetan Buddhism (Tuttle 2012). With surrounding regions to the east, north, and northwest plunged into conflict (Perdue 2005; Brook 2010), the region experienced relative stability and an economic and cultural efflorescence under the rule of the Gelukpa sect and their Mongol patrons. For the first time since the collapse of the Tibetan Empire in the tenth century, the northeast Tibetan Plateau came under the sway of a centralized, integrated Tibetosphere. Although the *tusi* continued to have an important role, the Gelukpa monasteries founded throughout this period also assumed significant governing functions (Tuttle 2012; Sullivan 2013), giving rise to what Weiner (2012) has called a "syncretic nexus of authority" combining imperial secular rule with monastic authority. Nominally, the area was under the administration of Khoshhud Mongols from 1640 to 1723 (Uyunbilig 2002), but the penetration of this polity at the level of everyday life is little understood.

The language setting would have been supportive, though Monguor may have lost some prestige to Tibetan, and possibly to Khoshuud Mongol. Demographically, the Monguor speakers would have been brought into greater contact with Tibetans through their participation in common religious communities, and would have faced continued pressure from Han migrants.

In terms of domains, Tibetan would have assumed greater significance due to the increased importance of Tibetan Buddhism. Gelukpa monasteries would have been a site of intensified language contact: Potanin (1893) suggests that among the Mangghuer he visited in 1884–5, households kept only one son at home to maintain their estate, and sent all others to local monasteries. Linguistic practice at such monasteries probably entailed the use of the local vernacular for most interactions, with Tibetan only used for liturgical functions. Tibetan would have been more important for monks who wished to graduate through the successive Buddhist degrees at higher

centers of monastic learning in Amdo or Lhasa, but such monks constituted only a small minority of the total population. Chinese would have remained the language of communication between the Monguor chieftains and the Ming and Qing states, as well as the language of *shenjiao* practice. Other domains – the majority of daily language use – would have remained exclusively Monguor.

The Monguor languages would have remained vital in this period, with strong intergenerational transmission and most likely positive attitudes among speakers.

The identity of Monguor speakers would have been somewhat weakened in comparison with that in the Imperial Privilege phase, as they were absorbed into the Tibetan Buddhist ecumene, in the context of which a Buddhist identity likely prevailed over ethnic, local, or political identities.

3.3 1723–1949: Localization and divergence In 1723–4, Amdo was violently incorporated into the Qing Empire and detached from the centralized Tibetan ecumene. Following this, the local population was subject to a new political order that aimed to survey, map, categorize, and fix the region's peoples. The policy was simultaneously aimed at making the population legible for taxation, as well as preventing horizontal solidarities from forming between populations (Perdue 2005; Dai 2009). Despite the drastic political changes that took place with the fall of the Qing, the rise of the Republicans, and the emergence of a local warlord regime in Amdo, the events of 1723–4 set the fundamental tenor of language and cultural policy throughout this period.

The language setting was most likely supportive throughout this era, although the population of Monguor speakers would have initially declined due to retaliation following some Monguor speakers' anti-Qing stance in the events of 1723–4 (Sullivan 2013). Nonetheless, the prestige of the Monguor languages would have been reconfirmed as the *tusi* were re-empowered, albeit with significant limitations, under the new administrative regime (Schram 2006; Roche 2015).

The domains of the Monguor languages remained relatively unchanged. Chinese remained an important tool for communication between the *tusi* and the imperial bureaucracy. Literary Tibetan remained important within Tibetan Buddhism, but the prestige and role of monasteries was significantly curtailed (Sullivan 2013). However, in a largely illiterate society, the Monguor languages would have retained their dominance in most domains of daily life.

The reproduction of the Monguor languages was mostly strong throughout this period, without any cause for transmission disruption or decline in speakers' attitudes.

Finally, it was probably during this period that heavily localized identities emerged in the region as a result of the Qing apartheid policies (Roche & Lcag mo tshe ring 2013), and were then strengthened by the pervasive localism that prevailed throughout China in the 1800s (Elverskog 2006) due to a steady and constant decline in centralized imperial authority. The Qing apartheid policy and the new localized identities it created probably caused the Monguor languages to begin diverging at this time, resulting in the distinct languages we see today (Roche 2015). Importantly, the

early years of this period saw the first usage of the term "Tu" in Chinese records to refer specifically to Monguor speakers (Cooke 2008).

3.4 1949–1958: Early communism   Communist forces entered Qinghai Province, where the vast majority of Monguor speakers live, in 1949 (Weiner 2012). Policies of the new government were generally cautious in their efforts to integrate the region into the new party-state. Cadres worked with local elites to implement policies, endeavoring to take cultural, linguistic, and social conditions into account. Initially, Communist minority cultural and linguistic policies were supportive and progressive. A statewide project was carried out to identify and classify minorities, ostensibly with the aim of better provisioning them with services (Mullaney 2011). On the basis of this project, scripts were developed for oral languages, minority publishing houses were established, and tentative efforts to implement bilingual education were begun (Tsung 2009). It was during this time that a script was developed for one of the Monguor languages, Mongghul, though it did not come into use until the 1980s (Limusishiden & Dede 2012; Shoji 2003). The impact of these policies, however, was generally low, due to the state's limited presence in the area (Weiner 2012).

The language setting saw an increased presence of Han Chinese in the area (Rohlf 2003)[26] and so the population of Monguor speakers would have declined in relative terms. This was especially the case for Mongghul speakers, whereas in-migration to the areas where Bonan and Mangghuer are spoken was lower.

The domains of the language remained mostly unchanged. Literary Tibetan was used in monasteries, Chinese in *shenjiao* rituals, Amdo Tibetan remained an important local *lingua franca*, and Monguor languages were used in all other domains. It was, however, during this time that written Chinese first began to have a public presence in the area, signaling a new role for writing as a non-liturgical technology.[27]

The reproduction of Bonan and Mangghuer would have remained basically unchanged, with strong intergenerational transmission, and positive language attitudes. Meanwhile, the reproduction of Mongghul began declining at this point, primarily due to in-migration, changed demographic context, and resultant language shift.

Finally, the new government's policy of working with local elites meant that the traditional power structures upon which local identities were based continued relatively unchanged throughout this period (Weiner 2012).

3.5 1958– ~1980: High socialism   The period 1958 to ~1980 was one of high socialist repression. The period began in 1958 with a violent military crackdown in response to a series of local uprisings throughout Amdo (Weiner 2012). Compulsory collectivization followed, along with iconoclastic attacks on traditional culture

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[26]Indicative of this trend, Rohlf (2003) estimates that more than 100,000 Han Chinese were resettled into Qinghai Province between 1958 and 1961.

[27]See Shoji (2003) for details of education among the Mongghul and Zhu & Stuart (1999) for education among the Mangghuer. Prior to this time, Chinese was used by local elites associated with the *tusi*. Its presence would primarily have been limited to government communications, *shenjiao* scripture and talismans, and, in a limited number of cases, the keeping of *jiapu* 'genealogies'. Beyond a small elite, the vast majority of Monguor speakers would have been illiterate in Chinese.

(Roche & Wen 2013) and minority languages (Tsung 2009), as well as massive demographic decline during the Great Leap Forward (1958–1961) and associated famine. The ideological campaigns of the era were intensified during the Cultural Revolution (1966–1976). Policy during this period was also unfavorable towards minority languages. Linguistic rights for minorities were construed as rightist and splittist. The prior, relatively supportive policies for minority languages were abandoned in favor of deliberate linguistic assimilation policies.

The language setting of the Monguor languages also changed, with prestige given to Chinese as the sole vehicle of socialist thought (Tsung 2009), and a large transfer of vocabulary from Chinese to the Monguor languages began (Limusishiden & Dede 2012). Demographically, all Monguor languages suffered, as the population of speakers became minoritized due to the continued resettlement of Han Chinese into the area.

The language domains of Monguor also contracted during this period, as Chinese became the sole language of all public discourse and the Monguor languages became "home languages."

The reproduction of all Monguor languages was likely impacted throughout this period. Emphasis on Chinese as a vehicle of socialism, and suspicion of minority languages as vehicles of sedition, restricted the transmission of the Monguor languages and negatively affected the attitude of speakers towards their languages.

During this period, all local and ethnic identities were suppressed as expressions of local chauvinism and splittism, and only identities predicated on socialism and patriotism were permitted (Tsung 2009).

3.6 ~1980–2000: A window opens Starting from around 1980, oppressive high socialist policies were repealed, following the institution of the *Gaige kaifang* (Open and Reform) agenda in 1978–9. This program implemented a series of economic, social, and cultural reforms that were enshrined in a new constitution, adopted in 1982. The new policies of this period reinstituted the freedom for minorities to develop and use their own languages (Tsung 2009). However, this right was predicated on the government's definition of the Tuzu as a nationality with a single common language. Even this limited right was only nominally provided in terms of education, publishing, or broadcast media in the Monguor languages, based on Mongghul as a standard variety (Zhu & Stuart 1999).

Demographically, the setting of the languages remained generally positive, but continuing in-migration to the area impacted the relative number of speakers.

In terms of domains, Tibetan regained some of its former prestige, but its influence was comparatively diminished, as enrollment in monasteries never recovered to previous levels. Meanwhile, Chinese continued gaining significance as the language of state-sponsored education and other state functions and also re-emerged as part of *shenjiao* practice. A localized media industry also started to grow, primarily in

the form of audiocassettes, most of which were either in local varieties of Chinese or Tibetan; Monguor languages did not partake in these new domains.[28]

Trends in reproduction established in the 1950s continued; Mongghul continued to undergo language shift while Mangghuer and Bonan were relatively stable. Speakers' attitudes towards all languages were likely relatively positive during this period of cultural and linguistic renaissance.

This period also allowed for the reclamation and re-expression of local identities that had been suppressed, but only along state-sanctioned ethnic lines (Mullaney 2011; Chao 2013). Localized, non-ethnic identities, especially those predicated upon pre-1949 political structures, did not reemerge. This was significant for the Monguor languages as, since the 1723–4 reforms, their identities were primarily localized, non-ethnic identities (Roche 2015; Roche & Lcag mo tshe ring 2013). Attempts were made to forge a unitary Tuzu identity, for example through the publication of magazines such as *Zhongguo Tuzu* (China's Tu), and although they were largely successful in forging a new identity that most Monguor speakers willingly claimed, this was not replicated in the creation of a new standardized language or culture associated with this identity.

3.7 2000–present: Assimilative modernization In 1999–2000, the central government began implementation of the *Xibu da kaifa* 'Develop the West' agenda (Goodman 2004; Barabantseva 2009; Potter 2010). This program was basically a modernization initiative for China's western regions, including Amdo. Under this agenda, roads and other infrastructure in the region were developed, nine-year education became compulsory, and the regional market-economy gathered momentum. However, the policy situation of all languages remained unchanged (Roche 2014b). Although the freedom to use and develop minority languages remains enshrined in the constitution, their delivery is largely predicated on government definitions of those languages that are based more on managerial pragmatics than more widely accepted definitions of language based on mutual intelligibility.[29]

The number of speakers of each of the languages remained relatively stable. However, as they continued to lose prestige, all languages have faced increasingly negative attitudes among their speakers. Furthermore, continuing in-migration into the areas where Monguor languages are spoken, and rotating labor out-migration of Monguor speakers, are also altering the demographic setting of the languages.

The most serious shift in this period occurred regarding domains. Although the situation was different for each of the Monguor languages, the overall pattern was the same: a multiplication of domains, and the total absence of Monguor languages

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[28]For one exception, see the work of Mongghul scholar Limusishiden, who has produced two Mongghul language programs: Learning English in Mongghul (https://archive.org/details/Mongghul), and Basic Health Knowledge in Huzhu Mongghul. (https://archive.org/details/TeachingBasicHealthKnowledgeIn-HuzhuMongghultu). Morcom (2008) discusses the new forms of Tibetan media that developed at this time.

[29]Sun (1992:2) states that "the use of two or more languages by a single nationality in China is not a rare phenomenon. According to preliminary statistics, of the 55 minorities in China, 15 (27.7%) use more than two languages."

from these domains. The case of (Qinghai) Bonan is illustrative. Tibetan continued to be an important language for religious purposes, but also took on new significance as the language of primary and lower secondary education, which became compulsory during this time. Tibetan also gained significance as the main language of local media: TV, DVD, audiocassette, and radio. Bonan was completely absent from all domains of communication beyond the home and village.

The reproduction of these languages was impacted in the post-2000 era. Mongghul and Mangghuer appear to be shifting to Chinese, though at different rates, with Mongghul shifting much faster, and Bonan towards Amdo Tibetan.

The government continued promulgating a unitary Tuzu identity in contrast to the more complex linguistic and cultural reality (Janhunen 2006; Mary Fried 2010). Meanwhile, widespread protests throughout Tibetan areas in 2008 (Smith 2010), self-immolations beginning in 2009 (Buffetrille & Robin 2012), and protests over language rights since 2010 (especially regarding bilingual education policy and practice: de Varennes 2012; Robin 2014), have produced a polarized ethnic environment in Amdo, placing greater emphasis on ethnic over local identities, and stressing ideologies of language purism and ethnicity based on linguistic homogeneity.

4. Discussion   Based on the two case studies above, we may now tentatively address our questions about the adaptive cycle, resilience thinking, and language endangerment. First, what were the drivers of change in the vitality of these languages that led to their endangerment? Were they internal or external to the system? Secondly, what is the nature of the historical trajectory that results in endangerment? Is there any evidence of a cycle? If language endangerment occurs according to the logic of the adaptive cycle, we should see *internal* system drivers resulting in a *cyclical* system. However, we see neither. In the following discussion, keep in mind that the quantifications and visualization of vitality should be interpreted as *indicators*, not *measurements*, of vitality; their value lies in highlighting patterns, not pinpointing values.

In the graphs below, neither case study shows clear evidence of a cyclical dynamic. A cyclical dynamic would manifest, in the bar graphs, as rising and falling waves of vitality, and in the radar graphs would appear as a "pulse" – a contraction and expansion of vitality – and yet neither pattern appears.

The bar graph for the vitality of the Saami languages shows a steady decline from the twelfth century, until the Indigenous revival of the late twentieth century, and the radar graphs do not demonstrate the pulsing morphology one would expect of a cycle. It is worth noting that not only the overall degree of vitality, but also the morphology of vitality – the relative contribution of different factors to overall vitality – also changes. A weighted system that explores the differing contribution of varying factors would be useful in better understanding vitality.

The Monguor languages shows a slight but steady decline until 1958, at which point vitality dropped precipitously, falling to levels very similar to those faced by the Saami languages during the high assimilationist period. Also similar to the Saami languages, the Monguor languages regained some vitality following the repeal of
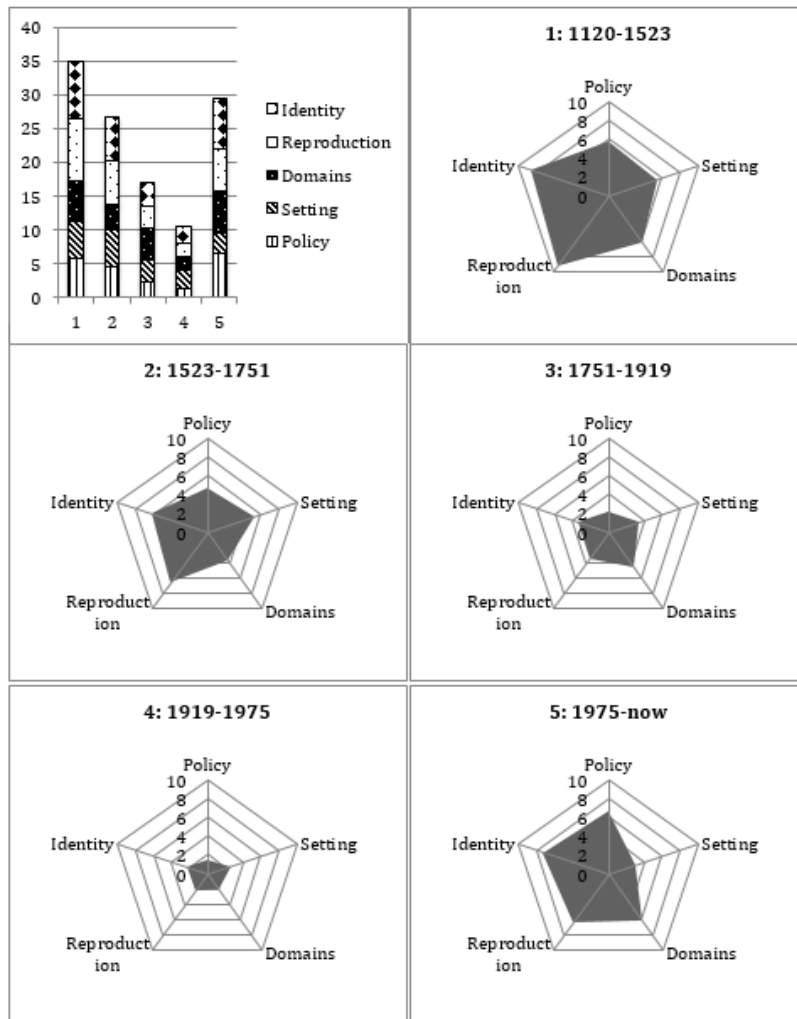
Figure 1. Visualizations of the diachronic vitality of the Saami languages. The bar graph shows sequential changes in overall vitality (out of a total of fifty) during the five time periods described above, and also indicates the contribution of each factor to overall vitality (scored from one to ten). The following radar graphs depict vitality during each period. All numerical representations of vitality should be read as approximate indicators rather than precise measurements.

assimilationist policies; however, unlike the Saami languages, this "rebound" effect was relatively slight, and was then reversed due to subsequent developments. Again, the multi-dimensionality of the radar diagrams highlights the complexity of changes in vitality and the loss of detail that results in imagining it as a monolithic factor.

What do these case studies tell us more broadly about the historical trajectory of language endangerment? How representative are they?
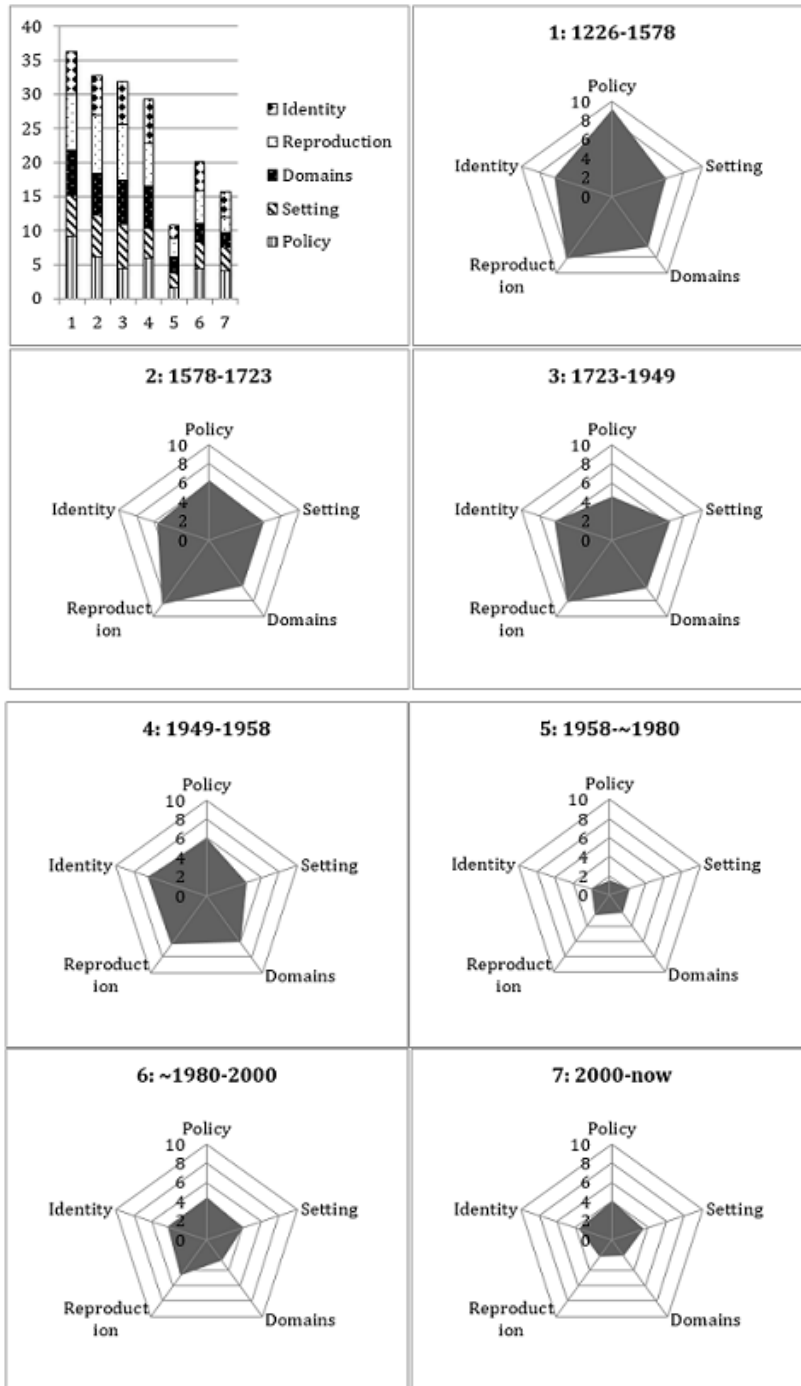
Figure 2. Visualizations of the diachronic vitality of the Monguor languages. See caption for Figure 1 for details.

Two caveats are necessary to interpret this data. First, it might be argued that greater time-depth would reveal a cyclical dynamic. However, extending the scale beyond the present limits would exceed the dimensions of anything that could identifiably be called a continuous language community; even 800 years is pushing the boundary of continuity. Secondly, it might be argued that the observed patterns result from the periodization used, and that a more finely graded periodization would reveal a cyclical dynamic. However, the available data does not allow for a more fine-grained periodization. In order to address this shortcoming, it would be ideal to undertake vitality histories for a greater number of languages, but as this was not possible, I have instead made recourse to the broader literature on language endangerment to assess the representativeness of these two cases.

Consideration of a broad comparative context further suggests that the history of language vitality is not cyclical, but is best portrayed as stochastic, linear, and contingent. Consider, for example, the case of Castilian, which went from a small, regional language to the *lingua franca* of a global empire and one of the world's most widely-spoken languages. Arabic, English, French, and Russian followed similar patterns. Consider cases of the reverse, where a previously widespread, dominant language has experienced a reversal in fortunes, such as Quechua, Nahuatl, or Aragonese. The rapid invention and institutional infusion of vitality into such languages as Bahasa Indonesia, Putonghua (Modern Standard Chinese), and Tok Pisin presents yet another possible case, as does the long-standing maintenance of high diversity found in Oceania or Amazonia – a form of persistent dynamic equilibrium. The fact that neither the Monguor nor Saami languages follow a cyclical pattern of vitality, therefore, does not appear to be aberrant. Rather, it is suggestive of the fact that language endangerment is the result of historical contingency rather than inexorable mechanics. It therefore seems that language endangerment is more accurately represented through specific, contextualized histories, rather than generic, universal historical templates.

This discussion of the morphology of language endangerment trajectories is also suggestive regarding questions of the *drivers* of language endangerment. Are they internal or external to the system – to the community that speaks the language? In both cases here, the drivers of vitality were almost exclusively external to the population: the states, both empires and modern nation-states, within which the Saami and Monguor languages are found. While we know that *languages* change as a result of internal factors, such as the development of orthography, deliberate reforms, or fashion, the cases above suggest that *language vitality* changes primarily in accord with external drivers, namely, neighboring communities with whom an uneven balance of power exists. The declining vitality of the Saami languages was largely the result of the deliberate efforts of colonial and imperial states. The vitality of the Monguor languages was supported by various imperial states, but is now undermined by the modern state.

This fits with broader patterns observed elsewhere in studies of language endangerment – that endangerment results primarily from systemic power imbalances, particularly the minoritization of languages within state territories (Williams 2005; Evans 2010). The importance of power inequities in driving endangerment can be appre-

ciated by looking at some linguistic features that are often considered to decrease vitality, but which are actually only significant in situations of power disparity. The number of speakers, for example, is not in and of itself an indicator of language vitality (Barreña et al. 2007). Numerous small languages have persisted for centuries; in fact, most languages, for most of history, have been spoken by small populations. It is only when a small population is placed in a subordinate position to an expansive, dominant one that small population size becomes problematic. Similarly, bilingualism does not, in itself, pose a threat to language vitality. However, bilingualism becomes problematic when it is "inegalitarian" (Hagège 2009:79), "when one language exerts formidable pressure upon the other because it is in a much stronger position due to its social status or its widespread national and international use." Likewise, a high degree of lexical borrowing does not indicate a decline in vitality – consider English – but can bring about language shift in contexts where speakers' attitudes result in preference for the source language, due to perceived inadequacy of their own language (Thomason & Kaufman 1988). Experience from the study of small populations, bilingualism, and lexical borrowing therefore indicate that power disparities are crucial to language endangerment. This again suggests that a weighted, multifactorial measure of vitality would be useful in capturing the nature of language endangerment.

Recognizing the central role of power in the production of language endangerment raises the issue of agency. To say that language vitality is driven, and language endangerment produced, by external agents, does not imply a wholesale denial of agency to the speakers of endangered languages. We know that subaltern agency exists even in situations of extreme power imbalance (Roche & Wen 2013; Scott 1985; Scott 1990) and that speaker attitudes have an important role to play in language maintenance (Bradley 2002; Perlin 2009; Dorian 2014). However, the agency of powerful, external actors drives the dynamics of language endangerment. To suggest otherwise is to blame speakers of endangered languages for "failing" to maintain their language (in the same way that Diamond 2011 blames societies for "choosing" to fail – see McAnany & Yoffee 2009 for a critique of this approach). In suggesting that internal system drivers are paramount, the adaptive cycle, as a model of social change, conceals the fact that language endangerment is typically produced in the context of power inequalities that restrain the capacity of communities to enact revitalization and maintenance. In the cases above, it is difficult to see how the Saami and Monguor communities could have driven the vitality of their languages in the face of such overwhelming state-sponsored assimilationist programs. This does not deny their agency, but does recognize the limitations within which this agency existed.

The adaptive cycle, therefore, is not only an inadequate model for language endangerment, revitalization, and maintenance, but is also highly problematic. It not only fails to represent the dynamics and drivers of language endangerment, but actively conceals the agents of endangerment, thus impeding revitalization and maintenance efforts. Does this suggest that resilience thinking is therefore useless in language maintenance and revitalization? Below, I argue that resilience thinking could have

practical benefits for language maintenance and revitalization, but only when is used without reference to the adaptive cycle.

Conceptualization of resilience without the adaptive cycle is aided by the fact that "resilience" emerged from two disciplines simultaneously – ecology (Holling 1973) and psychology (Garmezy 1970)[30] – only one of which, ecology, necessitates the use of the adaptive cycle. Despite this important difference, the widespread conflation of these two concepts has been facilitated by their convergence on a single object of study: human communities. Ecologically derived resilience studies focus on "socio-ecological resilience," and essentially extend the resilience of complex natural systems into the human realm, whereas psychologically derived concepts of resilience focus on "community resilience," and extend the psychological properties of individuals to the group. Although an attempt has been made to forge a synthesis between the two types of resilience (Berkes & Ross 2013), I argue that ecological and psychological resilience are fundamentally incompatible.

As mentioned above, the greatest difference between the two versions of resilience is their differing temporal frameworks. While ecological resilience rests on the adaptive cycle, psychological resilience assumes a linear, historical framework, focused on life histories rather than life cycles. In some sense, ecological resilience, and all cyclical models of history, are fundamentally *ahistorical*, in that they lack the specificity, contingency, and agential causality of narrative history. Although attempts have been made to show variation within the basic pattern of adaptive cycles (Gunderson & Holling 2002), such efforts either undermine the cyclical nature of the adaptive cycle, or retain its basic ahistorical character. In contrast, psychological resilience focuses on specific events within the life history of individuals and communities, and responses to disturbing events, be they the death of a parent, a natural disaster such as a fire or flood, or the economic collapse of a resource-dependent community.

Ecological and psychological resilience also assume fundamentally different attitudes towards capital (resources, potential). Within ecology, the accumulation of capital is thought to drive a system to inevitable collapse (Gunderson & Holling 2002). The paradigmatic example of this is the accumulation of litter on a forest floor, which leads to a fire, and thus the destruction or release of capital, followed by a resilient response, and then a new phase in the adaptive cycle. In contrast, psychological resilience adopts a fundamentally positive attitude towards capital, and assumes that the accumulation of capital is a basis for increased resilience in individuals and communities (Amundsen 2012; Besser 2013; Breton 2001; Kirmayer et al. 2009; Lambert et al. 2012; Sherrieb et al. 2010; Wilson 2014). In this sense, a psychological resilience framework is broadly concordant with our present understanding of the importance of legitimation and empowerment in language revitalization and maintenance (Williams 2005).

Debates in the psychological resilience literature regarding capital and resilience (Ledogar & Fleming 2008; Carpenter 2013) therefore have potential to inform a lin-

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[30]Although the term "resilience" does not appear in Garmezy's 1970 paper, Luthar et al. (2000:2) point out that the article discussed concepts that "may be viewed today as prognostic of relatively resilient trajectories." Garmezy does not appear to have actually used the term "resilience" until the 1990s (e.g., Garmezy 1991).

guistic resilience framework, and so I examine a few key issues here. Wilson (2012; 2014), for example, looks at how a combination of well-developed environmental, social, and economic capital is important in fostering community resilience. Sherrieb et al. (2010) focus specifically on measuring the contribution of economic capital to community resilience, while Matarrita-Cascante & Tejos (2013) examine how community resilience can be fostered by promoting equitable distribution and access to economic capital. Regarding social capital, a debate exists on how bridging (inter-communal) and bonding (intra-communal) capital contribute differently to community resilience (Newman & Dale 2004; Tomkins & Adger 2004). Berliner et al. (2012) discuss how issues of bonding social capital work out at the community level in practical terms through such social practices as gossiping, envy, and sharing. The practice and theory of language maintenance and revitalization has much to gain from a discussion of how various forms of capital contribute to community resilience.

Another issue which has emerged in the community resilience literature that may contribute to developing a resilience framework for language revitalization and maintenance focuses on different types of disturbances and how these require different types of response from communities. Lambert et al. (2013), for example, discusses how *endurance*, rather than resilience, has characterized the Māori response to the 2011 Christchurch earthquake, due to the ongoing nature of the disturbance. Wilson (2012), in his study of globalization, looked at how resilience was manifested differently in response to "sudden" versus "slow onset" disasters. Gallopín (2006) differentiates between "perturbations" (discrete stochastic events) and "stress" (persistent pressures), while Besser (2013) distinguishes "corrosive" disturbances that break down community links, and "consensus crises," which build community solidarity and unity. A resilience framework for language maintenance and revitalization could, for example, attempt to establish a typology of "vitality disturbances" in order to more effectively coordinate language planning activities.

5. Conclusion   This article has sought to critically examine the application of resilience thinking to the study of language endangerment, maintenance, and revitalization. In particular, I singled out the concept of the adaptive cycle, and suggested that this aspect of resilience thinking is inappropriate for a resilience framework for language maintenance and revitalization.

This conclusion was based on a thought experiment focusing on the history of vitality of two endangered language groups: the Saami languages of farthest northern Europe, and the Monguor languages of the northeast Tibetan Plateau. An examination of the history of these language groups, and how their vitality changed over time, resulting in endangerment, suggested that the adaptive cycle is ill-fitted to the observed realities of the trajectories and drivers of endangerment. Neither a cyclical trajectory, nor a predominance of internal drivers, was observed in either case, as would be expected if the adaptive cycle were adequately descriptive of the process of language endangerment. These findings were also supported by reference to the general literature on language endangerment. The adaptive cycle, therefore, seems poorly suited to describing how language vitality changes and how languages become

endangered, and therefore seems of limited use in constructing a new framework for language maintenance and revitalization theory and practice.

Does this mean that resilience thinking has no part to play in language maintenance and revitalization? I argue that a resilience framework is still possible. Acknowledging the distinction between ecological and psychological resilience and the differing role of the adaptive cycle in each is an important step in building such a framework. Psychological resilience assumes a stochastic, linear historical framework that more closely maps the observed historical trajectories of endangered languages. I therefore suggested that an examination of the psychological literature on community resilience, rather than the ecological literature on socio-ecological resilience, could provide a useful basis for constructing a resilience framework for language maintenance and revitalization. In particular, I highlighted two issues that may provide fertile grounds for further exploration in this regard: the contribution of various types of capital to community resilience, and the way in which different types of disturbances necessitate differing communal responses. It is hoped that examination of such issues might lead to practical outcomes that will support language maintenance and revitalization.

References

Amundsen, Helene. 2012. Illusions of resilience? An analysis of community responses to change in northern Norway. *Ecology and Society* 17(4). 46.

Austin, Peter K. 2010. Current issues in language documentation. *Language Documentation and Description* 7. 12–33.

Axelsson, Per. 2010. Abandoning 'the other': Statistical enumeration of the Swedish Sami, 1700 to 1945 and beyond. *Berichte zur Wissenschaftsgeschichte* 33 (September 2010). 263–279.

Barabantseva, Elena V. 2009. Development as localization: Ethnic minorities in China's official discourse on the western development project. *Critical Asian Studies* 41(2). 225–254.

Barreña, Andoni, Esti Amorrortu, Ane Ortega, Belen Uranga, Esti Izagirre & Itziar Idiazabal. 2007. Does the number of speakers of a language determine its fate? *International Journal of the Sociology of Language* 186. 125–139.

Barua, Anamika, Suparana Katyaini, Bhupen Mili & Pernille Gooch. 2013. Climate change and poverty: Building resilience of rural mountain communities in South Sikkim, Eastern Himalaya, India. *Regional Environmental Change* 14(1). 267–280. doi:10.1007/s10113-013-0471-1.

Berkes, Fikret & Helen Ross. 2013. Community resilience: Toward an integrated approach. *Society and Natural Resources: An International Journal* 26(1). 5–20. doi:10.1080/08941920.2012.736605.

Berliner, Peter, Line Natascha Larsen & Elena de Casas Soberón. 2012. Case study: Promoting community resilience with local values – Greenland's Paamiut Asasara. In Ungar, Michael (ed.), *The social ecology of resilience: A handbook of theory and practice*, 387–297. New York: Springer. doi:10.1007/978-1-4614-0586-3_30.

Besser, Terry. 2013. Resilient small rural towns and community shocks. *Journal of Rural and Community Development* 8(1). 117–134.

Bonanno, George A., Sandro Galea, Angela Bucciarelli & David Vlahov. 2006. Psychological resilience after disaster: New York City in the aftermath of the September 11th terrorist attack. *Psychological Science* 17(3). 181–186

Bourbeau, Philippe. 2013. Resiliencism: Premises and promises in securatization research. *Resilience: International Policies, Practices, and Discourses* 1(1). 3–17.

Bradley, David. 2002. Language attitudes: The key factor in language maintenance. In Bradley, David & Maya Bradley (eds.), *Language endangerment and language maintenance*, 1–10. London: Routledge Curzon.

Bradley, David. 2010a. Language endangerment and resilience linguistics: Case studies of Gong and Lisu. *Anthropological Linguistics* 52(2). 123–140.

Bradley, David. 2010b. Resilience thinking and language endangerment. In Bai, Bibo & David Bradley (eds.), *Extinction and retention of mother tongues in China*, 23–37. Beijing: Nationalities Publishing House.

Bradley, David. 2011. Resilience linguistics, orthography, and the Gong. *Language and Education* 25(4). 349–360.

Breton, Margot. 2001. Neighborhood resiliency. *Journal of Community Practice* 9(1). 21–36.

Broadbent, Noel. 2010. *Lapps and labyrinths: Saami prehistory, colonization, and cultural resilience*. Washington: Smithsonian Institute Scholarly Press.

Brook, Timothy. 2010. *The troubled empire*. Cambridge, MA: Belknap Press of Harvard University Press.

Buffetrille, Katia & Francoise Robin (eds). 2012. Tibet is burning. Self-immolation: ritual or political protest? *Revue d'Études Tibétaines* 25 (Special issue).

Canadine, David. 2013. *The undivided past: History beyond our differences*. London: Allen Lane.

Carpenter, Ann. 2013. Social ties, space, and resilience: Literature review of community resilience to disasters and constituent social and built environment factors. Federal Reserve Bank of Atlanta: Community and Economic Discussion Paper. 2–13.

Chapel, Laetitia, Xavier Castelló, Claire Bernard, Guillaume Deffuant, Víctor M. Eguíluz, Sophie Martin & Maxi San Miguel. 2010. Viability and resilience of languages in competition. *PLOS ONE* 5(1). e8681.

Chao, Emily. 2013. *Lijiang stories: Shamans, taxi drivers, and runaway brides in reform-era China*. Seattle: University of Washington Press.

Cooke, Susette. 2008. Becoming and unbecoming Tu: Nation, nationality, and exilic agency in the People's Republic of China. In Allatson, Paul & Jo McCormack (eds.), *Exile cultures, misplaced identities*, 33–56. Amsterdam: Rodopi.

Dahl, Östen. 2007. *Grammaticalization in the North: Noun phrase morphosyntax in Scandinavian vernaculars* (Studies in Diversity Linguistics 6). Berlin: Language Science Press.

Dai, Yincong. 2009. *The Sichuan frontier and Tibet: Imperial strategy in the early Qing*. Seattle: University of Washington Press.

Daurio, Maya. 2012. The Fairy language: Language maintenance and social-ecological resilience among the Tarali of Tichurong, Nepal. *Himalaya, The Journal of the Association for Nepal and Himalayan Studies* 31(1). 7–21.

Daveluy, Michelle. 2007. *Resilience and language.* http://ipssas.ku.dk/publications/publindex2005/09_Daveluy.pdf.

Davoudi, Simon & Porter, Libby. 2012. Applying the resilience perspective to planning: Critical thoughts from theory and practice. *Planning Theory & Practice* 13(2). 299–333.

de Varennes, Fernand. 2012. Language rights and Tibetans in China: A look at international law. In Gya, Kunsang, Andrea Snavely & Elliot Sperling (eds.), *Minority languages in today's global society*, 14–61. New York: Trace Foundation.

Dede, Keith R. S. 2003. The Chinese language in Qinghai. *Studia Orientalia* 95 (2003). 321–346.

Diamond, Jared. 2011. *Collapse: How societies choose to fail or succeed*. Revised edn. New York: Penguin.

Dorian, Nancy C. 2014. *Small-language fates and prospects: Lessons of persistence and change from endangered languages: Collected essays*. (Brill's Studies in Language, Cognition and Culture 6). Leiden: Brill.

Dwyer, Arienne. 2013. Tibetan as a dominant sprachbund language: Its interactions with neighboring languages in Gray Tuttle, Kunsang Gya. In Dare, Karma & JonathanWilber (eds.), *The third international conference on Tibetan language volume 1: Proceedings of the panels on domains of use and linguistic interactions*, 259–302. New York: Trace Foundation.

Elverskog, Johan. 2006. *Our great Qing: The Mongols, Buddhism and the state in late imperial China*. Honolulu: University of Hawaii Press.

Evans, Nicholas. 2010. *Dying words: Endangered languages and what they have to tell us*. Malden: Wiley-Blackwell.

Evjen, Bjørg. 2004. "…thought I was just a Same." 'Lulesame' and 'Lulesamisk area' as new political and identity-shaping expression. *Acta Borealia* 21(1). 41–53.

Faehndrich, Burgel. 2007. *Sketch grammar of the Karlong variety of Mongghul, and dialectal survey of Mongghul*. Honolulu: University of Hawai'i. Doctoral dissertation.

Fishman, Joshua A. 1991. *Reversing language shift: Theoretical and empirical foundations of assistance to threatened languages*. Clevedon: Multilingual Matters.

Folke, Carl, Stephen R. Carpenter, Brian Walker, Martin Scheffer, Terry Chapin & Johan Rockström. 2010. Resilience thinking: Integrating resilience, adaptability, and transformability. *Ecology and Society* 15(4). 20.

Fried, Mary Heather Yazak. 2010. *Dressing up, dressing down: Ethnic identity among the Tongren Tu of northwest China*. Buffalo, NY: University at Buffalo. Doctoral dissertation.

Fried, Robert Wayne. 2010. *A Grammar of Bao'an Tu, a Mongolic language of northwest China*. Buffalo, NY: University at Buffalo. Doctoral dissertation.

Gallopín, Gilberto C. 2006. Linkages between vulnerability, resilience, and adaptive capacity. *Global Environmental Change* 16. 293–303.

Garmezy Norman. 1991. Resilience in children's adaptation to negative life events and stressed environments. *Pediatrics* 20(9). 459–466.

Garmezy, Norman. 1970. Process and reactive schizophrenia: Some conceptions and issues. *Schizophrenia Bulletin* 1(2). 30–74.

Georg, Stefan. 2003. Mongghul. In Janhunen, Juha (ed.), *The Mongolic Languages*, 286–306. London: Routledge.

Gibbon, Edwin. 2014. *The History of the Decline and Fall of the Roman Empire (Online Edition)*. Adelaide: University of Adelaide. https://ebooks.adelaide.edu.au/g/gibbon/edward/g43d/.

Giles, Howard & Jane Byrne. 1982. An intergroup approach to second language acquisition. *Journal of Multilingual and Multicultural Development* 3(1). 17–40.

Goldin-Meadow, Susan. 2005. *The resilience of language: What gesture creation in deaf children can tell us about how all children learn language*. New York: Psychology Press.

Goodman, David S.G. 2004. The campaign to 'open up the west': National, provincial-level, & local perspectives. *China Quarterly* 178. 317–334.

Granqvist, Karin. 2004. Confrontation and conciliation: The Sami, the crown, and the court in seventeenth-century Swedish Lapland. *Acta Borealia* 21(2). 99–116.

Grenoble, Lenore A. & Lindsay J. Whaley. 2006. *Saving languages: An introduction to language revitalization*. Cambridge: Cambridge University Press.

Gunderson, Lance H. & Crawford S. Holling (eds.). 2002. *Panarchy: Understanding transformations in human and natural systems*. Washington: Island Press.

Hagège, Claude. 2009. *On the death and life of languages*. New Haven: Yale University Press. (Translated by Jody Gladding).

Hirvonen, Vuokko. 2004. *Sámi culture and the school: Reflections by Sámi teachers and the realization of the Sámi school. An evaluation study of Reform 97*. Kárášjohka, Norway: ČállidLágádus.

Holling, Crawford. 2001. Understanding the complexity of economic, ecological, and social systems. *Ecosystems* 4(5). 390–405.

Holling, Crawford. 1973. Resilience and stability of ecological systems. *Annual Review of Ecology and Systematics* 4. 1–23.

Huss, Leena. 2003. "We'll have to take it back!" Reclaiming Meänkieli in a Tornedalian school in Sweden. In Huss, Leena, Antoinette Camilleri Grima & Kendall A. King (eds.), *Transcending monolingualism: Linguistic revitalization in education*, 225–242. Lisse: Swets and Zeitlinger.

Janhunen, Juha, Lionel Ha Mingzhong & Joseph Tshe dPag rNam rGyal. 2007. On the language of the Shaowa Tuzu in the context of the ethnic taxonomy of Amdo Qinghai. *Central Asiatic Journal* 51(2). 177–195.

Janhunen, Juha. 2003. Shirongol and Shirongolic. *Studia Etymologica Cracoviensia* 8. 83–89.

Janhunen, Juha. 2005. The role of the Turkic languages in the Amdo Sprachbund. *Studia Turcologica Cracoviensia* 10. 113–122.

Janhunen, Juha. 2006. The Monguor: Emerging diversity of a vanishing people. In Schram, Louis M.J. [1954, 1957, 1961], The Monguors of the Kansu-Tibetan frontier Part I: Their origin, history and social organization; Part II: Their religious life; Part III: Records of the Monguor clans: History of the Monguors in Huanchung and the chronicles of the Lu family. Xining City: Plateau Publications, 26–29.

Jansson, Sven & Bengt Lundberg. 1987. *Runes in Sweden*. Stockholm: Gidlund.

Karppi, Kristiina. 2001. Encountering different territorialities: Political fragmentation of the Sami homeland. *Tijdschrift voor Economische en Sociale Geograpfie* 92(4). 394–404.

Kent, Neil. 2008. *A concise history of Sweden*. Cambridge: Cambridge University Press.

Kim, Stephen S. 2003. Santa. In Janhunen, Juha (ed.), *The Mongolic Languages*, 346–363. London: Routledge.

Kirmayer, Laurence J., Megha Sehdev, Rob Whitley, Stéphane F. Dandeneau & Colette Isaac. 2009. Community resilience: Models, metaphors, and measures. *Journal of Aboriginal Health* 5(1). 62–117.

Krauss, Michael. 1997. The indigenous languages of the North: A report on their present state. In Shoji, Hiroshi & Juha Janhunen (eds.), *Northern minority languages: Problems of survival* (Senri Ethnological Studies 44), 1–34. Osaka: National Museum of Ethnology.

Krauss, Michael. 2007. Classification and terminology for degrees of language endangerment. In Brenzinger, Matthias (ed.), *Language diversity endangered*, 1–8. Berlin: De Gruyter Mouton.

Kroeber, Alfred. 1919. On the principle of order in civilization as exemplified by changes of fashion. *American Anthropologist* 21(3). 235–263.

Lambert, Simon, Melanie Mark-Shadbolt, Jamie Ataria & Amanda Black. 2012. Indigenous resilience through urban disaster: The Māori response to the 2010 and 2011 Christchurch Otautahi earthquakes. *Proceedings of International Indigenous Development Research Conference 2012*, June 2012, Auckland, New Zealand. 234–242.

Lane, Pia. 2011. The birth of the Kven language in Norway: Emancipation through state recognition. *International Journal of the Sociology of Language* 2011(209). 57–74.

Lantto, Patrik & Ulf Mörkenstam. 2008. Sami rights and Sami challenges. *Scandinavian Journal of History* 33(1). 26–51.

Larsson, Lars-Gunnar. 2012. Variation in Ume Saami: The role of vocabulary in dialect descriptions. *Networks, interaction and emerging identities in Fennoscandia and beyond*, October 2009, Tromsø, Norway. 285–298.

Ledogar, Robert & John Fleming. 2008. Social capital and resilience: A review of concepts and selected literature relevant to aboriginal youth resilience research. *Pimatisiwin* 6(2). 25–46.

Leinonen, Marja. 2007. The Filman Sami on the Kola Peninsula. In Nuorluoto, Juhani (ed.), *Slavica Helsingiensia: Topics on the ethnic, linguistic and cultural making of the Russian North* 32. 138–162.

Lehtola, Veli-Pekka. 1997. *Saamelaiset. Historia, yhteiskunta, taide*. Jyväskylä: Gummerus.

Lewis, M. Paul & Gary F. Simons. 2010. Assessing endangerment: Expanding Fishman's GIDS. *Revue Roumaine de Linguistique* 55(2). 103–120. http://www.lingv.ro/RRL22010art01Lewis.pdf.

Lewis, M. Paul, Gary F. Simons & Charles D. Fenning (eds.). 2014. *Ethnologue: Languages of the world, 17th edn*. Dallas: SIL International. http://www.ethnologue.com.

Limusishiden & Keith Dede. 2012. The Mongghul experience: Consequences of language policy shortcomings. *International Journal of the Sociology of Language* 2012(215). 101–124.

Lindmark, Daniel. 2006. Pietism and colonialism: Swedish schooling in eighteenth-century Sápmi. *Acta Borealia* 23(2). 116–129.

Lindmark, Daniel. 2013. Colonial encounter in early modern Sápmi. In Naum, Magdalena & Jonas M. Nordin (eds.), *Scandinavian colonialism and the rise of modernity: Small time agents in a global era*, 131–146. New York: Springer.

Lipman, Jonathan N. 1998. *Familiar strangers: A history of Muslims in northwest China*. Seattle: University of Washington Press.

Luthar, Suniya, Dante Cicchetti & Bronwyn Becker. 2000. The construct of resilience: A critical evaluation and guidelines for future work. *Child Development* 71(3). 543–562.

Makley, Charlene, Keith Dede, Hua Kan & Wang Qingshan. 1999. The Amdo dialect of Labrang. *Linguistics of the Tibeto-Burman Area* 22(1). 97–127.

Matarrita-Cascante, David & Bernardo Trejos. 2013. Community resilience in resource-dependent communities: A comparative case study. *Environment and Planning A* 45(6). 1387–1402.

McAnany, Patricia A. & Norman Yoffee. 2010. *Questioning collapse: Human resilience, ecological vulnerability, and the aftermath of empire*. Cambridge: Cambridge University Press.

Minde, Henry. 1998. Constructing 'Laestadianism': A case for Sami survival? *Acta Borealia* 15(1). 5–25.

Minde, Henry. 2003. Assimilation of the Sami – implementation and consequences. *Acta Borealia* 20(2). 121–146.

Morcom, Anna. 2008. Getting heard in Tibet: Music, media, and markets. *Consumption Markets and Culture* 11(4). 259–285.

Mullaney, Thomas S. 2011. *Coming to terms with the nation: Ethnic classification in modern China*. Berkeley: University of California Press.

Mustonen, Tero & Kaisu Mustonen. 2011. *Eastern Sámi atlas*. Vaasa: Snowchange.

Nelson, Diane & Ida Toivonen (eds.). 2007. *Saami linguistics*. Philadelphia: John Benjamins.

Newman, Lenore & Ann Dale. 2005. Network structure, diversity, and proactive resilience building: A response to Tompkins and Adger. *Ecology and Society* 10(1). r2.

Nugteren, Hans. 2011. Mongolic phonology and the Qinghai-Gansu languages. Utrecht: LOT, Netherlands Graduate School of Linguistics.

Olthuis, Maja-Liisa, Suvi Kivelä & Tove Skutnabb-Kangas. 2013. *Revitalising indigenous language: How to recreate a lost generation*. New York: Multilingual Matters.

Paine, Robert. 1982. *Dam a river, damn a people? Saami (Lapp) livelihood and the Alta/Kautokeino hydro-electric project and the Norwegian Parliament*. IWGIA Doc. 45.

Perdue, Peter. 2005. *China marches west: The Qing conquest of central Eurasia*. New Haven: Yale University Press.

Perlin, Ross. 2009. Language attitudes of the T'rung. *Linguistics of the Tibeto-Burman Area* 32(1). 91–113.

Peura, Markku, Veera Jokirinne, Tore Hjorth, Eva Törmä, Per Jonas Partapuoli & Susanne Sznajderman-Rytz. 2014. *Continued lack of initiatives in the implementation of minority rights in Sweden*. http://www.str-t.com/files/1401391193-letter_to_council_of_europe_28_may_2014.pdf.

Pietikäinen, Sari. 2008a. Sami in the media: Questions of language vitality and cultural hybridization. *Journal of Multicultural Discourses* 3(1). 22–35.

Pietikäinen, Sari. 2008b. Broadcasting indigenous voices: Sami minority media productions. *European Journal of Communication* 23(2). 173–191.

Pietikäinen, Sari, Leena Huss, Sirkka Laihiala-Kankainen, Ulla Aikio-Puoskari & Pia Lane. 2010. Regulating multilingualism in the North Calotte: The case of Kven, Meänkialli, and Sámi languages. *Acta Borealia* 27(1). 1–23.

Potanin, Grigorij. 1893. Тангутско-тибетская окраина Китая и Центральная Монголія. Путешествіе Г. Н. Потанина, 1884–1886 [The Tangut-Tibetan borderlands of China and central Mongolia, The expedition of G. N. Potanin, 1884–1886]. Saint Petersburg: Imperial Russian Geographic Society.

Potter, Pitman. 2010. Economy and development on the inner periphery. In Potter, Pitman (ed.), *Law, policy, and practice on China's periphery: Selective adaptation and institutional capacity*, 116–141. London: Routledge.

Rasmussen, Torkel & John Shaun Nolan. 2011. Reclaiming Sámi languages: Indigenous language emancipation from east to west. *International Journal of the Sociology of Language* 209. 35–55.

Robin, Françoise. 2014. Streets, slogans and screens: New paradigms for the defense of the Tibetan language. In Brox, Trine & Ildikó Bellér-Hann (eds.), *On the fringes of the harmonious society: Tibetans and Uyghurs in socialist China*, 209–234. Copenhagen: NIAS Press.

Roche, Gerald & Lcag mo tshe ring. 2013. Notes on the maintenance of diversity in Amdo: Language use in Gnyan thog village annual rituals. *Studia Orientalia* 113. 165–179.

Roche, Gerald & Wen Xiangcheng. 2013. Modernist iconoclasm, divine power, and resilience among the Mangghuer of the northeast Tibetan Plateau. *Asian Ethnology* 72(1). 85–117.

Roche, Gerald, Ban+de mkhar, Bkra shis bzang po, G.yu lha, Snying dkar skyid, Tshe ring rnam gyal, Zla ba sgrol ma & Kevin Stuart. 2010. Participatory culture documentation on the Tibetan Plateau. *Language Description and Documentation* 8. 147–165.

Roche, Gerald. 2011. *Nadun: Ritual and the dynamics of diversity in northwest China's Hehuang region*. Australia: Griffith University. Doctoral dissertation.

Roche, Gerald. 2014a. Flows and frontiers: Landscape and cultural dynamics on the northeast Tibetan Plateau. *The Asia Pacific Journal of Anthropology* 15(1). 1–25.

Roche, Gerald. 2014b. The Vitality of Tibet's Minority Languages in the Twenty-first Century: Preliminary Remarks. *Multiethnica* 35:18–24.

Roche, Gerald. 2015. Nadun: Ritual and history on the northeast Tibetan plateau. In Walter, Mariko Namba & James P. Ito-Adler (eds.), *The silk road: Interwoven history. Volume 1: Long-distance trade, culture, and society*, 310–347. Cambridge, MA: Cambridge Institutes Press and the Association for Central Asian Civilizations and Silk Road Studies.

Rohlf, Gregory. 2003. Dreams of oil and fertile fields: The rush to Qinghai in the 1950s. *Modern China* 29(4). 455–489.

Rydving, Håkan. 2004. *The end of drum-time: Religious change among the Lule Saami, 1670s-1740s*. Uppsala: Uppsala University Press.

Ryymin, Teemu. 2001. Creating Kvenness: Identity building among arctic Finns in northern Norway. *Acta Borealia* 18(1). 51–67.

Sallabank, Julia. 2013. *Attitudes to endangered languages: Identities and policies*. Cambridge: Cambridge University Press.

Salminen, Tapani. 2007. Europe and North Asia 211–282. In Moseley, Christopher (ed.), Encyclopedia of the World's Endangered Languages. London: Routledge.

Scheller, Elisabeth. 2011. The Sámi language situation in Russia. Ethnic and linguistic context of identity: Finno-Ugric minorities. *Uralica Helsingiensa* 5. 79–96.

Scheller, Elisabeth. 2013. Kola Sami language revitalization – opportunities and challenges. In Andersson, Kajsa (ed.), *L'Image du Sápmi II: etudes compares/ texts réunis par Kajsa Andersson. Humanistica Oerebroensia, Artes et linguae* 15, 392–421. Örebro: Örebro University.

Schram, Louis M.J. 2006 [1954, 1957, 1961] The Monguors of the Kansu-Tibetan frontier Part I: Their origin, history and Social Organization; Part II: Their religious life; Part III: Records of the Monguor clans: History of the Monguors in Huanchung and the chronicles of the Lu family, Kevin Stuart (ed.). Xining City: Plateau Publications.

Scott, James. 1985. *Weapons of the weak: Everyday forms of peasant resistance*. New Haven: Yale University Press.

Scott, James. 1990. *Domination and the arts of resistance: Hidden transcripts*. New Haven: Yale University Press.

Scott, James. 1998. *Seeing like a state: How certain schemes to improve the human condition have failed*. New Haven: Yale University Press.

Scott, Mark. 2006. Resilience: A conceptual lens for rural studies? *Geography Compass* 7(9). 597–610.

Selle, Per & Kristin Strømsnes. 2010. Sámi citizenship: Marginalization or integration. *Acta Borealia* 27(1). 66–90.

Sergejeva, Jelena. 2000. The eastern Sami: A short account of their history and identity. *Acta Borealia* 17(2). 5–37.

Sherrieb, Kathleen, Fran Norris & Sandro Galea. 2010. Measuring capacities for community resilience. *Social Indicators Research* 99(2). 227–247.

Shoji, Hiroshi. 2003. Mother tongue education for revitalizing a vigorous language? The case of Monguor, a minority language of China. In Huss, Leena, Antoinette Camilleria Grima & Kendall King (eds.), *Transcending monolingualism: Linguistic revitalization in education*. Leiden: Swets and Zeitlinger.

Siqinchaoketu. 1999. *Kangjiayu Yanjiu* [A study of the Kangjia language]. Shanghai: Yuandong Chubanshe.

Slater, Keith. 2003. *Mangghuer: A Mongolic language of China's Qinghai-Gansu Sprachbund*. London: Routledge.

Smith, Warren. 2010. *Tibet's last stand? The Tibetan uprising of 2008 and China's response*. London: Rowman and Littlefield.

Spengler, Oswald. 1926. *The decline of the West: Form and actuality*. New York: Alfred A Knopf. (Translated by Charles Atkinson).

Sperling, Elliot. 1990. The Ho clan of Ho-chou: A Tibetan family in service to the Yuan and Ming dynasties. In Daffina, Paulo (ed.), *Indo-Sino-Tibetica: Studi in Onore di Luciano Petech*. Rome: Bardi Editore.

Sperling, Elliot. 1997. A Note on the Chi kyā Tribe and the two Qi Clans in Amdo. In Karmay, Samten & Philippe Sagant (eds.), *Les habitants du toits du monde. Etudes recueillles en hommage a Alexander W. Macdonald*, 111–124. Nanterre: Société d'ethnologie.

Sullivan, Brenton. 2013. *The mother of all monasteries: Gönlung Jampa Ling and the rise of mega monasteries in northeastern Tibet*. Charlottesville, VA: University of Virgina. Doctoral dissertation.

Stanford, James, & Lindsay Whaley. 2010. The sustainability of languages. *International Journal of Environmental, Cultural, Economic and Social Sustainability* 6(3). 111–22.

Sun, Hongkai. 1992. On nationality and the recognition of Tibeto-Burman languages. *Linguistics of the Tibeto-Burman Area* 15(2). 1–19.

Tainter, Joseph. 1988. *The collapse of complex societies*. Cambridge: Cambridge University Press.

Thomason, Sarah & Terrence Kaufman. 1988. *Language contact, creolization, and genetic linguistics*. Berkeley: University of California Press.

Tomkins, Emma & Neil Adger. 2004. Does adaptive management of natural resources enhance resilience to climate change? *Ecology and Society* 9(2). 10.

Toynbee, Arnold J. 1963. *A study of history* (Two volume abridged version). Oxford: Oxford University Press.

Tse, Lucy. 2001. Resisting and reversing language shift: Heritage-language resilience among US native biliterates. *Harvard Educational Review* 71(4). 676–709.

Tsung, Linda. 2009. *Minority languages, education, and communities in China*. London: Palgrave Macmillan.

Turchin, Peter & Sergey Nefedov. 2009. *Secular cycles*. Princeton: Princeton University Press.

Tuttle, Gray. 2012. Building up the Dge lugs pa Base in A mdo: The role of Lha sa, Beijing, and Local Agency. *Zangxue xuekan* (Journal of Tibetology) 7. 126–140.

UNESCO Ad-hoc Expert Group on Endangered Languages. 2003. Language Vitality and Endangerment. http://www.unesco.org/new/fileadmin/MULTIMEDIA/HQ/CLT/pdf/Language_vitality_and_endangerment_EN.pdf.

Uyunbilig, Borjigidai. 2002. The Hoshuud polity in Khökhnuur (Kokonor). *Inner Asia* 4. 181–196.

Valijärvi, Riitta-Liisa & Joshua Wilbur. 2011. The past, present, and future of the Pite Saami language: Sociological factors and revitalization efforts. *Nordic Journal of Linguistics* 34. 259–329.

van Driem, George. 2013. The ancestry of Tibetan. In Tuttle, Gray, Kunsang Gya, Karma Dare & Jonathan Wilber (eds.), *The third international conference on Tibetan language Volume 1: Proceedings of the panels on domains of use and linguistic interactions*, 363–418. New York: Trace Foundation.

Walker, Brian & Nick Abel. 2002. Resilient rangelands – adaptation in complex systems. In Gunderson, Lance & Crawford Holling (eds.), *Panarchy: Understanding transformations in human and natural systems*, 293–314. London: Island Press.

Walker, Brian & David Salt. 2006. *Resilience thinking: Sustaining ecosystems and people in a changing world*. Washington: Island Press.

Walker, Brian & David Salt. 2012. *Resilience practice: Building capacity to absorb disturbance and maintain function*. Washington: Island Press.

Wallerstein, Immanuel. 2000. Globalization or the age of transition? A long-term view of the trajectory of the world-system. *International Sociology* 15(2). 249–265.

Wande, Erling. 2011. From Tornedal Finnish to Meänkieli: A Tornedalian success story. In Fishman, Joshua and Ofela García (eds.), *Handbook of language and ethnic identity, Vol. 2: The success-failure continuum in language and ethnic identity efforts*, 420–431. Oxford: Oxford University Press.

Weiner, Benno. 2012. The Chinese revolution on the Tibetan frontier: State building, national integration, and socialist transformation, Zeku (Tsekok) County, 1953–1958. New York: Columbia University. Doctoral dissertation.

Wheelersburg, Robert. 1991. Umeå Saami native harvest data derived from Royal Swedish Taxation Records, 1557–1614. *Arctic* 44(4). 337–345.

Williams, Glyn. 2005. *Sustaining language diversity in Europe: Evidence from the Euromosaic project*. New York: Palgrave Macmillan.

Wilson, Geoff. 2012. Community resilience, globalization, and transitional pathways of decision-making. *Geoforum* 43. 1218–1231.

Wilson, Geoff. 2014. Community resilience: Path dependency, lock-in effects and transitional ruptures. *Journal of Environmental Planning and Management* 57(1). 1–26.

Wurm, Stephen A. (ed.). 1996. *Atlas of the world's languages in danger of disappearing*. Canberra: Pacific Linguistics.

Xu, Li & Dora Marinova. 2013. Resilience thinking: A bibliometric analysis of socio-ecological research. *Scientometrics* 96. 911–927.

Yamamoto, Daisuku & Yumiko Yamamoto. 2013. Community resilience to a development shock: A case study of a rural village in Nagano, Japan. *Resilience: International Policies, Practices, and Discourse* 1(2). 99–115.

Zhu, Yongzhong & Kevin Stuart. 1999. Education among the Minhe Monguor. In Postiglione, Gerard (ed.), *China's national minority education: Ethnicity, schooling and development*, 341–384. New York: Garland Press.

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