Linguistic diversity in mainland Southeast Asia

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Abbreviation: MSEA = Mainland Southeast Asia

1 Introduction

This draft discusses human diversity from the standpoint of language. Research on human diversity often focuses on historical questions of how the modern state of affairs came to be the way it is. This presumes a satisfactory account of that modern state of affairs. A first goal here is to answer the descriptive question: What is the nature of linguistic diversity in mainland Southeast Asia today? While this question is normally answered in terms of patterns of genealogical relatedness among languages of a region, I want to address other measures of diversity as well, including **structural** diversity of MSEA languages. The situation of linguistic diversity in MSEA is special among regions of the world (Dahl 2008), and for this reason begs explanation. I note some of the special properties of MSEA linguistic diversity, and consider these in terms of the socially-grounded causal processes that give rise to patterns of linguistic diversity over time. This addresses a second goal: to point to the kinds of underlying, social processes that we want to keep in mind when discussing history and diversity across disciplinary boundaries. This allows us to articulate some research questions that I hope will mesh with the concerns of other disciplines, particularly those concerned with the micro-level social dynamics that underlie aggregate macro-level effects.

2 Linguistics

In the kinds of interdisciplinary gatherings on human history and diversity that have inspired the present meeting, linguistics means traditional comparative/historical linguistics. A central aim of this branch of linguistics is to establish phylogenies of language

diversification. This is done typically if not exclusively with reference to word forms that are taken to be cognate across modern languages (e.g. Thai *ram* vs. Lao *ham* 'bran'). If a linguist can establish regularities in sound change across classes of words, this may be used as evidence for a proposed phylogeny, where the evolving entity is the language as a whole. It is a cladistic approach (Moore 1994). Usually the number of words that serve as data points is a fraction of the number of words in the language, but this small set is nevertheless taken to be sufficient for inferring the history of the language as a whole, and, by implication, of the historical community that has spoken the language and its ancestors. In this way, inferred linguistic phylogenies may serve as hypotheses for phylogenies of human groups, to be checked against other kinds of data (cultural, environmental, biological, genetic, etc.).[1] Such cross-checking requires interdisciplinary collaboration, and this is one objective of the present meeting. As Blench (2008) advises, true interdisciplinary collaboration has a long way to go.

A phylogenetic approach to language relatedness assumes vertical transmission for languages as whole systems: the entire language structure is passed on from generation to generation, with minor changes in each cycle. But as for culture generally, linguists also acknowledge processes of horizontal transmission—borrowing of elements from one language into another within generations—and need to account for these processes too. Accordingly, a special concern of traditional historical/comparative linguistics is to distinguish between the results of vertical and horizontal transmission. When two languages share a given structure, is it because they each derive it from a common ancestor (common inheritance) or because one or both of the languages has borrowed the structure (diffusion)? One view of horizontal transmission effects is that they obscure the real signal of interest, the signal of language phylogeny. But the special effects of horizontal transmission are of equal interest in characterizing linguistic diversity, particularly where—as in MSEA—a **lack** of diversity is part of what needs to be explained. As it happens, historical processes in language can readily be viewed as 'rhizotic' (Moore 1994), i.e., involving hybridization,

[1] Also of relevance in using linguistics to test hypothesized scenarios of human descent are inferences that can be made from the presence of words with certain meanings, and what it implies about the history of the community (e.g. presence of indigenous words for certain species of plant or animal).

implying quite different underlying processes to those standardly represented in phylogenetic trees.

As a complement to work in the comparative/historical tradition, this paper will draw on two other areas of linguistics: **language typology** and **sociolinguistics**. The aim of language typology is to determine constraints on diversity in the structure of human language. Typology asks: Are there universals in language structure? Are there dependencies between types of structure? What generalizations can be made? Typology provides a set of measures of diversity in language. Sociolinguistics asks: How is variation in linguistic behavior related to the position of speakers within a social system? What role do social networks play in determining language variation? What are the causal relations between social life and language structure? This paper considers the nature of human diversity in mainland Southeast Asia today through the lenses of linguistic typology and sociolinguistics.

3 Typological convergence of language in MSEA

Convergence in the structure of neighboring languages due to social contact between communities is a global phenomenon (Weinreich 1953; Emeneau 1956; Muysken 2008; Thomason 2001; Silva-Corvalán 1994, and many others). It results in what are referred to as **linguistic areas**. Another common term for linguistic area is sprachbund. In global terms, Mainland Southeast Asia (MSEA) is a remarkable example of a linguistic area. Five major language families are found in MSEA—Tai-Kadai, Sino-Tibetan, Hmong-Mien, Austroasiatic, Austronesian. (I leave aside the question of relations between these lineages that will be discussed by others.) Languages from these different lineages show massive convergence in structure at every level (Matisoff 1973, 2001, 1991; Clark 1985, 1989, 1996; Clark and Prasithrathsint 1985; Bisang 1991, 1999; Enfield 2003, 2005; Grant and Sidwell 2005, among many others). The relevant levels of linguistic organization are as follows:

Levels of linguistic organization

- PHONETICS/PHONOLOGY: sounds and sound systems
- MORPHOLOGY-SYNTAX: internal structure of words/phrases/sentences
- LEXICON: words and their meanings
- PRAGMATICS: patterns in language usage

The convergence among MSEA languages is so thoroughgoing that the typologist Östen Dahl calls the area 'the ultimate Sprachbund' (Dahl 2008:218). Using data from the World Atlas of Language Structures (Haspelmath et al. 2005), Dahl computed a pairwise measure of typological distance among over 200 languages. This numerical expression of distance ranges from 10 (Dutch versus German) to 75 (Ju|'hoan versus Central Yup'ik), with a mean of 42 (e.g., English versus Persian). The **typological distance** between two languages is a measure of how similar they are on a range of structural measures. Dahl's measures span all domains of linguistic structure for which the World Atlas supplied data. These include values of sound structure as well as presence and nature of grammatical patterns (for example, whether number is obligatorily marked in the grammar—yes for English, no for Khmer—or, for an 'adjective+noun' type structure, whether the adjective comes before the noun as in English *new village* or after it as in Khmer *phuum thmei*).

The measures for MSEA are striking. For example, Dahl compared Hmong (a language of the Hmong-Mien group, spoken in China, Thailand, Laos, and Vietnam) and Khmu (a language of the Northern Mon-Khmer group, spoken in Thailand, Laos, and Vietnam). Even though these two languages are entirely unrelated, and have been in direct contact only relatively recently (a few centuries), on Dahl's measure Hmong and Khmu score the same as German and English, two closely related languages:

(1) Hmong vs. Khmu' = 22.5
German vs. English = 21.1

In a more extreme example, pairs of genealogically unrelated languages of MSEA that have had more intensive contact—Thai, Khmer, and Vietnamese—measure as close to each other as Polish and Russian, among the typologically closest pairs on Dahl's scale:

(2) Thai vs. Vietnamese = 11.4
Thai vs. Khmer = 12.3
Polish vs. Russian = 12.8

These figures indicate a dramatic macro-level convergence that has taken place over centuries in MSEA. What kinds of micro-level, real-time causal processes have brought this convergence about? A fair amount is known of the micro mechanisms that must ultimately be involved in the macro aggregation of linguistic change (Weinreich,

Labov, and Herzog 1968; Keller 1994; Enfield 2008). But it is difficult to get a grip on these enormous processes in real time (and nigh impossible to do so in historical retrospect; Enfield 2003). We are, however, beginning to get a reasonable idea of the underlying, general causal anatomy of language transmission, both within and across generations.

4 Mechanisms of cultural transmission

Macro-level portrayals of linguistic lineages must ultimately be statable in terms of the micro-level processes that caused them. What do these micro-level processes look like? We need to characterize the dynamics of language transmission both within and across social groups, ultimately in terms of individuals and the events of interaction between them. This should point to new questions to be asked across disciplines.[2] As Ross (1997:255) puts it, 'the fundamental point that there is a causal relationships between particular kinds of speech-community event and particular kinds of patterning of linguistic innovations is vital to the practice of linguistic prehistory.' Ross advocates a program of research 'into determining the relationships between various speech-community events and linguistic innovations with the framework of an integrated social and socio-linguistic model', requiring a micro-level perspective to complement the macro view of most linguistic work in this context. Importantly, he adds, 'the linguistic prehistorian needs to know from the archaeologist what the archaeological reflexes of various speech-community events might be'. The questions are ultimately all social ones.

Language transmission can best be understood with conceptual tools developed for the general analysis of social diffusion of innovation and convention (Rogers 1995; see Ross 1997 for this point applied to language in a New Guinea case study). Innovations are adopted and transmitted in structured community networks. Through an enormous yet finite chain of events, an innovation (something new to the community) can enter a community and eventually become a convention (something normal in the community). The process involves social contact in populations through which people become

[2] Compare the bioarchaeological orientation to individuals in Oxenham and Tayles 2006: 'Central to all this are the people themselves. Nothing brings them to life as individuals, communities and populations like the physical remains themselves. They are, or should be, central to any archaeological endeavor.'

exposed to an innovation, adopting it and thereby exposing others, and so on, until it becomes a norm. Notice that micro-level processes of exposure and adoption are always going on, not only when something new enters a community. Conventions need to be actively maintained if they are to remain conventions. And when conventions are lost, this loss shows essentially the same pattern as the adoption of innovations. It too requires the spread of a new behavior, namely refraining from producing the conventional one.

Social diffusion of innovation is a rich and complex topic (see Rogers 1995 and references therein). We can nevertheless identify three central causal components of the process at the micro-level (i.e., the level of individual people and their interactions with others).

First, an innovation must have a **source**. That is, if a person is to adopt an innovation, he or she must get it from somewhere. One source is imitation, where the innovation is observed in the behavior of other people. In vertical transmission, those other people include one's closest kin, observed from childhood. In horizontal transmission, those others are typically neighbors or other outsiders, usually encountered after childhood. A second source is creation, where an innovation is produced by the person, thanks either to special creative insight, or through relatively natural principles building on existing practices. (One aim of historical linguistics is to define those natural principles.)

Second, once an individual has encountered an innovation through some source, he or she must produce a **representation** of the innovation. A representation is always a cognitive one, and may be artefactual as well. This means that the person forms a relatively stable abstraction of the observed practice, thereby able to carry it with them to new contexts. In culture and language, such representations are embedded in larger systems of practice and meaning, of the kind described in ethnographies and grammars. As they become conventionalized in new cultural settings, innovations will be more or less shaped to fit into the existing structure of such systems.

The third causal component of diffusion of a cultural innovation is an individual's **motivation to replicate** the innovation in their own behavior, thereby serving as a public source for others in ongoing diffusion of the innovation. Being exposed to an innovation is not enough, not even if one has formed a meaningful representation of it

within a cultural system. One has to expose others in turn, thus feeding in to a person-by-person yet community-wide wave of diffusion that ultimately causes innovations to become conventions.

At a community level, diffusion works by rules of numbers. In social networks, different individuals will be connected differently to their peers, in terms of numbers of relations in the network, and types and intensity of those relations. These individuals will also differ in personality and social role. Some will be natural innovators and early adopters, others will be natural laggards. Some will be charismatic trend-setters, others not. Some will be more discerning than others. And so forth. Individual differences combine with prevailing social conditions to cause success or failure of diffusion in any given case. This applies to all processes of spatial-historical development of socio-cultural practice that are the concern of anthropology's four fields. While we cannot reconstruct the micro-level facts of long past events of diffusion, we know that any linguistic or cultural convention we study today has a history of successful transmission and maintenance within a spatial-historical community. With models of the ground-level processes of such diffusion, we can look for ways in which different disciplines will complement each other in shedding light on the dynamics of human affairs, including the forms and causes of our diversity.

Let us now place the question of MSEA's linguistic diversity in a broader account of the nature of linguistic diversity in general, drawing extensively on Nettle (1999).

5 Linguistic Diversity

Linguistic diversity can be measured in three ways (Nettle 1999), always with reference to a geographical area: 1. The **language diversity** of an area is the number of distinct languages spoken in it; 2. The **phylogenetic diversity** of an area is the number of distinct language families found in that area; 3. The **structural diversity** of an area is the degree of typological difference between the languages.

5.1 Language diversity

Language diversity in MSEA is high compared to many regions of the world. This is consistent with observed high language diversity in areas with similar environmental conditions. There is a statistical association between tropical environment and high language diversity: 'language diversity tends to be greatest near the equator'

(Nettle 1999:61). Nettle suggests a causal account: Because a tropical environment affords economic self-sufficiency, human groups can afford to maintain greater socio-economic distance from their neighbors. This independence allows greater differentiation in social identity between groups, of which language distinctness is a primary indicator. Groups will still come into social contact under these conditions, but they will maintain more distant **types** of social relation, characterized less by reliance on exchange of fundamental economic resources. Exchange will be more specialized, including ritual exchange. In such conditions, ethnic distinction is allowed to flourish.

Nettle (1999) insists on a connection between society, economy, and ecology. (Nettle restricts his account to 'the post-Neolithic, but pre-Industrial, world'; p96.) He generalizes two kinds of social bonds: primary and secondary. **Primary bonds** are 'relatively enduring, are often formed early in life, and are multivalent', they are the bonds 'on which people have depended for their basic livelihood' (Nettle 1999:67). Normally, our first language is learned from people with whom we have primary bonds (Thomason and Kaufman 1988:11), biasing faithful vertical transmission, where genes, culture, and language follow a single historical path, despite their logical distinctness (Boas). **Secondary bonds** 'are based on specific functions, such as a trade in a specialized good'. Such bonds 'are associated with greater social distance than primary ones and are more typical of the relationships between ethnolinguistic groups than those within them'. Such relations are typical of neighboring ethnic groups (linguistically defined) almost anywhere in MSEA. (Note the need for more careful distinction of types of social relations, beyond Nettle's primary versus secondary bonds; Evans and McConvell 1997 speak of neighboring groups in Australia as being either isolated or linked; Thomason and Kaufman 1988 speak of more or less intense relations between groups; Ross speaks of groups being more or less tight-knit; and so on.)

Nettle argues that the appropriate theory for explaining the latitudinal trend 'will be one that links human agents to their ecological setting' (p69). He illustrates with a case study of equatorial horticulturalists in Interior New Guinea, where the ecology affords an 'enormous potential for self-sufficiency'. This self-sufficiency allows language groups to be very small, and therefore more numerous. Social relations between language groups are of the secondary type. This is contrasted with case studies from sub-

Saharan Africa where a very different ecology brings about primary social links between spatially distant households. Nettle writes of Hausa: 'The wide extent of the language must surely have its origin in the wide extent of these [primary social] links, which are in turn a response to the dangerous highs and lows of the agricultural calendar' (p77). The hypothesis for MSEA, then, is that neighboring groups have tended not to maintain primary social links, a possibility arising from the low ecological risk afforded by a tropical environment.[3]

Language diversity in MSEA is observed to different degrees within different language lineages. In Laos, for example, the Austroasiatic languages show greater language diversity—i.e., a higher number of languages, where each of these languages is spoken by a smaller number of speakers. It should be possible to account for the differences in terms of socio-economic history and inter-group social relations, with multiple determining factors (including ecology).

5.2 Phylogenetic diversity

Not only does MSEA feature an especially large number of distinct languages, these languages are from a large number of distinct lineages for a region of this size. The distinctness of five groups is relatively well established: Tai-Kadai, Sino-Tibetan, Hmong-Mien, Austroasiatic, and Austronesian. Considerable controversy surrounds the internal structure of these lineages (how many sub-groups, what are they, etc.), as well as their possible grouping at higher levels (e.g., whether Tai and Austronesian share a common ancestor).[4] On this I defer to the historical/comparative linguists.

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[3] Note that beyond developing certain types of social links with neighbors, there are other strategies for dealing with ecological risk, including livelihood diversification (certainly relevant for MSEA; cf. White), storage, and mobility. People who specialize in diversity or mobility—hunter-gatherers—may offset these tendencies to rely on primary social bonds outside the group.

[4] An inherent problem for interdisciplinary meetings like this one arises from limitations in the time depth of historical/comparative linguistics' reach. Once we are looking further than 2000 years or so into the past, the comparative method becomes inapplicable. Archaeologists are interested in significantly greater time-depths (see contributions to this meeting). The application of statistical methods from evolutionary biology is shaping to bridge this gap; cf. Dunn et al.

Nettle attributes to Nichols (1991) the idea that 'stock diversity is an increasing function of the time since founding' of distinct populations (p119). Nettle takes issue with Nichols' assumption of constant rate of ramification (see also Dunn et al). He writes, 'linguists have no rigorous or widely accepted method of dating the split of phylogenetic groupings', and 'the rate of diversification is actually rather variable' (p120). Different types of speech-community event (Ross 1997) clearly have different dynamics, for social reasons.

Nettle's proposals concerning social relations among neighboring groups are based on a simplified notion of static social equilibrium, with established patterns of economic and ritual contact between groups. But of course social relations are dynamic. How to capture this? Dixon (1997) takes a punctuated equilibrium model—earlier applied to biological speciation (Eldredge and Gould 1972) and then cultural diversification (Bellwood 1991)—and applies it to the diversification of languages. The idea is that during equilibrium periods, ethnic groups live alongside each other with a rather unconstrained process of diffusion of features from language to language. Punctuation arises from cataclysmic social events that trigger split and expansion of groups (Dixon 1997:67ff; cf. Nichols 1992). (Note that the distinction between equilibrium and punctuation does not imply different underlying processes of social diffusion at the fundamental micro-level; see section 4, above.)

Nettle (1999:100) assumes that after a global Paleolithic expansion, 'the whole of the presently inhabited world was peopled by hunting and gathering societies, except for far northern latitudes, and most of the Pacific islands'. The modern day states of affairs that we are presently trying to disentangle were caused by dramatic expansions of Neolithic societies into open or effectively open territory. Such scenarios provide the bread and butter of the comparative method: sub-families neatly separated by the split and spatial separation of sub-communities. The problem of course is that the split and spatial separation (and subsequent domination of expanding groups over others) is hardly ever as neat. Moore (1994:15) notes the special if not exceptional nature of the Polynesian situation which so neatly fits a cladistic approach: 'While an ocean limited contact among neighboring Polynesian ethnoi [= distinct ethnic groups], thereby preserving the integrity of ethnic boundaries, continental populations are constantly surrounded, buffeted, and confronted by their neighbors. Unless they are contiguous to an ocean or desert, continental populations are normally surrounded by foreign ethnoi,

often of several ethnic and linguistic types'. This clearly applies to MSEA.

5.3 Structural diversity

Languages contain huge inventories of features, including tens of thousands of words, hundreds of smaller components of words like *-s* for plural in English (as in *dog-s*), scores of patterns for combining those words (e.g. active versus passive sentences in English), patterns of word meaning, and habits of language usage (greetings, etc.). The most accessible data for calculating structural diversity are in phonology (sound structure) and morphosyntax (patterns of building words and combining them into phrases and sentences). Here are some technical linguistic features that are common to all or most MSEA languages, demonstrating a very low degree of structural diversity, particularly given high degrees of language diversity and phylogenetic diversity:

Phonological features

- very high number of vowels (relative to consonants)
- similar structure of vowel system (often 9-place, symmetrical)
- systematic long/short vowel distinction
- preference for one (major) syllable per word
- laryngeal features lexically contrastive (tone, register)
- fewer consonants possible in final than initial position

Morpho-syntactic features

- no head-marking (no agreement)
- no dependent-marking (no case)
- no obligatory marking of gender/number/definiteness on noun phrases
- no obligatory marking of tense on verbs
- zero anaphora (free ellipsis of arguments if definite)
- prevalence of verb-object constituent order
- topic-comment structure in clauses
- labile verbs
- rich set of sentence-final particles
- rich set of expressives/ideophones
- relatively flat noun phrase structure
- numeral classifiers and related systems of nominal classification
- verb serialization, richly multifunctional
- zero marking of relative clauses

Some of the most noteworthy commonalities among MSEA languages are their complete lack of values on certain parameters (most notably, 'no inflectional morphology'). It might be said that common **presence** of features would be more convincing evidence of convergence across languages. What is the significance of this shared **lack** of certain features? Consider how it is that languages may lose grammatical structure over time. One way to remove structure from a language is to learn it as an adult. (The inverse is also true: add structure to a language by learning it as a child; Trudgill.) This is called substratum interference, where an adult speaker's native language affects the structures of the new language. As Thomason and Kaufman put it, 'in this kind of interference a group of speakers shifting to a target language fails to learn the target language perfectly. The errors made by members of the shifting group in speaking the target language then spread to the target language as a whole when they are imitated by original speakers of that language' (Thomason and Kaufman 1988:39). These changes are of course learned by children in the next generation, hence their long-term effect on the target language. In this way, widespread learning of new languages in adulthood (e.g., in large-scale language shift during migration or under strong domination from another ethnic group) is a possible driving force of structural convergence. (LaPolla 2001 points in this direction in his assessment of the situation in China, with massive convergence between varieties of Chinese arising from massive migration over centuries; but see Ansaldo and Matthews 2001 against the idea that Chinese structure is evidence of earlier creolization. Part of the problem is ideological baggage belonging to the term 'creolization'. Ansaldo and Matthews are happy to posit 'hybridization' instead.)

If we are to understand why MSEA shows this low degree of structural diversity we of course want to know how it **came to be** like this. Processes of language change follow the same causal processes of innovation diffusion that underlie culture evolution more generally. An important feature of these processes are the various biases that promote or inhibit diffusion.

One of these biases is called a **context bias** (Enfield 2008), according to which a social innovation will diffuse more effectively if there is a ready context into which it fits. (For example, the necessary context for adopting ringtones is the presence and use of mobile telephones—if a society does not already have mobile telephones, they will not adopt ringtones. The idea is applicable to just about any

technology.) In language, a context bias favors diffusion of less 'embedded' linguistic items, since they are less dependent on language-specific structures (meaning, for example, that interjections like *Wow!* will diffuse better than grammatical markers, since they do not have a language-specific grammatical context). For any given linguistic innovation, the grammar of the borrowing language is a potential set of brakes on convergence.

Another bias is called the **content bias** (Boyd & Richerson 2005, Enfield 2008). A content bias favors the diffusion of innovations which have some payoff that the alternatives lack (e.g. certain agricultural practices will be of special interest to potential adopters if they offer greater yield for less effort). In language, a content bias will favor adoption of 'unmarked' structures, that is, structures that are simpler, more transparent, and more common. 'In general, because they are harder to learn, universally marked features are less likely than unmarked features to be transferred in language contact… In shift situations, this works two ways: shifting speakers are likely to fail to acquire marked features of the target language, and marked features carried over by shifting speakers from their original language are relatively unlikely to spread by imitation to the target language as a whole' (Thomason and Kaufman 1988:51). Of course, simplification is not the only force in language change—were it so, then all languages would be maximally simple. Languages can complexify, too, if given time, and specifically, if given a sufficient number of generations of normal transmission by which children who learn the language as a first language are able to effectively add structure and complexity to it (Thomason and Kaufman, Trudgill). The MSEA situation of low structural diversity across the languages, and relative lack of structure within the languages, is compatible with a long history of widespread language shift with continuous bilingualism.

An important aim is to uncover the causal processes that underlie change, differentiation, and convergence alike. Those processes are critical not only to understanding the MSEA facts, but to understanding cultural processes in general.

6 Linguistic diffusion in MSEA

We can now add to the above comments on the social context of language with some notes on the current MSEA situation. In MSEA today, there are widespread asymmetrical relations between languages, with levels of nesting. One class of language consists of the

major national languages: e.g., Thai, Lao, Khmer, Vietnamese, Chinese, Malay. Languages of this type and size are an extremely recent phenomenon. Trying to see through their nonetheless dramatic effects is an important challenge for historical linguistics, and for archaeology. These major languages are spoken by huge numbers of people. They are written, formalized, standardized, taught in schools, used in media such as newspapers, television, official correspondence and law. Large numbers of people are monolingual in these languages, but they are also a second (non-native) language for many speakers of ethnic minority languages. The recent existence of this type of language is one of the main factors in obscuring the information we have about the linguistic past of MSEA. (They can also interfere with analysis thanks to the political ideologies they introduce.) In these respects, these are most unusual languages. Vast numbers of people have shifted over recent generations to these languages, and this process continues in full swing.

The remaining languages—i.e., most languages—of MSEA are much smaller and much more numerous. At a second level of nesting, there are languages that are relatively widely spoken and have semi-official or de facto status as major languages: e.g., Hmong in Laos, Karen in Thailand, Kmhmu in Laos, Cham in Cambodia, Tai in Vietnam, Zhuang in Southern China. (When I say relatively widely spoken, I mean relative to the median size for a language community in the world: around 7000 speakers.) Each of these languages has some degree of official and administrative recognition, and each is spoken by large numbers of people. Still, the fact that they are not **national** languages means that their speakers will still tend to be bilingual in a national standard language. As noted already, the national language phenomenon has been quite recently imposed upon the general scene that was in place before the 20th century. Still, we have every reason to think that nested multilingualism was the norm in pre-nationalist MSEA.

While all minority languages are subordinate to the national languages of MSEA, they are not equally subordinate. Ignoring the national languages, we still see political asymmetries between minority languages at a local level. As an example, take Kaleum District in Sekong province in Laos. This is a small, isolated district. Several languages of the Katuic sub-branch of Austroasiatic are spoken there. These languages are each subordinate to Lao, the official national language. So, most natives of Kaleum also speak Lao

to some degree, and are in some circumstances obliged to do so (e.g. using Lao as a lingua franca when traveling outside of their home area or when dealing with officials). But within daily life in their home district, there is a recapitulation of the language dominance relation at a more local level. One of the local languages—Ngkriang (also known as Ngeq)—belongs to a locally dominant ethnic group, and serves as a lingua franca for between-group dealings. So, if you are of the Ngkriang ethnicity, then you will speak Lao with people outside your district and Ngkriang with people inside your district, including both other Ngkriang and people of other ethnicities. If, however, you are of one of those other ethnicities, you will speak at least three languages: (1) Lao with people from outside your district, (2) Ngkriang with people of other ethnicities inside your district, and (3) your own language with your own people. (People of Kaleum also know Vietnamese because of proximity to the border and contact with traders.) Such nested political asymmetries of neighboring languages is the general pattern in MSEA. Social relations are asymmetric, and the asymmetry tends to be oriented in a downhill direction (Diller, Blench). The higher upstream you live, the less dominant you are, and the more likely you will be to have to accommodate to the language of your downstream neighbors. In the Kri-speaking area at the peak of the Nam Noy valley in eastern Khammouane Province, Laos, Kri speakers inhabit the highest reaches of a major watershed, and they are the most multilingual of all their neighbors. Kri men mostly speak proficient Sek, the Northern Tai language of their immediate neighbors downstream. The Sek tend to speak little or no Kri in return. But the Sek, in turn, speak Lao with their downstream compatriots, and so forth.

One account for the special degree of linguistic convergence observed in MSEA is horizontal diffusion through sustained social contact between language groups, in a more 'rhizotic' account of language history (Moore 1994). As suggested by the discussion so far, to understand these patterns of contact, we have to look at the structure and dynamics of social relations, not within language groups, but **across** language groups. Recent research on language contact and its effects (e.g., by Thomason, Ross, Aikhenvald, Muysken, inter alia) has underlined the primacy of inter-community social factors in determining structural linguistic outcomes. The work offers empirically-based distinctions between types of inter-community relations. Direct social contact between groups—a necessary condition for horizontal transmission—will be facilitated by more loose-knit, open social organization within a given group.

Once two groups come into regular contact, the type and intensity of this contact will depend on the nature of social relations between the groups.

A rough scheme for thinking about differences between types of inter-group contact is a scale from **symmetrical** contact to **asymmetrical** contact (cf. Thomason 2001, Aikhenvald 2006). Social contact between groups is more symmetrical when each group has a comparable degree of control over local power and resources. The languages of two groups will be mutually influential, each contributing structure to the other, resulting in gradual convergence. By contrast, social contact between groups is more asymmetrical when one social group wields significant power over the other, particularly when one group displaces the other, coming into control of land and other resources through military might, technology, or other means. In these conditions, speakers of a substrate language (the language of the subordinate group) may either find their language being heavily affected by the superstrate language (especially in vocabulary) or they may shift to the superstrate entirely. Language shift of this kind is currently in full swing in MSEA among many minority populations, especially those who speak Austroasiatic languages.

Little is known about what determines the likelihood and rate of language shift. One factor is the language attitudes of a speech community. Some communities view their language as ethnically emblematic, and go to special lengths to make sure that the younger generation learns and uses it; e.g., Hmong in Laos. Other communities are willing to let their language disappear. Is it possible to determine ethnolinguistic ideology from archaeological research?

Large-scale language shift does not mean that a superstrate language simply replaces a substrate. In language shift, large numbers of people learn the superstrate language as adults and as multilinguals. Factors of both adult second-language learning and of multilingual speech contribute to the transformation of a language through contact. As noted above, when adults learn new languages, they do so imperfectly, and in particular with the result of simplifying the language learnt. If this simpler variety serves as input to the next generation, a net result can be simplification of the superstrate language as a whole.

Multilingual speech can also have a structural effect on language. In multilingual settings, multilinguals practice **code-mixing**, that is, they use multiple languages at the same time, often within the same utterance (Muysken 2000). (Note Khanittanan's argument that the 'Khmero-Thai' society of Ayuthya was fully bilingual, driving the convergence of the two languages to an extreme degree.) Because such within-utterance mixing involves the interlocking of components of two or more languages, the languages involved will tend to structurally converge where possible in order to better facilitate this. The MSEA situation would fit a scenario of long-term and widespread practices of code-mixing in multilingual settings.

Based on the above observations, we may hypothesize that the MSEA facts—very high degree of linguistic convergence combined with relative simplicity of grammatical structure—are to be explained by a history of widespread adult learning of neighboring languages (indicative, say, of large-scale migration) and widespread code-mixing in multilingual environments. A hope of this meeting is to draw on multiple sources of evidence in order to determine whether this is the case. (Or, at least to specify what we would need to know in order to determine whether this is the case.)

7 Conclusion

I have tried to address the question of human diversity through the prism of language. While most linguistic research focuses on phylogenetic diversity (number of language families, and relations between them), I have tried to draw attention to two other measures: language diversity (number of languages) and typological diversity (similarity or difference in structure of languages). MSEA shows an extreme discrepancy between phylogenetic diversity (high) and typological diversity (low), the most extreme in the world, in fact. This demands an explanation. An explanation is likely to combine multiple factors, including (a) a tendency for MSEA peoples to maintain ethnic distinctions through language yet nevertheless cultivate close social connections across ethnic boundaries, and (b) a tendency for the particular type of language found in MSEA to accelerate convergence through heightened possibility for code-mixing.

The kinds of scenario that make a cladistic approach difficult are precisely those found in MSEA. For Moore, who promotes an ethnogenetic model of rapid hybridization in cultural change, the 'greatest task' is to determine 'how often human societies undergo

these radical linguistic and cultural transitions, as opposed to diverging slowly in the cladistic manner of the Polynesians. That is, how much of current diversity is due to rapid, ethnogenetic processes, as opposed to slow, cladistic processes.' (Moore 1994: 18)

These conclusions emerge partly from what is known ethnographically about the linguistic situation in modern MSEA, and partly from what is known about the linguistic effects of different types of social situation. I have also argued in terms of the basic, micro-level mechanisms that underlie all cultural transmission. These ideas need to be further investigated through ethnographic work, and their development will surely profit from consideration in light of what we may learn from disciplines like archaeology, bioarchaeology, and genetics about inter-group social organization in history and prehistory.

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