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Ethnographically informed language documentation

K. David Harrison

1. Introduction

Documentary linguistics (DL) is rapidly gaining recognition as a fully-fledged sub-field of linguistics, on a par with the theoretical subfields in its complexity, the intellectual effort required, and its significance to science. There is also a very active discussion going on among practitioners about core principles of the discipline, how it is best practised and taught. We can predict somewhat optimistically that we will soon see DL (not simply field methods) taught in the curriculum of university departments, practised by a larger percentage of post-graduate students, and accepted as dissertation work. At the same time as DL is being restored to its proper place at the core of the discipline, it is also being redefined and contested (Himmelman 1998, Woodbury 2004). There are ongoing discussions of methods, best practice, technical standards, and the ethics of data access and community ownership.

In this paper, I discuss one important dimension of language documentation – the inclusion of ethnographic methods. I advocate a restored balance between structuralist concerns and attention to cultural content of speech. An ethnographicallyinformed approach is essential, I argue, to adequate language documentation. I provide several examples of this, based on my fieldwork on endangered languages in Siberia and Mongolia.

2. A post-structuralist agenda

Adopting a strictly traditional paradigm and sentence elicitation approach, it is impossible to fully uncover and describe the grammar of a language. This holds true even if one takes a narrow view that language (or what gets called "i-language" in the Chomskyan tradition) is purely a set of abstract structures, and that structure always trumps content and is superior to it for purposes of linguistic analysis and for science.

In traditional structural elicitation of the kind taught in field methods classes, the researcher does not know or speak the target language, and typically presents sentences of English for translation, or tries to construct utterances based on very limited knowledge of the target language to get a speaker's grammaticality judgment on these. Rarely does the native speaker get to determine the topic of discussion in classroom field methods, nor does it usually matter much what topics get discussed. The ethnographic method contrasts sharply with this approach and, should it prove effective, holds forth the possibility of a new 'post-structuralist' agenda for documentary linguistics. 1

3. The ethnographic method

The ethnographic method has a long history with many interpretations and practitioners. We often associate it with anthropology, thanks to work by pioneers like Bronisław Malinowski (1922a, b) and Franz Boas (1919, 1921, 1927) and later Mary Haas (1941) and Harold Conklin (1954), to name just a few leading practitioners of linguistic anthropology. But for purposes of linguistic documentation, ethnography is best viewed as a research strategy, not owned by any one discipline. This means that we are free to borrow from ethnography just those methods, whether old or new, that enhance language documentation.

The essential elements of classical ethnography, as I understand them, include (i) participant observation (Spradley 1980); (ii) use of the target language as the contact language; (iii) privileging speech & discourse that is culturally embedded, spontaneous, ecologically valid, etc. (Hymes 1970, Bauman & Scherzer 1975, Ratliffe 2003, Woodbury 2003); and (iv) adopting an 'emic' perspective (Pike 1967, Harris 1976). The latter requires suspension of one's own analytic categories in order to try to uncover the salient units and categories as defined from the point of view of the native speakers. Classical ethnography (Malinowski 1922b:25) took as a realistic goal "grasp[ing] the native's point of view". Contemporary anthropology, by contrast, assumes that it is never possible to get completely past one's own point of view and cultural frames of reference, and that ethnography remains a wholly interpretive enterprise (Geertz 1973). But this does not mean that as linguists we must abandon any attempt to understand categories relevant to native speakers, and, to the extent that we are able to discern these, to allow them to inform our understanding of grammars. As a research strategy, classical ethnography is fully compatible with linguistics and with field work, and may enable these endeavors to realize their full potential.

The ethnographic method has another significant advantage to offer field linguists. Given the recent attention to language endangerment, it should be emphasized that the overwhelming majority of the world's languages (including most moribund and endangered ones) will never be available for classroom or laboratory study. They must be studied in the field, in the native milieu, or not at all. Secondly, most of the world's endangered languages are indigenous languages, meaning they are spoken by a small population that has longstanding ties to a particular locale, and a cultural and ecological niche. In such communities where I have worked, I found everyday speech to be saturated with references to the local environment. Given that fact, it is by no means a

¹ The term 'post-structuralist' as applied to documentary linguistics first came to my attention in a poster entitled 'Fieldwork as Philology, or, the Boasian Revolution in Linguistics' presented by Andrew Garrett at the July 2005 *Conference on Language Documentation: Theory, Practice, and Values.*

radical idea to suggest that such languages cannot be well understood or described in isolation from their environment, just as biological specimens cannot be fully understood by examination under a microscope.

There is a certain bottleneck created when we elevate structure over content, as we have been trained to do in the generative, Chomskyan tradition. As linguist Mary Haas (1976:43) pointed out, a purely structuralist approach hinders us in seeing the larger picture: "In their search for universal tendencies... some scholars have taken an atomistic approach. In other words, they have obtained examples of relative clauses, auxiliary verbs, the copula, and so on, from speakers (or grammars) of as many languages as possible without regard to anything else in the language..." Endorsing a sensible alternative, Haas writes: "In the present climate of interest in the problem of language universals, we must not overlook the importance of the holistic approach... A language must be understood and described as a whole. It is not a thing of bits and pieces, haphazardly strung together. It must be seen and described as a whole."

The ethnographic approach attempts to address this problem by shifting the focus from pure i-language to the interplay between speech and the cultural knowledge (or what one might call 'technologies'). Paying attention to what people care to talk about spontaneously (instead of just what linguists think to ask about) can reveal how culturally embedded knowledge permeates and interacts with linguistic structures. This can in turn allow us to view both as being components of a larger language system.

Even though we may not be professional ethnographers, linguists who do field work on small and endangered languages find it hard to ignore the rich cultural content, or to examine phenomena like syntax in isolation from the rest of the language. As soon as one looks at the content of language – what people actually talk about – it becomes obvious that this content is also a richly structured and worthy object of study for any science of the mind. And it becomes clear that structure may be misunderstood if content and cultural knowledge is ignored.

Linguists are not typically trained to do ethnography. Most linguistics postgraduate students do not take courses in linguistic anthropology or in anthropology. In field methods courses, we typically teach and learn traditional elicitation methods that are solidly Chomskyan in their preoccupation with structure and neglect of content. But linguists need not fear culture, even though it is broader and deeper than the domain we have been trained to examine. A sensible application of ethnographic techniques will get us to the point where we can document all the linguistic structures we need, and along the way we will have been enriched by the culture, too.

Ethnography as a research strategy, I argue, enhances the linguist's access to: (i) LANGUAGES that can only be studied in the field (i.e., most languages); (ii) GRAMMATICAL STRUCTURES that may not otherwise be visible; (iii) KNOWLEDGE SYSTEMS ('technologies') grounded in the local environment and essential to

understanding the content of what people say; and (iv) MICRO-VARIATION and OBSOLESCENCE EFFECTS. In the remainder of this paper I will give anecdotal examples of discoveries in each of these areas, made possible in my own fieldwork by using ethnographically informed elicitation techniques.

4. How do you say 'go' in Tuvan?

As a post-graduate student trained in the generative tradition, I went off to the field to Siberia armed with tools like Government and Binding theory, Optimality theory, Phonemics, Auto-segmental phonology, and various models of morphology. These tools, I discovered, proved woefully insufficient to achieve an adequate description of the grammar of the language I wanted to study.

For the beginning of my field work, I chose to live in a remote province of the Siberian republic of Tuva among a population of transhumant nomads (yak herders) who spoke no Russian. This meant that I had no contact language and had to rely solely on immersion and participant observation. Imagine trying to elicit a phoneme inventory (much less phrase structure) with no common language!

At the same time, in this state of forced inactivity, because I could not elicit much more than simple names for objects, I began to notice the richness of the cultural matrix around me. And I was free to ask a lot of questions that might seem frivolous in an American classroom or at a linguistics conference, but seemed very relevant to me out in the field.

Fig. 1 The author (right) with Mr. Tserenedmit (left, pointing) of the Monchak Tuvans of Western Mongolia, using directional verbs in the native landscape. (2004).



One early question was how to say 'go' in Tuvan. I assumed I would need to use a fairly basic verb for that, but could not have been more mistaken. It turned out that Tuvans have a generic word for go, but rarely use it. Most frequently, they select one of a set of verb roots that reference ground slope and direction of river flow, independently of cardinal directions (though when they want to, they can also revert to a cardinal direction system). The terms stand in a hierarchy, in which one system dominates another, and speakers must know the topography to use the system correctly. Topographic verb stems (e.g., 'ascend' / 'go upstream', 'descend' / 'go downstream') appear as verbs (1), modifiers (2), and deverbal nouns (3) as these field examples show:

(1)	bàt-qan-ga∫	sarluq-tar	uraj	berdi
	descend-PST-SS	yak-PL	go.far- Cv	AUX-REC.PST

'The yaks went downhill (downstream) and moved far away.'

(2)	bis-tıŋ	t∫òqta-an-wvws	t∫er-ge	ovaa	t∫ok=tur
	we-GEN	ascend-PST-1\PL	place-DAT	cairn	NEG-DEIC
	'There was i	no cairn in the place we ha	d climbed up	to.'	

(3)	t∫òqta-an-ш-n	∫uut	esker-be-di-m
	ascend-PST-3-ACC	completely	notice-NEG-REC.PST-1
	'I didn't notice his asc	ent at all.'	

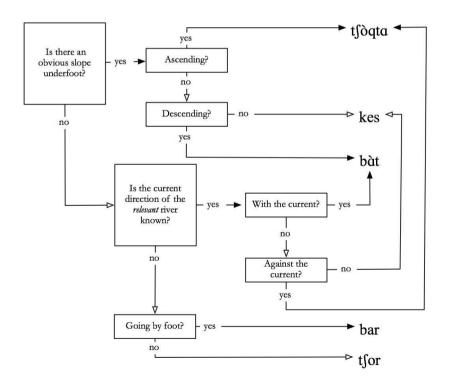
If a Tuvan is standing on a highly salient slope, say 12% grade or more, and planning to descend, they will use the verb root [bàt]; if ascending, they say [tʃòq]. Since I did my initial fieldwork in an extremely hilly area, there were few instances where the ground underfoot did not slope. But some time later, while in the village on a perfectly flat surface, I noticed people using the same terms. I assumed that the village had a coordinate grid, much like 'uptown' or 'downtown' in Manhattan.

Still later, I found the same terms being used outside the village on flat areas. Nobody could explain to me exactly how the choice of terms was made, and it took a while to discover the underlying *emic* category. It is actually not slope, but direction of river flow. If you are on a slope that is steep enough, you use the term for the direction water would flow if it were on the slope. If you are on a less salient slope or flat ground, you reference the nearest river and the direction of its water current, a fact so well known to all and obvious so as to not merit explanation to visiting linguists. A

similarly complex and abstract system of topographic verbs for 'go' has been documented in Lolovoli Ambae, a language of Vanuatu (Hyslop 1999).

The Tuvan directional system (as encoded in the verbal morphology) thus relies on a hierarchal combination of ground slope and water flow direction in the nearest or dominant river basin. The system is simple, but hard to decode. Less obvious is a superordinate system that has greater geographic range and overrides the slope-based system. This is based on the direction of water flow either in the nearest known river, or in a dominant river that may be more distant. Again, the generic word for 'go' [bar] is rarely used, but for Tuvans the system is so second nature that I had to interview dozens of consultants before discovering it was tied to land slope and river current. Moreover, the system is abstract enough to be extended to micro domains such as the level floor space inside a yurt or the locations on a chess board.

Fig. 2 A schematic decision chart of how one might arrive at the appropriate word for 'go' in Tuvan in any given context. Start in the upper left hand box.

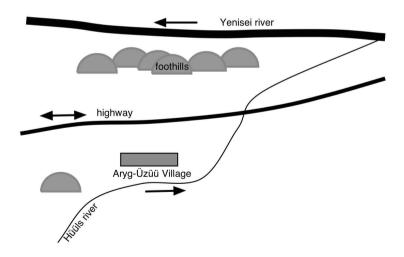


Tuvan directional verbs illustrate that morphology is sometimes not just morphemes, it can also be packaging of topographic knowledge or other ecologically valid knowledge. You cannot interpret – let alone use – such a system unless you decode the mental map it is built upon. Landscape and culturally-specific packaging of knowledge impinges on grammar, sometimes to such an extent that there can be no adequate description of grammar in isolation from the cultural knowledge that underlies it.

Even with the most elaborate of thought experiments or miniature scale models, I sincerely doubt that this system could be fully elicited, understood and documented in the classroom or laboratory. Tuvans deprived of topographic reference points will revert to informationally-poor and generic words for 'go'. The result would be a serious gap in the morphology and an incomplete description of the grammar.

In a different village than where I originally learned the system, I discovered that frames of reference can vary within this system. I was walking along a main road and stopped to ask directions. Pointing due West, a woman told me to 'upstream'. A bit later walking on the same road in the same direction, I was told by another woman to go 'downstream.' It turned out each one was referencing a river that lay behind her, one the Yenisei and the other the Hüüls.

Fig. 3 The Tuvan village of Aryg-Üzüü with its two rivers and nearby highway, each providing a coordinate grid for selecting the verb 'to go'.



5. Which yak is black? A Tuvan color hierarchy

During my 1998 fieldwork in Tuva I lived with a nomadic yak herding family during the first few months I was trying to become functional in the language. As I could not carry on a competent adult conversation, I spent a lot of time talking to children and being around yaks and goats. My early conversations thus tended to be *with* children *about* yaks and goats. Yaks were a highly salient feature of the environment, and I asked and was told far more about them than I ever would have asked in a classroom or typical elicitation setting.

Yaks are so salient, in fact, that Tuvan children appear to learn their color terms first not as abstract labels for visual qualia, but as labels for yaks. Much of the voluminous research into color perception, beginning with Berlin and Kay (1969) up to the present, assumes that people learn basic color terms primarily as abstract labels for hues. An alternative and more field-based view, dubbed the 'emergence hypothesis' (Levinson 2000, Kay and Maffi 2000) places greater emphasis on cultural uses of color terms, noting that many cultures use simplex labels to refer to hue in combination with pattern, surface quality or reference to other culturally salient objects, such as cattle (Turton 1980). At least for Tuvan children who herd yaks, color terms appear to be initially acquired with yak types as their primary referents.

Second, I found yak color terms to be a richly structured system, in which all colors and patterns were not equal, but existed in a permanent hierarchy of salience dictated by cultural importance. Like other documented animal color hierarchies (Fukui 1996) the Tuvan system encapsulates centuries of accumulated experience about breeding and domesticating yaks. In a simplified version, as follows, the features may be arrayed in order of importance:

(4)	head markings:	a spot a stripe	
	body patterns:	one big stripe one big spot many small spots head & tail white and many small stripes	l body another color
	body colors:	blue white red, yellow black brown	(most salient) (least salient)

Cultural preferences (lexically encoded) affect the choice of terms chosen to name or describe a yak. Head marking is the most salient, such that if a yak has it, any mention of its body pattern and body color becomes optional. Similarly, when referring to a yak with a body pattern, mention of its color may be omitted, but the reverse (omitting pattern in favor of color) is impossible (i.e. ungrammatical). The naming system – deeply embedded in the lexicon and morphology – provides a technology that allows herders to very efficiently pick out and name any given yak in the herd.

Tuvans thus employ a set of 'emic' categories that parse the visual color / pattern palette of animals, as culturally defined, into the lexicon. Blue, for example, is culturally more salient than black for Tuvans, and is learned earlier and used far more frequently, perhaps in part because it is a rare and prized yak and goat color. In the Berlin and Kay (1969, Kay 1975) hierarchy, black comes before blue in the order in which languages augment their color term repertoire. For Tuvan children, blue comes first. While it is beyond the scope of this paper to review the entire color perception literature, field linguists can profit from careful attention to the uses of color terms in their native environment while suspending any expectations of universality (Levinson 2000).

Fig. 4 Domesticated yaks in western Mongolia, 2004. The yak in the foreground cannot be considered 'black' because it has a small white head-spot. The yak on the right is black. (Photo by Kelly Richardson, used by permission)



6. Mimesis and the language-ecology interface

Another advantage to encountering languages in the field is that a whole range of new questions present themselves. I found Tuvan discourse to be absolutely saturated with references (lexical, semantic, morphological and phonological) to the local ecology. In a cursory glance at my field notes and recordings, I estimated that at least 75% of spontaneous discourse among the nomadic Tuvan population touched on such topics. Using ethnographic methods along with standard linguistic elicitation, I felt free to pose questions like "Where is the language-ecology interface?" This might seem like a frivolous question, and one that is well off the track of linguistic inquiry. In the classroom, you would not think to ask it, but in the field, you cannot avoid it.

A specific linguistic example of the language-ecology interface came to my attention while accompanying Tuvans on hunting expeditions. Hunters constantly employ a rich repertoire of mimetic expressions both while hunting and while talking about hunting experiences to others after the hunt. Some mimetic expressions were directed at animals, intended to lure them, while others were in speech. Tuvans also employ a large set of sound symbolic terms to refer to nature and animal sounds. This sound technology springs from a culture that places a very high value on the ability to interpret and interact with the ambient sound environment.

The Tuvan sound symbolic lexicon resembles phenomena found areally across north Asia and within the Turkic family. But in exploiting the full productive possibilities (reduplicative and combinatory), Tuvan goes to far greater extremes than any other attested system (Harrison 2004).

(5) Tuvan sound symbolic words using [ʃ] and [l] combined with various vowels (*denotes impossible combinations)

∫ilir-	* (not possible)
∫ylyr-	 sound of a nearly dried up river sound of mucous (snot) being blown out of the nose
∫elir-	* (not possible)
∫ølyr-	 sound of something falling loudly, e.g., a bundle of wood a sound of loud slurping
∫alwr-	 sound of dry leaves or grass rustling to rustle (e.g., paper in the wind) sound of something thin and dry

∫olur-	1. sound of water as in a babbling brook
	2. to be a blabbermouth
	3. to blabber
∫աlաr-	same as ∫aluır-
∫ulur-	to chatter or blab

Tuvan has eight vowels, but owing to two distinct systems of harmony, the combinatory possibilities are very limited. The chart below shows that for any given vowel in syllable one (column A) there are only two possible vowels for the second syllable, the remaining six being disallowed by either round harmony or back harmony. Mimesis disallows an additional vowel (column E) thus further narrowing the combinatory possibilities, but paradoxically, allowing greater expressivity.

(6)	А	В	C	D	E
	Possible V1	Possible V ₂	Disallowed V ₂ (Round Harmony)	Disallowed V ₂ (Back Harmony)	Disallowed V ₂ (Mimesis)
	i	i e	уø	шиао	e
	У	y e	øi	шиао	e
	e	i e	y ø	шиао	e
	ø	у е	i ø	шиао	e
	ı			1	

ш	ша	u o	iуеø	a
u	u a	шо	iyeø	a
a	ша	u o	iyeø	a
0	u a	шо	iyeø	a

Linguists and especially phonologists love combinatory systems. But we rarely get to see the full range of combinatory possibilities in normal language. This is because all such systems have gaps caused by possible but not attested (or infrequently attested) sound combinations. We often have to look for special language play contexts or be content with static patterns that just happen to occur. It's very hard to carry out more than a rudimentary 'bnick' test and get grammaticality judgments with a language you

don't command natively, or that is endangered, or where people have more pressing things to do than serve as linguistic consultants.

Tuvans – in everyday, ecologically-informed speech – produce and understand novel sound symbolic forms that follow the above template, and they do so with great frequency. A similar dynamic – achieving maximal expressivity by limiting combinatory possibilities – has been documented in the sound symbolic lexicon of White Hmong (Ratliffe 1992). Tuvan sound symbolism elicited in the course of hunting calls reveals the full exploitation of combinatory possibilities of the vowel harmony system.

Fig. 5 A Tuvan nomadic yak herder and hunter (M. Kara-ool) in a typically mountainous environment, where linguistic sound mimesis and attention to ambient sounds play important roles. (Photo 2003 Katie Vincent, used by permission)



Sound mimesis in Tuvan is evidenced in a rich system of hunting calls, animal domestication songs, and stylized animal sounds. It is a technology for managing natural resources, and part of cultural knowledge. Without actually going out hunting with Tuvans (part of my basic duty as a participant observer), I would never have documented what is for them an integral part of the grammar (the combinatory, sound

symbolic manipulation of phonemes), nor seen it in use in its natural environment (to imitate animal and nature sounds). In this case, by paying attention to the (somewhat marginal) language-ecology interface, I was also able to collect rich data for highly formal models of vowel harmony and computational phonology (Harrison 2004).

7. Observing obsolescence

I have argued that ethnographically informed field work produces more interesting data. Imagine people looking at archived video materials 50 years from now, of languages long extinct, and seeing only elicited word lists and sentences with no interesting content. Secondly, I have argued that ethnographically informed work has the potential to uncover better, fuller data. There are two reasons: first, when the researcher encounters the language in its natural environment, he or she may be made aware of some of the expectations and biases arising from his or her own native language and conceptual framework (in my case, the expectation of finding a single verb to express 'go'). While one can never completely overcome one's own biases, encountering the language in the field may free the researcher to look at domains such as sound mimesis or color/pattern hierarchies and frame these in terms of larger questions such as the language-ecology interface. Second, languages do not always show their full range of possibilities and potentialities in laboratory-like conditions isolated from the environments where they are spoken spontaneously. Structures that the researcher may not think to ask for in the laboratory may be revealed in spontaneous interactions.

A further question that can only really be asked in the field has to do with very small and moribund languages. How does language obsolescence actually happen? What does it look like in everyday praxis and in the grammar? (Harrison and Anderson forthcoming). Speakers of dying languages (and the linguists who hope to document them) confront a catch-22. Speakers need to converse in order to recall forgotten parts of the grammar and lexicon, but they hesitate to talk because they often cannot remember well enough. Getting the self-reinforcing process of talking and remembering started can be challenging. I have found that speakers will talk more, and more enthusiastically, when given topics that are culturally dear to them. This is especially true in the case of a moribund language, one that speakers seldom use, that is being forgotten, and that is harder to dredge up from memory. Such languages usually require field study.

Data I collected in July 2005 in central Siberia, with my colleague Gregory Anderson, illustrates this point. With the support of ELDP, we have been working to document a very small and moribund language called Ös, spoken in a very remote region along the Middle and Upper reaches of the Chulym river watershed in Central Siberia. The Middle Chulym Dialect of Ös, only minimally documented (e.g., Dul'zon 1952a, 1952b, 1957, 1966, 1973, Birjukovich 1979, Harrison and Anderson 2003) has fewer than a dozen fluent speakers left (and only five currently able to work as language consultants). The Upper Chulym dialect has a similarly small but undetermined number of speakers (Anderson & Harrison forthcoming). Remaining fluent Ös speakers are distributed across five villages, and most rarely use the language and have not spoken it regularly in over 20 years. They have trouble remembering basic lexicon and other structures, and lack confidence in speaking.

While doing elicitation using Russian as a contact language, we noticed a great deal of calquing going on. Speakers would tell us a sentence in Ös that had the same word order as in Russian, which is not the order natural for Ös. We were also having trouble eliciting structures we knew (or at least expected) to exist. For example, Turkic languages usually have two kinds of possessive marking known as 'izafet' constructions (the term comes from the Arabic grammatical tradition). We refer to them as Type A and B in the data below.

(7)	Type A	mogalaq-tuny	t∫amaa-zw
		bear-GEN	hide-3
		'the bear's hide'	
	Type B	mogalaq	t∫amaa-zw
		bear	hide-3
		'a bear hide'	
	Unattested	*mogalaq-tuıŋ	t∫amaq²
		*mogalaq	t∫amaq

In Type A izafet, the first noun bears a genitive case marker and the second noun a third person possessive marker (van Schaaik 2002). Based on what we know about other Turkic languages of Siberia, we expected Type A to express definiteness in contrast to more generic Type B. But although speakers seemed to accept tokens of Type B we produced, we had not been able to get them to produce them spontaneously. We began to suspect that unlike in nearby languages, the Ös Type B was highly marked and infrequently used, but could not confirm this without collecting spontaneous tokens of it.

² The underlying form for bear hide is $[t \int a \ ma \ q]$ when suffixed with the third person possessive marker, the uvular stop [q] gets deleted, yielding /t $\int a \ ma \ q + u \ / > [t \int a \ ma \ a \]$.

The problem was compounded by the fact that the elderly speakers found it difficult to respond to the kind of elicitation typically taught in field methods; for example, when asked to say 'my head' they would respond 'your head' and so on. They often seemed to be agreeing with structures we produced just to be polite, so we had little confidence in their expressed grammaticality judgments.

We tried to obviate this problem by asking questions in the target language, as per the ethnographic method. We also trained one speaker, the youngest, to do elicitation by discussing culturally relevant topics we arranged in advance. In the dialogue reproduced below in English translation, our consultant V. M. Gabov [VG], who at age 54 is the youngest fluent speaker of Ös, asks two elderly speakers (I. Skoblin [IS], born 1930, and A. Badeyeva [AB], born 1932) if they can remember anything of the traditional Ös lunar calendar. Such calendars were once widely used among all Siberian cultures. The Ös version has been out of use for well over a century (Falck 1785-1786), and is remembered only in fragmentary form. We reproduce the dialogue here in English translation (field notes p. 62).

- (8) [VG] and you, well I asked, how is it in our language? 'Month' in the Russian language?
- (9) [IS] How is our month? There was fox month. Which you yourself should know what months, [how] month [is] in our language.
- (10) [AB] Oh, month,
- (11) [IS] how, fox month,
- (12) [AB] fox month, chipmunk month,
- (13) [AB] chipmunk month, raven month
- (14) [IS] Green, green month
- (15) [AB] that's May, I said that, it seems. May is green month, green month. What else?
- (16) [AB] I knew some of the months, my father, [he knew them] all.

- (17) [IS] Me too, I used to know.
- (18) [AB] I knew them. Oh, I've forgotten them.
- (19) [VG] You've forgotten a lot...of course.

As was clear from our speakers' response – enthusiastic, with raised voices, frequent interruptions and simultaneous talk – the topic delighted them. Though these elderly speakers could not ultimately recall more than four month names, we managed, in the course of collecting the calendar narrative, to elicit multiple tokens of the type B izafet construction from this seldom used corner of the lexicon. It appeared, for example, several times in lines (12) through (15) above, reproduced below (20) in full interlinear form.

(20) [AB]	dylgy	aj-w	kyzy	gen	aj-w		
		fox	month-	-3 chipr	nunk	montl	n-3	
		'fox m	ionth, chipi	nunk mon	th,'			
[AB]	kyzyg	en aj-w	kai	ga	aj-t	u	
		chipm	unk mont	h-3 rav	en	mor	nth-3	
		'chipn	nunk month	n, raven m	onth'			
[IS]		køk	køk	aj-w				
		Green	green	mont	h-3			
		'Greer	n, green mo	onth'				
[AI	B]	køk	aj-w	eta	maj	mæn	an-ш-n	di-dır = mæn
		green	month-3	(R)DEIC	May	Ι	it-3-ACC	say-EVID.PST-1
		'that's I	May, I said	that, it see	ems.'			

8. The field is our laboratory

To conclude, I have given four examples of linguistic structures that came to light due to the use of the ethnographic method, including participant observation and attention to culturally relevant speech. First, Tuvan directional verbs used to say 'go'; second, Tuvan lexical terms for colors as instantiated in the yak color and pattern hierarchy; third, Tuvan combinatory phonology as expressed in the sound symbolic lexicon used while hunting and talking about ambient sounds; fourth, the Ös type B izafet construction that emerged during a discussion of the lunar calendar system. Documenting the nearly-forgotten Ös lunar calendar, albeit in fragmentary form, was also an unexpected bonus of using the ethnographic method.³

I have argued that cultural context, knowledge systems, and information packaging strategies are all usefully viewed as part of language proper. Moreover, they impinge on the phonology, morphology, prosody, syntax and discourse structures linguists seek to document. These structures can be more fully accessed by using the ethnographic method to complement linguistic elicitation. And adequate description and documentation require it.

We field linguists may sometimes feel intimidated by the fact that the pristine laboratory conditions and statistical validity of data prized by psycholinguistics and psychology are almost never replicable in the field conditions we work in. As a result, we often feel we must apologetically present our field data as 'anecdotal', not statistically valid or replicable, and therefore scientifically suspect or inferior. We need to rid ourselves of this inferiority complex, and be confident that not only is the field our laboratory, but it is an excellent laboratory on its own terms. Field documentation can to some extent make up for the shortcomings of experimental laboratory methods or classroom elicitation, especially, I have argued, when linguists practise ethnographically-informed documentation.

References

- Anderson, Gregory D. S. and K. David Harrison (1999). *Tyvan*. München: Lincom-Europa.
- Anderson, Gregory D. S. and K. David Harrison (forthcoming). Ös til t (Middle and Upper Chulym dialects): Towards a comprehensive documentation. Turkic languages.
- Bauman, Richard and Joel Scherzer (1975). The ethnography of speaking. *Annual* review of anthropology 4:95-119.

³ The Ös calendar we documented overlaps to some extent with that documented by Falck (1785-1786).

- Berlin, Brent and Paul Kay (1969). *Basic color terms*. Berkeley and Los Angeles: University of California Press.
- Birjukovich, R. M. (1979). Morfologija chulymsko-tjurkskogo jazyka I. Moscow
- Boas, Franz (1919). Kinship terms of the Kutenai Indians. American anthropologist 21.98-101.
- Boas, Franz (1921). Ethnology of the Kwakiutl. Annual reports of the Bureau of American Ethnology 35: 41-1481.
- Boas, Franz (1927). Additional notes on the Kutenai language. *International journal of American linguistics* 4.85-104.
- Conklin, Harold C. (1954). *The relation of Hanunoó culture to the plant world*. PhD dissertation, Yale University.
- Dul'zon, A. P. (1952a). Ocherk fonetiki chulymsko-tjurkskogo jazyka. [Phonological sketch of Chulym] In Uchenye zapiski Tomskogo pedagog. instituta IX.
- Dul'zon, A. P. (1952b). Chulymskie tatary i ikh jazyk. [The Chulym Tatar and their language]. In Uchenye zapiski Tomskogo pedagogicheskogo instituta IX, 76-211.
- Dul'zon, A. P. (1957). Tjurkskie jazyki i dialekty zapadnoj sibiri. [Turkic languages and dialects of western Siberia]. In Uchenye zapiski Tomskogo pedagogicheskogo instituta.
- Dul'zon, A. P. (1966). Chulymsko-tjurkskii jazyk. [Chulym Turkic language]. In Jazyki Narodov SSSR: Tjurkskie jazyki. Moscow: Nauka. 446-66.
- Dul'zon, A. P. (1973). Dialekty i govory tjurkov chulyma. [Dialects and sub-dialects of the Turks of the Chulym]. In Sovetskaja Tjurkologija, #2, 16-29.
- Falck, Johan Peter (1785-1786). Beyträge zur topographischen Kenntniss des russichen Reichs. Georgi, Johann Gottlieb (ed.). Sankt-Peterburg: Gedruckt bey der Kayserl. Akademie der Wissenschaften. Volume 3. 554-557. Digitized version is available from Göttingen State and University Library. Call number SUB Göttingen <4 H NAT III, 1450:1-3>, accessed July 2005 at http://www.gdz.sub.uni-goettingen.de/cgi-bin/digbib.cgi?PPN335894348>.
- Fukui, Katsuyoshi (1996). Co-evolution between humans and domesticates: the cultural selection of animal coat-colour diversity among the Bodi. In Roy Ellen and Katsuyoshi Fukui (eds.) *Redefining nature*, pp. 319-385. Oxford: Berg.

Geertz, Clifford (1973). The interpretation of cultures. New York: Basic Books.

- Haas, Mary R. (1941). Tunica. In *Handbook of American Indian languages*, vol. 4. New York: Augustin Publishers.
- Haas, Mary R. (1976). Anthropological linguistics: history. In Wallace, Anthony F. C., J. Lawrence Angel, Richard Fox, Sally McLendon, Rachel Sady, and Robert Sharer (eds.). *Perspectives on anthropology 1976*. 33-47. Arlington: American Anthropological Association.
- Harris, Marvin (1976). History and significance of the emic/etic distinction. *Annual review of anthropology* 5:329-350.
- Harrison, K. David (2004). South Siberian sound symbolism. In Vajda, Edward, ed. Languages and prehistory of Central Siberia. London: Benjamins.
- Harrison, K. David & Gregory D. S. Anderson (2003). Middle Chulym: Theoretical aspects, recent fieldwork and current state. *Turkic Languages* 7/2.
- Harrison, K. David & Gregory D. S. Anderson (forthcoming). Language change and terminal generation speakers: The case of Tofa. To appear in Arienne Dwyer, K. David Harrison and David Rood (eds.). A world of many voices: lessons from documented endangered languages.
- Himmelmann, N. P. (1998). Documentary and descriptive linguistics. *Linguistics* 36, 161-195.
- Hymes, Dell (1970). Linguistic method in ethnography: its development in the US. In P. Garvin, ed. *Method and theory in linguistics*. 249-325. The Hague: Mouton.
- Hyslop, Catriona (1999). The linguistics of inhabiting space: spatial reference in the North-East Ambae language. *Oceania* 70: 25-42.
- Kay, Paul (1975). Synchronic variability and diachronic change in color terms. Language in society 4:257-70.
- Kay, Paul and Luisa Maffi (2000). Color appearance and the emergence and evolution of basic color lexicon. *American anthropologist* 101(4):743-760.
- Levinson, Stephen C. (2000). Yélî dnye and the theory of basic color terms. *Journal of linguistic anthropology* 10(1):1-53.
- Malinowski, Bronis□aw (1922a). Ethnology and the study of society. *Economica* 6:208-219.
- Malinowski, Bronis aw (1922b). Argonauts of the western Pacific. London: Routledge.

- Pike, Kenneth (1967). Etic and emic standpoints for the description of behavior. In Donald C. Hildum (ed.). *Language and thought: an enduring problem in psychology*. 32-39. Princeton, N.J.: D Van Norstrand Company.
- Ratliff, Martha (1992). *Meaningful tone: a study of tonal morphology in compounds, form classes, and expressive phrases in White Hmong.* Dekalb: Center for Southeast Asian Studies, Northern Illinois University.
- Ratliff, Martha (2003). Hmong secret languages: themes and variations. In D. Bradley, R. LaPolla, B. Michailovsky, and G. Thurgood (eds.). *Language variation:* papers on variation and change in the Sinosphere and in the Indosphere in honour of James A. Matisoff. 1–18. Canberra: Pacific Linguistics.
- Spradley, James P. (1980). Participant Observation. New York: Rinehart and Winston.
- Turton, David (1980). There's no such beast: cattle and colour naming among the Mursi. Man, New Series, Vol. 15, No. 2 (June 1980). 320-338.
- van Schaaik, Gerd (2002). The noun in Turkish: its argument structure and the compounding straight-jacket. Wiesbaden: Harrasowitz.
- Woodbury, Anthony C. (2003). Defining documentary linguistics. In Peter Austin, (ed.). Papers in Language Documentation and Description. Volume 1. London: SOAS.

Abbreviations

1	First person
3	Third person
ACC	Accusative
AUX	Auxiliary
CV	Converb
Dat	Dative
DEIC	Deictic
Evid	Evidential
Gen	Genitive
NEG	Negative
Pl	Plural
PST	Past
(R)	Russian loanword or code-mixing
REC.PST	Recent Past
SS	Same subject marker (in switch reference system)