

今日人类学民族学论丛

Anthropology and Ethnology Today Series

国际人类学民族学联合会第十六届大会文集

Book Series of the 16th World Congress of IUAES

黄忠彩 总编

Editor-in-Chief Huang Zhongcai

濒危语言

Issues of Language Endangerment

徐世璇 [荷] 郭天德 [英] 廖乔婧◎主编

Edited by Xu Shixuan Tjeerd de Graaf Cecilia Brassett

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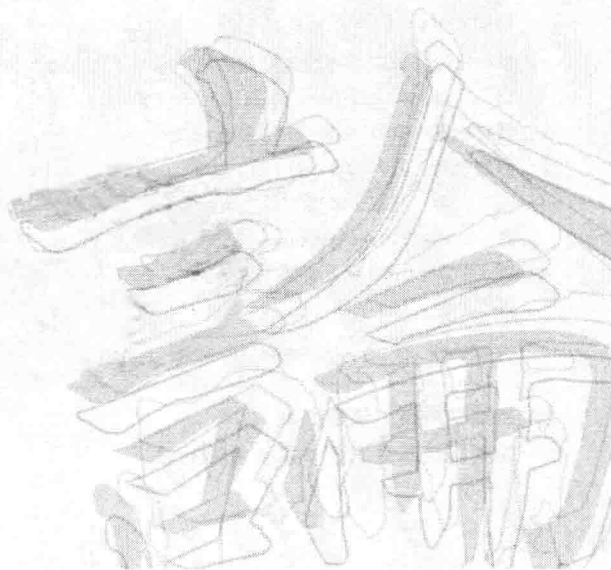
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Preface

China won the right to host the 16th IUAES World Congress in July, 2003. After six years of preparation, the Congress will be held in Kunming, China during July 27-31, 2009.

The International Union of Anthropological and Ethnological Sciences (IUAES) was established on August 23, 1948, when it merged, in fact, with the International Congress of Anthropological and Ethnological Sciences (ICAES), which was founded in 1934. The latter was the product of various Congresses of Anthropological Sciences, starting in 1865.

The IUAES is one of the member organizations of the International Social Science Council (ISSC) and also of the International Council for Philosophy and Humanistic Studies (ICPHS). The IUAES is also a member of the International Council of Scientific Unions (ICSU). Its aim is to enhance exchange and communication among scholars of all regions of the world, in a collective effort to expand human knowledge. In this way, it hopes to contribute to a better understanding of human society, and to a sustainable future based on harmony between nature and culture. The IUAES once noted a draft statement on the future of world anthropology in "*Current Anthropology*" (1979): "The scope of anthropology in terms of areas of human interest includes such critical issues of the contemporary world as problems of environmental management, pressure for the progressive reduction of disparities and the restructuring of the world order, the future of the nation-state, ethnic pluralism and the future of national society, and the harmonization of the roles and functions of institutions with the basic and derived biological and psychic drives of man". The IUAES itself consists of national and institutional organizations in more than 50 countries in all parts of the world, and also includes some hundreds of individual members. The research effort and involvement of the IUAES is principally arranged by its scientific commissions, of which, currently, there are twenty-seven, and each of which concentrates on some areas of anthropological interest. They included ethnic relations, aging and the aged, women, children, youth, migration, epidemiology and Aids, tourism, primatology, linguistics, and so on.

The theme of the 16th IUAES World Congress in Kunming, China is "Humanity, Development, and Cultural Diversity". The Anthropologists and Ethnologists around the world will present over 4 000 papers, which covered 33 sub-disciplines or research fields as follows: Aging and the Aged Studies, Aids, Archaeological Anthropology, Children, Youth and

Childhood Studies, Communication Anthropology, Development and Economic Anthropology, Educational Anthropology, Enterprise Anthropology, Ecological/ Environmental Anthropology, Ethnic Culture Studies, Ethnic Relations and Ethnic Identities, Food and Nutrition Anthropology, Gender and Woman Studies, Globalization Anthropology, Historical Anthropology, Human Ecology, Human Rights Studies, Indigenous Knowledge and Sustainable Development Studies, Legal Anthropology and Legal Pluralism, Linguistic Anthropology, Medical Anthropology and Epidemiology, Migration Anthropology, Museum and Cultural Heritage, Nomadic Peoples Studies, Physical Anthropology and Molecular Anthropology, Psycho-anthropology, Religious Studies, Sport Anthropology, Theoretical Anthropology, Tourism Anthropology, Urban Anthropology, Urgent Anthropological Research, and Yunnan Studies.

As the organizer of the 16th IUAES World Congress, the Chinese Union of Anthropological and Ethnological Sciences (CUAES) decided to edit and publish “Anthropology and Ethnology Today Series”—the paper collection series of the above sub-disciplines or research fields, for example, Physical Anthropology, Molecular Anthropology, Migration Anthropology, Museum and Cultural Heritage, Nomadic Peoples Studies, Linguistic Anthropology, Medical Anthropology, and Ethnic Culture Studies. We hope that the scholars from different parts of the world can share with all the achievements collected in the book series of this congress.

**Zhou Mingfu, Executive Vice-president
Chinese Union of Anthropological and Ethnological Sciences**

**Huang Zhongcai, Secretary-general
Chinese Union of Anthropological and Ethnological Sciences**

July 14, 2009

Preface

The past few decades have seen an unprecedented global increase in the rate and scale of language decline, with increasing numbers of languages facing endangerment and ultimate extinction. As language and culture are inextricably linked, such widespread language loss represents a serious and irreversible loss of human heritage. Language endangerment has therefore received much international attention, and has also become a topic of major concern for contemporary linguists. Research is now being focused on archiving and documentation of language data, investigation and analysis of the causes of language decline, and assessment of different measures for the maintenance of language vitality.

With the aim of facilitating dialogue between linguists undertaking such research, a two-day Academic Session on *Issues of Language Endangerment* was held at the XVIth IUAES Congress 2009 in Kunming, China. There were over 40 participants from China, Taiwan, Russia, Japan, the Netherlands, France, the UK, Finland, Sweden, the USA, Morocco, Bangladesh and Nepal, with papers presented by 26 scholars. Their reports encompassed Asia, Africa, Europe and the Pacific Region, and included endangered languages in Mainland China, Taiwan, Bangladesh, Nepal, Iran, Morocco, Tanzania, Russia, Finland and the Basque Country. Studies ranged from descriptions of the state of endangerment, analyses of structural decline, discussions of archival methods, and strategies for preservation. The complete agenda of the Academic Session may be found in the Appendix. Linguists from all over the world exchanged ideas and experiences during official panel discussions, with stimulating conversations being continued outside the meeting rooms.

This collection of papers was based on the reports presented in July 2009. The authors have revised and expanded their presentations by highlighting significant features, clarifying important points, and providing more detailed examples. Two key themes may be identified: the papers in the first section include descriptions and analyses of endangered languages and their regions of distribution; while those in the second section discuss methods and strategies for language documentation, maintenance and preservation. The above topics represent significant areas in language endangerment research, and reveal how much progress has already been made in recent years.

As this volume goes to press, we would like to acknowledge the enthusiastic support and assistance provided by the members of the Editorial Committee of the XVIth IUAES Congress 2009, without whom this publication would not have been possible. It is our sincere hope that this collection of papers will fulfil its purpose of promoting research in language endangerment and preservation worldwide.

The Editors

Cecilia Brassett, Tjeerd de Graaf and Xu Shixuan

Beijing, May 2011

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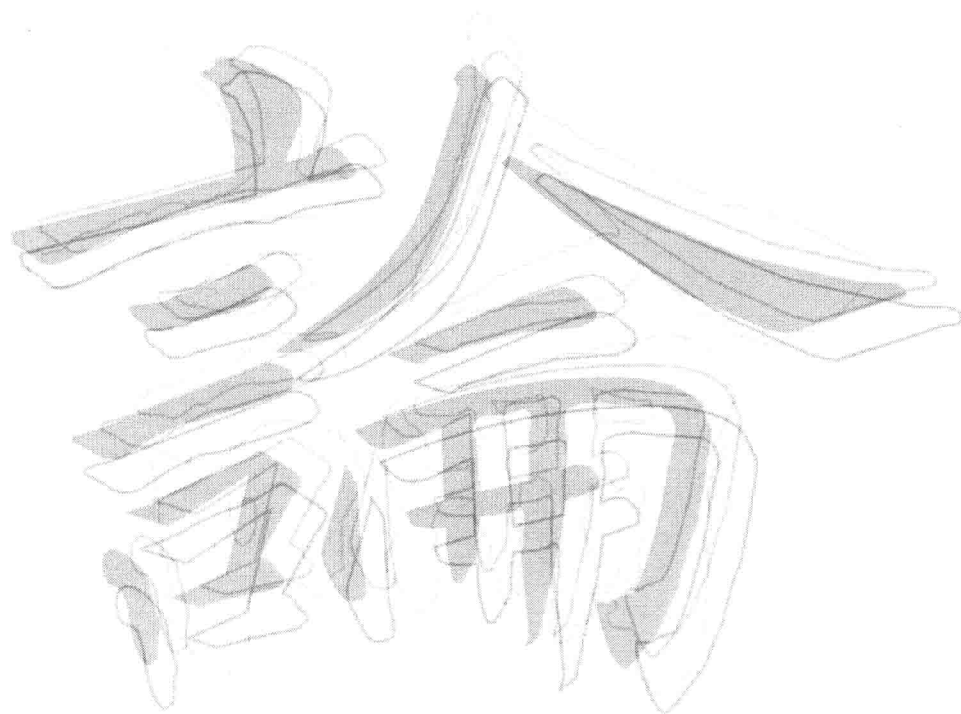
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Academic Session on *Issues of Language Endangerment* at the XVIth
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Chapter 1 Language Endangerment: Descriptions and Analyses



Mapping Endangered Languages of the Pacific: Cases Studies in Taiwan of China, Orchid Island and the Batanes^o

David Blundell (卜道)^o

National Chengchi University

Abstract: This report illustrates an ongoing commitment to map languages and cultures in the Asia-Pacific region. It features a consortium of academic institutions and

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- ① This article is originally from a presentation at Issues of Language Endangerment 16th International Union of Anthropological and Ethnological Sciences (IUAES) Congress, Kunming, China 2009. This project for mapping languages and cultures was last reported in the *Proceedings of the 37th Annual International Conference on Computer Applications and Quantitative Methods in Archaeology (CAA)*. Williamsburg, Virginia, USA. March 22–26, 2009. Also see recently published, David Blundell, Michael Buckland, and Jeanette Zerneke, with Yu-Hsiu Lu and Andrew Limond, “Empowering Pacific language and Culture Mapping with Applied Case Studies in Taiwan of China and the Philippines,” *Endangered Austronesian, Papuan and Aboriginal Languages*. Gunter Senft, ed. *Pacific Linguistics*, 2010: 137–152.
- ② David Blundell, Ph D. in cultural anthropology, University of California, Los Angeles, has lived in China Taiwan for more than twenty years. Work on life histories and visual documentation from the insider’s point of view best describes his research methods. Blundell has participated in research on the archaeological sources and living cultures of the China Taiwan Austronesian-speaking peoples. His work focuses on concepts and theories of dialogue relationships, language and knowledge acquisition, and documentation based on case studies in the region. This research shares an edge with his previous South Asian studies, *Masks: Anthropology on the Sinhalese Belief System* (New York: Peter Lang, 1994) to elicit separate voices in cultural systems with attention to ethnicity, linguistic diversity, and concepts of heritage. Blundell edited a related volume *Austronesian Taiwan: Linguistics, History, Ethnology, Prehistory*. Taipei: Shung Ye Museum of Formosan Aborigines and Berkeley: Phoebe A. Hearst Museum of Anthropology, University of California (Revised Edition), 2009. He offers courses on language and culture, socio-linguistics, aesthetic anthropology, filmmaking and visual anthropology and features Cultural and Ethnic Structure of Taiwan (台湾的文化与族群结构) at National Chengchi University, Taipei.

independent scholars who interact with the Electronic Cultural Atlas Initiative (ECAI) that connects diverse regions of the world by means of compatible geographic information systems (GIS).

This article features the ECAI Language Atlas of the Pacific in particular. It also presents case studies of Formosan languages in Taiwan of China as well as the Malayo-Polynesian Bashiic Yami language of Orchid Island and the Ivatan in the Batanes of the Philippines. It concerns (1) the state of the languages in their local setting, (2) language mapping, and (3) processes of language vitality. For a continuation of earlier research, this study provides digital documentation for local community and scholarly interactive use.

Digital language tools are utilized at the local community level to enable temporal-spatial language dynamics in a variety of ways: to create and categorize texts, audio and image files, hyperlinks, tabular data; tools to query remote data catalogued in libraries; means of downloading selected data for further analysis with other software; editing data sets into a single time-aware map (map space); methods of illustrating data through time. These projects are about valuing diversities of worldviews derived from ethnography and GIS digital technology that document ways of life and applied meanings from language and culture as patterns of human experience.

Keywords and phrases: Endangered Languages, Ethnolinguistics, Ethnography, Linguistic Diversity, Language Education, Worldviews, Digital Internet Tools, Information Management Systems, Temporal-spatial Data, Taiwan of China, Orchid Island, the Batanes, Electronic Cultural Atlas Initiative (ECAI)

Anthropological Studies and a Digital Atlas of Pacific Languages

The study of languages has been an important focus of anthropology since its modern inception in the 19th century. Language can be considered one of as the first human tools in the evolution of culture. Without language, how could people develop institutions, belief systems, or computers? Research into language communication indicates that it serves as a network for cultural expansion and preservation. English is the present standard of global networking communication, other languages such as Mandarin Chinese are on the horizon. The importance of the research in this paper is to document and help conserve language communities in the Asia Pacific Area that are in danger of extinction in this century.

I am currently the editor of a digital atlas of Pacific languages. This atlas encompasses languages that extend from Taiwan of China through Oceania and connects diverse geographical areas of the world by means of a geographical

information systems (GIS)-based mapping process. Dr. Lewis Lancaster, the founding director of the Electronic Cultural Atlas Initiative (ECAI), suggested me to organize a team for ECAI Austronesia studies in 1997. I have collaborated with Michael Buckland (Co-Director of ECAI, Professor Emeritus at the School of Information, University of California, Berkeley), and Jeanette Zerneke (Director of ECAI Technology) for language and culture documentation systems from 2001. Further assistance to expand the initial database project has come from the Pacific Neighborhood Consortium (PNC) located at the Computing Centre, Academia Sinica.^①

The purpose of this electronic bulletin board of Pacific cultural and linguistic data is to present sustainable and lasting spatial features on the ECAI Web pages that are compatible with other digital modular geographic programs. A metadata system utilizing the ECAI-coded information format allows the user to seek additional stored data on the attributes or elements given in the Atlas. The mapping ideas have been developed by anticipating of other cultural atlases, and to be produced by local teams interested in this subject and interacting with peoples across the Pacific and Indian oceans.

As the past sites are more and more recognized as a precious resource, accordingly society at large, wants to protect it and understand its meaning and value for today (Appadurai 1981). In Taiwan of China, prehistoric and historic sites have a profound bearing on cultural systems that still have an enduring impact on Pacific cultures as well as those of East and Southeast Asia. This ethnographic region has been well documented in the archaeological and ethnological literature. I will present the richness of these heritages, I experienced as a long-term resident scholar and participant in the cultural activities of local people.

Research Methodology^②

Anthropology is... open to theories, research techniques, and substantive knowledge generated from other fields... an extreme case of growth by borrowing. In fact, anthropology is a pluridiscipline, not a discipline.

Jacques Maquet 1982:vii

① The Pacific Neighborhood Consortium (PNC) is based at Academia Sinica, Taipei, since 1997. It facilitates research through conferences and networking digital research and education. It is devoted to “scholarly communication, information exchange, and collaborative research among the nations of the Pacific Rim.” See <http://pnclink.org>.

② For this portion, see “Relating Orchid Island (Taiwan) and Batanes (Philippines): ECAI Pacific Languages and Cultures Mapping,” Third Taiwan of China–Philippines Academic Communication Conference: Perspectives on the Development and Public Policy of Culture Industry in Taiwan of China and Philippines. Aletheia University, Taipei, October 22nd, 2010.

Anthropology is the scientific expression of man's curiosity about human life in the present—not only about how other people have lived in other places and at other times, but also about how we live here and now. Anthropology offers best practice approaches for participant observer methods to cross the analytical line and partake in the experience and later stepping away for analysis and interpretation. This methodology is what Hortense Powdermaker (1966) involved herself in depth “psychological involvement” with “detached objectivity.” In doing interpretation, the anthropologist looks at appearances and connections to recognize patterns of *abstract* and *objective* forms. Subjective senses are used to assign meanings to the configuration; ethnography is never anonymous. To see configurations, the ethnographer observes and grows with the patterns. The attention to life is the source of applied meanings—the harvesting of the patterns in human experience. I have relied on participants presenting the data for relevant use as “sober description” (Schutz, 1967) or “thick description” (Geertz, 1973) from the interview process. The orientation “is a full-blown, actualized event, which the actor pictures and assigns to its place in the order of experiences given to him at the moment of projection” (Schutz, 1967:61). Only from the interpretation of retrospective observation and contemplative gaze, do discrete experiences as units of significance emerge from the study. The ethnographer looks carefully into patterns in the process of life in order to distinguish life shades as coherent experiences. “Meaning is merely an operation of intentionality, which however, only becomes visible to the reflective [contemplative] glance” (*ibid.* 52). Otherwise, “if we simply live immersed in the flow of [time] duration, we encounter ... undifferentiated experiences that melt into one another in a flowing continuum” (*ibid.* 51). The individual reflecting on life's experiences constructs life shades into frames.

Research tools are influencing the format and outcome of the ethnographic process. In my studies the local participants and I mutually utilize those research tools. And of course, the participants know that their documentation will be a repository for their community heritage. My methodologies derive from the visual ethnographic documentation research is based on Rundstrom, Rundstrom, and Bergum^① and Rundstrom^② and their experiments in participant feedback to produce a cultural

① D. Rundstrom, R. Rundstrom and C. Bergum, *Japanese Tea: The Aesthetics, The Way: An Ethnographic Companion to the Film — The Path* (Andover, MA: Warner Modular Publications, 1973).

② D. Rundstrom, *Imaging anthropology. Anthropological Filmmaking: Anthropological Perspectives on the Production of Film and Video for General Public Audiences*. Jack R. Rollwagen, ed. Chur: Harwood Academic Publishers, 1992. pp. 317–370.

document and the models from Jay Ruby's Producer-Process-Product interactive ethnography that aims for producing reflexive presentational accounts.^① The research procedures resulted in cultural documents with a definite source and intention for utilization in academic and public education settings. Ethical responsibility to the local participants and accuracy of the data are especially important in maintaining the research. *Professional Ethics: Statements and Procedures of the American Anthropological Association*^② notes that research integrity concerns "professional responsibility," researchers should be responsible in their interaction—"with those studied," "to the public," "to the discipline," "to sponsors," "to one's own government and to host governments." The researchers' ethical challenge is to commit to veracity.

Local value systems are utilized as a means of "emic" or indigenous approaches. Douglass Price-Williams,^③ among others^④ distinguish research strategies in the study of culture as tending to two basic approaches: the *etic* and the *emic*. The "emic" approach describes a phenomenon in terms of its own units... while the "etic" approach is a measurement external to that phenomenon.^⑤ Price-Williams further divides cultural investigation into separate categories:

1. The distinction between abstract and concrete;
2. The distinction between intellect and emotion, and;
3. The distinction between rhetoric and logic, metaphor and fact.^⑥

The above research distinctions should be known and respected, but they are not always cognitively displayed. As anthropologists attempt to define meanings in culture, worldview references can be made in terms of processes, metaphors, structures, and symbols or linguistic forms. Rodney Needham mentions that anthropological studies isolate "primary factors," to investigate "synthetic images," and standardize operations.^⑦ In terms of symbolic or cultural interpretation, anthropologists tend to interpret

① J. Ruby, "The Image Mirrored: Reflexivity and the Documentary Film," *Journal of the University Film Association*, 29(1), 1977.

② *Professional Ethics: Statements and Procedures of the American Anthropological Association*, Washington, D.C., 1973. A review draft of this report submitted September 16, 1995, Commission to Review the AAA Statements on Ethics Final Report, <http://www.aaanet.org/committees/ethics/ethrpt.htm>.

③ D. Price-Williams, *Explorations in Cross-cultural Psychology*. San Francisco: Chandler and Sharp Publishers, 1975.

④ K. Pike, *Language in Relation to a Unified Theory of the Structure of Human Behavior*, 1. Glendale, CA: Summer Institute of Linguistics, 1954. M. Cole and S. Scribner, *Culture and Thought: A Psychological Introduction*. New York: John Wiley & Sons, 1974.

⑤ D. Price-Williams, *Explorations in Cross-cultural Psychology*. 23.

⑥ *Ibid*: 27.

⑦ R. Needham, *Belief, Language, and Experience*. Chicago: University of Chicago Press, 1972.

worldviews beyond what exists in a locality. Anthropological research forays into unfamiliar cultures and their interpretations sometimes make little sense to the individuals represented in the ethnography.^①

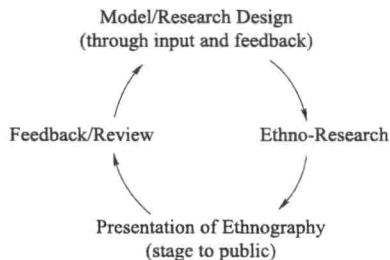
Research is designed as a formal statement with *built-in* alternatives for flexibility if unforeseen events. My method of anthropological research is to make vibrant ethnographic portraits from observations and participation in daily life in order to understand key elements of a society. Interviews are recorded as written and audio-visual statements. I have sought to better understand people through the uses of drawings, sketches, recordings, and notebook procedures in accordance with the sensibilities of participants. Ethnographic research is a kind of initiation into understanding of another worldview as an agreement of reciprocal procedures *vis-à-vis* the community that was studied. My rationale for doing ethnography is to create a portrait or cultural document for the participating community.

The above concept stems from a moral determination to share with the participants the material from the research. Thus, the research must remain intelligible for the participant community. In terms of my performance, the “ethnographic encounter” is a life commitment.

Ethnographic Encounter

No relationship significantly entered can ever end —the trouble is with the significant entry.

—David Cooper 1974:113



The above illustration represents the cycle of the research.

Figure 1 Ethnographic cycle of research: model design, fieldwork, Presentation of study, feedback to public, and model revision.^②

The model/research design, ethnographic research, presentation of ethnography/ stage to public, and feedback/review circle is an upward cycle to new research

① I. C. Jarvie, On the limits of symbolic interpretation in anthropology. *Current Anthropology*, 1976, 17(4): 687–701.

② D. Blundell, *Masks: Anthropology on the Sinhalese Belief System*. New York: Peter Lang, 1994: 15.

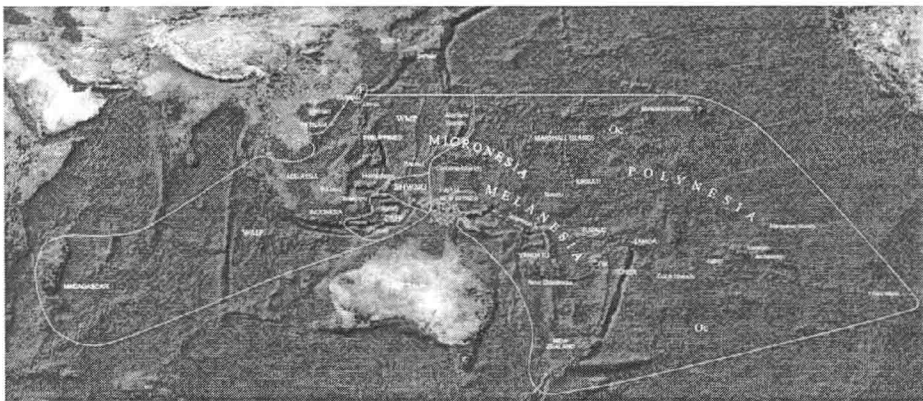
perspectives (Blundell 1994).^①



Electronic Cultural Atlas Initiative

Figure 2 ECAI Website banner.

Note: Early Austronesian-speaking peoples traversed the Pacific and Indian oceans to create a linguistic network of the most extensive language family in the world prior to European arrival. Launched from the Western Pacific and sailing in canoes simply lashed and pegged together, they reached the widely separated islands of Micronesia, the Lesser Sunda, and Polynesia. In a westerly direction, voyagers made it across the Indian Ocean to Madagascar.



Key to the Austronesian Language Map

F	Formosan Languages
WMP	Western Malayo-Polynesian Languages
CMP	Central Malayo-Polynesian Languages
SHWNG	South Halmahera West New Guinea
Oc	Oceanic Languages
	Papuan Languages

Structure of the Austronesian Language Family

AN	Austronesian Language Family
F	Formosan Languages
MP	Malayo-Polynesian Languages
WMP	Western Malayo-Polynesian Languages
CMP	Central Malayo-Polynesian Languages
EMP	Eastern Malayo-Polynesian Languages
SHWNG	South Halmahera West New Guinea
Oc	Oceanic Languages

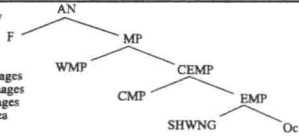


Figure 3 Map of Austronesian Language Family and Major Subgroupings.^②

Note: Distribution of the Austronesian Language Family and Major Subgroupings. Adapted from the Research School of Pacific and Asian Studies, National University. Structure of the Austronesian language family from Blust.

Our rationale for ECAI Austronesia research mapping is a commitment to document cultures in order to produce a temporal-spatial atlas *by, for, and with* local communities. Results are Internet-based and open source with dynamic tools of inter-operability. It offers shared interactivity for local communities usage and for

① *Ibid*: 11–23.

② P. Bellwood, Formosan prehistory and Austronesian dispersal. *Austronesian Taiwan*, D. Blundell, ed. Revised Edition. Taipei: Shung Ye Museum, and Berkeley, CA: Phoebe A. Hearst Museum, University of California, 2009. Map 343–344.

scholarship. Projects are about the way people use their languages and cultures according to their own needs and perceptions.

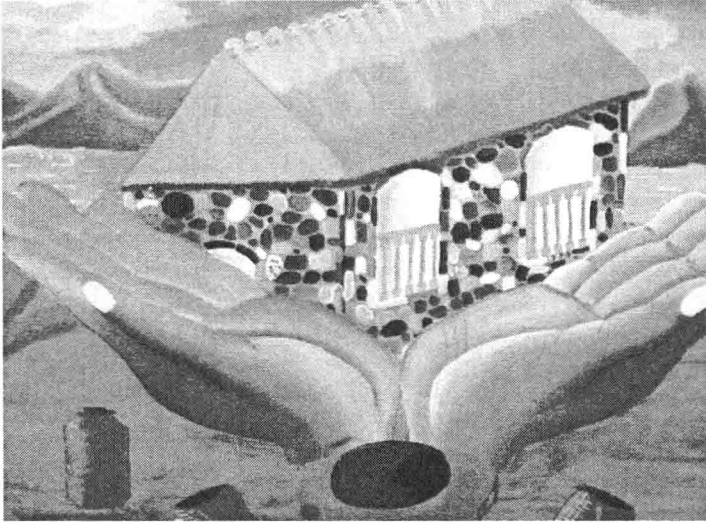


Figure 4 Batanes Islands mural of household supported by hands.

Continuing my earlier research, these studies provide documentation of the following by means of interviews, informal communication, and participant observation:

- (1) Description of speech community;
- (2) Conversational use of language;
- (3) Gestures and non-verbal communication;
- (4) Aesthetics of language, i.e. songs and poetry;
- (5) Oral narrative, including myths and legends;
- (6) Language teaching;
- (7) Oral history;
- (8) Visual documentation of cultural and natural environment.

How ECAI Applies to Cultural Mapping

Our language-mapping projects are undertaken and supported to advance linguistic studies and social sciences. It is an interdisciplinary and collaborative task that involves content specialists, information technologists, and library scientists for advancing contextual sociolinguistics developing standards, best practices, and proof-of-concept projects. Pertinent cultural resource documentation aspects of our studies are based on institutions offering international language guidelines such as Initiative B@bel of

UNESCO,^① Foundation for Endangered Languages,^② the Documentation of Endangered Languages [Dokumentation Bedrohter Sprachen],^③ Ethnologue,^④ Summer Institute of Linguistics,^⑤ Indigenous Language Institute,^⑥ and others.

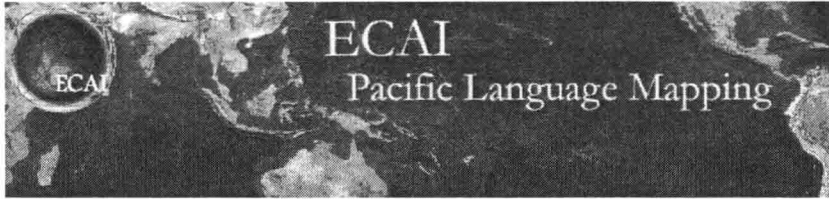


Figure 5 ECAI Pacific Language Mapping banner.

From our research, digital languages maps are developed at the community level. New dynamic temporal language maps show the ability to track language dispersal based on historical records from distinct time periods and sources. *Time Map*TM developed by Ian Johnson and Artem Osmakov at the University of Sydney, Australia, is utilized as software to record, index, analyze, combine, and deliver data with temporal spatial components to support dynamic mapping processes.^⑦ Our mapping of languages and cultures draws on the commitment and work performed at the Academia Sinica^⑧ of Taiwan, and Griffith University^⑨ in Australia, to scan and digitize *The Language Atlas of the Pacific Area*.^⑩

In Canberra, The Australian Academy of the Humanities, which owns the

-
- ① Initiative B@bel of UNESCO, http://portal.unesco.org/ci/en/ev.php-URL_ID=16540&URL_DO=DO_TOPIC&URL_SECTION=201.html.
 - ② Foundation for Endangered Languages, <http://www.ogmios.org/home.htm>.
 - ③ Dokumentation Bedrohter Sprachen [Documentation of Endangered Languages], <http://www.volkswagenstiftung.de/index.php?id=172&L=1>.
 - ④ Ethnologue, <http://www.sil.org/sociolx/ndg-lg-resources.html>.
 - ⑤ Summer Institute of Linguistics, <http://www.sil.org>.
 - ⑥ Indigenous Language Institute, <http://www.indigenous-language.org>.
 - ⑦ I. Johnson, The *Time Map* project: Interactive maps of time-dependent cultural features using multiple internet data sources. *Proceedings of the Annual Meeting of Pacific Neighborhood Consortium*. Computing Centre, Academia Sinica, Taipei, 1998, 245–290. <http://www.timemap.net>. J. Zerneke and I. Johnson, The ECAI vision for data sharing and recent developments in *TimeMap*. Paper presented at the *Pacific Neighborhood Consortium (PNC) and the Electronic Cultural Atlas Initiative (ECAI) Conference*. Osaka City University, Osaka, Japan, September 20th–22nd, 2002.
 - ⑧ Academia Sinica, Computing Centre, <http://www.ascc.sinica.edu.tw>.
 - ⑨ The Australian Consortium for the Asian Spatial Information and Analysis Network (ACASIAN), <http://www.asian.gu.edu.au>.
 - ⑩ S. A. Wurm and S. Hattori, eds. *Language Atlas of the Pacific Area*. The Australian Academy of the Humanities in Collaboration with the Japan Academy. Canberra: The Australian National University, 1981 Part 1 and 1983 Part 2.

copyright to the printed maps, has graciously permitted utilization and distribution in digital form through ECAI. The dynamic maps and GIS data provide valuable tools for researchers to use as a resource base for their own projects. Our current *ECAI Digital Language Atlas of the Pacific Area*¹ includes vectored GIS data set viewables using dynamic map browsers from the original 47-leaf atlas of language units of the Pacific and Indian oceans. Michael Buckland,² and Jeanette Zerneke³ are advancing language documentation systems development for individual projects with team members. Projects are digital and Internet-based.⁴ In researching language maps, several distinctions come into play. Charting a language could refer to “mapping communications” as a theoretical field approach to the ways and means people utilize in formulating and transferring ideas and information. Other kinds of mapping purpose are conceptual, giving “reference to space and spatial directions”⁵ embedded in language. Speakers also adopt multi-languages complicating GIS census data. Language area maps show the spatial extent of the use of a given language or dialect. Although other forms of cultural maps can be found, for example, the distribution of material culture.⁶ Our mapping is intended to (1) produce temporal-spatial atlas with local communities to strengthen integrity and revitalization of their languages; (2) include an evaluation component of languages and cultures mapping process; and (3) results are for Internet open source interactive utility for local community and scholarship with dynamic tools essential for interoperability.

Languages and cultures are dynamic—shrinking, expanding, and moving with speakers reflected in geographic dispersals. Conventional language area maps are static without illustrating diachronous change. Temporally dynamic area map spaces are created with software that displays geographical changes in the distribution of cultures.

We provide geo-referencing tools to work like pushing a pin into a paper map.

¹ ECAI Pacific Language Mapping, <http://ecai.org/austronesiaweb/pacificlanguages.htm>.

² M. Buckland, The Cebuano language atlas: A demonstration project. Paper presented at the *Pacific Neighborhood Consortium (PNC) and the Electronic Cultural Atlas Initiative (ECAI) Conference*, Osaka City University, Osaka, Japan, September 20th–22nd, 2002).

³ J. Zerneke, Web implementation of a language and cultural atlas. Paper presented at the *2nd Annual Congress of Cultural Atlases*, Center for Historical Geographic Studies, Fudan University, Shanghai, May 9th–15th, 2005.

⁴ ECAI Austronesia Team, Electronic Cultural Atlas Initiative, <http://www.ecai.org/austronesiaweb>.

⁵ G. Senft, *Referring to Space: Studies in Austronesian and Papuan Languages*. Oxford Studies in Anthropological Linguistics. Oxford: Clarendon Press, 1997.

⁶ D. Blundell, M. Buckland, and J. Zerneke, Empowering Pacific languages and cultures mapping with applied case studies in Taiwan and the Philippines. *Endangered Austronesian, Papuan and Aboriginal Languages*, G. Senft, ed. *Pacific Linguistics*, 2010: 137–152.

The cursor on a digital map knows the latitude and longitude of its position, so for any given file or link. We move the screen's cursor to a location on the map, and by clicking the mouse, the latitude and longitude are added for that point to the file, resulting as a dot on a map and seen in its geographical relationship to other data.

Existing interface prototypes being developed in Java are for such projects as "Going Places in the Catalog,"^① "Support for the Learner: What, Where, When, and Who,"^② developed under the direction of Prof. Ray Larson for the CHESHIRE System (now adopted for humanities and library computing in the UK).^③

Languages and Cultures Mapping

Digital languages maps are developed at the community level. New dynamic temporal language maps show the ability to track language dispersal based on historical records from distinct time periods and sources. *Time Map*TM developed by Ian Johnson and Artem Osmakov is utilized as a suite of software for recording, indexing, analyzing, combining, and delivering data with temporal and spatial components to support the spatial-temporal dynamic mapping process. Its functions include making text, images, hyperlinks, tabular data; tools to query the data catalogued libraries; means of downloading selected data for further analysis with other software; editing data sets into a single time-aware map (map space); methods of display and animation of maps through time. *Time Map* is open source (<http://www.timemap.net> and Johnson 1998, Zerneke and Johnson, 2002).

When researching language maps, several distinctions come into play. Charting a language could refer to "mapping communications" as a field theoretical approach, i.e., ethnography of communication, media conveyance, to the ways and means people utilize in formulating and transferring ideas and information. Another mapping purpose is a conceptual "reference to space and spatial directions" given in a language (Senft, 1997). Speakers also adopt other languages, becoming bilingual or multilingual, complicating geo-census data. The two standard types of language maps are language area maps and isogloss maps. Language area maps show the spatial extent of the use of a given language or dialect. Isogloss maps record the geographical distribution of

① M. K. Buckland, F. C. Gey, and R. R. Larson, *Going Places in the Catalog: Improved Geographic Access: Final Report*. Berkeley: University of California, Electronic Cultural Atlas Initiative, 2004, http://ecai.org/imls2002/imls2002-final_report.pdf.

② Support for the Learner: What, Where, When, and Who, <http://www.ecai.org/imls2004>.

③ CHESHIRE System, <http://cheshire.berkeley.edu>.

individual language features, such as vocabulary, grammar, and pronunciation. The co-occurrence of distinctive features constitutes a basis for dialect studies. Although other forms of cultural maps can be found, as for example, the distribution of material culture. Language maps are the commonest example of cultural map and the strong relationship between language and culture allows language and culture maps to serve as surrogates for cultural maps if other data are not available. Recording and displaying changes over time, where evidence can be found, allows a view of cultural and language dispersal based on a more complete perspective.

The ECAI Austronesia and Pacific Language Mapping continue as ongoing process projects of locally-based atlases based on languages and cultures, and generally applied with specific collaborative team accomplishment expectations. Projects are dependent on the goals of the researchers fitting into the parameters of ECAI objectives.

Internet-based open source interactive software invites local communities and scholarship utility with dynamic tools of interoperability. This project is about the way people use their language and culture according to their own needs and perceptions. The research is a documentation study about mapping languages and cultures based on specific case studies in Taiwan of China, Orchid Island, with comparative related work in the Batanes of the Philippines. Project concerns are: (1) state of the language and culture, (2) current educational techniques for language acquisition and cultural observance, and (3) different levels of language competence in the local cultural context. Elements of the project include:

Mapping Languages

Information and communication technology (ICT) that supports language mapping processes of linguistic communities.

Revitalizing and/or Maintaining Languages

Role of dominant/non-dominant languages in society

Sustainable language revitalization

Multilingual Education

Dealing with multiple languages in education

Language Policies

Education language policies in multilingual settings

Impact of language policies on non-dominant languages

Preserving Language Heritages

Aesthetics, i.e. songs and poetry

Oral history, including life narratives

Incorporating local knowledge and traditions into processes of education

Evaluation of Language Maintenance, Multilingual Education, Revitalization

Results of case study research on language maintenance and multilingual education

Analysis based on small-scale language revitalization programs

Local language community programs

Our language-mapping projects are undertaken and supported to advance linguistic studies and social sciences. It is a collaborative effort among scholars, information technology specialists, and librarians for advancing socio-linguistics through increased attention to place and time mapping based on standards and best practices developing proof-of-concept exploratory projects.

Mapping in Local Settings: Taiwan, Orchid Island and the Batanes

Research was initiated as a documentation study about cultural mapping based on specific case studies in Taiwan of China,^① Orchid Island, and the Batanes Islands of the Philippines. Languages and cultures documented are becoming increasingly endangered.^② Our project on the “Comparative Ethnography of Language and Culture in Local Settings of Taiwan of China, Orchid Island, and the Batanes” is about people’s education and utilization of language. This outcome, in terms of the process, is a walk through the variety of inputs, which I have considered from collected data. Documentation is utilized in various ways as they contain verbatim—direct information, i.e., interviews, and details of cultural data illustrated with video.

Various forms of ethnographic techniques will be utilized in multi-dimensional approaches since each research tool influences the format and outcome of the ethnographic process. Of course, the participants are aware that their documentation is going to be utilized as social science research. Ethnography, too, should match its goals in terms of the orientation and direction of the research design. Our first year has concentrated on localities in Taiwan of China sharing an edge with previous work with school children learning from elders. Websites created by children of indigenous communities are linked to the Internet showing the capabilities of community involvement with simplified digitization tools. This allows community input of cultural

① D. Blundell and J. Hsiang, Taiwan electronic cultural atlas of the Pacific. *Proceedings of the 1999 EBTI, ECAL, SEER & Pacific Neighborhood Consortium (PNC) Joint Meeting*, Computing Centre, Academic Sinica, Taipei, 1999. pp. 525-540.

② D. Nettle and S. Romaine, *Vanishing Voices: The Extinction of the World’s Languages*. Oxford: Oxford University Press, 2000.

resources from specific locations. Following my research methodology, local people will identify craft that fosters integrity of the community. Such was Taroko weaving projects of Hualien County. Other crafts selected will be compared to Orchid Island and the Batanes crafts such as working in timber, stitching, and boat assembly.

I embarked on a GIS language and culture mapping survey in Orchid Island from 2004. The Shun-yong Chang family is regarded as the last to emigrate from the Batanes islands. Their oral tradition includes the story of their family's migration. According to field interviews, their seniors still sang songs in the early 1990s that described the interaction between the Tao (people) of Orchid Island and Batanes. For example, the Batan people sang "we two separate here returning to our respective communities, you return directly to your own island by the easy-sail paddle," and the Tao respond, "you use a very good paddle sailing back to your Batanes islands. We have the same blood." Before Yami speakers voyaged by sea to the southward Batanes islands and, in the past, boat sails were made from stitched palm fiber.

Our research included observation of the construction of an ocean-going boat. The craft of making one-man or two-man boats for fishing prevails among the men. The ten-man boat is infrequently made and requires the consensus of the village and the supervision by the elders. Elders of each village decide matters in their society. Respect for the elderly is based on their knowledge of the heritage embedded in lore and craft. The young Tao are educated by observing senior people.

It is evident from Yami speakers and other Batanic narratives relating to origins and ways of doing things, such as the fishing customs, that these people have moved in a pattern of migration with the Black Current flowing north from the tropical Pacific east of the Philippines and Taiwan of China to southern Japan. The Yami arrived at their island about seven hundred years ago from the main islands of the Batanes. Yami speakers maintain an oral heritage based on poetic songs. From the 16th century, the Bashiic region came under European colonial influence from the Spanish, and to a lesser extent from the Dutch in the seventeenth century. About three hundred years ago the Tao ceased sailing the open Bashi Channel to the Batanes Islands in their own boats. European shipping provided transportation across the Bashi Channel.

In 2006, our Batanes GIS mapping produced a linguistic cultural atlas using *Time Map* through ECAI. At that time archaeologist Peter Bellwood completed excavations there based on his discoveries of a nephrite jade workshop over 4,500 years old. In 2004 Bellwood came to Taiwan of China where his findings of worked jade was examined to source the material at the Institute of Earth Sciences, Academia Sinica. It was proven

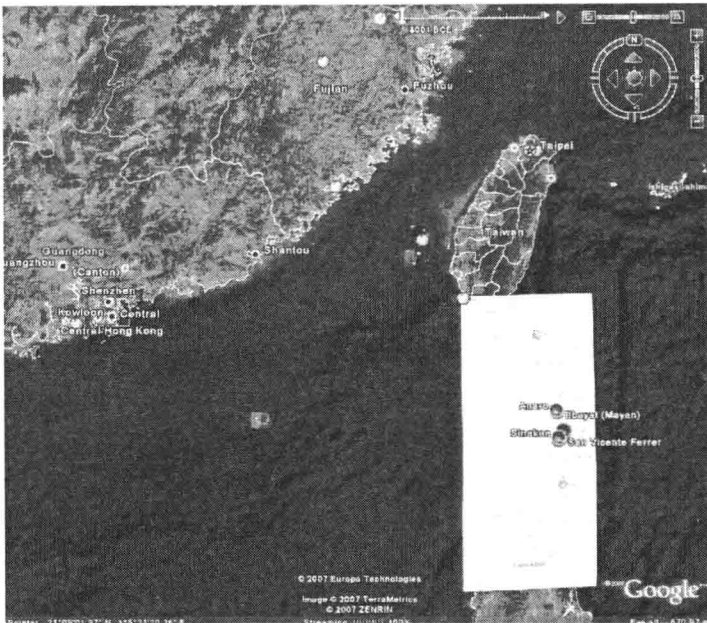


Figure 6 *Time Map of Batanes migration by Paul Jen-kuei Li (2001).*

to be nephrite jade from the region of Hualien, Taiwan of China. The implications are powerful in terms of the relationship of the indigenous Neolithic peoples of Taiwan of China of the Formosan languages and further a field in the Batanes. Thus we used the data to create time layer for the dispersal of Formosan influence southward. Bellwood participates with our projects to link with *Time Map* new layers from his discoveries up to the ethnographic present. We are sure these new discoveries linking prehistory with Taiwan of China enhances the Language Atlas of the Batanes Islands. The richness of the collaboration has increased the spatial-temporal depth of the mapping sequences related to the cultural resources of Taiwan of China.

Conclusion

Our work fosters wider collaboration and infrastructure that combines ethnography with methodological advances in data collection and documentation. Several distinctions come into play when researching a locality. Charting languages and cultures includes theoretical and practical approaches, i.e., ethnography of communication, media conveyance, to the ways and means people utilize to formulate and transfer ideas and information to GIS formats. Mapping is the conceptual “reference to space and spatial directions” embedded in language (Senft 1997). Here, language and culture mapping

produces atlases with boundaries. Serious physical and theoretical problems occur when defining a language and its dialects and when attempting to mark the geographic limits. Languages and cultures are referred to by various names, often by names that do not originate with local speakers, but were selected from field studies or in previous accounts in the academic literature. As the language speakers move spatially, or as the language becomes a dialect, the supposed language shifts position on maps. Speakers also adopt other languages and become bilingual or multilingual, and challenge the established geo-census data.

Our research is interactive with people of a locality to produce heritage resources available on Internet-based video—*YouTube*, local oral histories with transliteration and translation, and gatherings of communities in diaspora. Land use maps, archaeological sites, artifacts, rituals, crafts, photographs and interviews are features of our GIS mapping. These are placed on an Internet bulletin board and can be utilized as resources for local community building and shared worldwide.

Bibliography

- Appadurai, Arjun. 1981. The past as a scarce resource. *Man* 16 (2):201–219.
- Belwood, Peter. 2009. Formosan prehistory and Austronesian dispersal. *Austronesian Taiwan: Linguistics, History, Ethnology, Prehistory*. Revised Edition. David Blundell, ed. Taipei: Shung Ye Museum, and Berkeley, CA: Phoebe A. Hearst Museum, University of California. pp. 336–364.
- Blundell, David. 1994. *Masks: Anthropology on the Sinhalese Belief System*. American University Studies in Theology and Religion, VII, Vol. 88. New York: Peter Lang.
- . 2009. Cultural atlas of the Batanes Islands and region—The Bashiic languages. *Electronnyye Biblioteki i Bazy Danykh po Istorii Evrazii v Srednie*, 13. pp. 33–47.
- . 2010. Relating Orchid Island (Taiwan of China) and Batanes (Philippines): ECAI Pacific languages and cultures mapping. *Third Taiwan-Philippines Academic Communication Conference: Perspectives on the Development and Public Policy of Culture Industry in Taiwan and Philippines*. Aletheia University, Taipei, October 22nd.
- Blundell, David, and Jieh Hsiang. 1999. Taiwan electronic cultural atlas of the Pacific. *Proceedings of the 1999 EBTI, ECAI, SEER, & PNC Joint Meeting*, Computing Centre, Academic Sinica, Taipei. 525–540.
- Blundell, David, Michael Buckland, and Jeanette Zerkeke, with Yu-Hsiu Lu and Andrew Limond. 2010. Empowering Pacific language and culture mapping with applied case studies in Taiwan of China and the Philippines. *Endangered Austronesian, Papuan and Aboriginal Languages*. Gunter Senft, ed. *Pacific Linguistics*. 137–152.

- Buckland, Michael. 2002. The Cebuano language atlas: A demonstration project. *Pacific Neighborhood Consortium (PNC) and the Electronic Cultural Atlas Initiative (ECAI) Conference*. Osaka City University, Osaka, Japan, September 20th–22nd.
- Buckland, Michael K., Fredric C. Gey, and Ray R. Larson. 2004. Going places in the catalog: Improved geographic access: Final report. Berkeley: University of California, Electronic Cultural Atlas Initiative. http://ecai.org/imls2002/imls2002-final_report.pdf
- Cooper, David. 1974. *The Death of the Family*. New York: Penguin.
- CHESHIRE System. <http://cheshire.berkeley.edu>
- Dokumentation Bedrohter Sprachen [Documentation of Endangered Languages] <http://www.volkswagenstiftung.de/index.php?id=172&L=1>
- Edgerton, Robert B. and L. L. Langness. 1977. *Methods and Styles in the Study of Culture*. San Francisco: Chandler and Sharp Publishers.
- Electronic Cultural Atlas Initiative (ECAI). <http://ecai.org>
- Ethnologue. <http://www.sil.org/sociolx/ndg-lg-resources.html>
- Greetz, Clifford. 1973. *The Interpretation of Cultures*. New York: Basic Books.
- Foundation for Endangered Languages. <http://www.ogmios.org/home.htm>
- Indigenous Language Institute. <http://www.indigenous-language.org>
- Initiative B@bel of UNESCO. http://portal.unesco.org/ci/en/ev.php-URL_ID=16540&URL_DO=DO_TOPIC&URL_SECTION=201.html
- Jarvie, I. C. 1976. On the limits of symbolic interpretation in anthropology. *Current Anthropology* 17(4): 687–701.
- Li, Paul Jen-kuai. 2001. The dispersal of the Formosan aborigines in Taiwan. *Language and Linguistics* 2(1): 271–78.
- Living Tongues. <http://livingtongues.org>
- Johnson, Ian. 1998. The TimeMap project: Interactive maps of time-dependent cultural features using multiple internet data sources. *Proceedings of the Annual Meeting of Pacific Neighborhood Consortium*. Computing Centre, Academia Sinica, Taipei. 245–290. See <http://www.timemap.net>
- Needham, Rodney. 1972. *Belief, Language, and Experience*. Chicago: University of Chicago Press.
- Nettle, Daniel and Suzanne Romaine. 2000. *Vanishing Voices: The Extinction of the World's Languages*. Oxford: Oxford University Press.
- Maquet, Jacques. 1982. From engineering to anthropology. *Systems Analysis in the Human Sciences: Writings by Richard L. Weisbrod*. David Blundell and Lisabeth Ryder, eds. *Anthropology UCLA*, 12: vii.
- Pacific Neighborhood Consortium (PNC). <http://pnclink.org>.
- Pacific Neighborhood Project*. 1990. Proposal of the University of California at Berkeley, University

- of California, San Diego; University of California, Office of the President; and University of Hawai'i, Manoa.
- Pike, K. 1954. *Language in Relation to a Unified Theory of the Structure of Human Behavior*, 1. Glendale, CA: Summer Institute of Linguistics.
- Powdermaker, Hortense. 1966. *Stranger and Friend: The Way of an Anthropologist*. New York: Norton.
- Price-Williams, Douglass. 1975. *Explorations in Cross-cultural Psychology*. San Francisco: Chandler and Sharp Publishers.
- Professional Ethics: Statements and Procedures of the American Anthropological Association*, Washington, D.C. 1973. A review draft of this report was submitted September 16th, 1995, Commission to Review the AAA Statements on Ethics Final Report <http://www.aaanet.org/committees/ethics/ethrpt.htm>
- Ruby, Jay. 1977. The image mirrored: Reflexivity and the documentary film. *Journal of the University Film Association*, 29(1).
- Rundstrom, Don. 1992. Imaging anthropology. *Anthropological Filmmaking: Anthropological Perspectives on the Production of Film and Video for General Public Audiences*. Jack R. Rollwagen, ed. Chur: Harwood Academic Publishers. pp. 317–370.
- Rundstrom, Don, Ron Rundstrom, and Clinton Bergum. 1973. *Japanese Tea: The Aesthetics, The Way: An Ethnographic Companion to the Film—The Path*. Andover, MA: Warner Modular Publications.
- Schutz, Alfred. 1967. *The Phenomenology of the Social Order*, trans. George Walsh and Frederick Lehnert. Evanston, IL: Northwestern University Press.
- Senft, Gunter. 1997. *Referring to Space: Studies in Austronesian and Papuan Languages*. Oxford Studies in Anthropological Linguistics. Oxford: Clarendon Press.
- Summer Institute of Linguistics. <http://www.sil.org>
- Wurm, Stephen A., and Shiro Hattori, eds. 1981. [Part 1] and 1983 [Part 2] *Language Atlas of the Pacific Area*. The Australian Academy of the Humanities in Collaboration with the Japan Academy. Canberra: The Australian National University.
- Zerneke, Jeanette. 2005. Web implementation of a language and cultural atlas. *ECAI Shanghai Conference, 2nd Annual Congress of Cultural Atlases*. Center for Historical Geographic Studies, Fudan University, Shanghai, May 9th–15th.
- Zerneke, Jeanette, and Ian Johnson. 2002. The ECAI vision for data sharing and recent developments in TimeMap. *Pacific Neighborhood Consortium (PNC) and the Electronic Cultural Atlas Initiative (ECAI) Conference*. Osaka City University, Osaka, Japan, September 20th–22nd.
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A Sketch Introduction of Sakizaya

Lin Melissa Shih-hui (林蒨慧)

Abstract: Sakizaya, known as a dialect of Amis for years, one of the Austronesian languages, is spoken on the eastern part of China Taiwan Island, mainly in northern Hualien. The population of Sakizaya is estimated to be less than 2000 and most of the speakers are elders. In this paper, I would like to introduce Sakizaya phonologically, morphologically and syntactically, and then try to rethink whether Sakizaya is only a dialect of Amis.

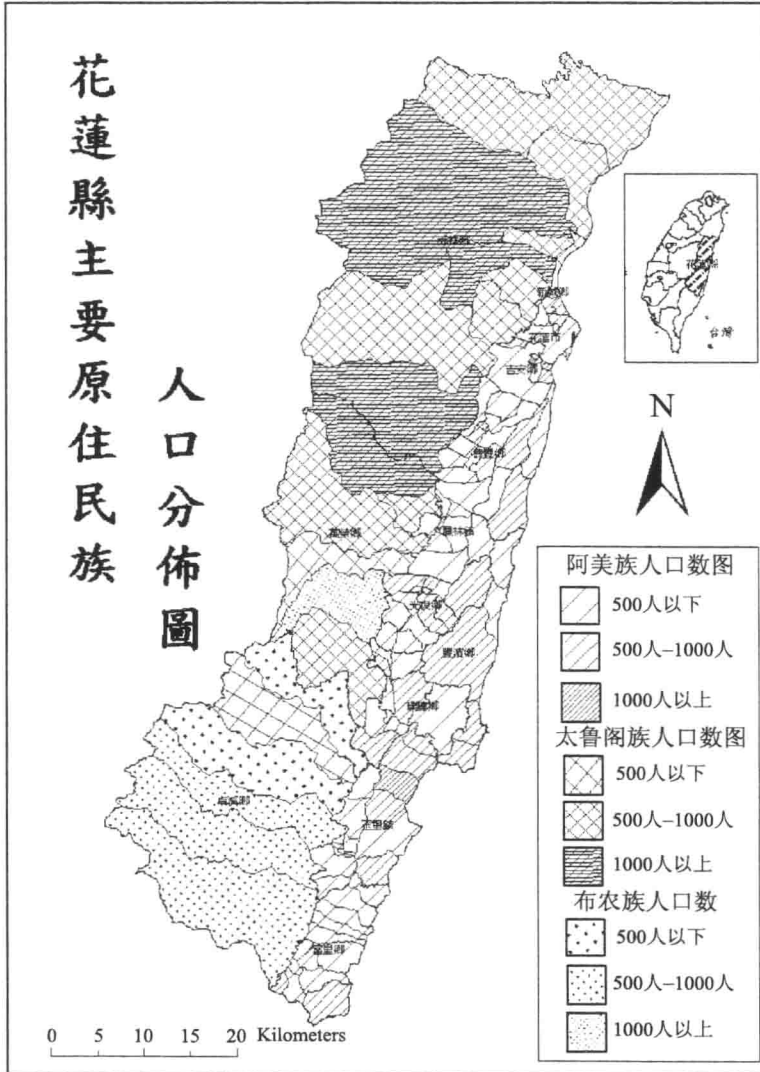
Keywords: Sakizaya, Amis, Language Description, Language and Dialect

1. Introduction

This study is mainly conducted in Hualien county, where the most Sakizaya population live. Hualien county is characterized by its population diversity. While the indigenous peoples only account for about 2 percent in Taiwan's 23 million populations, they form almost a quarter of total population in Hualien county. The geographical distribution of the indigenous peoples is as followed: Taroko in the north and middle parts of the county, Amis in the middle-to-north and the coastal area, Bunun in the middle and south, and Sakizaya mainly in the north. The rich diversity even within the indigenous population itself reflects the changing ethnic power relations and complex historical interactions in this region. The map 1 below shows the distribution of the three main indigenous peoples in Hualien country: Amis, Taroko and Bunun.

In January of 2007, Sakizaya was recognized by the Taiwan government as the thirteenth Indigenous Group in Taiwan. However, for decades, Sakizaya was considered as only a subgroup of Amis, the largest Taiwan Indigenous group. Language is one of the most important claims used by the Sakizaya people, especially the elites, in the process of "ethnic reconstruction". They believe Sakizaya is at least 40 per cent different compared with the Amis in the linguistic point of view. However, because of

the lack of the related linguistic studies, there are still a lot of debates concerning about the status of Sakizaya, no matter with its ethnic status or its language status.



Map 1 The distribution of the Amis, Taroko and Bunun peoples in Hualien country. (Huang 2011)

In order to extinguish these debates, it is necessary to have a much more in-depth study to determine the status of the Sakizaya language and its relation to other languages, such as Amis, to make a final judgment on the whole process of ethnic reconstruction—Sakizaya case.

In this paper, first, I am going to discuss the historical records of Sakizaya; second, I will try to introduce Sakizaya phonologically, morphologically and syntactically. At the end, I will try to discuss the importance of the language in the building of the ethnic identity.

2. Historical Background

Taiwan indigenous peoples currently comprise 2 percent of the total around 23 million population in Taiwan. However, almost all of the Austronesian languages spoken by the Taiwan indigenous peoples are facing the danger of becoming extinct.

Until 2008 there are fourteen Taiwan indigenous peoples, who are recognized by the government: Atayal, Saisiyat, Bunun, Tsou, Rukai, Paiwan, Puyuma, Amis, Yami, Thao, Kavalan, Truku, Sakizaya and Seediq. Nine of the Taiwan indigenous peoples were originally recognized prior to 1945 by the Japanese government, and the latter five were recognized by the government after 2000. Among them, the Sakizaya was recognized on January 17, 2007. There are still other indigenous peoples in Taiwan, however they have not been officially recognized yet. These indigenous peoples include Ketagalan, Luilang, Taokas, Papora, Babuza, Hoanya, Pazeh and Siraya.

According to my field work (2007), some informants believe the Siraya, one of the extinct Taiwan indigenous groups, was the ancestor of the Sakizaya. Around 1621, Siraya, who were attacked by one general in Ming Dynasty from Mainland China, were forced to move from Tainan, the western part of Taiwan to the eastern part of Taiwan, where was believed to be the Sakizaya original tribe. However, because of no written records or documents to support this idea, this saying still needs to be proved.

In seventeenth century, the term “Sakizaya” was first used in the literary records left by the Spanish and the Dutch, who colonized Taiwan during that period. In the 1630s, during the Spanish period and the following period of the Dutch East India Company, names of tribes and names related to places with mineral deposits (esp. gold) in the eastern part of Taiwan were mentioned. Among these place and tribe names, some are believed to be of Sakizaya tribes, such as *pazik*, *nararacanan* and etc. For example, in the map 2 below, it is clear that the Sakizaya tribe *nararacanan* was living among the Nansi Amis tribes before, i.e. Nansi Amis is one subgroup of Amis.

In 1640, Pieter Boon, a Dutch soldier on his expedition to the eastern part of Taiwan, described in his records the Sakizaya people living there. Again, the term “Sakizaya” was mentioned. According to my field work results (2007), it can be only assumed that, for a long time, Sakizaya had stayed on Qilai plains of the eastern Taiwan



Map 2: The distribution of the old tribes of Nansi Amis and Sakizaya in Hualien
(Sing'Olam 2005; Lin 2007)

of China, close to where is now Hualien City. During the 1800s, indigenous peoples often fought with Qing soldiers from Mainland China to protect their territory around Qilai plains. In 1878, the Kavalan people of *Kaliyawan* area allied with the Sakizaya to attack Qing, known in the history as the “Kaliyawan Incident”. On the other hand, because among the Sakizaya people, it was only the *Takobowan* tribe which took part in this Incident, so this Incident is also called the “Takobowan Incident”. After the “Kaliyawan Incident” or “Takobowan Incident”, the Sakizaya and the Kavalan people were forced to disperse to other places. For the Sakizaya, they started to hide among the Amis in order to survive. (Hsu, Liao & Wu, 2001)

During the later Japanese colonial period, from 1895 to 1945, Sakizaya was mentioned again (Mabuchi, 1935: 33) : “Sakizaya was called by the Amis as *Sakiraya*, and by the Kavalan as *Sakizaya*... The people who stayed at *Cipawkan* tribe called themselves as *Sakizaya*. The people who stayed at *Sakol* tribe called themselves as *Sakidaya*...” However, in this text Sakizaya was considered as part of Amis.

In the 1990s, the Japanese linguist Tsuchida (1989) even provided a set of categorization for the Amis language:

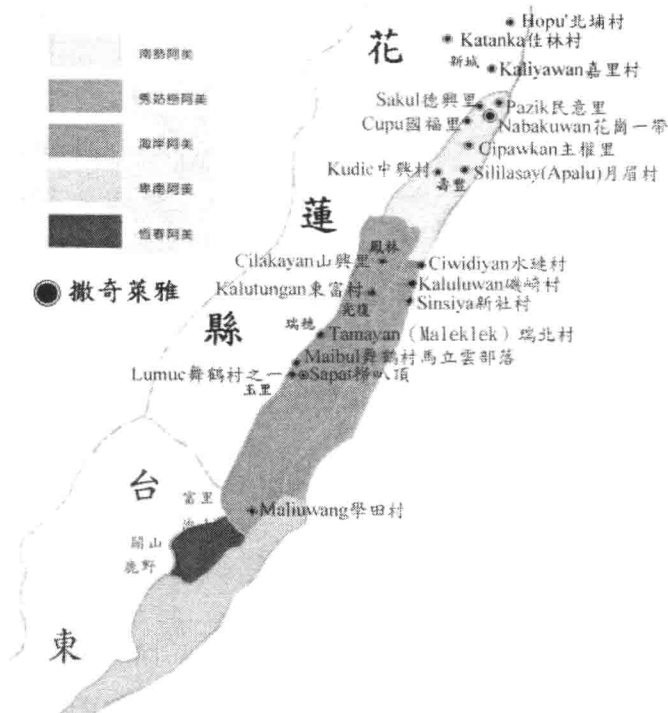
1. Sakizaya dialect;
2. Northern dialect (Nansi Amis);
3. TavaLong-Vataan dialect;
4. Central dialect (Coastal and other Soukuzun Amis).
5. Southern Amis (Puyuma Amis and Hanchan Amis)

His categorization was very clear to show that the Sakizaya was considered as a dialect of Amis language.

From the 1990s on, the Sakizaya elites have strived for the ethnic recognition by the government. One of their claims in the process of the ethnic reconstruction was their language, which was used as a marker of their ethnicity. In January of 2007, Sakizaya was recognized by the Taiwan government as the thirteenth Indigenous Group in Taiwan.

3. The current distribution of Sakizaya

According to my field work (2007), the current distribution of Sakizaya is very dispersive compared with the other Taiwan indigenous peoples, though still mainly in the Hualien county, the eastern part of Taiwan. In the map 3 below, the black circles show the current distribution of the Sakizaya tribes, though the population of each tribe is very small relatively.



Map 3 The current distribution of the Sakizaya tribes in Hualien (Huang 2005; Lin, 2007)

In the Table 1 below, I try to list the estimated number of Sakizaya population in seven main tribes. This result is mainly based on the questionnaire about the lexicon

difference between Amis and Sakizaya. (I will discuss the lexicon difference between Amis and Sakizaya in the following section.)

Table 1 The estimated number of Sakizaya population in main seven tribes.
(Chen, 2005; Lin, 2007)

Tribe	Total population	The number of Taiwan indigenous people	The number of Sakizaya people
<i>hopo'</i>	6,000	1,500	400
<i>copo'</i>	1,714	578	440
<i>apalo</i>	780	554	28
<i>ciwidiyan</i>	1,260	630	378
<i>cilakayan</i>	832	478	32
<i>karorowan</i>	493	445	44
<i>maibol</i>	400	360	292

From the Table 1 above, the estimated current number of Sakizaya population is assumed to be less than 2000. Also, according to my field work, most of them are elders.

4. Some linguistic data of Sakizaya

The data on the linguistic research of Sakizaya are comparatively scarce, which include the researches of Mabuchi, T. (1935), Tsuchida, S. (1982, 2002), Jen-Kuei Li (1999) and Tsukida, N. (1993). The previous three only mentioned Sakizaya on the categorizing of Amis language, but Tsuchida labored over a 39-paged specific discourse on Sakizaya language. Besides, the Sakizaya people's spiritual leader, principal Lai-Won Lee (1996), also contributed greatly to related discourses. From 2008 until now, I join the team which is working on the first Sakizaya dictionary, sponsored by the Council of Indigenous Peoples in Taiwan. One of the contributions of this dictionary is to develop a sketch grammar structure of Sakizaya. In the following, I will try to introduce it phonologically, morphologically and syntactically.

4.1 Phonetics

The following Table 2 and Table 3 are the consonants and vowels in Sakizaya:

Table 3 Consonants in Sakizaya (Lin, 2011)

		Bilabial	Alveolar	Palatal	Velar	Glottal
Stop	-voiced	p	t		k	' (?)
	+voiced	b	d		g	
Nasal		m	n		ng (ŋ)	
Fricative	-voiced		s			h
	+voiced		z			
Affricate			c (ts)			
Lateral			l			
Glide		w		y (j)		

Table 4 Vowels in Sakizaya (Lin, 2011)

	Front	Central	Back
High	i		o/u
Mid		e (ə)	
Low		a	

When to compare Sakizaya and Amis phonetically, according to my field work (2007), Sakizaya language has two more consonants than Amis: /z/, /b/, the consonant /f/ in Sakizaya language is not employed. And the most distinguished part in phonetics is that Amis' /ʌ/ and /x/ are mostly replaced by /h/ in Sakizaya. However, it is still unknown whether the phonetic differences are caused by the mutually language contact nowadays, it is still worthy to pay attention on.

4.2 Lexicon

According to my field work (2007), I found there is lexical difference between Sakizaya and Nansi Amis. However, the number of the lexicons which I found can differentiate Sakizaya and Nansi Amis are not a lot. Please see the Table 5 below. Concerning this part, I assume it is worthy to have much more research, because the lexical difference would be the key point to decide whether Sakizaya is a dialect of Amis and to clarify the relation between Sakizaya and Amis language.

Table 5 Some lexical differences between Sakizaya and Nansi Amis (Lin, 2007)

Lexical meaning	Sakizaya	Nansi Amis
ox	<i>katararan</i>	<i>rarapa/gulung</i>
chicken	<i>tolako</i>	<i>'ayam</i>
snake	<i>bao</i>	<i>'oner</i>
clothes	<i>zigoc</i>	<i>fodoy</i>
girl	<i>tatina</i>	<i>fafahi/fafahiyan</i>
senior	<i>babalaki</i>	<i>mato 'asay</i>
priest	<i>mapalaway</i>	<i>sikawasay</i>
nose	<i>cihek</i>	<i>ngoso'</i>
tooth	<i>ngipen</i>	<i>wadis</i>
language	<i>kamu</i>	<i>sowal</i>
betelnut	<i>daedac</i>	<i>'icep</i>

4.3 Morpho-syntactics

In the previous related papers, only Tsukida (1993) stated both the Sakizaya and Amis languages have a verbal prefix *mi-* which functions as subjective focus (or actor voice) and verbal prefix *ma-* as subjective or objective focuses. However, the Sakizaya language has one more prefix *mo-* than Amis, but Sakizaya doesn't have verbal infix *-om-* as subjective focus in Amis.

In the following, I will introduce the voice system and the case marker system of Sakizaya I found in my field work. On the other hand, I will compare what I found with the Amis voice system and the Amis case marker system proposed by Wu (2006).

In the voice system, Sakizaya seems to have two more prefixes: *a-* and \emptyset - which function as actor voice marker than Amis. Besides, Sakizaya does not have infix *-um-* as actor voice marker, but prefix *mo-*. For the undergoer voice marker, Amis seems to have one more circumfix *mi-...-an*. There is no difference in the instrument voice marker and locative voice marker between Sakizaya and Amis.

Table 6 The estimated Sakizaya Voice system (Lin, 2007)

Actor Voice Marker	<i>a-</i>
	<i>mi-</i>
	<i>ma-</i>
	<i>mo-</i>
	\emptyset -

continued

Undergoer Voice Marker	<i>ma-</i>
	<i>-en</i>
Instrument Voice Marker	<i>sa-</i>
Locative Voice Marker	<i>-an</i>

Table 7 The Amis Voice system (Wu, 2006)

Actor Voice (AV) Markers	<i>mi-</i>	<i>um-</i>	<i>ma-</i>
Undergoer Voice (UV) Markers	<i>ma-</i>	<i>ma-</i> <i>ma...um-*</i>	<i>ma-kma</i> ^{*43}
	<i>mi... an</i>		<i>ka...-an</i>
	<i>-en</i>		<i>-en</i> <i>ka...-en</i>
Instrument Voice (InV) Markers (the bold-faced part)	<i>sa-pi-</i>	<i>sa-ka...-um-</i>	<i>sa-ka-</i>
Locative Voice (LV) Markers (the bold-faced part)	<i>pi... an</i>	<i>ka...-um...an</i>	<i>ka...-an</i>

In the case marker system, according to my field work, the case markers for the personal proper singular and plural nouns are the same, however, this point needs more investigation. From the tables below, there is locative case marker in Sakizaya, but in Amis the locative case marker is absent.

Table 8 The estimated Sakizaya Case Marker system (Lin, 2007)

Nouns	Case markers			
	Nomonativa	Genitive	Oblique	Locative
Common	<i>ko</i>	<i>no</i>	<i>to</i>	<i>i...(an)</i>
Personal Proper	<i>ci</i>	<i>ni</i>	<i>ci...an</i>	<i>ci...an</i>

Table 9 The Amis Case Marker system (Wu, 2006)

Nouns	Case	Nominative	Genitive	Dative
	Common	<i>k-u</i>	<i>n-u</i>	<i>t-u</i>
Personal Proper	Singular	\emptyset - <i>ci</i>	<i>n-i</i>	<i>ci...-an</i>
	Plural	\emptyset - <i>ca</i>	<i>n-a</i>	<i>ci...-an</i>

Besides of the voice system and the case marker system, there is also difference in the expression of the 3rd singular and plural pronouns between Sakizaya and Amis. Please see the table 10 below:

Table 10 The expression of the 3rd singular and plural pronouns in Sakizaya and Amis (Lin, 2007)

Personal Pronoun	Language	Nominative	Oblique	Genitive
3 SG	Sakizaya	<i>ciniza</i>	<i>cinizaan</i>	<i>iza</i>
	Amis	<i>cinga</i>	<i>cingraan</i>	<i>ira</i>
3 PL	Sakizaya	<i>koheni</i>	<i>tohenian</i>	<i>heni</i>
	Amis	<i>cangra</i>	<i>cangraanan</i>	<i>nangra</i>

According to my field work, most of the sentence patterns are the same between Sakizaya and Amis. Only the negative imperative sentence pattern between Sakizaya and Amis is different, shown as below. (Lin, 2007)

Nansi Amis	Sakizaya
<i>aka pi-sabana' ci taymo-an.</i> NEG [IMP-to cheat] [OBL Taymo-OBL] “Don’t cheat Taymo!”	<i>amana pi-sabana' ci taymo-an.</i> NEG [IMP-to cheat] [OBL Taymo-OBL] “Don’t cheat Taymo!”
<i>aka ka--sabana' no tao kiso.</i> NEG[KA-to cheat] GENOthers [2SG.NOM] “Don’t be cheated!”	<i>amana ka-sabana' no tao kiso.</i> NEG [KA-to cheat] GEN others [2SG.NOM] “Don’t be cheated!”

Conclusion

Language is one of the most important building blocks of ethnic identity and can be a marker of identity. (Safran, 2008) However, when one group of people is trying to use language as a main claim in the process of building the ethnic identity, they shall be very careful. Otherwise, there would be some worries that language is used as an instrument of ethnicity building. (Jusdanis, 2001: 120f.)

From the discussion in this paper, obviously there are some linguistic differences between Amis and Sakizaya. However, whether these differences are enough to decide Sakizaya is an independent language, instead of a dialect or a variation of Amis? On the other hand, how to define a dialect and a language clearly? Or is it necessary to define

Sakizaya is a not dialect of Amis in the process of the Sakizaya ethnic reconstruction?

I agree that language can be a marker of ethnicity, but not necessary. According to Chambers and Trudgill (1998), “a language is a collection of mutually intelligible dialects”. Danish and Swedish are mutually intelligible, but usually they are considered to be different languages. It might be better to say Danish is less than a language, according to Chambers and Trudgill. However, the status of Danish will not bring any influence on its nation-building, because there are still other elements to solidify this ethnic group, such as its culture and so on.

However, because language is the most important claim of Sakizaya elites in the process of its ethnic recognition, it is necessary to have a much more in-depth linguistic study in Sakizaya. Through the linguistic study, it might help people to know more about this endangered indigenous people in Taiwan.

References

(In English)

- Blundell, David (ed). 2000. *Austronesian Taiwan, Linguistics, History, Ethnology and Prehistory*. Phoebe A. Hearst Museum of Anthropology, University of California, Berkeley with Shung Ye Museum of Formosan Aborigines.
- Chambers, J.K. and Petr Trudgill. 1998. *Dialectology* (2nd edition). Cambridge University Press.
- Huang, Pao-chu [黃寶珠]. 2011. *Space, naming and place identity—the history experience of Amis Cikasuan in Hualien* (in Chinese). Hualien, Taiwan: The M.A. dissertation in National DongHwa University.
- Jusdanis, Gregory. 2001. *The Necessary Nation*. Princeton: Princeton University Press.
- Li, Paul Jen-Kuei [李壬癸]. 1999. *The linguistic history of Formosan aborigines* (in Chinese) Nantou, Taiwan: The Historical Research Commission of Taiwan Province.
- Lin, Melissa Shih-hui [林蒔慧]. 2007. *Some Investigation on Sakizaya* (in Chinese). Taipei: The final report of project NSC95–2411–H–259–006. National Science Council.
- Lin, Melissa Shih-hui [林蒔慧]. 2011. *The report on Sakizaya Dictionary*. (in Chinese) Taipei: Council of Indigenous Peoples.
- Lin, Melissa S. H. 2010. “Sakizaya or Amis? — A Hidden Ethnic Group in Taiwan?” In *Asian Culture and History*. Vol. 2 (1): 116–125.
- Safran, William. 2008. *Language, ethnicity and religion: a complex and persistent linkage*. In *Nations and Nationalism* 14 (1), pp.171–190. Blackwell.
- Sing 'Olam [星·欧拉姆]. 2005. *The Amis Reader* (in Chinese). Taipei: Taiwan ethnic languages Committee [台湾族群母语推行委员会].

- Spencer, Andrew. 1991. *Morphological Theory*. Blackwell.
- Stewart, T. W. and Vaillette, N. 2001. *Language Files—Materials for an Introduction to Language & Linguistics (8th edition)*. The Ohio State University Press.
- Tsukida, Naomi, 1993. *A Brief Sketch of the Sakizaya Dialect of Amis*. Tokyo University Linguistic Paper 13.
- Tsuchida, Shigeru, 1982. *Subclassification of Amis dialects*. Unpublished MS.
- Tsuchida, Shigeru, 1983. Austronesian languages in Taiwan (Formosa). In S. A. Wurm and Shiro Hattori(eds). *Language Atlas of the Pacific Area*. Canberra. Australian National University.
- Wu, Joy. 2006. *Verb Classification, Case marking, and Grammatical Relations in Amis*. The Ph.D. dissertation. The State University of New York at Buffalo.

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Structural Decline in Endangered Languages as Exemplified by Structural Changes in Southern Tujia

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Abstract: The Southern Tujia language is distributed in the mountainous areas of northwest Hunan Province in South Central China. Currently, there are fewer than 1,000 speakers, of whom half are semi-speakers. Under the long-term and intense influence of Chinese, the usage domains of Southern Tujia have been restricted to daily affairs within villages and homes, with severe deterioration in its social function. In addition, complex structural changes have occurred within the language itself, and intrinsic features are gradually being lost due to the rapid increase in external elements. This paper analyses the structural changes in Southern Tujia from three aspects: phonology, the lexicon, and grammar. In terms of phonology, there is mixing and combining of native phonemes, with many Chinese onsets and rhymes being incorporated into the phonological system. This has also led to greatly increased numbers of allophones, with individual arbitrariness in pronunciation and decreased phonetic standardisation. With respect to the lexicon, loan words are abundant and cover a wide range of semantic domains. Not only do loans co-exist with native words, but they are also gradually replacing them. Among common vocabulary items, Chinese loans comprise a higher proportion compared to their ratio to native words in other lexical categories. In addition, Chinese elements are also used as morphemes in word formation, and the increase in the number of subsequent neologisms has led to wider dissemination of such Chinese constituents. Lastly, with the weakening or loss of native grammatical devices, there is increasingly widespread use of Chinese function words. Generalisation of their grammatical function has also occurred, leading to the emergence of multi-functional grammatical elements and subsequent simplification of

grammatical expression. These specific examples occurring in Southern Tujia reflect common patterns found in other endangered languages, which have been subjected to long-term influences from “foreign” languages and which may even now be heading towards extinction.

Keywords: Southern Tujia, Structural Changes, Endangered Languages, Language Decline

Introduction

Southern Tujia belongs to the Tibeto-Burman language family within the Sino-Tibetan phylum, and is distributed in Luxi County in the mountainous region of northwest Hunan Province in South Central China. Currently, it is spoken in 4 to 5 non-contiguous hamlets within a circumference of 5km. There are fewer than 1,000 speakers, with half being semi-speakers. Southern Tujia is an unwritten language, and has never been used in politics, economics, or education. It is only used as a trading language in local markets and villages. In the past few years, it has been further restricted to daily social interactions within hamlets and in homes. Over a long period, the Tujia language has been subjected to the strong and intense influence of Chinese language and culture, so that all mother tongue speakers are now bilingual in Tujia and Chinese, or trilingual in Tujia, Chinese, and Miao. In villages where their mother tongue has been best preserved, clear signs of lack of transmission to younger generations are beginning to appear. Thus, school-age children and teenagers are rapidly losing their mother tongue, and are changing completely to Chinese. In 2004, the Endangered Languages Documentation Project (ELDP) granted funding for a project to undertake comprehensive documentation and archiving of language data from Southern Tujia as a severely endangered language.

Along with the restriction in its usage domains, and the severe decline in its social function, many structural changes have also occurred in Southern Tujia. These have mainly been reflected in the following areas: a rapid increase in “foreign” components, a gradual decline in intrinsic features, and systematic rather than isolated changes in phonology, lexicon, and grammar. This paper presents an analysis of the structural changes observed in Southern Tujia as an endangered language. Observations of certain phenomena among the structural changes occurring in a language undergoing decline have led to the discovery of general features which are common to all such endangered languages. The language data presented in this paper are based on the material obtained in field investigations performed as part of the ELDP project,

together with lexical data from the Tujiayu Jianzhi .

1. Phonology

The most prominent features in the phonological changes are the loss of inherent features and a systematic increase in foreign phonemes. Throughout this paper, the Southern Tujia phonetic orthography has been used. Please see the appendix for the corresponding IPA symbols.

1.1 Onsets

Southern Tujia comprises of 27 onsets, as shown below:

Manner of Articulation/ Position of Articulation		Bilabial	Dento-al veolar	Alveolar	Apico- palatal	Velar	Glottal
P	vl.	unasp.	p		t	k	
		asp.	ph		th	kh	
	voiced	b		d	g		
A	vl.	unasp.		ts	tɕ		
		asp.		tsh	tɕh		
	voiced		dz	ɟʑ			
N	voiced	m		n	ŋ		
L				l			
F	voiceless		f	s	ɕ		x
	voiced			z	ʑ		ɣ
Approximants		w					

Key: P = Plosives; A = Affricates; N = Nasals; L = Laterals; F = Fricatives

vl. = voiceless; unasp. = unaspirated; asp. = aspirated

For some onsets, there is phonemic confusion due to loss of discrimination between different native consonant phonemes.

Example 1

dz-z

Voiced affricates and voiced fricatives are native phonemes, but discrimination between these two phonemes is being lost. In the vast majority of syllables where these

phonemes occur, native speakers are unable to discriminate between the two, leading to arbitrary dual pronunciation, as in the following examples:

	dz → z		z → dz
rain	dzie ³⁵ → zie ³⁵	four	zie ³³ → dzie ³³
rice	dzɿ ³⁵ → zɿ ³⁵	earth	za ⁵⁵ → dza ⁵⁵
pig	dzɿ ¹³ → zɿ ¹³	do	zɿ ¹³ → dzɿ ¹³

Example 2

[n]-[l]

The distinction between the nasal phoneme [n] and the lateral phoneme [l] is unclear, with much arbitrary dual pronunciation of these two phonemes in many syllables where they appear, as in the following examples:

	n → l		l → n
breast	nai ³⁵ nai ²¹ → lai ³⁵ lai ²¹	tiger	le ²¹ → ne ²¹
black	no ²¹ → lo ²¹	road	lo ³³ → no ³³
press	no ³³ → lo ³³	cloth	lo ³³ → no ³³

Confusion occurring in these phonemes is clearly related to the influence of Chinese language. From further investigations of the dual pronunciation of [n] and [l], it can be seen that confusion between the alveolar nasal and lateral phonemes mainly occurs when these onsets are used with back vowels, especially with [o]. It does not occur when these onsets are used with front vowels, as seen in the following examples:

	n ≠ l		l ≠ n
person	nia ³³	girder	lian ²¹ ho ²¹
laugh	nie ³³	two	lie ⁵⁵
fall	nio ⁵⁵	lick	lio ²¹
concentrated	nion ³³	rub	lio ¹³

Such partial confusion is closely associated with the influence of Chinese phonemes. The local Chinese dialect lacks the alveolar nasal [n], but only the lingua-palatal nasal [n̥] onset, which only combines with “thin” sounds. Therefore, in certain cases where [n] combines with back vowels in standardised Mandarin Chinese

(*Putonghua*), it is pronounced in the local Chinese dialect as the alveolar lateral onset [l]. Thus, in the phonetic system of the local Chinese dialect, discrimination between [n] and [l] only occurs in syllables where they combine with high front vowels, but not in syllables where they combine with back vowels. In Southern Tujia, this confusion is also observed for the onsets [n] and [l] in syllables where they combine with back vowels.

1.2 Rhymes

Southern Tujia has 13 vowels, forming a total of 34 rhymes, as shown below:

Monophthong rhymes	a		o	i	u	y	ɨ	ɤ	ɯ
Diphthong rhymes	ai	ei		ia ie io iɤ iau	ua uai uei	ya ye	ie		iu
Nasalised rhymes	an	en	on	in ian ion	uan uen	yan yen			
Rhymes with nasal endings				iaŋ					

Great changes have occurred in the Southern Tujia rhymes, with the addition of many new forms and loss of many inherent features. Among these changes, the most prominent is the emergence of a new series of [y] rhymes. Comparison with the phonological system of Northern Tujia has shown that Tujia did not originally have the [y] rhyme or rhymes with the [y] approximant. Therefore, all the syllables with [y] rhymes have originated from Chinese loans, clearly indicating the undoubted source of this series of rhymes, as shown in the following examples:

lift	tɕy ⁵⁵	crease	tɕya ³⁵
roll	tɕyan ⁵⁵	persuade	tɕhyan ¹³
stride	ɕɣya ¹³	bracken	tɕye ²¹
hang	cyān ³³	smoke (v.)	cyen ³³
iron (v.)	ɕyen ¹³	transport (v.)	ɕyen ¹³

Compared with the number of phonemes described in the *Tujiayu Jianzhi* in the 1950s, 5 new rhymes have appeared in the past 50 years. These new rhymes are mainly diphthongs with a high vowel as the head of the rhyme (iu, uai, yen, ion, and ian). The emergence of these new rhymes has led to the addition of new phonemic categories, namely triphthongs and rhymes with nasal endings.

Concurrently, inherent features are being lost, with lack of discrimination between certain rhymes, as in the following examples:

i → ie

plough	$xi^{13} \rightarrow xie^{13}$	say	$xi^{55} \rightarrow xie^{55}$
about to	$di^{21} \rightarrow die^{21}$	not have	$ki^{33}lie^{35} \rightarrow kie^{33}lie^{35}$

1.3 Tones

There are 5 tones in Southern Tujia, as shown below:

Southern Tujia				Local Chinese dialect			
High level	55	lo ⁵⁵	cook (v.)	High level	55	ma ⁵⁵	mother
Middle level	33	lo ³³	road	Low level	11	ma ¹¹	hemp
High rising	35	lo ³⁵	sew	Rising	35	ma ³⁵	scold
Low falling	21	lo ²¹	bamboo basket	Falling	42	ma ⁴²	horse
Low rising	13	lo ¹³	ripe (ear of corn)				

Currently, there is confusion between low falling and low rising tones 21 and 13, so that the tonal system of Southern Tujia is now similar to that of the local Chinese dialect in terms of number of tones and tonal pattern.

1.4 Summary of phonological changes

Systematic assimilation of many foreign phonological forms has led to new phonemes and phonemic confusion due to loss of inherent features. This has resulted in a greatly increased frequency of dual pronunciation and decreased standardisation of intrinsic phonemes with weakened discriminatory function. These two areas have led to clearly observable changes in the original phonological system of Southern Tujia.

2. The Lexicon

There are numerous Chinese loans in Southern Tujia, which comprise about half of the

over 2,000 common vocabulary items. Of these, many loan words have become part of the core vocabulary. Among the core items based on the Swadesh list, the ratio is 20% Chinese loans in 200 core items, as for example: $\text{z}\text{y}\text{e}\text{n}13\text{d}\text{u}33$ (“cloud”), $\text{k}\text{e}\text{n}33$ (“root”), $\text{t}\text{sh}\eta55\text{p}\text{a}21$ (“wing”), $\text{t}\text{u}13\text{s}\text{e}\text{n}33$ (“heart”) and $\text{x}\text{a}\text{n}13$ (“contain”); and 6% loans in 100 core items, as in $\text{y}\text{e}21\text{n}\text{i}\text{a}\text{n}13$ (“moon”), $\text{t}\text{h}\text{i}\text{a}\text{n}33\text{e}\text{i}\text{n}33\text{t}\text{s}\eta55$ (“stars”), $\text{w}\text{u}21$ (“mist”), $\text{n}\text{a}\text{i}35\text{n}\text{a}\text{i}21\text{c}\text{e}35$ (“breast milk”), $\text{t}\text{c}\eta13\text{d}\text{a}\text{u}55$ (“knife”), and $\text{k}\text{a}\text{u}33$ (“tall”).

The numerous Chinese loans encompass a wide range of semantic domains, including almost all semantic categories. These comprise cultural items, basic lexical items, and function words with grammatical meaning or indicating structural relationships.

The Chinese loans in Southern Tujia exhibit the following two distinctive features:

2.1 Co-existence of Native and Loan Words

Although some Chinese loans do represent concepts new to the Tujia language, a large proportion are words which are already in existence in Tujia. Thus, these native words and Chinese loans which have been assimilated into the language often co-exist, as in the following examples:

	Native Tujia word	Chinese loan
cave	$\text{a}^{33}\text{d}\text{u}^{35}$	$\text{t}\text{h}\text{o}\text{n}^{21}$
wild boar	$\text{n}\text{o}\text{n}^{21}\text{h}\text{o}\text{n}^{21}\text{d}\text{i}\text{e}^{55}\text{d}\text{z}\eta^{13}$	$\text{z}\text{i}\text{e}^{55}\text{t}\text{s}\text{u}^{33}$
moss	$\text{l}\text{a}^{13}\text{s}\eta^{33}$	$\text{t}\text{c}\text{h}\text{i}\text{n}^{33}\text{t}\text{h}\text{a}\text{n}^{33}$
maize	$\text{a}^{21}\text{b}\text{u}^{21}\text{t}\text{c}\text{h}\text{i}^{33}$	$\text{p}\text{a}\text{u}^{33}\text{k}\text{u}^{33}$
palm (of the hand)	$\text{d}\text{z}\text{i}\text{e}^{55}\text{p}\text{h}\text{o}^{33}$	$\text{s}\text{v}^{55}\text{p}\text{a}^{21}$
storehouse	$\text{u}^{21}\text{d}\text{z}\eta^{21}$	$\text{t}\text{s}\text{h}\text{a}\text{n}^{33}\text{k}\text{h}\text{u}^{13}$

In daily social interaction, there is a considerable difference in the usage frequency of co-existing native words and Chinese loans. In general, usage is related to the age of the speakers. The elderly, most of whom are over the age of 60, habitually use native words, whereas those below the age of 60 tend to use Chinese loans. This indicates that these synonyms represent a transitional stage in the replacement of native words by loans.

Although the dissemination of Chinese loans and their replacement of native

words is a gradual process, between these two stages, the vocabulary items of these two languages may enter a prolonged period when they are in a state of contention. However, the high percentage of Chinese loans in the core vocabulary and the difference in the ages of speakers using loans or native words are indications that Chinese loans already have an advantage in terms of usage, thus showing a clear trend towards replacing native words.

Apart from the co-existence of native words and Chinese loans for synonymous terms, there is also the co-existence of Chinese loans with the same meaning but different forms, i.e. using different Chinese loans to express the same object or concept, as shown in the following examples:

Meaning	Chinese loan (1)	Chinese loan (2)
fog	tsau ²¹ tsɿ ³³	wu ²¹
stomach	tu ⁵⁵ tsɿ ³³	wei ¹³
adobe	mau ¹³ tɕyan ³³	thu ⁵⁵ do ²¹
spear (n.)	biau ³³ so ³³	kan ⁵⁵ tsɿ ²¹
match (n.)	ziaŋ ¹³ xo ⁵⁵	xo ⁵⁵ dzaɿ ²¹
dyke	di ²¹ tsɿ ²¹ khan ⁵⁵	di ²¹ pa ²¹

In some cases, three different Chinese loans may exist for the same concept, as in the following examples:

Meaning	1	2	3
cabbage	tsen ¹³ dv ³³ tshai ²¹	dzen ¹³ dv ³³ pie ²¹	lu ²¹ ye ²¹ pie ²¹
hollow	tho ³³ ŋan ⁵⁵	thon ³³ ŋa ³³	khon ⁵⁵ khon ²¹
dyke	di ²¹ tsɿ ²¹ khan ⁵⁵	di ¹³	pa ²¹ pa ²¹
city	dzen ²¹	tshen ²¹	tshen ²¹ sɿ ²¹
shop	tian ¹³	xian ³³ tian ¹³	saŋ ³³ tiān ¹³
drawer	tɕhiu ³³ xian ³³	tshiu ³³ xian ³³	tshiu ³³ thi ²¹

The use of different forms of certain loan words may be due to different periods of borrowing, so that “old” loans and new loans are separated chronologically. For other loans, this may be due to their origins from different dialects, in that there are different

ways of saying the same word.

However, whether their co-existence is caused by temporal or spatial factors, their use shows that a complex process of replacement is occurring in Southern Tujia. Not only are native words being replaced by foreign words, but the Chinese loans themselves are being replaced by other loans within a short period of time in a stratified manner. The Southern Tujia lexicon has therefore lost the basic stability required to maintain its position as an independent language, and has entered a disordered state.

2.2 Core Lexical Items

Another noticeable feature of the lexicon is that there are many Chinese loans being used for local flora and fauna, and constitute a ratio that is even higher than general common vocabulary items. Among the 150 words used for local animals, fowl, insects, birds and fish, 86 words are Chinese loans, i.e. 57.33%; among the 115 words used for local trees, grasses, crops, and vegetables, 83 words are Chinese loans, with a ratio as high as 72.17%.

Many of these Chinese loans co-exist with native words, and represent concepts and names already present in Southern Tujia. Therefore, these Chinese loans for commonly occurring local objects are not being used to address any deficiencies in the language, but are simply replacing native words. This indicates that in the process of changing language use, replacement of words in common semantic domains occurs more rapidly than those in less commonly used domains.

3. Grammar

Grammar is considered to be one of the more stable components of a language, as it is part of the deeper structure. However, not only has the grammatical system of Southern Tujia undergone changes under the influence of the Chinese language, but these changes appear to be progressive, involving both lexical categories and word order. Examples involving classifiers and modal verbs are given below.

3.1 Classifiers

Classifiers constitute an important category in Chinese, which has greatly influenced other Sino-Tibetan languages. Southern Tujia is no exception, with over half its classifiers originating from Chinese. These classifiers have played an important role in the formation and development of this category in Southern Tujia. Not only do they

lend a distinct Chinese flavour to the classifier system in Southern Tujia, but they have also led to certain chain effects.

The loan of the Chinese cardinal number for “one” has led to the appearance of foreign elements in the numeral domain, a domain which is generally considered to be the most stable part of a language. This has resulted in the formation of distinctive numeral-classifier phrases which stand against native constructions.

In Southern Tujia, when classifiers from two different origins combine with numerals to form numeral-classifier phrases, a clear distinction is made between Tujia and Chinese loan classifiers. Thus, Tujia classifiers are used only with Tujia numerals, and Chinese classifiers with Chinese numerals. The following examples show the combination patterns with the numeral “one”. The Tujia form of “one” is la^{21} , and the Chinese loan is lji^{21} . Note that sandhi occurs when they combine with classifiers.

Native classifier	Numeral-classifier phrase (noun-numeral-classifier)		Chinese classifier	Numeral-classifier phrase (noun-numeral-classifier)	
xo^{21}	a road	$lo^{33}-la^{21}-xo^{21}$	$tɕie^{21}$	a section of road	$lo^{33}-zi^{35}-tɕie^{21}$
xu^{55}	a backload of vegetables	$a^{21}ɕi^{13}-la^{13}-xu^{55}$	lo^{21}	a bamboo basketful of vegetables	$a^{21}ɕi^{21}-zi^{35}-lo^{21}$
khi^{55}	a handful of rice	$s_1^{13}yie^{55}-la^{13}-khi^{55}$	yan^{33}	a handful of rice	$si^{13}yie^{55}-zi^{13}-yan^{33}$
$tɕi^{35}$	an earring	$xo^{21}tɕi^{35}-la^{21}-tɕi^{35}$	fu^{33}	a pair of earrings	$xo^{21}tɕi^{35}-zi^{13}-fu^{33}$
$phie^{55}$	a book	$u^{33}tsh_1^{35}-la^{13}-phie^{55}$	lu^{13}	a row of books	$u^{33}tsh_1^{35}-zi^{13}-lu^{33}$

The above examples indicate that the native form la^{21} for “one” only appears in Column 3, where it combines only with native Tujia words to form numeral-classifier phrases; while the Chinese form zi^{21} only appears in Column 6, where it combines only with Chinese loans to form numeral-classifier phrases. There is definitely no mixing between the two forms.

3.2 Modal Verbs

Southern Tujia has OV word order, where the verb follows the object, and modal verbs follow the main verb in the predicate. Introducing the Chinese negating adverb “not” has led to the addition of many Chinese negative constructions. One of these is the

formation of a negative construction with a modal verb, leading to the co-existence of the native form of “cannot” $ts_1l_3tshie^{55}$ with the Chinese form $pu^{35}len^{21}$. The emergence of this new construction has led to a complete change in the word order when the Chinese form is used, with the modal verb preceding the main verb, which stands in contrast to the native construction. This is illustrated in the following examples:

(1) Native Word Order: the *Main Verb* precedes the **Modal Verb**

lo^{33}	yi^{21}	ts_1^{13}	$tshie^{55}$	$sa^{33}ta^{21}se^{21}$.
road	walk	not	can	at a young age

When [I] was young, I could not walk.

$la^{21}phie^{13}tie^{55}$	$la^{13}di^{55}$	ts_1^{13}	$tshie^{55}$.
at night	come back	not	can

[He] cannot come back at night.

ηo^{33}	ya^{13}	kau^{55}	$tchin^{33}tshu^{33}$	ts_1^{13}	$tshie^{55}$.
I	still	make	clear	not	can

I still cannot work it out.

(2) **New Word Order**: the **Modal Verb** precedes the *Main Verb*

pu^{35}	len^{21}	xi^{55}	$dzia^{21}wo^{21}tie^{21}$	tu^{13} .
not	can	cover	here	be

[You] cannot cover [it] here.

ηo^{33}	pu^{35}	len^{21}	s_1^{35}	ye^{35} .
I	not	can	meat	eat

I cannot eat meat.

ka^{33}	pu^{35}	len^{21}	$ta^{21}wo^{21}$	z_1^{13} .
he	not	can	those [things]	do

He cannot do those things.

Conclusion

The above examples illustrate some of the structural changes that have occurred in the phonology, lexicon, and grammar of Southern Tujia. These changes differ from those which occur in normal linguistic development, but instead are those which reflect the structural decline in an endangered language. The features of structural decline include the following.

The new constructions which enter such a language do not have a complementary role, but instead are seen to replace native words. This differs from a language which, as it comes into contact with other languages, actively absorbs vocabulary items that are lacking in the language so that it can be enriched. Instead, the new elements entering a language in decline, such as loan words and grammatical constructions, are elements which already exist within the language. Addition of new elements under such circumstances increases redundancy in the system, with many co-existent synonyms and structures, leading to a rapidly expanding but chaotic system. This disrupts the fundamental structural principle of a language, *i.e.* economy with high efficiency, and leads to subsequent decrease in function.

The large numbers of loan forms have an erosive effect on the language. The language lacks the time that is needed to modify and absorb the incoming elements so that they can conform to and merge with pre-existing rules or patterns. Instead, rapid increase in the number of loans has led to the decline or loss of inherent features, with a large increase in allophones, arbitrary dual pronunciation, decreased standardisation, and phonemic confusion between different onsets or rhymes. In the lexicon, native vocabulary items are replaced by loan words, which also become elements in word formation, and the subsequent large numbers of such new word forms have led to further dissemination of Chinese forms within the language. Changes in grammatical structures have led to the weakening and decline in the use of inherent grammatical devices, so that Chinese loan function words have increased grammatical roles and become multi-functional, with subsequent emergence of a single unitary construction.

Rapid and increasingly frequent replacement of linguistic elements has led to disorderly change and loss of the stability that a language system should possess. In general, common words and basic constructions are more easily replaced. Replacement is systematic rather than within specific categories only. This is a distinctive feature of endangerment in a language whose usage situation is changing.

The effects of a foreign language has had chain effects on Southern Tujia, leading

to a disruption of the usual progression from surface to deep structures. Indirect changes due to contact with loan words have permeated every level of the language. Thus, both surface and deep structures are affected, resulting in sweeping changes within the language.

These distinctive changes in Southern Tujia reflect the common patterns observed in languages which have been subject to intense influences from a foreign language over prolonged periods and which are now facing extinction. Language endangerment is primarily due to a decline in function which results in its disappearance, and changes in the structure of a language are inevitable within the endangered state. In general, a language which is rapidly heading towards extinction shows fewer structural changes, whereas gradual decline leads to large and complex changes in structure. A language like Southern Tujia, therefore, which has undergone progressive decline over a prolonged period, will exhibit major structural changes. To use the words of a linguist who was describing a similar situation, "This language is wearing Tujia boots and heading towards extinction."

Reference

- Durie, Mark, and Malcolm Ross, eds. 1996, *The Comparative Method Reviewed: Regularity and Irregularity in Language Change*, Oxford University Press. Oxford.
- Li Jingzhong. 2000, *The Tujia Language of Luxi*. Central University for Nationalities Press. (李敬忠, 2000, 《泸溪土家语》, 中央民族大学出版社, 北京。)
- Sarab G. Thomason. 2001, *Language Contact*, Georgetown University Press, Washington, D.C.
- Smith, Norval 2007, *Contact Phonology, Phonology in Context*, Edited by Marta c. pennington, Printed and bound in Great Britain by Antony Rowe Ltd, Chippenham and Eastbourne.
- Tian Desheng, He Tianzhen et al. (eds.). 1986, *Tujiayu Jianzhi (A Brief Description of the Tujia Language)*, Ethnic Publishing House. (田德生、何天贞等, 1986, 《土家语简志》, 民族出版社, 北京。)
- Van Coetsem, Frans, 1988, *Loan Phonology and the Two Transfer Types in Language Contact*, Dordrecht: Foris.
- Xu Shixuan. 2006, *The Tujia Lexicon and Language Contact*. 39th International Conference on Sino-Tibetan Languages and Linguistics. The University of Washington. Seattle. Sept. 14–17.
- Xu Shixuan. 2007, Documentation of endangered languages, *Contemporary Linguistics* no. 1. 44–51. (徐世璇, 2007, 《濒危语言的文献记录》, 《当代语言学》第1期, 北京, 44–51。)
- Xu Shixuan. 2008, The Profound Effects of Language Contact as seen in the Special Features of Word Formation in Southern Tujia, Volume 2, *Dongfang Yuyanxue (Oriental Linguistics)*, Shanghai

Education Press, Shanghai. 167–176. (徐世璇, 2008, 《从南部土家语的特殊构词看语言的深层接触》, 《东方语言学》第2辑, 167–176。)

Xu Shixuan. 2010, Contact-Induced Changes in Tujia Phonology, *Minzuyuwen* no.5, Beijing. 3–11. (徐世璇, 2010, 《土家语的接触性语音演变》, 《民族语文》第5期, 3–11。)

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“Endangered Dialects” in Tibetan: a Case of Eastern Khams Vernaculars

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Abstract: Because of no common standard for differentiating between a language and a dialect, few works have noted the endangerment of minor Tibetan dialects. This paper focuses two dialects spoken in Khams area, Danba (Ganzi, Sichuan) and Daan (Lijiang, Yunnan), explains each language situation of endangerment and introduces several idiosyncratic linguistic features.

Keywords: Tibetan, Khams Tibetan, Socio-linguistics, rGyalrong, Naxi

1. Introduction

There is no common standard for differentiating between a language and a dialect; definitions depend of the viewpoint of researcher (cf. a discussion on Xiandao, one of the endangered Tibeto-Burman languages spoken in China, in Dai et al. (2005:169-180)). The Tibetan language, or the complex of the Tibetic languages (Tournadre, 2008:282), is spoken in China, Bhutan, Nepal, India, Pakistan, and Myanmar. The Tibetan *dialects*, which can be regarded as several distinct languages, are extremely various, in which unintelligible varieties are also included though they share the majority of the cognate words which are represented by Written Tibetan (WrT) forms.

In general, studies on the “endangered languages” do not include ones of each dialect of languages, thus the languages such as Tibetan have been studied very little, even though the dialects of these languages are now facing to the same environment of the “endangered languages”.

This paper deals with endangered Tibetan dialects spoken in the Eastern Khams area, i.e. Sichuan and Yunnan, and discuss the value of the method for linguistic studies. Eastern Khams area is a socio-geographically complex area in which multicoloured

dialects have developed due in part to the influences from non-Tibetan languages are found out there. This paper especially reports the case of two dialects in particular: Danba Tibetan (in Ganzi Pref., Sichuan) and Daan Tibetan (in Lijiang, Yunnan).

2. Variegated Tibetan dialects and a sub-grouping of Khams Tibetan

There are numerous lesser-known dialects of Tibetan. My reports Suzuki (2009ab) provide a detailed classification on the Tibetan dialects of the Tibeto-Lolo Corridor/TLC 藏彝走廊 (Ethnic Corridor of West Sichuan) mainly based on my collected data. The dialects of this area are divided into three main dialectal groups: Khams, Amdo and Shar. Shar Tibetan was proposed by the present author in Suzuki (2008a), which contains the dialects spoken in the northeastern area of Aba Tibetan and Qiang Autonomous Prefecture, Sichuan. Among them, Khams Tibetan possesses the most complicated sub-classification of its vernaculars. The following tabular is my updated opinion on the classification of the sub-dialects of Khams Tibetan spoken in the TLC. In other words, the listed dialects are spoken only in Sichuan and Yunnan. The dialects marked with * are endangered, those with ** are nearly extinct.

group	sub-group	dialects
Northern Route 北路	Derge dKandze	Derge, Sereshul, dPalyul dKandze, Nyagrong
Rongbrag 丹巴	Eastern Western	Sogpho*, sProsnang* Rongbrag*, dGudzong
Minyag 木雅	Northern Southern	Bame, Lhagang Dartsendo**, Rangakha
Southern Route 南路	Nyagchu Lithang mBathang	Milong Lithang, Grongsum mBathang, mTshola, Dangba
Muli-nDappa 木里稻城	Muli bCingrol	Mairi, Mundzin, Nyayulzhab nDappa
sDerong-nJol 得荣德钦	West Yunling Mountain sPomtserag sDerong gYagrwa	nJol, lCagspel, sNyingthong, Budy sPomtserag, Wakha sDerong, Zulung gYagrwa
Chaphreng 乡城	Chaphreng Rwata gTorwarong	Chaphreng, Sagong, gDongsum Rwata, Tsiu gTorwarong, mPhagri
Sems-kyi-nyila 香格里拉	rGyalthang East Yunling Mountain Melung Lamdo	rGyalthang, Yangthang, sKadgrags Nyishe, Thoteng, Byagzhol, Qidzong Melung**, mThachu, Zhollam*, Daan** Lamdo

The classification above is proposed mainly based on the correspondence of oral forms and Written Tibetan (WrT) forms.

Note the situation of the southern subgroup of the Minyag group. One vernacular is nearly extinct, the other is of a good condition. The former is known as a dialect of Kangding Town, where the authentic local Tibetan speech does not functioned as a communication language any more, even in the Tibetan family, only few elder Tibetans know it. The Tibetan dialect of Kangding (the Dartsendo dialect) has ever been recorded, and we can find several word forms in Zhang (2009). The latter is a variety known as a dialect of Xinduqiao Town, which people have ever substituted instead of the Minyag language, one of the Qiangic languages in the 20th century (Huang 1988). The difference of the language vitality is attested even in a sub-group according to the social environment.

The role of the study of Tibetan dialects is extremely important, especially for the historical study of Tibetan. The many previous studies on Tibetan have focused mainly on well-known dialects, and have tended to neglect small vernaculars.

3. Two cases of the endangered Tibetan dialects

This section reports two cases of the endangered Tibetan dialects: Danba Tibetan and Daan Tibetan. Each dialect possesses peculiar characteristics in the Tibetan dialectology, however, previous studies did not report them, in addition, even the existence of such dialects was not recognised.

The report consists of two subsections: the first is on the distribution, linguistic situation of the area, actual language use, and supposed main factors making the Tibetan dialects endangered; the second is on an introduction to several linguistic features characterising the dialects.

3.1 Actual situation of the endangerment and its background

3.1.1 Danba Tibetan: rGyalrong and Tibetan

Danba (丹巴) is located at the most eastern part of Ganzi Tibetan Autonomous Prefecture, western Sichuan. In the Tibetan traditional geography, this place belongs to rGyalrong, and it is the central spiritual area of rGyalrong region as well as an ethnic border area of Tibetan, Qiang and Han Chinese.

Khams Tibetan spoken in Danba belongs to an independent dialectal group named Rongbrag (traditionally called "Twenty-four-villages patois"). Descriptive studies on this group are very few. An contrastive analysis on four dialects of this group was done

in Suzuki (2008b).

Danba is a multi-lingual area, where Tibetan people who speak Situ-rGyalrong, Geshitsa, Sichuan variety of Mandarin Chinese, Amdo nomadic Tibetan as well as Khams Tibetan live. The Tibetans in Danba identify themselves as rGyalrong, and their culture, traditions and heritage are also similar to those of other rGyalrong people who speak rGyalrongic languages. The multilingual situation in Danba has been reported in several papers such as Lin (2006), but the detailed description has not been done on each language. Under this situation, it is reported that the Khams Tibetan dialect spoken in Danba is a language similar to the “standard” Khams Tibetan (Derge dialect), but this is not correct. Indeed, comparing Khams Tibetan in Danba with other languages spoken in Danba, we could conclude that it is the most similar language to the Derge dialect or Written Tibetan. But as mentioned above, this comparison is not significant for the linguistics, because the dialectal situation among all Khams Tibetan is not considered.

Actually, all the ethnic languages such as Khams Tibetan, Amdo Tibetan, Geshitsa and Situ-rGyalrong are used only the native village of each speaker, or only in the family. Each village has its own vernacular, which makes the communication in the same language (such as Khams) among persons coming from different villages unintelligible in some cases. In everyday life, Chinese (the Sichuan dialect) is chosen as a communication language in the town of Danba.

Generally speaking, the Danba Tibetans do not want to learn non-native ethnic languages, and they tend to use Chinese as a language of wider communication (LWC). Moreover, the progress of the Chinese education diminishes many occasions to use the ethnic languages. In daily life, especially related to the tourism development, the occasion to contact with many travellers from the outside is heightened even in local villages. Because of these factors, less and less people use the ethnic languages even though one of them may be their mother tongue.

3.1.2 Daan Tibetan: Naxi and Tibetan

Daan village is located at the west of Yongsheng County, Lijiang City, Yunnan. Historically, this area belongs to the Naxi cultural area. The Tibetans inhabiting in Daan have their origin from Mangkang (芒康) (in Tibet, but close to northwest Yunnan) according to their own oral history, and this migration was forced by the Naxi chieftain about 500 years ago. In other words, they have been under the Naxi influence for 500 years.

Daan Tibetan belongs to the Melung sub-group of the Sems-kyi-nyila group of Khams Tibetan in the actual study. It possesses several idiosyncratic phonetic characteristics among the Tibetan dialects. The existence of this dialect was reported (He, 2001: 253), however, its linguistic/dialectal features were quite unknown.

Daan village is a multi-ethnic area including Tibetan, Naxi, Yi (Lolo), Han Chinese, etc. Before the LWC was Naxi, but at present it has become the Yunnan dialect of Chinese. At the present, there are only a few people who use the Daan dialect in daily life and the younger generation does not understand it. The environment of its use is highly limited, only in the family, among relatives whose members are all Tibetans. In the older generation, there are a few trilinguals who speak Tibetan, Naxi and Chinese or bilinguals who speak Tibetan and Naxi; around a half of the younger people (mainly over ca. 40-year-old) is a bilingual in Tibetan and Chinese; almost all younger people (under ca. 40-year-old) are speaking only Chinese (including the persons who understand only a few expressions in Tibetan). This dialect is facing severe endangerment.

Exogamous marriage (i.e. the marriage between the different nationalities) could be one of the main factors for causing the Daan dialect to become endangered. Members of a family tend to select a common language (usually Chinese). Since their migration, Daan Tibetans had kept endogamous marriage (i.e. the marriage within the Tibetan nationality). However, in the 20th century their value of endogamous marriages slowly changed. Perhaps this change has resulted in the endangerment of the Daan dialect.

3.2 Linguistic characteristics attested in the Danba and Daan dialects

Several main linguistic characteristics of Danba and Daan Tibetan are provided in comparison with WrT here. Contrasted with the data provided in Jiang (2002) and Zhang (2009), these features are a minority among the Tibetan dialects. Concerning the detailed status of each dialect, we can consult the individual works indicated in each paragraph below.

3.2.1 Danba Tibetan

As mentioned above, a sketch of the Danba Tibetan dialects was presented in Suzuki (2008b). For the sProsngang dialect see Suzuki (2007); for the Sogpho dialect see Suzuki (2011a); for the Rongbrag dialect see Suzuki (2008c); and for the dGudzong dialect see Suzuki (2011b).

The idiosyncratic linguistic features of Danba Tibetan are following:

1. WrT Py > /*(p)tsh, (p)ts, (b)dz*/
2. WrT glide *r* is preserved as a glide /*r*/ (sProsnang vernacular only)
3. WrT *sh, zh* > /*ʃh, ʃ, z*/ mainly
4. WrT *C* > /*tʃh, tʃ, dʒ*/ (sProsnang vernacular only)
5. WrT *a#* > /*ɔ, o, wə*/
6. WrT *ag* > /*e*/ (dGudzong and Rongbrag vernaculars)
7. WrT *ad* > /*a*/
8. special case marker for the ablative /*de*/
9. ergative case as an emphasised subject
10. evidential category for the copula expression employing /*ŋ̃*/

3.2.2 Daan Tibetan

According to current research, Daan Tibetan is regarded as a member of the Melung sub-group of the Sems-kyi-nyila group of Khams Tibetan (Suzuki 2009c). A sketch of the phonetics of Daan Tibetan is provided in Suzuki (2011c).

The idiosyncratic phonetic features of Danba Tibetan are following (grammatical features have not been analysed yet):

1. open syllable as a main construction;
2. voiceless resonant series lacked;
3. WrT glide *r* is omitted in quite all the examples;
4. WrT *sh, zh* > /*ʃh, ʃ, z*/;
5. WrT *C* > /*tʃh, tʃ, dʒ*/;
6. WrT nonnasal final occurred the vowel lengthening.

4. Conclusion

The two dialects introduced in this paper have been studied little in the previous works. But they have many different features from other Tibetan dialects. Under this situation, they are now facing endangerment because of various reasons.

The indifference to small vernaculars of Tibetan has been depriving us of the precious heritage of the Tibetans, therefore I insist the necessity of the knowledge on the dialects of a language, and of the assessment for the dialectal difference for the study on both of the endangered and non-endangered languages. Tibetan, even though it possesses its own script and the long tradition of the written language, is a language which has various endangered dialects. It would be much preferable that, before

beginning to describe a variety of each language/dialect, we should consider the situation concerning the endangerment among dialects or vernaculars.

There must be multiple keys for unlocking the local unwritten history inside of these dialects, they are now being endangered, therefore a record of them is really needed.

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References

- Dai Qingxia [戴庆厦] et al. (2005) *Xiandaoyu Yanjiu* (A Study of Xiandao), Zhongyang Minzu Daxue Chubanshe.
- He Xudong [和旭东] (ed.) (2001) *Lijiang Diqu Minzuzhi* (Annals on the Nationalities in Lijiang District), Yunnan Minzu Chubanshe.
- Huang Bufan [黄布凡] (1988) Chuanxi Zangqu de yuyan guanxi (Ethnic relations in the Tibetan area of West Sichuan). *Zhongguo Zangxue* 3, 142–150.
- Jiang Di [江荻] (2002) *Zangyu Yuyinshi Yanjiu* (A Study of the Tibetan Phonetic History), Minzu Chubanshe.
- Lin Junhua [林俊华] (2006) Danbaxian yuyan wenhua ziyuan diaocha (Researches in the language culture in Danba County). *Kangding Minzu Shifan Gaodeng Zhuanke Xuexiao Xuebao*, 5: 1–3.
- Suzuki Hiroyuki [铃木博之] (2007) Tibet-go Zhonglu [sProsng] hoogen no /r/ wo hukumu siinrenzoku (/r/ as a glide of the consonant cluster in sProsng [Zhonglu] Tibetan). *Tokyo University Linguistics Papers* 26, 31–47.
- (2008a) Nouveau regard sur les dialectes tibétains à l'est d'Aba : phonétique et classification du dialecte de Sharkhog [Songpan-Jiuzhaigou]. *Linguistics of the Tibeto-Burman Area* Vol. 31.1, 85–108.

- (2008b) *Historical position of Danba Tibetan among Khams Tibetan dialects*, paper presented at the Workshop on TibetoBurman Languages of Sichuan (Taipei).
- (2008c) rGyalrong tiiki no Khams Tibet-go Danbaken Puguoding [Rongbrag] hoogen no onseibunseki to goi (Khams Tibetan Rongbrag [Zhanggu] dialect: phonetic analysis with a wordlist). *Bulletin of National Museum of Ethnology* 200833.1, 39–80.
- (2009a) Introduction to the method of the Tibetan linguistic geography — a case study in the Ethnic Corridor of West Sichuan — in: Yasuhiko Nagano (ed.) *Linguistic Substratum in Tibet — New Perspective towards Historical Methodology (No. 16102001) Report Vol.3*, 15–34.
- (2009b) Chuanxi diqu “Jiuxiang xian” shang de Zangyu fangyan : fenbu yu fenlei (Tibetan dialects spoken over JiuzhaiShangriLa Line in the Ethnic Corridor in West Sichuan: their distribution and a new classification). *Hanzangyu Xuebao* 3: 17–29.
- (2009c) Naxi bunkaken no Tibet-go Yongshengken Daan [Daan] hoogen no hoogen syozoku (Dialectal position of Daan Tibetan spoken in the Naxi cultural area). *Bulletin of National Museum of Ethnology*, 200934.1, 167189.
- (2011a) Dialectal particularities of Sogpho Tibetan — An introduction to the “Twenty-four-villages’ patois” —in: Mark Turin & Bettina Zeisler (eds.) *Himalayan Languages and Linguistics: Studies in Phonology, Semantics, Morphology and Syntax*, Brill (in press).
- (2011b) Phonetic analysis of dGudzong Tibetan: The vernacular of Khams Tibetan spoken in the rGyalrong area. *Bulletin of National Museum of Ethnology* 2011–35.4 (in press).
- (2011c) Lijiang Yongshengxian Daan Zangyu yuyin fenxi (Phonetic analysis of Daan Tibetan spoken in Yongsheng County of Lijiang). *Hanzangyu Xuebao* 5 (in press).
- Tournadre, Nicolas (2008) Arguments against the concept of ‘conjunct’ / ‘disjunct’ in Tibetan, in: Brigitte Huber et. al (hrgb.) *Chomolangma, Demawend und Kasbek, Festschrift für Roland Bielmeier zu seinem 65. Geburtstag*, 281–308, International Institute for Tibetan and Buddhist Studies GmbH.
- Zhang Jichuan [张济川] (2009) *Zangyu Cizu Yanjiu — Gudai Zangzu Ruhe Fengfu Fazhan Tamen de Cihui* (A Study of Tibetan Word Family: How the Ancient Tibetans Enriched their Lexicon). Zhongguo Shehuikexue Wenxian Chubanshe.

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A Description of Endangered Phonemic Oppositions in Yongning Na (Mosuo)

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Abstract: Several phonemic oppositions (including tonal oppositions) are under a severe danger of disappearing from the Na language spoken in the plain of Yongning (Ninglang prefecture, Lijiang municipality, Yunnan province, China). The overall tendency is, unsurprisingly, that the oppositions found in Na but not in Mandarin Chinese tend to become lost by the speakers who are most proficient in Chinese. Na contrasts /l/, /ɬ/, /ɛ/ and /ɿ/; this set is fully preserved in the speech of a 55-year-old speaker, whereas in the speech of a schoolgirl (in senior high school at the time of fieldwork) the four have simplified to /l/: /li^M/ “to look” and /ɬi^M/ “ear; moon” have merged to /li^M/; the syllables /ɛæ/ and /ɿæ/ in /ɛæ.mi^M/ “sword” and /k^hwæ.ɿæ^{#H}/ “satin” simplified to /æ/. (Superscript letters indicate tones.) In-between these two extremes, in the speech of a speaker aged 35, these oppositions are still present but their lexical distribution is imperfectly preserved. For instance, she pronounces the word “sword”, /ɛæ.mi^M/, which is not in common use anymore, as /ɿæ.mi^M/. As far as tones are concerned, the differences between the oldest generation and the speakers under 60 years set in sharp relief the complexities of the tonal system of Na: the oppositions that are neutralized in citation form tend to be overlooked by the less proficient speakers, leading to a major transformation of the architecture of the tone system.

Keywords: Yongning Na, Mosuo, Tones, Phonemic Oppositions, Loss of Oppositions, Sporadic Loss of Oppositions, Age Groups

Introduction

The present study concerns the Na language (a.k.a. “Mosuo”, “Eastern dialect of Naxi”) as spoken in the plain of Yongning, Ninglang County, Lijiang Municipality, Yunnan, China.

There already exist relatively abundant ethnological writings about the Na/Mosuo people, including an outline of the history of the Yongning area by Guo Dalie et al. (1994 [2nd ed. 1999]: 426–430) and a two-volume collection of articles (Latami Dashi, 2006). From a linguistic point of view, elements of description of this Sino-Tibetan language are available in the presentation of the Naxi language by He Jiren et al. 1985:104, where Na is classified as part of the “Eastern Naxi dialects”. Research about this language includes a Ph. D. dissertation (Lidz, 2010), a phonemic and tonal inventory (Michaud, 2008), and a study of the historical phonology of the language subgroup to which Na belongs (Jacques et al. 2011).

Speakers of various languages, including Prinmi (a.k.a. Pumi), Lisu, Naxi, Nosu (a.k.a. Nuosu) and Chinese, have been in continuous contact in Yongning for centuries. Its market-place used to play an important role for neighboring mountain villages—indeed, Yongning still preserves this role to a certain extent, for instance for the Yi and Pumi/Prinmi people from small villages around Yongning (Wellens, 2006:85). However, the feudal lord of Yongning being Na (Mosuo), the Na language had a dominant situation in the plain of Yongning up until the mid-20th century. While there can be no doubt that the language received various influences in the course of its development, bilingualism was not widespread: speakers of other languages were bilingual in Na, rather than the other way round. Numerous Na speakers had little or no command of other languages. This is a somewhat exceptional situation in this area, at the border between Sichuan and Yunnan: for instance, the small community of Na speakers in the neighboring county of Muli (Shuiluo township) are bilingual in Shixing and have some command of Tibetan; and the variety of Na/Naxi spoken in Guabie has long been influenced by other languages, in particular Prinmi and Nosu.

Today, language shift from Na to Chinese is under way in Yongning. The present study investigates specifically the situation in a hamlet of the Yongning plain (Pingjing Village; in Chinese: 平静村), tracing the effects of growing proficiency in Mandarin on the speakers of Na. Examples of endangered phonemic oppositions are provided: oppositions which have a low functional yield and which have no counterparts in Chinese (Standard Mandarin and Southwestern Mandarin, the two varieties learned by

Na speakers).

The data were collected during four stays in the field, from 2006 to 2009. Data from five language consultants are reported here, spanning three generations for women—a speaker born in 1950, who will be referred to below as F4; her daughter-in-law, F5; and the latter's niece, F6, aged 19—and two generations for men: a man born in 1942, M21, and his youngest son, M23, born in 1974. (The labels F1, F2..., M1, M2... are assigned to language consultants in the database of Na, Naxi and related languages collected over several field trips; they allow for unambiguous reference.) The second author of the article is himself a native speaker, who exemplifies the situation of bilingual speakers with an excellent command of Chinese (in his case, both Southwestern Mandarin and Standard Mandarin).

1. Consonants and vowels

Yongning Na has a simple syllabic structure, (C)(G)V, where C is an initial consonant, G a glide—with a severely restricted distribution—and V a vocalic element. The overall tendency is, unsurprisingly, that the phonemic oppositions found in Na but not in Mandarin Chinese tend to become lost by the speakers who are most proficient in Chinese.

1.1 Endangered consonantal oppositions: laterals and rhotics

The consonantal inventory of Yongning Na is recapitulated below.

	bilabial	dental	retroflex	velar	uvular	glottal
plosive	p ^h p b	t ^h t d	t ^h ʈ ɖ	k ^h k g	q ^h q	
<i>affricate</i>		ts ^h ts dz tɕ ^h tɕ dʒ	tʂ ^h tʂ dʒ			
nasal	m	n	ŋ	ŋ		
fricative		s z ɕ ʒ	ʂ ʐ		ʁ	h
lateral		ɭ l				
approximant			ɻ			

The approximant /ɻ/ can appear on its own, as a syllable: /ɻ/, for instance in /pɻ.ɻ/ 襁褓 (a type of Tibetan garment). It can also appear in the syllables /ɻæ/ and /ɻwæ/.

This set is fully preserved in the speech of proficient speakers (exemplified by speaker F4). On the other hand, a variety of simplifications is observed in the speech of younger (and less proficient) language consultants.

Syllabic /ɿ/ is not strongly integrated within the phonemic system; it is therefore a likely candidate for confusion with other syllables in the speech of bilingual speakers. For instance, it has become confused with the syllable /luw/ in the speech of M23 (aged 35): in his pronunciation, the plural pronouns for the first, second and third persons are not /njɿ^Mɿ^L/, /nu^Mɿ^L/ and /tʂ^hu^Mɿ^L/ (as in the speech of F4, our reference speaker), but /njɿ^Mluw^L/, /nu^Mluw^L/, and /tʂ^hu^Mluw^L/. In the speech of F5 (same age group), sporadic confusion of /ɿ/ is taking place with /lɿ/: for instance, she pronounces the adjective ‘square’, /zɿ^Mɿ^H/, as /zɿ^Mlɿ^H/.

Initial /ɿ/ is also threatened. In the speech of less proficient speakers of the younger generations, the initial /ɿ/ in the combination /ɿwæ/ appears to be in danger of confusion with /l/: speaker M23, and the second author of this paper, realize ‘to call out, to shout’, /ɿwæ^H/, as /lwæ^H/ (this change does not result in lexical confusions, since /lwæ/ is an otherwise unattested combination in the lexicon of Yongning Na). As for /ɿæ/, it gets simplified to /ɿ/ or to /læ/ by this same generation of speakers, e.g. the second author of this article realizes the plural marker /ɿæ/ as /ɿ/ and the second syllable of the disyllabic words /su.ɿæ^M/ ‘table’, /t^hæ.ɿæ^{ML}/ ‘book, scripture’ and /k^hwæ.ɿæ^{MH}/ ‘felt; mat’ as /læ/. These changes amount to the complete loss of the initial /ɿ/ in the speech of these speakers.

As for speaker F5, who belongs to the intermediate age group (age: 35), she preserves the sound /ɿ/ as an initial consonant, but its lexical distribution is becoming somewhat confused. For instance, she pronounces the word ‘sword’, /ɿæ.mi^M/, as /ɿæ.mi^M/; this is clearly an effect of the low frequency of this word, due to the disappearance of swords as an object of Na/Mosuo material life. The language consultant has few opportunities of hearing the word pronounced by more proficient speakers – which would allow her to revert to the “correct” form – or of pronouncing it in a linguistic context where her pronunciation would be likely to be corrected by more proficient speakers. The opposition between /ɿ/ and /l/ thus shows signs of weakening even in the speech of those speakers who still contrast these two phonemes. In other items, /ɿæ/ is simplified to /læ/: for instance, speaker F5 pronounces /ɿæ^{LM}/ ‘flat’ as /læ^{LM}/.

Lastly, in the speech of F6 (a 19-year-old high school student) the four sounds /l/, /ɿ/, /ɿ/, and /ɿ/ have all simplified to /l/, which is the closest approximation found

in the Chinese language for these sounds. Thus, in F6's speech, /li^M/ 'to look' and /li^M/ 'ear; moon' have become homophonous, simplifying to /li/; and the syllables /kæ/ and /ɬæ/ in /kæ.mi^M/ 'sword' and /k^hwæ.ɬæ^{#H}/ 'satin' both simplified to /læ/.

1.2 Endangered syllable structures: the case of nasality

In Yongning Na, there exist the following nasal vowels: /ĩ/, /ỹ/, /ã/, /æ̃/, /w̃ɣ/, /ũ/, and /ĩ̃/. The first five are found exclusively after /h/, where they contrast neatly with their non-nasal counterparts. Phonetically, /h/ in front of oral rhymes is realized with a friction source at a point in the vocal tract determined by the following vowel, e.g. palatal before /i/ and labial-dental before /y/ (hence [çi] and [fỹ]). In front of nasal rhymes, /h/ is nasalized.

This syllable type is relatively marginal in Yongning Na, and unlike anything found in the varieties of Chinese that are being learnt by Na speakers. As a consequence, it is among the most likely candidates for merger with other syllable types. In the speech of bilingual speakers, sporadic changes were observed: for instance, /dzi.hỹ^{#H}/ 'clothes' has become /dzi.ɲỹ^{#H}/ in the speech of M23 – nasality being carried only by the initial – whereas other items (such as /hỹ.hỹ^M/ 'to stir-fry') retain their /h/-plus-nasal-vowel structure.

1.3 Loss of an acoustically fragile opposition: the case of apicalization

Yongning Na has apical vowels [ɿ] (apico-alveolar) and [ɿ̠] (apico-retroflex) as allophones of the high unrounded back vowel /ɯ/ after fricatives and affricates of like place of articulation, e.g. /su^H/ 'to know' is realized [sɿ], and /ʂu^{MH}/ 'to peel' is realized [ʂɿ̠]. The syllables composed of a dental fricative or affricate followed by /ɯ/, namely /zɯ/, /sɯ/, /dzɯ/, /tsɯ/ and /ts^hɯ/, contrast with syllables containing the rhyme /i/: /zi/, /si/, /dzi/, /tsi/ and /ts^hi/. The latter are well-advanced on the path towards apicalization: strong fricative noise is present throughout the syllable. Acoustically, the opposition between pairs such as /sɯ/ and /si/ is difficult to perceive – so that this opposition escaped the linguist's notice at first, and was not reported in Michaud 2008. Thus, /si^{#H}/ 'wood' (realized [si^M]) is to be distinguished from /su^H/ 'to know' (realized [sɿ^M]). It appears that bilingual speakers of Na are also experiencing some trouble with these syllable oppositions: bilingual speakers still maintain the opposition, but its lexical distribution is becoming fuzzy. When it was realized that these two sets needed to be distinguished, the first author went through the entire vocabulary to tease apart instances of /sɯ/ and /si/, /tsɯ/ and /tsi/, and so on (which had all been transcribed

originally with the vowel /u/), asking consultants questions such as: “Is ‘to sharpen’ pronounced like ‘wood’ [that is, /si/] or like ‘to know’ [that is, /su/]?” Language consultants other than F4 (our reference speaker) experienced some difficulties in this task, despite the care taken to make it as easy as possible (making short sessions to avoid fatigue, for instance). It appears that, among the less conservative speakers, F5 maintains the distinction consistently, whereas M23 does not usually realize it anymore. Speaker M23 does preserve an awareness of the distinction, but this distinction is endangered: having lost (or having never acquired) the habit of distinguishing them in his own speech, he is hard put to indicate into which set a given word belongs. For instance, being asked whether the initial syllable in ‘table’ (/su.ɬæ^M/) is like in ‘wood’ or in ‘to know’, he chose the former, substituting the form /si.ɬæ^M/ for /su.ɬæ^M/ ‘table’. This amounts to a folk etymology whereby the first syllable is considered identical with the word for ‘wood’, /si^{#H}/.

While the consonants and vowels discussed above constitute salient examples of endangered oppositions, tone is no less revealing of the current tensions in the phonological system of Yongning Na. This topic is discussed at some length in section 2.

2. Tones

The tones of Yongning Na are phonetically simple. The tone-bearing unit is the syllable; in continuous speech, each syllable carries one of three level tones, H(igh), M(id) or L(ow). Tonal systems thus based on levels (tone heights) are relatively unusual in Sino-Tibetan, but not unheard of: examples include Pumi (Ding, 2006, Jacques, 2011), Mianchi Qiang (Evans, 2008), Shixing (Chirkova et al. 2009), Hakha Lai (Hyman et al. 2002) and Kuki-Thaadow (Hyman, 2010). In Na, the last syllable of a phonological phrase can carry either a level tone, H, M or L, or one of two contours: LM or MH. There is no distinction in terms of syllable weight: any syllable can function as tone-bearing unit for one or two tonal levels.

From a phonological point of view, tones are an especially complex part of the language. It has been observed that Yongning Na has tone sandhi “which seems to be at least partly morphologically motivated” (Lidz, 2006:4); the presence of tonal changes is also mentioned by Yang Zhenhong 2009. An inventory of distinctive tones for monosyllables and disyllables is proposed in Michaud 2008; the essentials are recapitulated in Table 1 (monosyllables) and Table 2 (disyllables).

Table 1 provides a summary of the tonal classes of Yongning Na nouns. The oppositions between these classes being partly neutralized in citation form, the

table indicates, along with citation forms, the tonal pattern which obtains when a one-syllable grammatical word is added after the target word: (i) the possessive particle [by], which is toneless, or (ii) the copula, [ŋi^L], in frame (1).

(1) [tʂ^hu^M _____ ŋi] ‘This is (a/the) _____.’

Deictic target item Copula (*note: the unmarked word order is SOV*)

The tonal patterns are indicated in superscript at the end of the tone-bearing syllable, e.g. [bu^{LM}] ‘pig’ is strictly equivalent to [bu^L] in tone-letters (Chao Yuen-ren 1930) or [bū] in Africanist notation. In frame (1), no tone is indicated for the copula [ŋi], because its tone changes as a function of the pattern of the target-word, as set out in table 1. In the column that indicates the tonal pattern after addition of the copula or the possessive particle, the ‘+’ sign demarcates the noun from the added morpheme. For instance, the information provided in table 1 for the tonal class LM is: LM in isolation, L+M with copula and with possessive particle. As an example, the word ‘pig’ is [bu^{LM}] in isolation, yielding [bu^L ŋi^M] ‘...is (a) pig’ and [bu^L by^M] ‘...of (a) pig’. The tone of the deictic in (1) is M, [tʂ^hu^M], regardless of the tonal class of the following item; as a consequence, only the tonal pattern of the rest of the sentence is indicated in table 1.

Table 1 The tones of monosyllables: underlying phonological category; realization in isolation; when the possessive is added after the noun; and when the copula is added after the noun.

example	tone	in isolation	+Poss	+Cop
la ^M	‘tiger’	M	M+M	M+L
k ^h v ^L	‘dog’	L	L+M	L+LM
zwa ^{#H}	‘horse’	#H	M+M	M+H
hwɿ ^{MH}	‘cat’	MH	M+H	M+H
bu ^{LM}	‘pig’	LM	L+M	L+M

The tone system of Yongning Na includes some oppositions that do not surface in the citation form of the words. A Yongning Na word that carries a Mid tone when it is said in isolation may have one of three underlying tones: M, L, or #H, the latter being a High tone that can only attach to a following syllable within the phonological word. A hint to the diversity of the underlying tonal classes can be gleaned from variants: a LM variant (instead of M) is acceptable for the L tone in isolation – e.g. /ŋv^L/ ‘silver’ can be pronounced [ŋv^{LM}], as well as [ŋv^M] – whereas this variant is not acceptable for

tones M and #H. However, this piece of evidence is nowhere as compelling as that drawn from combinatorial properties of the tonal classes, such as their behavior when followed by the possessive or the copula – and in compound nouns, about which more below.

When they learn Mandarin Chinese, Na speakers come to terms with a differently structured tone system: one in which (leaving aside marginal phenomena of toneless syllables and tone sandhi) each syllable has its own tone, which surfaces as such in isolation. The discrepancy between the underlying forms and the surface forms of Yongning Na tones makes them relatively difficult to handle for less proficient speakers. This complexity is even greater on disyllables, presented in Table 2.

Table 2. The tonal classes of disyllabic nouns in Na. The thick horizontal line separates the five tonal classes that correspond to those of monosyllables (above the line) from the other six. The ‘dollar’ sign, \$, stands for the end of the phonological phrase. The ‘plus’ sign, +, demarcates the disyllabic noun from following morphemes.

tone: phonetics in isolation	tone: phono-logical category	tone: +Poss	tone: +Cop	example		
				phonemes	phonetics in isolation	meaning
[M.M]	M	M.M+M	M.M+L	/i.mi ^M /	[i ^M mi ^M]	‘moon’
[L.LM]	L	L.L+M	L.L+M	/k ^h y.mi ^L /	[k ^h y ^L mi ^{LM}]	‘she-dog, bitch’
[M.M]	#H	M.M+M	M.M+H	/ŋi.mi ^{#H} /	[ŋi ^M mi ^M]	‘sun’
[M.MH]	MH#	M.M+H	M.M+H	/hwɤ.li ^{MH#} /	[hwɤ ^M li ^{MH}]	‘cat’
[L.M]	LM	L.M+M	L.M+L	/bu.mi ^{LM} /	[bu ^L mi ^M]	‘sow, female pig’
[L.M]	LML	L.M+L	L.M+L	/bu.ɬa ^{LML} /	[bu ^L ɬa ^M]	‘boar, male pig’
[M.H]	H\$	M.M+M	M.M+H	/hwɤ.mi ^{H\$} /	[hwɤ ^M mi ^H]	‘she-cat’
[L.M]	LM+#H	L.M+M	L.M+H	/na.hi ^{LM+#H} /	[na ^L hi ^M]	‘Naxi’
[L.MH]	L+MH	L.M+H	L.M+H	/i.tʂæ ^{L+MH} /	[i ^L tʂæ ^{MH}]	‘waist’
[M.L]	ML / L#	M.L+L	M.L+L	/ɤu.dzu ^{ML} /	[ɤu ^M dzu ^L]	‘Tibetan’
[M.H]	MH / H#	M.H+L	M.H+L	/ɤæ.ty ^{MH} /	[ɤæ ^M ty ^H]	‘neck’

The H tones in Table 2 illustrate no less than four types of association between tones and syllables, corresponding to tones #H, MH#, H\$ and H#.

- (1) The #H class possesses a High tone that remains unassociated when the word is pronounced in isolation. For instance, the #H word ‘little brother’ and the M word ‘little sister’ have the same tonal pattern in isolation (M on both syllables: [gi^M zu^M] ‘little brother’, [gu^M mi^M] ‘little sister’), but the former yields [gi^M zu^M ɲi^H] ‘...is little brother’ (tone sequence: M.M+H), the latter [gu^M mi^M ɲi^L] ‘...is little sister’ (tone sequence: M.M+L). The analysis proposed is that [gi^M zu^M] has a final H tone which remains unassociated unless it can associate to a following syllable. This type of H tone is described here as ‘floating H’, and transcribed as #H.
- (2) The MH# class yields the same tonal string as #H in frame (1), namely M.M+H, but its citation tone is M.MH – e.g. [hwɣ^M li^{MH}] ‘cat’ –, suggesting that the final H in the MH# pattern is part of a MH contour. This suggests that MH# may be characterised by a M-to-H ‘tonal accent’ associated to the last syllable of the lexical item.
- (3) As for H\$, in frame (1) its final H tone manifests itself exactly as in the previous two cases, but unlike #H it surfaces in the citation form, as a simple H tone: e.g. [hwɣ^M mi^H] ‘she-cat’, [hwɣ^M mi^M ɲi^H] ‘...is (a/the) she-cat’. Class H\$ can be said to be characterised by a prosodic-phrase-final H tone. Thus, all three items, [gi^M zu^M] ‘little brother’ (#H), [hwɣ^M li^{MH}] ‘cat’ (MH#) and [hwɣ^M mi^H] ‘she-cat’ (H\$), yield a M.M+H tonal sequence when followed by the copula.
- (4) Lastly, the tonal class H# has a M.H pattern in isolation, like H\$, but its H tone does not undergo reassociation when in context: e.g. [kɤ^M ʃi^H ɲi^L] ‘...is (a/the) neck’ (H#), vs. [kɤ^M ʃi^M ɲi^H] ‘...is (a/the) flea’ (H\$). Class H# could be described as having a H tone attached to its last syllable. Alternatively, its M.H pattern might be analyzed as consisting in the same tone pattern (tonal accent) as MH# but associated to the first syllable and not the second.

The description in terms of levels thus needs to be supplemented by a specification concerning the syllabic anchoring of tones. A H tone on the last syllable of a disyllable or a polysyllable may have different origins. It may be the realization of the tone pattern transcribed as H\$, where \$ stands for the end of the phonological phrase: a High tone that is anchored to the end of the phonological phrase. Alternatively, it may be a High tone anchored to the last syllable of the lexical word: there is no way to tell, since in isolation both positions coincide. In order to learn the tone pattern of these words, they have to be heard in various contexts: in phrase-final

position; in phrase-internal position; and when followed by a toneless clitic such as the possessive. Their behavior in these contexts disambiguates between the different tonal classes.

Sections 2.1 and 2.2 examine the loss of some of these categories in the speech of less proficient speakers (bilingual speakers) and the consequences of these losses on the tone system as a whole.

2.1 The loss of tone categories not reflected in surface forms in isolation

Among the less proficient speakers, there is a tendency to overlook the differences that are neutralized in isolation. The surface tone pattern of a word is reinterpreted as its underlying pattern, leading to a major transformation of the architecture of the tonal system. For instance, the family name of the second author of this article is pronounced $[la^M t^h a^M mi^H]$. If the surface pattern, M.M.H, is taken at face value, the derivation of the plural form ('the Latamis, the Latami family'), by addition of the plural /ɬæ/, should lead to the assignment of a L tone on the plural suffix, because a phonological word can have at most one H tone and all following syllables can carry no other tone than L. This would yield $*[la^M t^h a^M mi^H ɬæ^L]$, a tone pattern which is actually attested in the speech of one of the bilingual speakers. However, the correct (conservative) tone pattern is $[la^M t^h a^M mi^M ɬæ^H]$: it reveals that the final H tone in the name $[la^M t^h a^M mi^H]$ is in fact phonologically specified as attaching to the last syllable of the phonological word. Using the notation presented above, the name is to be transcribed as /la.t^ha.mi^{HS}/ (H tone at the end of the phonological phrase); under the reinterpretation made by less proficient speakers, it becomes /la.t^ha.mi^{H#}/ (H tone at the end of the lexical word).

Arguably the most difficult opposition to learn is that between the LM and LML patterns over disyllables, because it only surfaces when the word is followed by a toneless clitic. For instance, $[bu^L mi^M]$ 'sow, female pig' and $[bu^L ɬa^M]$ 'boar, male pig' have the same tones not only in isolation but also when followed by the copula; the only contexts that can disambiguate their tone pattern are exemplified by $[bu^L mi^M by^M]$ '...of (a) sow' vs. $[bu^L ɬa^M by^L]$ '...of (a) boar', where the final L tone of the LML pattern associates to the following possessive particle. This opposition is well attested in the speech of the language consultant F4, our reference speaker: not only in elicited combinations, but also in a corpus of narratives.

Under such circumstances, it does not come as a surprise that the opposition between LM and LML should be lost by some speakers, such as F5 (aged 35, proficient in both Na and Chinese). In her speech, the tones of 'sow' and 'boar' are strictly

identical: LM and LML have merged, into LM.

As an anecdote: this opposition proved challenging for the linguist; in the tonal inventory proposed by Michaud 2008, the differences across speakers had led to the provisional conclusion that the word for ‘boar’ may be an exception. The recognition of the LML tone pattern as distinct from LM came later, and required a reexamination of all the words which, on the basis of their tone in isolation, had been bunched together as ‘LM’.

2.2 Consequences of tonal losses for the architecture of the tone system

Simplifications such as the one reported in the previous section have major consequences for the tonal system, because the underlying tone of a lexical item determines the tone pattern of the higher-level combinations into which it enters, such as noun phrases and verb phrases.

The study of compounds is known to be highly revealing of prosodic systems. In Yongning Na, no tonal change takes place in possessive constructions, whereas tonal changes take place in compounds. In possessive constructions, the particle /bɣ/ is added after the determiner, before the head, e.g. [hwɣ^M li^{MH}] ‘cat’, [ɬɣ^{MH}] ‘brains’, [hwɣ^M li^M bɣ^H ɬɣ^{MH}] ‘brains of the cat’. The first noun – the determiner – and the possessive particle form a single phonological phrase whose tonal pattern is determined in the way described in Tables 1 and 2; as for the second noun – the head –, its tonal pattern remains the same as in isolation. In determinative compounds, the order of constituents is, again, determiner plus head, but the tonal strings that result from compounding are not simply the concatenation of those found in isolation.

The tonal patterns of compound nouns in Yongning Na are set out in Table 3 as a function of the tones of their constituting elements. Table 3 includes both monosyllables and disyllables. It is based on data provided by our reference language consultant, F4; they were elicited systematically; the same tonal patterns are observed in the compounds found in a 2,000—entry glossary (deposited in 2011 in the Sino-Tibetan Etymological Dictionary and Thesaurus, STEDT) and in narratives recorded by the same consultant. Each line of Table 3 corresponds to one determiner and each column to a head. The tonal pattern indicated is that of the compound noun as realized in isolation. The mapping of tones to syllables is indicated by a dot separating tones attached to different syllables. For instance, LM+MH# yields ‘L.MH (L.M.H)’: an example is [bu^L ɬɣ^{MH}] ‘pig brains’, [bu^L ɬɣ^M ŋi^H] ‘...is pig brains’. Taking [bu^{LM}] ‘pig’ and [u^{LM}] ‘skin’ as another example, their association yields L.M, that is L on the first

syllable and M on the second: [bu^Lu^M] ‘pig(’s) skin’. When the tone received by the copula following the compound is other than L, the full pattern for compound+copula is indicated in brackets, with a ‘+’ sign indicating the juncture between the compound and the copula. The meaning of the symbols is as follows: #: last syllable of compound; \$: last syllable of phonological phrase (see table 1); °: last syllable of first member of compound. Some patterns are analytically indeterminate, e.g. ‘pig’s back’, [bu^L gɤ^M dy^M], could be analysed as having a simple L pattern (the M tones being added by default), as well as a LM pattern; in such cases, alternatives are given in brackets.

Table 3 (3a: monosyllabic second member of compound, 3b: disyllabic second member). The tonal patterns of compound nouns in Yongning Na. Each line corresponds to one determiner and each column to a head.

Table 3a

tonal class		LM	M	L	#H	MH#
	pattern with copula	L+M	M+L	L+LM	M+H	M+H
LM	L+M	LM			LM+#H	LM+MH#
M	M+L	°L	#H	L# (LM#)	#H	L# (LM#)
L	L+LM	L	#LM (LM#)			
#H	M+H	H#	#H			°L
zero	M.M+L	°L	#H	°L		°L
#H	M.M+H	°H (H#)	°ML			
MH#	M.M+H		MH#			H#
H\$	M.M+H		#H	H\$	#H	°H
LM#	L.L+M	L°M	°LM			
L#	M.L+L	ML				
L+ MH#	L.M+H	L+ H#	L+ MH#	L+H\$		
L+ #H	L.M+H		L+ #H	L+ H#	L+ #H	L+H#
L	L.M+L	LML	L	LML		L+ #H
LML	L.M+L	LML				
H#	M.H+L	H°				

Table 3b

tonal class	M	#H	MH#	H\$	LM#	L#	L+ MH#	LML	H#
	M.M+L	M.M+H	M.M+H	M.M+H	L.L+M	M.L+L	L.M+ H	L.M+L	M.H+L
LM	LM	LM+#H (L+#H)	LM+ MH# (L+MH#)	LM+H\$ (L+H\$)	LML			LM+H#	
M	zero	#H	MH#	H\$	#L	°ML	#L	H#	
L	#LM	LM#		#LM	LM#	#LM	LML	#LM	
#H	H#	#H	°H	H\$	°H	H#	°H	H#	
zero	zero	#H	MH#	H\$	°L	°ML	°L	H#	
#H	H#								MH#
MH#									
H\$									
LM#	°LM	#H	L°ML	°LM	L°ML	°LM	L°ML	°LM	
L#	ML								
L+ MH#	L+ H#	L+ #H	LMH		L+ H#	LMH	L+H#		
L+ #H			L+ MH#	L+H\$				LML	LM°ML
L	L								
LML	LML								
H#	H°								

While the number of combinations in Table 3 may look staggering, these combinations are not all that difficult to memorize and apply so long as one practises the language very regularly: these rules are productive, and are so frequent that they are not particularly difficult to memorize if one is steeped in a Na linguistic environment. On the other hand, from the point of view of a speaker with limited fluency, these combinations may prove problematic. Examples of hesitations and “mistakes” can be found in the speech of M23, a bilingual language consultant. He realized the combination ‘sheep’s muzzle’, made of /ju^L/ ‘sheep’ and /ɲi.gɣ^M/ ‘nose, muzzle’, as [ju^Mɲi^Mgɣ^M]; this is because he reinterprets /ju^L/ ‘sheep’ as /ju^M/ on the basis of its M-tone realization in isolation. The correct form is in fact quite different: the tone of the compound is simply the underlying L tone of the determiner of the compound, /ju^L/ ‘sheep’. This yields /ju.ɲi.gɣ^L/, ‘sheep’s muzzle’, realized phonetically as [ju^Lɲi^Lgɣ^{LM}]

following the post-lexical addition of a final M tone (due to the fact that all-L-tone phonological phrases are not allowed in Na). A speaker needs a good command of the grammar of Na to implement this tonal rule, which thoroughly modifies the surface forms: the L tone of ‘sheep’, which does not even surface in isolation, has the effect of imposing itself onto no less than three syllables in succession in the compound, wiping out the lexical tone of the head of the compound in the process (from [ŋi^Mgɣ^M] in citation form to [ŋi^Lgɣ^{LM}] in this compound). Such a process is unheard of in Mandarin Chinese; in light of this discrepancy, it is understandable that some less proficient speakers who are exposed to Chinese on a day-to-day basis should come to have hesitations, and should (occasionally or regularly) go for a simple succession of “citation” tones, as is the case in their second language (Mandarin Chinese), instead of applying the complex rules of Yongning Na tonal grammar.

For this evolution to proceed further towards a complete loss of a given tonal opposition, a requirement is that listeners should tolerate the deviation: while a pool of variation is present at every moment and for any language, linguistic change in the strict sense requires that the innovation be accepted within the community of speakers (see, for instance, Martinet, 1955:203, *passim*). In the present state of Yongning Na, as far as we could observe, while elders do regret the fact that their language falls into gradual disuse, they rank proficiency in Chinese—one of the keys to success in society—far above proficiency in Na, and the attitude that we observed was one of great toleration, whereby phonemic confusions such as those reported above, and more generally phenomena of blending between Na and Chinese, were not stigmatized.

2.3 The loss of irregular tone patterns

In addition to losing some tone categories, less proficient speakers tend to regularize irregular patterns, for want of having memorized the exceptions. For instance, the word for ‘powder, flour’ is /tsa.bɣ^M/; according to the rules that govern the tone pattern of compound nouns, the combination of this word with /lv.mi^M/, ‘stone’, should yield a simple M-tone output, /lv.mi.tsa.bɣ^M/. (The compound means ‘fine sand’.) This is a simple rule: in this case underlying tones and surface tones are identical. This rule is therefore applied productively even by the speakers with a less than full command of Yongning Na. However, the older generation of speakers have a different tone pattern for these words: compounds involving /tsa.bɣ^M/, ‘flour, powder’, are irregular. They carry a L tone on that morpheme, witness [lv^Mmi^Mtsa^Lbɣ^L] ‘fine sand’, [k^ha^Mdze^Mtsa^Lbɣ^L] ‘sweetcorn flour’, [dze^Mlu^Mtsa^Lbɣ^L] ‘wheat flour’, all with a

M.M.L.L tone pattern, instead of the expected M.M.M.M (/lʏ.mi^M/, /k^ha.dze^M/, /dze.lu^M/ all have a lexical M tone).

Conclusion

There is at present a strong awareness, within the community of linguists and beyond, of the far-reaching consequences of the extinction of numerous languages worldwide: see in particular the contribution to the UNESCO encyclopedia of life support systems “Documenting endangered languages, and language maintenance” (available online from mercator-research.eu). The importance of producing high-quality documentation on the languages still spoken today cannot be overemphasised. It is difficult for linguists involved in documentation efforts not to feel that they have come too late, as they work with bilingual speakers who are keenly aware that a large part of the language and the oral tradition have not been passed down to them. The striking differences in degrees of proficiency across speakers is another ominous observation. It may come as a (partial) consolation to the linguist that these conspicuous differences across speakers provide exceptional insights into the language structure under description, bringing attention to the more fragile parts of the system (in the spirit of “dynamic synchrony” as advocated by Martinet, 1990). This was illustrated above by the tonal difference between ‘sheep’s muzzle’ as spoken by two speakers with different degrees of proficiency, which brought out the headlong conflict between the complex mechanism of tone assignment in Yongning Na and the syllable-based system of Chinese, where — apart from a highly restricted set of phenomena — tone is phonologically inert. Information on how language shift affects the various aspects of the language’s structure can thus help the investigators in their urgent descriptive work.

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References

- Chao Yuen-ren (1930), “A system of tone letters”, *Le Maître phonétique* 45, 24–27.
 Chirkova, K. and Michaud, A. (2009), “Approaching the prosodic system of Shixing”, *Language and*

- Linguistics* 10:3, 539–568.
- Ding, P.S. (2006), “A Typological Study of Tonal Systems of Japanese and Prinmi: Towards a Definition of Pitch-accent Languages”, *Journal of Universal Language* 7, 1–35.
- Evans, J. (2008), “ ‘African’ tone in the Sinosphere”, *Language and Linguistics* 9:3, 463–490.
- Guo Dalie 郭大烈 and He Zhiwu 和志武 (1994 [2nd ed. 1999]), *Naxizu Shi* 纳西族史 (*A History of the Naxi people*) (Sichuan Minzu Chubanshe, Chongqing).
- He Jiren 和即仁 and Jiang Zhuyi 姜竹仪 (1985), *Naxiyu Jianzhi* 纳西语简志 (*A Presentation of the Naxi Language*) (Minzu Chubanshe, Beijing 1985).
- Hyman, L.M. (2010), “Kuki-Thaadow: an African tone system in Southeast Asia”, in *Essais de typologie et de linguistique générale. Mélanges offerts à Denis Creissels* ed. by F. Floricic, 31–51 (ENS Editions, Lyon).
- Hyman, L.M. and VanBik, K. (2002), “Tone and stem 2 formation in Hakha Lai”, *Linguistics of the Tibeto-Burman Area* 25, 113–121.
- Jacques, G. (2011), “Tonal alternations in the Pumi verbal system”, *Language and Linguistics* 12:2.
- Jacques, G. and Michaud, A. (2011), “Approaching the historical phonology of three highly eroded Sino-Tibetan languages: Naxi, Na and Laze”, *Diachronica* 28:4.
- Latami Dashi 拉他咪·达石 (2006), *Mosuo Shehui Wenhua Yanjiu Lunwenji* 摩梭社会文化论文集 (1960–2005) (A collection of research articles about Mosuo society and culture) (Kunming University Press, Kunming 2006).
- Lidz, L. (2006), “A synopsis of Yongning Na (Mosuo)” [long version of handout]. 39th International Conference on Sino-Tibetan Languages and Linguistics, University of Washington, Seattle.
- Lidz, L. (2010), “A descriptive grammar of Yongning Na (Mosuo)” (Ph. D., University of Texas, Austin).
- Martinet, A. (1955), *Economie des changements phonétiques. Traité de phonologie diachronique* (A. Francke AG Verlag, Bern, Switzerland).
- Martinet, A. (1990), “La synchronie dynamique”, *La linguistique* 26:2, 13–23.
- Michaud, A. (2008), “Phonemic and tonal analysis of Yongning Na”, *Cahiers de linguistique–Asie Orientale* 37:2, 159–196.
- Wellens, K. (2006), “Consecrating the Premi house: Ritual, community and the state in the borderlands of East Tibet” (Ph. D., University of Oslo).
- Yang Zhenhong (2009), “An overview of the Mosuo language”, *Linguistics of the Tibeto-Burman Area* 32:2, 1–44.

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6

New Data on the Socio-Linguistic Situation in Minor Pamiri Communities

Leila Rahimovna Dodykhudoeva

Abstract: The paper deals with the problem of the ethnic groups of Eastern Iranian origin that coexist in a close neighbourhood in a compact area of the Badakhshan Province in Tajikistan and Afghanistan, as well as closely related or affiliated with the people of China and Pakistan. Up to now, they speak various Pamiri languages. These are: Shughn(an)i, Rushani, Khufi, Bartangi, Roshorwi, Sarikoli, Yazghulami, Wakhi, Ishkash(i)mi, and Munj(an)i and Yidgha. These languages have no script and written tradition and are used only as spoken languages of the communities in the region. The status and problem of the origin of these languages and many other local idioms are still discussed in Iranian Studies. Practically speaking, all Pamiri languages to a certain extent can be called “endangered”.

Information on minor Iranian idioms up to now is rather scarce despite the fact that an enormous effort was made by researchers in the area of their authentic location. The paper gives an overview of efforts of Russian scholars who were pioneers in the documentation of the data on language, religion and ethnic varieties in this region.

We also demonstrate the achievements of recent field research made in this vicinity. The paper is focused on the status of the Pamiri languages and their change in result of ethnic contacts and cross-cultural communication in the process of adaptation in global scale. We describe and interpret some specific processes that are common for the languages under pressure in various fields: phonetics, syntax, vocabulary, etc.

Keywords: Pamiri languages, Ethnic terminology and traditions, Endangered languages

Background

This paper is dedicated to the present language situation in a flourishing multilingual

region with a range of endangered East-Iranian languages which are usually called by a term Pamiri languages (in its wider sense). These languages include (nearly) extinct languages (speakers of these languages range from 1000–5000 speakers including children), such as Ishkashimi, Zebaki, Sanglichi, and Munjani spoken in the Province Badakhshan, Afghanistan and Yidgha in Chitral (North-West Frontier Province of Pakistan) (Urdu *shumal maghrebi sarhadi subha*, Sarhad), and also Sarikoli and the Wakhi languages of the Tajik Autonomous Region of the Xinjiang-Uyghur Autonomous District of China, as well as a group of potentially endangered Pamiri languages (without an official status and prestige), most of them located in the Mountainous Badakhshani Autonomous Province of Tajikistan.

Pamiri people live in close neighbourhood with other ethnic minorities, as well as titular nations in mutual natural, social and cultural environment in four countries of Central Asia. Thus, the socio-linguistic and cultural situations of each case have particular features in each country that is due to the influence of its titular language, religion, ethnic and cultural variety. The languages of the Pamiri people coexist with a variety of state languages of different origin: Western Iranian Tajik and Dari, Eastern Iranian Pashto, Turkic Uyghur and Kyrgyz, and Chinese, as well as Indo-Aryan Urdu and Dardic languages. As Pamiri languages are used as community languages, almost the whole population is bi-lingual or multi-lingual. The second language is usually the titular language of the state. This language is used as the language of education, press, media, and culture.

General Remarks on the Spread of the East Iranian Languages

East-Iranian Pamiri languages are spread in various geopolitical zones. Of these areas, in the last three decades only Chitral has remained outside the war zones. The level of their endangerment is connected with socio-linguistic aspects, such as strong pressure of the regional language, lessening of the number of speakers, of their living area, migration and relocation, inter-ethnic marriages, and reduction of the language functions, as well as with entirely linguistic reasons. We identify several regions according to the level of endangerment of the language: Tajikistan: Badakhshan and Central Tajikistan (Yazghulami along with Yaghnobi), Afghanistan: Kabul, Sanglich, Zebak and Ishkashim regions, and Afghanistan-Pakistan (Munji and Yidgha). These languages are from the so called group of Pamiri languages, so named after the Pamir-Hindu Kush mountain region where they are spoken.

The paper gives an overview of the particular efforts of Russian scholars who

were pioneers of the documentation of the data on language, religion and ethnic varieties in this region. Information on the region and its minor Iranian idioms up to now is rather scarce despite the fact that from the second part of the 19th century, an enormous effort was made by European researchers in the area of their authentic location due to the interest of Britain and Russia in this region of Central Asia, especially from 1872 to 1895. So in 1877, after the success of the first Russian captain Ionov's expedition to the area of the Pamirs, the military topographer Nikolay A. Severtsov was sent to this area in order to inspect the geographical landscape of the region and examine those parts of the inner Pamirs that nobody visited before him (with the exception of Marco Polo). His objective was to investigate the possibility of fixing the borders based on a natural setting. It is known that the area of the Greater Pamirs around the upper Panj-river could be divided into the East Pamir—highland, raised ground, and the deep rocky valleys of the West Pamir that could be strictly called (basing on geographical principles)—Pamir region (Russian *Pripamir'e*) (Ivanov 1889). The population that we examine lives to the west of the uplands in the area of the West Pamir. From ancient times the region next to the west is known as Badakhshan. Approximately from Timurid's period (16th century); this name is applied also to the neighbourhood of the West Pamir and became known as the Mountainous Badakhshan area (*Kuhistan*) where the missionary Nasir Khusraw is known under the title of "Piri Kuhistan" (Shohumorov 2000). In 1882 after several requests from local representatives, who described their homeland as an extremely rocky area (*tahzor*), doctor A.E.Regel was for the first time sent by Russian Geographical Society to a prolonged business trip to collect scholarly data on the region (in particular his objective was to assemble a collection of plants) to Shughnan. Before him a similar business trip was undertaken in summer of 1880 by the British explorer Georg Littledale, who was sent by British Geographical Society.

One of the first Russian philological works was an article published by Karl Zalemann under the title of "Shughnani Vocabulary of D.L.Ivanov" (1895). This was based on the linguistic data of the geologist and engineer D.L.Ivanov who travelled to Pamirs in the 1880s and collected accurate data on the region and its language and folklore. In 1914 Ivan I. Zarubin (1887–1964) took part in a united French-Russian Academies' expedition with Professor Gothiot and he prepared the "Report of Professor Gothiot and I.I.Zarubin on the exploratory journey to Pamirs in the summer of 1914". In 1915–1916 Zarubin, who believed that language data should be collected straight away in the areas of its locality, visited most important settlements of the

Iranian speaking people of the Pamirs.

In Soviet times, the area that was included into Tajikistan was studied extensively. As an overview of Zarubin's trips and data collection an article "To the list of the Pamiri languages" was published in 1924. In 1926 he became the head of the Zeravshan division of the Central Asian Ethnological expedition of the Soviet Academy of Sciences. Zarubin made 13 trips to Central Asia, where he collected 460 artefacts. Up to now Zarubin's heritage is not entirely studied, it includes an immense collection of linguistic data (vocabulary, phrases and texts of Pamiri languages), drawings, photos and artefacts. Today, when we have much more information on the topic, this collection could be examined in the context of the traditional culture and world view of the Pamiri people.

The Pamiri languages spoken by the local population have some common characteristics resulting from their shared history. According to the origin of the languages they are united in several groups. So, **Yazgulami** is the only remnant of the one of two branches of the once united Northern Proto-Shughnani-Yazghulami group. The second subdivision is represented by the entire Shughnani-Rushani group of languages (Shughn(an)i, Rushani, Khufi, Bartangi, Roshorvi, Sarikoli). All these languages (with the exception of Sarikoli) are located in Tajikistan. These languages experience strong pressure from larger languages: from Tajik, the state language of Tajikistan, and the regional language Shughnani. In elementary and high school all education is in Tajik. This language, along with Russian, is essential to finding jobs. People listen to Tajik and Russian on the radio, TV, and DVDs. While most marriages are within the community, increasingly there are examples of intercommunity marriages. As titular languages are used in school, religion, literature and mass media, as well as being official languages of state administration, local language communities have ceased to speak their mother tongues in official gatherings in favour of the surrounding dominant language. These local languages have now deteriorated: they are spoken only in private, between community members. This process is rapidly taking place in Tajik Badakshan, affecting different languages, depending on the number of their speakers and their local status. For instance, the territory of usage of Yazghulami has been gradually reduced. Yet in the 1920s, according to local tradition documented in an interview by Boris Lapin, it was also spoken widely in the Darwaz valley, where a great number of Yazghulami speakers was relocated. In neighbouring Wanj valley, Zarubin found in 1916 an old man and woman, who remembered that in their childhood their family was using another language, not Tajik. They remembered

around thirty words, and on the basis of these records, Zarubin could expose that this extinct **Old Wanji** language is closely related to the languages of the Pamiri group. Later more traces of this language were identified by Rozenfeld and Lashkarbekov (1964; 2008). Today, scholars can only try to reconstruct its outline based on data of the local Tajik vernacular and making assumptions on the language structure and vocabulary.

A similar and even more complicated situation could be observed with **Sarikoli** in China, where the Sarikoli Pamiri language is surrounded not by Iranian languages, but by two titular languages—Turkic Uyghur and Chinese. As a result, because of political and economic reasons, the language is gradually fading away in that region. The mother tongue is used only for contact within the community, especially between family members, the status of such speech deteriorates to that of a domestic language until, finally, and cease completely to be passed on to the children. The language situation in the Tajik region becomes even more complex for Sarikolis as the members of this community live in close contact with speakers of Iranian Wakhi and the Turkic Kyrgyz language. Sometimes they live in one and the same settlement, like the administrative centre of the region Varshide (Uyghur Tashkurghon) or the nearby village Teghermi, where both Iranian and Turkic communities speak mainly both languages. Processes that are taking place in Sarikol, such as intermarriages and intercommunity contacts, effect different languages, whatever their local status.

Zarubin was one of the first to remark that the Upper Bartang population is closely related to Sarikoli settlers who migrated, along highland paths of the Ghund valley and ranges of the Pamir highlands to Xinjiang in China. The Sarikoli language which is by origin closely related to the Shughnani-Rushani group is geographically located in Chinese Turkestan, Xinjiang-Uyghur Autonomous Region, Tajik county. The group of Sarikoli settlements include the administrative and economic centre—Warshi-de (Tashqurghan), and surrounding villages: Tiznef, Ghushmon, Baldir, Tayarmi, Qeqyor (here live Sarikolis and Kyrgyz population); Poshti Kuh: Vacha, Baldir, Qughuchlugh, Tüng, Burümsol (Burungsol), Maryong; Daftor (Dafdor), Mazor.

In 1950s Pakhalina identified three speech varieties—the central one in Varshide and vicinity (villages Ghushmon, part of Baldir, Rabat); the eastern in close proximity—Vacha village and vicinity: Maryong, part of Baldir, and Rabat; the eastern remote or Burungsol—Tüng, Kichiktüng, Burümsol (Burungsol 1966: 3). In general, this vernacular profile is preserved up to the 21st century (Field data 2007). The geographical location cuts off the Sarikoli language and its speakers from the other

related groups. Another remarkable process that is exclusive only for China, where Iranian Pamiri languages are surrounded by Turkic and Chinese languages, is the rapid progression in reshaping of the ethnic identity of Iranian ethnic groups. In official administrative documents in China. Iranian languages (Tajiki and both Pamiri languages: Sarikoli and Wakhi) are called “Tajik”. Thus, young Sarikoli speakers according to official practice, identify themselves as *Tajik* and their language as *Tajikcha*, along with the Wakhi people of China who also call themselves by the same ethnonym “Tajik”, in opposition to the Kyrgyz, Uyghur and Chinese populations. As a result of this language policy younger speakers of Pamiri languages are used to identify their mother tongue as “Tajik” (Sarikolis and Wakhis in similar way) and are not acquainted with the term “Sarikoli”. Usually, only elder generations know Persian/Tajik, youngsters usually know Turkic Kyrgyz and Uyghur and also the state language Chinese, which is a medium in elementary and high school since 2002.

This course of action is similar to the process with Pamiri ethnic names in Russian Pamiri diaspora, where youngsters who have never been in their remote motherland—Mountainous Badakhshan in Tajikistan, and who do not have full command of their mother tongue, are not sure whether they are Pamiri—the most general ethnic term for residents of Mountainous Badakhshan, or they are Shughnani, Rushani, Xufi (*xúfej*), Bartangi, Roshorvi (*rošorvej*), Yazghulomi (*yazgílúmi*), Waxi (*waxej*), Ishikashimi (*šikošumi*)—more detailed ethnonyms all of which record rocky valleys or villages. In 2009 we came across an analogous situation in a summer camp near Moscow: when asked to define his ethnic and language identity filling in a form on ethnic (self) identification one of the participants of 10 years old did not know which ethnonym to choose and called himself by the all-encompassing ethnonym “Pamiri” (*Pomeri*) and his language also as “Pamiri”, as he never heard ethnic terms “Shughnani” (though being himself of Shughnani origin and a fluent speaker of the language). Consequently, relocation and reshaping of ethnic identity, triggered by the age of globalization, resulted in the (re)emergence of newly constructed nationhood.

Today, most endangered among East Iranian languages spoken in Tajikistan, Afghanistan, China and Pakistan are considered the languages of the **Ishkashimi** group which includes Ishkashimi proper, Sanglichi and extinct Zebaki. Early work on this language group by Gauthiot (1914), Grierson (1920), who gave the only description of Zebaki, and Zarubin (1920), was done in various regions of Tajik and Afghan Badakhshan. Zarubin collected data on-site in Tajik Ishkashim in the village Ryn and incorporated the data of all three languages which were known by that time. His text

“Ishkashimi texts and vocabulary” is still unpublished and is kept in the archive of the Institute of the Oriental Studies Russian Academy of Sciences in St. Petersburg. George Morgenstierne in his “Indo-Iranian frontier languages” (1938) collected data and finalized a description of the phonetic system, historical phonology, and morphology of Sanglichi-Ishkashimi. In the 1950s, extensive fieldwork on the Ishkashimi was done in Tajik Ryn by Tatyana Pakhalina, who collected new data and published “Ishkashimi language” including also four texts from Zarubin’s archive (1959). It is noteworthy that in 1917 only 100 speakers of Ishkashimi were documented; in the 1950s Pakhalina counted more than 400 speakers in the village of Ryn, high up in the mountains with smaller settlements in the Tajik speaking villages Nud (Ishkashim), Sumjin, and Mulvoj. Only in Ryn, there was a critical mass of speakers who use Ishkashimi in everyday communication. Thus, today the Ishkashimi language of Tajik Badakhshan became known among speakers of mother tongue as **Ryni** that originated from a toponym—the name of the village Ryn, which counts these days up to 1000 people. The settlers call their language exclusively “Ryni”, and they are totally unfamiliar with the term “Ishkashimi”. Partly because of very limited contacts with Ishkashimi groups in Afghanistan intermarriage, patterns become more and more complex and the majority of the wives are taken among Wakhi and Tajik speakers. This finalises in the language situation when children become multilingual just from early childhood with “mother tongue” Wakhi or Tajik and only “father tongue” the Tajik variant of Ishkashimi that is called locally Ryni. In Tajikistan, Ishkashimi is under strong pressure, not only from literary Tajik, but also from Badakhshani Tajik and Wakhi, which is widely spread in administrative centre of the district.

In Soviet times, the Pamiri languages of Tajikistan were studied extensively, but the Afghan and Pakistan areas of the Pamir received only occasional attention, most prominently by Morgenstierne (1938). So, the Pamiri languages of Afghanistan and Pakistan are sparsely described and there is very little reliable data on the Ishkashimi language group in Afghanistan. There were no exact data on the number of Ishkashimi speakers in the Afghan town of Sultan Ishkashim. In 1996, Yusufbekov visited the Afghan Ishkashim region, Sultan Ishkashim in particular, and identified some speakers of Ishkashimi. The official number of Ishkashimis (identified on the basis of a religious principle) is 1500, but whether this estimate is accurate, and how many among them are full speakers of the Ishkashimi language was still unknown. But our recent field data allowed to document (by indirect estimation of local settlers themselves) up to 300–400 of full speakers of the Ishkashimi language who live in

Afghanistan in the area of Sultan Ishkashim and vicinity (especially in the village Xirmani, where several full families using mother tongue are living), right across the river Panj and the border with Tajikistan.

Our own efforts to find out traces of **Zebaki** were not successful, the language is practically extinct. Even in the 1930s, Morgenstierne calls Zebaki and Ishkashimi language of the Grierson's texts "slightly more persianized" in comparison with Sanglichi (1938: 285) and even states that "my informants, both in 1924 and in 1929, all agreed" that in the market village of Zebak itself "Persian was the exclusive language". He presumes that maybe Zebaki was spoken only in the surrounding villages (1938: 287–288). This vernacular was spread in Zebak which is one of the districts of the Badakhshan Province. Today most of its population lives in Zebak—the capital of the Zebak District. Zarubin considered that texts published in Grierson's "Ishkashimi, Zebaki and Yazghulami (an account on of three Iranian dialects)" (1920) are not original. The Zebaki text is a translation of the Prodigal son parable and was prepared in Chitral, Stein's Ishkashimi text is a translation of a Sarikoli tale published by then also in Shughnani by Karl Zaleman. Based on the comparison of these texts Grierson made a conclusion that both vernaculars are representatives of one language. Later Morgenstierne's "Indo-Iranian Frontier Languages" on three languages was published with five texts and an etymological vocabulary. The data here were still collected out of the area of the language spread (1938).

Until recently, the main source on **Sanglichi** was Morgenstierne (1938). In 1996, Yusufbekov visited the Afghan Sanglich valley as a member of the Aga-Khan Foundation mission that distributed humanitarian aid identified 1312 local settlers. He used the occasion to collect new language materials on the Sanglichi vernacular (*Sanglēcī lavz/ zāvūk* 'speech of Sanglich' that is derived from the name of the valley named after its upper village Sanglich). Two distinct varieties of Sanglichi were identified: the less polluted "Upper" or "Proper" variety in the more remote villages (Sanglich, Iskitul, Takiyai Khubon) higher in the valley, and the "Lower" variety in Porog, Flakhmadik and Dashti Rubot, more heavily influenced by Badakhshani Tajik/Dari, but also preserving some remnants of Zebaki. The population of the village Kulolo that speak today the Dari vernacular probably was speaking earlier one of the dialect that was closer to the Zebaki vernacular or the incorporated Zebaki speaking population (field data 2009). Yusufbekov collected several texts, a choice of phrases, and a list of words. A description and analysis of those materials have been published in Russian by Yusufbekov in "Sanglichi language in synchronic and diachronic

aspects” (1999), and later in a publication by Yusufbekov, Dodykhudoeva (2008). As other local Pamiri languages Sanglichi has no written tradition and is used only in everyday life among the community members. At school all children study Dari; so everybody is bilingual except children under seven and elderly women. Dari is also the lingua franca in interactions with neighbors: Munjis, Ishkashimis, and Zebakis.

The situation with the **Wakhi** language that is dispersed in four countries is rather complicated. Today Wakhi has four national varieties: Tajik, Afghan, Pakistani and Chinese. In Tajikistan Wakhi is split into upper and lower vernaculars with some Tajik-speaking villages in the middle of the valley (see Pakhalina, 1975; Steblin-Kamenskiy, 1976; 1999). Wakhi settlements are located in Tajik and Afghan Badakhshan, along the river Panj in the so called “Wakhan corridor”. In 2009 a particular programme on minor Iranian languages was launched in Afghanistan, the special department on Pamiri language was organised in the framework of the Afghan Academy of Sciences and the Law on Pamiri language was issued. In spite of the fact that in Afghanistan a number of Pamiri languages are located (such as Shghnani, Wakhi, Ishkashimi, Sanglichi and Munji) the document defines it as one language—Pamiri (*zabani pameri*). In the framework of this new language policy several textbooks on two Pamiri mother tongues (Wakhi and Shughnani) were published, and in the same time the mother tongue was introduced into elementary school (the 1st and the 2nd classes) curriculum as a subject.

The upper part of the Wakhan corridor near Sarhad village has pathways to Pakistan, where in adjacent regions Wakhis are living (mainly in Khunza and Gilgit). These are strong Wakhi communities whose activists promote Wakhi contacts across borders. In the 1980s, they created a special alphabet to write down texts on Wakhi and from that time they supported written practice. In 2000 they established the Cultural Association of Wakhan and organised several meetings. The last one was held in 2009 and representatives of all four countries Tajikistan, Afghanistan, Pakistan and China were invited. In China Wakhis who live predominantly in Tajik region around the town of Daftar are actively assimilating with Wakhis of Pakistan and neighbouring Sarikolis, who mention that usually they speak also Wakhi (language). This was also typical for the situation in the 1950s that was documented by Pakhalina in the Varshide village of Sarikol in China: *wazik mas levam waxyj ziv* ‘I also speak Wakhi (language)’ (1966: 64). More recently we came across Sarikoli - Wakhi and Chinese Wakhi - Pakistani Wakhi intermarriages and even Sarikoli/Wakhi - Kyrgyz intermarriages that results in bilingualism and/or shift into one of the languages; some Wakhi communities who live

in Khotan (near Gulistan, Guma) in China and were surrounded by Uyghurs lost their speech completely in the 20th century. The only feature that is still connecting these societies with ethnic Wakhis is the Ismaili faith.

In the following section, the paper reflects on the change of the Pamiri languages as a result of ethnic contacts and cross-cultural communication in the process of adaptation on a global scale. As Pamiri vernaculars have no solid written tradition, they are used in the region only as spoken languages. This steadily results in the erosion of the functionally limited East Iranian languages, and makes them closer to the status of one of the speech varieties of West Iranian languages, such as Tajik or Dari or Urdu and Uyghur/Chinese. Since independence Tajikistan has been making an effort towards integration with its Central Asian neighbours. The capital of Tajik Badakhshan, Khorog, has a university that has a linguistics department with a graduate program (MA and PhD. courses). The Aga Khan Foundation introduces here a new regional Central Asian University that will give education to students of all countries of the region in a new regional/global perspective. There is a branch of the Tajik Academy of Sciences. It includes an Institute for Humanities, with a strong linguistic division and special Department on Iranian and Pamiri Studies. In general, Khorog's linguists, together with scholars in Dushanbe, are increasingly involved in the study and preservation of local languages and cultures.

Attitudes towards the mother tongues remain positive inside the communities of all minorities. In spite of the fact that mother tongues here are still passed on from one generation to another, they are limited rigorously and solely to informal settings in communities, and to mono-ethnic families. The transmission of languages takes mostly place in the context of community and family activities, such as the transmission of knowledge to recover and restore traditional skills in diverse areas. These include information on indigenous wild animal life and plant species; medicinal plants and their application; agriculture and recreation of environment, protection of sacred sites and recovery of related knowledge and values; educational programmes (other than language learning) for learning and demonstrating various traditional skills, like local handicrafts, dance, singing, etc. All these activities strengthen local Pamiri languages as repositories of traditional knowledge and values. This makes it possible to start efforts in creating a database of language and cultural materials.

We shall now consider the language data employed in this paper, which are mostly names of ethnic and social groups and their identities.

Names of ethnic groups and their identities

As a highland region, generally remote from centers of urban civilization and only traversed by the very arduous Oxus valley route of the trans-Asiatic “Silk Road,” Badakhshan has served as a refuge for peoples of ancient stock, who still live there side by side with descendants of peoples, who have arrived more recently. The great majority of the population of the area consists of the so called “Persian-speaking Tajiks”, the highland peasants, who predominate in the Darwaz (or Nesay) area on the Tajik and Afghan side of the northward bend of the Oxus, and in general throughout Afghan Badakhshan

The term *yalča* indicates ‘Mountain (Gornye) Tajiks; Pamir (Pamirskie or Pripamirskie) Tajiks’. In Ayni’s Tajik Language Vocabulary, the word *yalča* has a meaning “odami qadpast” (Ayni, 1976). It is probable that this word is a derivative from Yaghnobi word *yar* ‘mountain (pathway)’, cf. also Yaghnobi *yalang* “a pile of stones” (Andreev, 1970: 20). M.S.Andreev states that he came across the term *yalča* only in Zeravshan valley, and never further to the South-East of Bukhara and Turkestan. According to him this is the source of the name that Western researchers, who entered Tajik mountainous regions from the direction of Samarqand applied to a broad scope of mountainous peoples (Andreev, 1970: 12–13), namely Pamiris. See, for example, the title of R.B.Shaw articles “On the Ghalcha dialects/languages: Sarikoli, Wakhi, Shughnani” (Shaw, 1876; 1877).

On the other side, Andreev documented in 1901 that the speakers of Pamiri languages regard themselves as “pure, authentic Tajiks”: *Asli tojik mo hastem* ‘We are true Tajiks’. In the beginning of the 20th century, inhabitants of Khuf valley identified the population of the Darwaz valley as Persians: *zabonash ki pors boshad, mo uro tojik nameguem* “When (somebody) speaks Persian, we do not call that person Tajik” or *Uno porsand, tojik ne* “They are Persians, not Tajiks”. Later in the middle of the 20th century, after the establishment of the Tajik Socialist Republic, in the same area the term “*Tojik*” undertook a semantic shift and acquired a broader sense including all local Iranian ethnic groups. In 1943, a 90-year old Yor Mamad of Rushan region gave a perfect definition of the view of former inhabitants of the Upper Panj on the term Tajik: *Xudi mo tojik astem... Darwozu Karoteghini pors meguem ... Lafzi Darwoz niz pors ast... Yazghulomi az mo aloida lafz dorad. Vay am tojik ast* ‘We are Tajiks. We call the residents of Darwaz and Qarateghin Persians. The language of Darwaz people is also Persian. Yazghulami (residents) have a different language. But they are also Tajiks’

(Andreev Archive). Another example was documented by Andreev in the 1940s in Yazghulami village of Jamak: “We (Yazghulamis) identify ourselves as genuine Tajiks, we have this name (*laqab*) from ancient times. On the other side, we have a tale that in the time of Chinghiz Khan Tajiks from the plains were forced to run off to the mountains, especially to Darwaz” (Andreev Archive). In 1957 in Varshide village of Sarikol in China, Pakhalina wrote down the following phrase: *waz tujik chi ziv na vazonam* “I do not understand the Tajik (language)” (1966, 64). (Here the speaker means Tajik language, not Sarikoli.) It could be also mentioned here that Dari speaking ethnic groups of Afghanistan are called generally *tājik* as opposed to to Uzbeks and Pashto people.

Tajik speaking groups of Ghoron that are built-in geographically inside the Pamiri speaking communities (the origin of their emergence in this place is unknown) are called “*Pors*” or “*Porsigu*”, “*pors-(za)bon*” (not Tajiks). It is significant that in their locality we come across numerous microtoponyms of Shughnani origin, thus, demonstrating that in earlier times, several centuries ago, this population did not have that much in common with this region. The similar way, toponymic inventory of the Upper part of the Sheva River, where Shughn(an)is and Rushanis live today, is mainly of Tajik/ Dari origin, thus revealing that these ethnic groups came to the locality not long ago. In the same way, as in Yazghulam (*Yūzdom*) valley, which has one entrance/exit, the upper part of the valley is inaccessible (though from approximately the middle of the valley one could reach across ranges into the Bartang and Wanj valleys). As a result here, you would not find traces of Turkic toponyms, though there are some Tajik ones (Dodykhudoev, 1979, 288: 162).

Some derogatory names were in use among various groups of the population. So in the Yaghnob valley those salesmen who were usually residents of the Fan valley and put on the market alum (Tajik *zamch*) were called by an abusive term (*laqam*) *zok-furush* “lit. the alum tradesman”. Another term of ethnic origin that was widely used in Yaghnob of the early 20th century: *hi/undu* “lit. hindus”, residents of the three villages Kashi, Rout and Pulls-Rout. They are descendants of the Non-Muslim idolaters (*but paraston*), who came from the Matcho valley through a mountain pathway Surkh-kat, and their descendants are identified on the pretext that they get up after the sunrise, i.e. later then their Muslim neighbours. Another instance is the microtoponym *muyi kur* “lit. a tomb of a Magi”—a small hill near Bidiv (near Kansay) in Yaghnob with remnants of the pagan’s tombs. One more microtoponym is *kofiri lakka* “lit. land of the pagan”, the name for a part of the field in Yaghnob valley

(Andreev, 1970: 25, 27, 31, 28).

One more ethnically based term is the one for a wedding party which is popular in Mountainous Badakhshan region: Shughnani-Rushani, Badakhshani Tajik *moyulbozi* “wedding performance”, and a personage of this performance — Shughnani-Rushani *moyul-bačā*, Badakhshani Tajik *moyul-bača* “lit. young Mongol boy”.

The Evolution of Ethnic Names

A striking instance of shifting ethnic names and identities is that endonyms and exonyms that are controversial and provoke strong disagreement or disapproval in public—have conflicting connotations, but can also be used in juxtaposition in different contexts. Some usages arise from an earlier stage in history, while others denote another ethnic group’s perspective. For instance, we can specify terms like: endonym “Ryni” with exonym “Ishkashimi”, endonym “Tajik” vs. exonyms “Sarikoli” and “Wakhi” (that on earlier stage were endonyms; the last one is still used as endonym by Wakhis of Tajikistan and Afghanistan). The following examples are further cases illustrating this point: endonym “Pomeri”, “Yaghnobi” vs. exonym “*yalča*”, endonym/exonym “Tojik”. It could be pointed out that in modern Tajikistan the ethnic term Tajik (*tojik*) is treated as unifying both Tajiks and Pamiri speaking communities of Tajikistan. In recent years, endonyms have been used with the aim of lessening historically sensitive or political tensions.

Confessional Terms

One more group of terms consists confessional terms of Muslim schools (*mazhab*): “*čoryori*”, “*sunni*” and “*panjtani*”, “*yismoiliyā*”, “*ampirā*”, which are common in Central Asia. The first subdivision is used as a rule when identifying representatives of the Hanafi Sunni *mazhab*, who in secret language was defined as “*čoryori*”, lit. “(devotee) of four-comrades”; the second classify Shiyas and Ismailis, who are attached to the family of the Prophet *Ahl al-bayt*, consisting of five people: Muhammad, Ali, Fatima and their children Hasan and Husayn, i.e. lit. “(devotee) of five-person(s)”. Another term that is widely used up to now is “*ampirā*”, i.e. ‘(Ismaili devotee) of the same Pir’. It is worth mentioning that Darwaz and Wanj residents are always defined by Pamiri people as “*čoryori*”, but this term is never applied to inhabitants of Yazghulam valley.

Population groups and lifestyles

In time with social reorganization of the 20th century, a sense of various terms were changed several times. This is documented in written recollections of scholars, travelers and other investigators, in folklore and literature. Shughnani-Rushani *gāp* “gatherings of the youngsters of the village for the entertainment and communal meal; conversation” (Field data, 1977), Badakhshani Tajik *gap* “id”, Tajik *gaštak* “winter gatherings of young men neighbour community of the village”. This is arranged by each member of the group for the entertainment and communal meal’ TRD. Cf. also Shughnani *gāp* “conversation; words”, *gāpak* “quiet conversation”, *gāp-či-gāp* “conversation; making peace”, *gāp-gāp* “talk, chat”, *gāpdūn* “skillful speaker; smart”.

Greeting rites

In traditional culture greetings are strictly connected with gender and age of the people in contact, their social status, kinship and relationship, and situation of communication act. These norms help to regulate social relationship and their break brings tension in the community. In the moment of meeting, speakers usually shake hands, hug each other, elder people as a sign of respect usually kiss each other hands (Persian *dastbusī*) or just imitate this procedure producing a kind of air kiss. In the moment of meeting, speakers usually have a small dialog. The question “is everything all right (with cattle and people)” presumes a positive answer. Formulas *Salam alaykum* and *Walaykum assalam* are used among men when a younger one greets an elder person, followed by a full procedure of shaking hands and hugs. Those who sit should not shake hands, as one can shake hands only when standing. There are some less formal, colloquial formulas, like Shughnani *ca rāng* “How are you? How do you do?” or Sarikoli *čarj-at-o?* “Is everything all right? Are you well?” In Sarikol the ancient traditional ritual “*dastbusī*” (kissing hand) is still in use; its focal point are elderly or respected men: girls or young women meeting their close male kin, i.e. father, uncle or elder brother, kiss his palm; men in their turn kiss young women’s forehead. When two women of the same age meet each other, they just kiss each other’s cheeks. When one woman is older than the other, she kisses a forehead of a younger one.

One more common feature that unites these languages is that the languages of the group still keeps the remnants of a specific “secret idiom”. These languages have usually three distinct stylistic variants: the narrative style, the colloquial language and the specialized argot that are used in the presence of “others”. The narrative style is

used in folklore and in historical and religious narratives. It is fairly consistent across dialects and uses many borrowings from Tajik, both from neighbouring dialects and from the literary language. The colloquial style is what is used in every day contexts. For instance, Pakhalina (1959) published 6 Ishkashimi colloquial texts, 11 fairytales and 3 rubai, all of them with Russian translations. All Pakhalina's records were taken from elderly people and represent various styles, the so called "high-style" as well as colloquial speech.

In the beginning of the 20th century nearly in all Iranian, especially Pamiri languages introduced a variant of speech, an argot with a vocabulary of "secret" words that are articulated in the unusual way and pronounced with a specific unemotional intonation. Lately, the specialized slang "zargari" was used mainly by children and adolescent girls. Here every syllable is followed by a syllable *zi-*, *za-*, *zu-* (Klimchitsky 1945; Edelman 2000). In the beginning of the 21st century a similar slang was observed by Yusufbekov in 1996 in Sanglich. This type of speech is known in Persian as *zargari*, where the sound [z] is inserted somewhere into every syllable. In monosyllabic words, the [zV] is inserted between the initial and final phonemes; e.g., *mazan* < *man* 'I'; *azaz* < *az* "from, of"; *tozo* < *to* "thou" (singular "you"), etc. Participants of the 1974 expedition of the Institute for Humanities of the Tajik Academy of Sciences to remote village Bardara in Bartang observed that inhabitants here were mostly reserved, though they stressed the residents' eagerness to keep rites and traditions, ancient stone carvings and crafts, and especially specific vocabulary, in particular "*chapona-gap*" 'secret (lit. left, reverse) speech' and also specific a social game "*cem-be.xt*" (lit. playing one's eyes).

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References

- Ayni, S. (1976). *Lughat. Kulliyot*. Vol. 12. Dushanbe: Irfon.
- Andreev M.S. (1953;1958.). *Tajiks of Khuf Valley*. Stalinabad.
- Andreev M.S. (1970). *Materials on Yaghnobi Ethnography* (1927–1928)/ Ed. A.K.Pisarchik. Dushanbe: Donish, 1970.
- Bartold V.V. (1960–1973). *Collection of works*. Vol. I-X. Mosow: Nauka.
- Dodykhudoev R.Kh. (1975). *Pamiri microtoponymy*. Dushanbe; Moscow, Doctor of Philology Dissertation.
- Edelman J.I. (1987). Shughnani-Rushani language group. In *Fundamentals of Iranian Linguistics*.

- New Iranian Languages. East-Iranian group. Moscow.
- Edelman J.I. (2000). Yazghulami language. In *Languages of the world*. III. Moscow.
- Gierson G.A. (1920). *Ishkashimi, Zebaki, and Yazghulami*. London.
- Gierson G.A. (1921). *Linguistic Survey of India*. X. Calcutta.
- Gryunberg A.L. (1972). *Languages of Eastern Hundukush: Munji language*. Moscow.
- Ivanov D.L. (1889). *Chto nazyvat Pamirom* (What should be called Pamir) // Proceedings of the Russian Geographical Society, Vol. 21.
- Lashkarbekov B.B. (2008). Old Wanji. In *Fundamentals of Iranian linguistics*. Moscow.
- Morgenstierne G. (1938). *Indo-Iranian Frontier Languages*. II. Oslo.
- Pakhalina T.N. (1959). *The Ishkashimi Language*. Moscow.
- Pakhalina T.N. (1975). *The Wakhi Language*. Moscow.
- Pakhalina T.M. (1966). *The Sarikoli Language*. Moscow.
- Pakhalina T.N. (1966). *Colloquial texts in Sarikoli* // Acta Orientalia. XXX. Copenhagen.
- Pakhalina T.M. (1971). *The Sarikoli-Russian vocabulary*. Moscow.
- Rozenfeld A.Z. (1956). *To the Tajik-Persian language relationship problem* // Transactions of the Institute of Linguistics. 6. M.
- Rozenfeld A.Z. (1964). *Vanj dialect of Tajik language*.
- Shaw R. (1876). On the Ghalcha Languages (Wakhi and Sarikoli). In *Journal and Proceedings of the Asiatic Society of Bengal*. 45.
- Shaw R. (1877). On the Ghalcha Language (Shighni). In *Journal and Proceedings of the Asiatic Society of Bengal*. 46.
- Shohumorov Abusaid. (2000). *Badakhshan in crossroads of the Central Asia*. Dushanbe. *Shughnani-Russian Dictionary*. M., 1981–1999.
- Sokolova V.S. (1967). *Genetic Relations Between the Yazghulami Language and the Shughnani Language Group*. Leningrad.
- Steblin-Kamensky M.I. (1976). *Languages of Eastern Hundukush: Wakhi language*. Moscow.
- Steblin-Kamensky M.I. (1999). *Etymological Dictionary of the Wakhi Language*. Moscow.
- Tajik-Russian Dictionary*. M. (1954).
- Yusufbekov Sh.P. (1999). *Sanglichi Language*. Moscow.
- Yusufbekov Sh.P. (2008). Dodykhudoeva L.R. Sanglichi Language. In *Fundamentals of Iranian linguistics*. Moscow.
- Zalemann K.G. (1895). *Shughnani vocabulary by D.L.Ivanov*. St.Petersburg.
- Zarubin, I.I. (1915). *Otchet Got'o i Zarubina po komandirovke na Pamir letom 1914g.* (Report on linguistic mission to West Pamir in 1914). St.Petersburg.
- Zarubin I.I. (1924). To the List of Pamiri Languages. In *Proceedings of the Russian Academy of*

Sciences. Petrograd.

Zarubin I.I. (1920). *The Ishkashimi Language*. Archive of the Institute of the Oriental Studies Russian Academy of Sciences. Manuscript. St-Petersburg.

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7

Endangered languages in Africa: Focus on Tanzania's Ngasa and Akie

Karsten Leg 俵 re

1. Introduction

The United Republic of Tanzania is one of those African countries that are known for their ethnic and linguistic heterogeneity. This heterogeneity is shared with other countries such as with Cameroon, Nigeria, Ethiopia, Sudan and the Democratic Republic of the Congo to name but the most linguistically diverse areas. In Tanzania Mainland more than one hundred languages are spoken in this East African country. The exact number is not known, because many of the Tanzanian languages are mutually intelligible. This means that neighbouring linguistic varieties, although having different autoglossonyms are in linguistic terms dialects, which belong to a dialect continuum. For example in the Hinterland of the East African coast close to Dar Es Salaam languages like Zalamo, Kami, Kutu, Kwere and probably more belong to such a continuum. Or, the Vidunda, Kwiva and Sagala languages are similarly so close to each other that a Vidunda understands a Kwiva or Sagala and vice versa. As a consequence, the number of languages spoken in Tanzania could be drastically reduced; nevertheless it remains a fact that the linguistic diversity is still impressive. In this context, it should not be forgotten, that all language phyla of the African continent are found in this East African country. Thus, Niger-Congo languages are represented by the large Bantu family, Afro-Asiatic by Southern Cushitic languages like Iraqw, Nilo-Saharan by Nilotic languages, such as Eastern (Maasai) or Southern (Datoog) and the so called Khoisan phylum that is constituted in Tanzania by Sandawe and Hadza which are languages that are treated by some linguists as language isolates.

In Tanzania, the national language Swahili has spread to all corners of this country. There is virtually no place where Swahili is unknown, for even in remote areas

up-country, people speaking Swahili could be found.

The strong position of Swahili in Mainland Tanzania is mainly the result of its informal spread, which has taken place for centuries. In addition, since independence of 1961, the official promotion of Swahili aiming at replacing English in many formal domains has further consolidated its status in the country. Especially in the official domains legislation, the executive and the judiciary (including law enforcing institutions) the State has contributed to making Swahili the most important medium of communication in Tanzania. The use of Swahili as the medium of instruction in primary schools from grade one to grade seven and its prominent role in the media (newspapers, radio and TV) have also been much supportive to the linguistic situation in favour of Swahili.

As a result of this development, Languages other than Swahili (L1s) have almost no chance of being used in formal domains. It's a fact that e. g. whenever administrative matters are discussed at the grassroots, the communication is conducted in Swahili and not in any other Tanzanian language. This is also due to the lack of corpus development, where only Swahili has benefited. In fact, no other Tanzanian language has been exposed to corpus development with regard to e.g. coining new terms and expressions that relate to changing communicative needs and attitudes of L1 speakers. Only for selected L1s orthographies were developed and subsequently applied mainly in religious publications and, to a limited extent, in samples of oral traditions or other texts. It remains a fact that literacy is achieved in Swahili, while orthographical competence in other languages is mostly a by-product and creative application of a Swahili based linguistic background.

In its capacity as the national language, Swahili has an important impact on all other languages of the country. Thus, the official exclusion of L1s from official and almost all other formal domains seriously affects language attitudes of L1 speakers. Especially small L1s are facing language erosion which goes along with loss of language speakers who prefer communicating either in Swahili or (a) major neighbouring language(s), which both have a higher social status or are bread and butter languages.

The attitude of adults who are at least bilingual with a high competence in Swahili (that often surpasses L1 competence) threatens language transmission to children even in monolingual areas up-country who are no longer or only partly exposed to L1 immersion. Nevertheless, the extended family is still often a guardian of L1 use provided that the family members share an identical ethno-linguistic background. In urban areas or in ethno-linguistically mixed settlements heterogeneity triggers the

widespread use of Swahili even within the family. This implies that under these conditions a number of L1s have already lost the survival battle.

Another important and far-reaching influence is exerted by the education system, where young children are exclusively exposed to the national language as the medium of instruction and learning. Swahili is often L2 or in remote places and among non-Bantu language speakers even a foreign language, especially in rural areas. It should also be noted that Swahili as the medium of instruction is used at a time when L1 competence — provided it exists at all — is not yet fully developed, thus interfering in the mother tongue background of the young learners. In the course of seven years in primary school, Swahili becomes the most widely used medium of communication for many learners, in particular in upper grades, as research even in homogeneous areas has shown. This situation was i.a. studied in the Vidunda area (Central Tanzania); its results were published in Legère (2006b).^①

2. Research on language endangerment in Tanzania Mainland

In recent years, comprehensive research embarked on the thorough analysis of the Tanzanian ethno-linguistic situation. This research was carried out as part and parcel of the “Languages of Tanzania” project.^② The research focus was on identifying in all registered villages of Tanzania Mainland those languages which were rated relevant by officials in each village. Moreover, even selected urban areas were included in this survey. The results indicate the approximate percentage of speakers of at least two languages (up to four) at the village level and in other areas that were subsequently converted into figures.^③ The data was further processed culminating in the 2009 Tanzanian language atlas (MLT, 2009).

For the study of language endangerment, the point of departure was both the then 1967 census^④, from which a list of small Tanzanian ethnic groups was established (see Legère, 2006) and the Language Atlas that included a numerical summary of all

① See also Legère (2007).

② This project initiated in 2001 is funded by the Swedish International Development Agency (SIDA). The project partners are the Department of Foreign Languages and Linguistics of the University of Dar Es Salaam (UDSM) and the African Languages Section (originally belonging to the Department of Oriental and African Languages which in 2009 was transferred to the Department of Languages and Literatures, University of Gothenburg).

③ An example is given below for Akie.

④ This was the last census that recorded ethnicity. The most recent census was that of 2002 where a request by LoT was turned down for being irrelevant (at least for the time being) by census officials, see Edenmyr, Idriss and Legère (2011).

Tanzanian languages (MLT, 2009:2).

Based on the 1967 census data, it was initially assumed that there is an identity of ethnic origin and competence in the language of any small ethnic group. This was a problem that the LoT survey had to address too. Given the latter's linguistic survey data the figures varied, on the one hand, from other sources such as "Ethnologue" (Lewis, 2009) These figures were, on the other hand, not always acceptable to the author who had earlier conducted much research himself in various areas, thus shaping his own picture of the grassroots' situation. Suffice it to note here that e.g. in the Bondei area of Tanga Region and in other places along the East African coast, to a growing extent, ethnic self-identification, did not necessarily match with adequate linguistic competence. As a consequence, it was concluded even after the publication of the Language Atlas that it is still indispensable to study the linguistic situation pertaining to each ethnic group at the grass root level. Such an approach is, of course, a time consuming job that, however, when being combined not only with investigating speaker numbers and other socio-linguistic details, but also with linguistic elicitation and documentation, is rather productive.

3. Two extremely endangered Tanzanian languages

To give two examples of how the issue of heavily endangered languages in Tanzania was studied, reference is made here to the Ngasa as well as the Akie ethnic groups and languages.^① The former language was studied by Heine and Vossen (1975–1976) and referred to by Sommer (1992:380),^② "Ethnologue" (Lewis, 2009)^③ and others. Ngasa which is an Eastern Nilotic language is neither mentioned in MLT (2009) nor in URT (1971), as outlined in Legère (2003). All information about Ngasa people and their language dates back to the seventies and earlier. When the author together with Christina Tornell (Associate Professor, then Department of African Languages, University of Gothenburg) and Deogratia Mushi (then M.A. student in linguistics, University of Dar Es Salaam) visited the Ngasa area in February 2003,^④ approximately fifty people

① The support by the University of Dar Es Salaam, which issued the research permit (AB3/3 [B]), and the commitment of the local officials are gratefully acknowledged. This research permit was later also extended to the fieldwork in Manyara Region for studying the endangered position of Akie.

② This summary is based on the Heine and Vossen (1975-76) paper as well as Nurse's and Blackburn's unpublished papers.

③ Claiming that there were 250 speakers in 1983.

④ Ngaseni, Kahe and Reha of Kilimanjaro Region (Eastern part of Kilimanjaro Mountain close to the Kenyan/Tanzanian border).

who claimed to be Ngasa were met. But only twelve of them fragmentarily remembered the language. Almost no communication whatsoever was possible in this language any longer, since the resource persons who were older than eighty years did not speak the Ngasa language anymore to each other. Their day to day medium of communication was the Seri dialect of Chagga. The members of the Ngasa community were gradually assimilated by their Chagga neighbours. This process included also linguistic assimilation. Accordingly, Ngasa language elicitation was almost impossible. It was only after entries from a word list, published by Heine and Vossen (1975–1976) were presented that the elders remembered selected Ngasa words and pronounced them, thus making recordings and subsequently sound files of this moribund language available. However, it was not possible to record any substantial communication in this language, because Ngasa people could not tell any story in their language. Even the songs they were singing. It seems that the spirit to use the Ngasa language and to maintain it had disappeared a long time ago. The reason for this voluntary decision was not made clear by Ngasa people. But it seems that the size of the ethnic group, at least in past century, was rather small. Further, Chagga people (who occupy large parts of the territory) and their language were so prominent that Ngasa speakers were continuously assimilated, while the Ngasa language ceased to have any meaningful function. In addition, speakers of this language lacked people to speak to, for Ngasa speakers lived no longer close to each other, but were separated by pockets of Seri speaking Chaggas. As a conclusion, Ngasa can no longer be just called just moribund, this language is dead, although there are still some language rememberers left.

Example number two refers to the Akie and the Akie language. Initially preliminary information about his ethnic group that, do a large extent, is identical with what is called “(N)Dorobo” in reference and even academic publications was extracted from various sources, mainly Maghimbi (2005) (see Legère 2006) supplemented by LoT village statistics (that is replicated in MLT 2009) and subsequently by Rottland (1982) as well as Maguire (1948).^① All sources confirm the small number of people who belong to the Akie ethnic group^② that is also found in Kenya where it is known as Okiek. No contacts exist between the Akie and the Okiek in Kenya. From the latter an Akie group is said to have split off “in company with a section of the ... Parakuyo, as

① Originally published in 1927-8. Maguire and two other authors (Nurse and Blackburn) are also widely referred to in Sommer's Akie overview in Brenzinger (1992:305/6) on language death in Africa

② A BBC program (not available so far for consultation outside the UK) featured the Akie; its web side summary does not reveal any linguistic information.

they expanded southward ... two hundred years ago” (Sutton 1993:51).

According to “Ethnologue”, the following languages/linguistic varieties fall under *Ndorobo*:

- Aramanik 3,000 (2002). Arusha region, Masaai Steppe. Alternate names: “Dorobo”, Laramanik, “Ndorobo”. Classification: Nilo-Saharan, Eastern Sudanic, Nilotic, Southern, Kalenjin, Nandi-Markweta, Nandi;
- Kisankasa 4,670 (1987). Alternate names: “Dorobo”, “Ndorobo”. Dialects: Distinct from others called “Dorobo”: Aramanik [aam], Mediak [mwx], Mosiro [mwy]. See also Aasáx [aas]. Classification: Nilo-Saharan, Eastern Sudanic, Nilotic, Southern, Kalenjin, Nandi-Markweta, Nandi;
- Mediak 5,270 (2000). Alternate names: Dorobo, Ndorobo. Classification: Nilo-Saharan, Eastern Sudanic, Nilotic, Southern, Kalenjin, Nandi-Markweta, Nandi;
- Mosiro 5,270 (2000). Alternate names: Dorobo, Ndorobo. Dialects: A distinct language from others called “Dorobo”: Aramanik [aam], Mediak [mwx], Kisankasa [kqh]. Classification: Nilo-Saharan, Eastern Sudanic, Nilotic, Southern, Kalenjin, Nandi-Markweta, Nandi;

It looks as if Mediak and Mosiro are identical (for the speaker number), although Mosiro is treated as being different from the rest. Maguire (1948:7) asserts that excluding Aramanik the other three names “denote one and the same type of Dorobo” (and probably also language).

The Akie are widely known in Tanzania as (*Wa-*)*Ndorobo*, e.g. the LoT survey listed 1,151 Ndorobo (MLT 2009:2). The xenonym Ndorobo originates from Maa *Ol-Ndórobóni* (sg.) – *Il-Tórobo* (pl.) ‘a person/people without cattle’ (derogatory), while the autonym is *Akyé* (*Akyé ante* ‘[one] Akie’ [sg.], *Akyé chacháng* ‘[several] Akie’ [pl.]). The latter ethnonym/glossonym is rarely used, since among themselves, but especially in contact with members of other ethnic groups, e.g. Maasai, Akie people refer to themselves as Ndorobo.

With regard to the Akie language “Ethnologue” (Lewis 2009) mentions both Okiek and Akiek as well as Ndorobo, but does not indicate speaker numbers. Here is the Okiek entry for Tanzania which, however, then switches to Akie:

... North, south Arusha region.^❶ Akie small groups south of Arusha among

❶ Must be Manyara Region.

Maasai [mas]. Alternate names: Akiek. Classification: Nilo-Saharan, Eastern Sudanic, Nilotic, Southern, Kalenjin, Okiek.

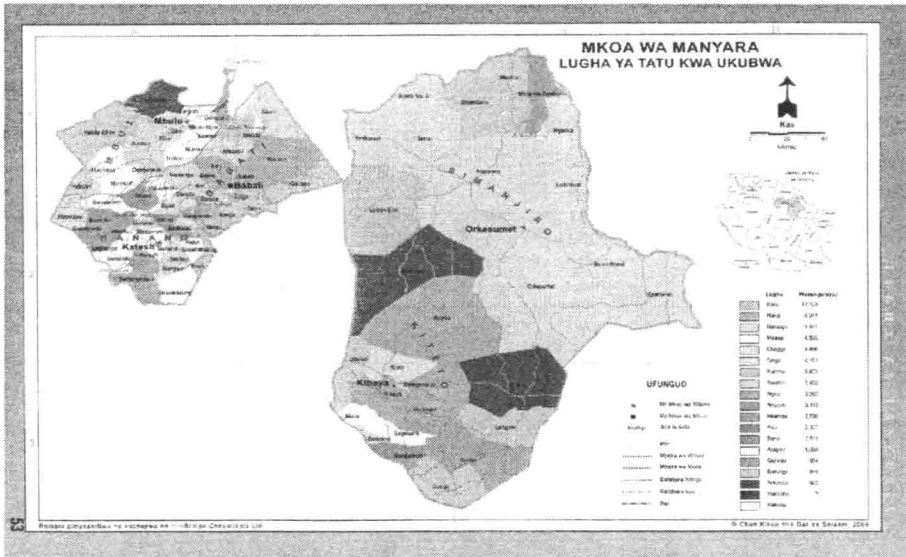
Below is an overview of “Ndorobo” speaking people in Tanzania, extracted from the LoT village statistics. People speaking this “language” were primarily identified in the Kilindi District of Tanga Region and in the Kiteto District of Manyara Region.

District	Village	1st	%	2nd	%	3rd	%	4th	%
Kilindi	Kwekinkwembe	Zigua	98	Ndorobo	2				
Kilindi	Lengusero	Zigua	97	Ndorobo	3				
Kilindi	Masagalu	Nguu	50	Zigua	40	Ndorobo	10		
Kilindi	Mkindi	Zigua	98	Ndorobo	2				
Kilindi	Muheza	Zigua	60	Nguu	30	Ndorobo	5		
Kilindi	Sambu	Nguu	80	Zigua	10	Maasai	8	Ndorobo	2
Kiteto	Amei	Maasai	90	Ndorobo	10				
Kiteto	Kimana	Maasai	62	Gogo	28	Nguu	6	Ndorobo	2
Kiteto	Lerug	Maasai	80	Ndorobo	15				
Kiteto	Makame	Maasai	80	Rangi	10	Ndorobo	10		
Kiteto	Ngababa	Ndorobo	70						

This summary was supposed to indicate the percentage of those speaking Akie (or any other language whose speakers are called Ndorobo according to the Maasai identification). It turned out afterwards in the course of the author's field work that in the case of Akie people, these estimates were incorrect and much too high, because obviously the LoT resource persons/interviewees frequently equated ethnicity and language competence. But the fact that village names were quoted, facilitated the process of tracing potential speakers or members of the ethnic group in a particular area.

Below is a map of the Manyara Region extracted from MLT (2009:53) that shows Simanjiro and Kiteto Districts (eastern part of the Manyara Region) including places where Akie people and the Akie language were traced in the LoT survey, i. e. Kijungu and Makame Wards. As visible on another map (not reproduced here), the Maasai are the most prominent ethnic community in Kiteto District as well as in Simanjiro District of Manyara Region (and moreover in parts of Arusha Region and elsewhere), while

Akie people are a minority as reflected in the status of the Akie language that is ranked third important together with other languages.¹



Several field trips to the Akie territory (from June 2009 onwards until now) were carried out. In doing so, in Kiteto District where the field work started mainly Maasai were requested to help identify those that they call *Il-Tórobo*. In total, the field work aimed at verifying, modifying, revising and updating the information available so far about the Akie language and Akie ethnic group.

The contacts to Akie people in Manyara and subsequently Tanga Regions that were established in due course substantially contributed to collecting a vast amount of reliable knowledge about the current distribution of the Akie language and those who still speak it as well as the way the language is used. Moreover, a solid summary of Akie groups in Kiteto and Simanjiro Districts (Manyara Region) as well as of Kilindi District (Tanga Region) became available. It turned out that there is a considerable gap between ethnic self-identification and Akie linguistic competence. A good number of Akie who no longer speak the language, but mainly Maa, were met. These people could not make any significant contribution in the data collection process, although some of them, in particular females, were still active in singing Akie songs (the text of

¹ In the published version of the socio-linguistic survey (MLT 2009) the original figures of 1152 Akie speakers (*ibid.:2*) were dropped and instead only the status of Ndorobo as a third language was taken into account. The speaker number given in the map section is 652 (*ibid.:53*), while the total figure could not be verified elsewhere in the atlas.

which they knew by heart) or taking part in traditional dances.

With regard to Akie linguistic competence and the solid command of the language, Akie speakers were found in the places listed below.

- The most important residential area where Akie speakers live is **Gitu** (Losikito)/Mnadani Section (Kibirashi Ward). In Gitu/Mnadani all Akie (39 adults) communicate in their mother tongue. The language is still transferred to the young generation that also speaks the language. Hence, this small mono-ethnic settlement can be counted as the backbone of the struggle for Akie language maintenance and survival. It is in Gitu where a full range of language speaking activities can be observed and recorded, including spontaneous everyday conversation as well as language use that pertains to Akie specific events, traditions, customs and folklore.

Most other Akie speakers who were identified in cooperation with Tanzanian project assistants^① live scattered in small groups in a vast territory as follows:

- five (three males, two females) in **Napilukunya** (coordinates S 05 14.974', E 036 47.520', altitude 1120 meters, approx. 32 km from Kibaya),
- nine (five females, four males) in **Ngababa** (coordinates S 05 24.371', E 037 02.630', altitude 1390 meters, approx. 70 km from Kibaya (60 km main road Kiteto to Kijungu + 10 km from junction),
- five (two females, three males) in **Ngabolo** (coordinates S05° 07,069', E 036° 07.435', approx. 10 km from Ndidu–Kibaya road, from there 28 km to Kibaya) called *Imosiro* (clan name) by Maasai
- 19 (eleven females, eight males) in **Kitwei A** (coordinates S04° 48. 470', E037° 08,570', altitude 1000 meters, approx. 47 km southeast from Orkesumet) .

In addition, other Akie speakers were found in the following places

- eleven Akie speakers (all females) in **Loolera Milula**,
- six (of the Terite clan) in **Kwekinkwembe**,
- five in **Mkindi** and four in **Mbogoi** (Lengusero Ward),
- ten in **Jungu**, five in **Balanga** (both Kwediboma Ward) and
- four in **Kwa Magule** as well as
- three in **Amei Chini**.

Further Akie speakers are said to be found in **Moipo** (people to be called Ilpesa, sg.

① Peter Mkwana'hembo and Lazarus Ole-Wanga (a Maasai who was instrumental in finding Akie people among his fellow Maasai).

Olpesai) and probably a few more elsewhere so that maybe to the total of approx. 80 Akie speakers above another twenty could be added, ultimately amounting to about 100 Akie speakers that live in an area dominated mainly by Maasai or Bantu groups. It seems that for quite a few of these people referred to above Maa proficiency is higher than that of Akie. Some old Akie who would much like speaking Akie are forced by the circumstances to speak Maa too, as otherwise they would not be listened to. However, at least, for the time being, most of these Akie are still reliable informants and resource persons, as interviews, recordings and lexical elicitation have shown, they were able to tell stories, sing traditional songs, communicate with others in Akie or provide important grammatical and lexical details. Their language competence and proficiency could certainly be improved, would they regularly be exposed to the Akie language as spoken in Gitu or be more consistent in refraining from speaking Maa to each other.

Others who identified themselves as Akie speak no longer Akie, but exclusively the language of the Maasai neighbours, i.e. Maa.

For many years, the Akie have lived close to the Maasai and were heavily influenced by them. Maguire commented in 1927/8 that in particular young Akie men imitate "... the Masai in wearing pigtailed and dress like them when they can ... and will, in time, be absorbed by the Masai" (Maguire 1948:10). He further observed "The *Aramanik* (in the Moipo area) are also rapidly becoming Masai" (*ibid.*:26). In view of Mosiro which is definitely Akie he observed:

The language of the Mósiro is dying, as any language except Masai tends to do in the Masai country (Maguire 1948:10).

In Kilindi District of Tanga Region, Akie people are reported to interact with their Bantu neighbours, the Ngu(l)u, being exposed to the latter's language that is partly learnt.

Akie people work for Maasai to earn some living. In addition Akie girls are frequently married by Maasai men who pay a dowry to Akie parents that young Akie men cannot afford. These marriages undermine the existence of the Akie community, which loses potential mothers, as they live among Maasai and whose children grow up as Maasai. In any case, even the survival of the Akie as an ethnic group is essentially endangered, although Maasai do not accept those Akie who have changed identity, because there are still various features that differentiate an Akie from a Maasai.

Despite the existence of the small Gitu/Mnadani Akie speech community the Akie language is extremely vulnerable for the low number of speakers. In particular those who live in mixed villages and places close to Maa or Bantu language, speakers are

exposed to the permanent presence of a dominant medium of communication which is spoken by the more numerous neighbours. In these places Akie competence is regressing and non-existing among the young generation that grows up speaking the dominant language of the area which is not Akie.

It should also be borne in mind that Akie is no longer actively spoken by those who are still known as competent speakers, the latter's medium of communication being Maa. The choice of Maa is self-evident, but nevertheless interesting, because in many other rural areas Swahili is given preference as the *lingua franca*. But in the given case, Swahili plays a rather subordinate role; it is only mastered by young Akie and some who were employed outside the traditional residential area. In formal domains, administrative and other matters pertaining to national issues are mostly discussed in Maa, much less in Swahili.

The older the Akie speakers are, the better language mastery and proficiency is, as observed in Napilukunya or Ngababa. The most competent Akie speakers are approx. 70 years old and older. It is very urgent to document the language these elders speak, since the harsh conditions under which they live affect their health and life expectancy.

In general, a lack of Akie corpus development is observed. The development of the Akie language is heavily influenced by Maa. Thus, whenever a new concept or object enters the Akie world, Maa is the prominent vehicle and source of borrowing. Even Swahili loanwords are borrowed via Maa.

The official disregard of L1 development that is transparent in Tanzania Mainland affects Akie too. Although the 1997 Cultural Policy document "Sera ya Utamaduni" (JMT, 1997) recognizes the importance of L1s country-wide, no feasible official initiatives have been made so far. It seems that the multitude of L1s in Tanzania is counter-productive to Government commitment. Those that are responsible for cultural matters including languages are reluctant to become active in this regard. This implies that officials are not even aware of what is going on at the linguistic grassroots. As pointed out elsewhere (Legère, 2006b), Akie is only one candidate among several others the future of which is extremely bleak. Hence, urgent actions should be high on the agenda of not only individual projects, but also of communities that deserve official recognition and support.

The field work carried out so far produced a substantial corpus of Akie texts and data. Competent and experienced Akie elders such as Mzee Lesakat (Napilukunya/Ngababa) narrated attractive traditional stories that fellow Akie transcribed and translated into Swahili. Female Akie sung songs that were recorded both as audio and

video files. More texts regarding history, historically grown knowledge etc were made available in a similar way. In doing so, it turns out how much Akie people are committed to preserve valuable aspects that are substantial for their marginalized ethnic group and posterity.

The linguistic study of the Akie language is still in its infancy. Within the framework of a Southern Nilotic comparative study, Rottland (1982) addressed basic Akie grammatical structures. However, extracting grammatical information from spoken language and transcribed texts is quite different from elicitation that was Rottland's approach. All written documents need a thorough analysis from a grammatical and phonetic/phonological perspective that is also essential for establishing orthographical rules.

Conclusion

This paper addressed language endangerment issues with regard to examples from Tanzania. Reference was made to Ngasa as well as Akie. In the case of Ngasa, it is safe to state that the language is dead. Although being spoken by an extremely small speech community, Akie is still vibrant. A full range of speech events that are relevant for the ethnic group can be covered by Akie speakers both from Gitu/Mnadani and, probably more restricted, also by those who live among Maasai or Bantu speakers, but have still preserved a solid active command of the Akie language. It goes without saying that the small speech community is highly vulnerable. Accordingly, linguistic and other research is a top priority.

Reference

- Edenmyr, Niklas, Fatima Idriss and Karsten Legère. 2011. Endangered languages: Examples from Tanzania and Sudan. In Christina Thornell and Karsten Legère (eds.) *North-South Contributions to African Languages (Topics in Interdisciplinary African Studies, volume 19)*, pp. 81–94. Cologne: Rüdiger Köppe.
- Heine, Bernd and Rainer Vossen. 1975/6. Zur Stellung der Ongamo-Sprache (Kilima-ndscharo). *Afrika und Übersee* LIX(2):81–105.
- JMT (Tanzania, Jamhuri ya Muungano), Wizara ya Elimu na Utamaduni. 1997. *Sera ya Utamaduni*. Dar Es Salaam: Mpiga Chapa Mkuu wa Serikali
- Legère, Karsten, 1983. Lokale Sprachen in Tansania und sich verändernde kommunikative Bedürfnisse ihrer Träger (am Beispiel des Bondei). In *Zeitschrift für Phonetik, Sprachwissenschaft und Kommunikationsforschung*, 36(1):79–86.

- Legère, Karsten, 2002. The “Languages of Tanzania” project: Background, sources and problems. In *Africa&Asia*, 2:163–186.
- Legère, Karsten. 2006a. Language endangerment in Tanzania: Identifying and maintaining endangered languages. *South African Journal of African Languages*, 26 (3): 99–112.
- Legère, Karsten. 2006b. Swahili's current spread to a remote area. Data from primary schools in Vidunda Ward (Central Tanzania). In Lotta Harjula and Maarja Ylänkö (eds.) *Africa in the Long Run. Festschrift for Professor Arvi Hurskainen (Studia Orientalia, vol 103)*, pp. 93–109. Helsinki: Finnish Oriental Society.
- Legère, Karsten. 2007. Vidunda (G 38) as an endangered language? In *Selected Proceedings of the 37th Annual Conference on African Linguistics* edited by D.L. Payne & J. Peña pp. 43–54. Somerville, MA: Cascadilla Proceedings Project.
- Lewis, M. Paul (ed.) 2009. *Ethnologue: Languages of the World*. Sixteenth edition. Dallas, Tex.: SIL International. Online version: <http://www.ethnologue.com/>.
- Maghimbi, Sam (2005). The Dynamics of Household Livelihood Strategies in the Drylands of Central and North Eastern Tanzania: The Case of Kiteto District. In B. Kamondo et al. (eds.) *Biodiversity Research for Livelihood Support and Food Security*, pp. 145–149. Nairobi: National Museum of Kenya.
- MLT (Mradi wa Lugha za Tanzania). 2009. *Atlasi ya Lugha za Tanzania*. Dar es Salaam: Chuo Kikuu cha Dar es Salaam.
- Rottland, Franz. 1982. *Die südnilotischen Sprachen*. Berlin: Reimer.
- Sommer, Gabriele. 1992. A survey on language death in Africa. In Matthias Brenzinger (ed.) *Language Death. Factual and Theoretical Explorations with Special Reference to East Africa (Contributions to the Sociology of Language, 64)*, pp. 301–417. Berlin, New York: Mouton de Gruyter 1992
- Sutton, John E. G. 1993. Becoming Maasailand. In Thomas Spear and Richard Waller (eds.) *Being Maasai. Ethnicity & Identity in East Africa*, pp. 32–60. Oxford, Dar es Salaam, Nairobi, Athens: Curry, Mkuki na Nyota, EAEP, Ohio University Press.
- URT (United Republic of Tanzania), Ministry of Economic Affairs and Development Planning, Central Statistical Bureau. 1971. *1967 Population census* (vol. 3). Dar es Salaam: Government Printer.

Websites:

[http://www.ogiek.org/The Ogiek People \(Kenya\)](http://www.ogiek.org/The_Ogiek_People_(Kenya))

<http://www.bbc.co.uk/tribe/tribes/akie/index.shtml> (Akie in Tanzania, a summary of a BBC video by Bruce Parry).

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8

Saami Languages in Finland and Russia after one and a Half Century

Tatjana Agranat

Abstract: This article is devoted to the results of some expeditions to Finnish Lapland and to the Kola Peninsula. The indigenous population of Finnish Lapland and the Kola Peninsula in Russia are the Saami people, who – as it is known – also live in Sweden and Norway. The field work in this region is the first part of a large project which, according to the plan, consists of several expeditions following the tracks of M.A.Castren.

Key words: Saami languages, Lapland, M.A.Castren

History of Saami expeditions

M.A.Castren was a great scientist in the 19th century. He worked as a linguist, ethnologist and anthropologist. While traveling (from 1838 till 1849) from Finland through the whole of Siberia to the Chinese border, he has written grammatical descriptions of some Uralic and Altaic languages and has described the customs and ways of living of the peoples he has investigated.

The aim of my field work is to visit all the places, which Castren has visited and to compare sociolinguistic and ethno-cultural situations of our days to what has been described in Castren's materials.

M.A.Castren has undertaken two expeditions to Finnish Lapland, in 1838 and 1841. Even in that time in southern Lapland, the Saami language was nearly extinct. In northern Lapland the Saami languages remain almost in the same area where they were spoken in the middle of the 19th century, but the distribution of Finnish and Saami has greatly changed. In Rovaniemi, the capital of Lapland and in other relatively big towns

the Saami languages were not spoken even in the time of Castren. M.A.Castren has written that in southern Lapland the Saami people have assimilated with Finns and there ethnic Saami speak Finnish and they have become settled farmers, although the agriculture in circumpolar zone is risky (Castren, 1999, 15; 62–63).

In 1944, the border between Finland and USSR in the region of Lapland—North Karelia was moved to the west. At that time the area near Petsamo, where the Scolts, one of Saami ethnic group lived, became a part of the USSR. Before the demarcation of borders, the Finnish government resettled Scolts from the Petsamo area to Finland, near Lake Inari. At present no more Scolts live in their old territory near Petsamo (in Russian Pechenga) in Russia. M.A. Castren has studied the Saami language in this region; he called Scolts Russian Saami and noted a large number of Russian loanwords in this language.

Language use of the Saami people

So Scolts found themselves in the area of the Inari Saami language, whereas Scolts and Inari Saami cannot understand each other. In addition, Inari are Lutherans and Scolts are traditionally Orthodox Christians. This predetermines rare marriages between them and, as a result, not a considerable degree of language contact. As a consequence, Inari and Scolts communicate in Finnish. At the time of Castren's expeditions many Saami did not know the Finnish language, now 100% of the Saami people speak Finnish fluently.

In the 19th century, the Christianization of Saami in Finland was achieved and the language of the church always was Finnish, which is one of the reasons that the Saami people can speak Finnish. Although early missionaries have translated religious literature into Saami, M.A.Castren described some examples (Castren, 1999: 17). On the other hand they have taught Finnish to Saami people (Castren, 1999: 63), which has promoted the assimilation of Saami with Finns. Now the language of the Scolts Orthodox church is Finnish too, whereas before it was Russian. Nowadays Finnish is the main language of school education and mass media.

The number of Saami speaking people has greatly decreased. But in spite of this, the Saami languages became written languages and found for their use some more domains. In contrast to the situation of the 19th century, at present the three Saami languages: Inari, North and Scolt are taught at schools in the Inari Lake area. To the North of the Inari Lake, there is the area of the North Saami language, which is also spoken in Norway and which is the biggest and the safest Saami language. In some

regions North Saami replaces local Saami languages because it is used in more domains than other Saami languages

In Finland there is Saami radio broadcasting in all three Saami languages with a frequency of 15–30 min every weekday from the Inari village. There is no Saami TV in Finland, but it is possible to watch Norwegian Saami TV in North Saami. Inari Saami people can understand this language, but Scots cannot. Some Saami magazines and newspapers are printed (the editorial office is situated in Ivalo village).

Doorplates of office buildings are written in the three Saami languages as well as in Finnish. Saami road signs on highways are used from Sodankylä 70 km to the North, just in the area where the Saami languages are still alive.

In the time of Castren, an important part of the Saami people were nomadic and only some people became settled. Nowadays all the Saami people are settled, but reindeer-breeding always was and remains till now the base of the Saami economy. Now Saami people have to live in family farms. Nomadic people used Saami as their every day spoken language within society in contrast to settled people. The population density in Lapland is very low—2 persons per 1 sq. km. The Saami village now is the centre with a church, a school, some office buildings, shops and some other infrastructure, while the population registered at a parish live in a hundred kilometers around the village. In such conditions it is very difficult to accomplish a sociolinguistic investigation, but I managed to discover that, for example, teenagers still use the Saami language in every day conversation.

The Saami people of Russia

In 1839, M.A.Castren visited North Karelia (for which at present we use the geographical term Kola Peninsula). Until the beginning of the 20th century, Kola Saami were nomads, because of their occupation of reindeer-breeding, whereas some Saami ethnic groups were nomads till the Second World War. They moved in meridian direction during the year. They changed three or more nomad camps per year: in winter, in summer and for autumn and spring more often nomadic groups used one camp. Some groups set up some additional camps on the way. The type of Saami reindeer-breeding was not extensive, they let reindeer moss regenerate. Therefore they changed camps in some years. And often they gave to the new camps the same “tribal” names that had the old, abandoned ones. For this reason, sometimes it is difficult if at all possible to locate the place and the distribution of a dialect. However, in the State Archive of Murmansk, there are archival documents on the area about migrations of

Saami ethnic groups.

One more reason why it is difficult to collect data on Saami group migrations and the natural distribution of the dialects, is that in the time of collectivization almost all the Saami people were forcibly resettled to larger population aggregates. Their old places were wiped out from the face of the earth. Even the physical geography of the Kola Peninsula has changed from the time of Castren. The place where the Notozero dialect was spoken, was flooded by an artificial reservoir. The people speaking this dialect were resettled to several places and the dialect is now almost extinct.

The most important location of the Saami population on the of Kola Peninsula is the village of Lovozero. Saami from other places who spoke various dialects were resettled here. In this village Kildin Saami is used as the most important among the Kola Saami idioms. Originally, Kildin Saami was spoken further north. The idiom which is now called Kildin Saami is of course the result of the influence and of the mixing of various dialects. In spite of the fact that Kildin is the safest of Kola Saami languages, it is now almost only spoken by the eldest generation. However, there are ABC-books on Kildin Saami and there are attempts made to teach the language to the children. In addition there is a Saami radio station in Lovozero which is sponsored by Norwegian Saami organizations. Young newsreaders go for study to Norway, where the language of education is North Saami.

In the 19th century, after the expeditions of M.A. Castren, Izhem Komi and Nenets appeared in Lovozero. The Izhem Komi people used to be nomads and reindeer- breeders and as distinct from Saami their reindeer-breeding was extensive, because they could migrate on a large territory. They employed Nenets as farm laborers. Since then tree languages were spoken in Lovozero: Saami, Komi and Nenets.

As only the Kildin dialect is a written language, in the village Akkala the Kildin dialect is taught as literary language, which caused the disappearance of the Akkala dialect, replacing it with Kildin. In his time Castren has pointed out that the inhabitants of Akkala almost had not contacted with other Saami as well as with Russians and therefore the Akkala dialect saved many archaic features (Castren, 1999: 84).

As of other Kola Saami ethnic groups, Castren noted that they speak Russian as well as Saami, and he found an important Russian influence in Kola Saami languages and their culture. M.A.Castren predicted the total disappearance of Kola Saami languages because of the absence of the literary language (Castren, 1999: 113). As they were Orthodox Christians, their language of the church was Russian, but all of them could not read it and though sometimes they went to the church, they often also

consulted shamans (Castren, 1999: 113).

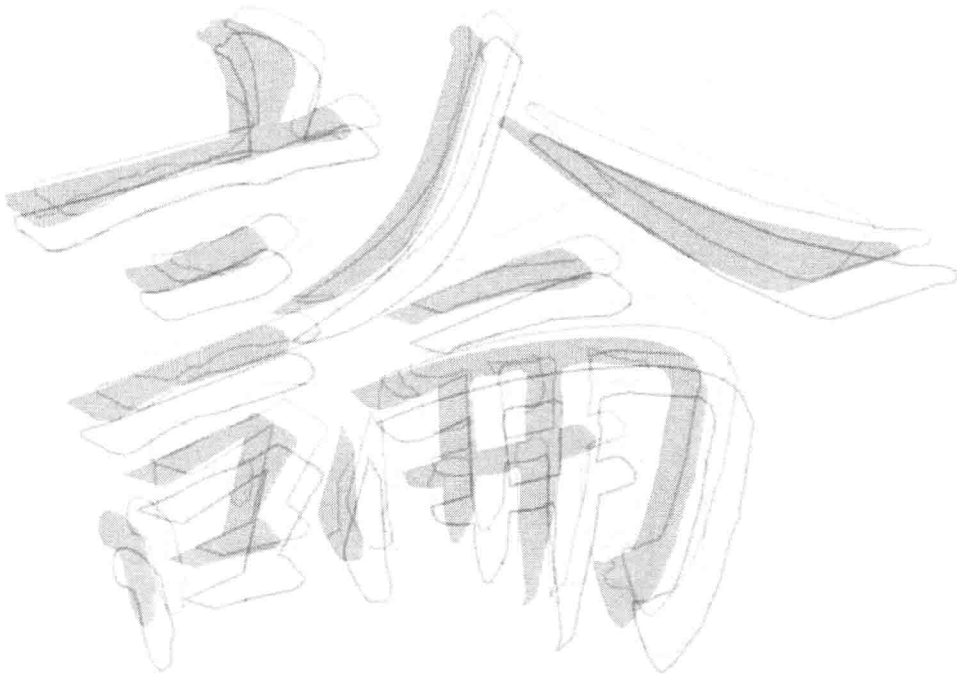
The process of globalization and replacement of the Saami languages by Finnish and Russian respectively, started already in Castren's time and now it is difficult to say if steps for saving the Saami languages will achieve good results.

References

Castren, M.A. (1999), *Sochinenija v dvuh tomah, v.1. Laplandia. Karelia. Rossia.* (in Russian), [Collected works in two volumes. I. Lapland, Keralia, Russia], Tumen.

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Chapter 2 Language Maintenance: Documentation and Preservation



The Use of Sound Archives for the Study and Teaching of Endangered Languages

Tjeerd de Graaf (郭天德)

Abstract: The research program Voices from Tundra and Taiga has been devoted to the study of endangered languages and cultures of the Russian Federation, which must be described rapidly before they become extinct. This research is in the fortunate position that earlier work on the reconstruction technology for old sound recordings found in archives in St. Petersburg has made it possible to compare languages still spoken in the proposed research area to the same languages as they were spoken more than half a century ago.

We have prepared a catalogue of the existing recordings, and a phono- and video-library of recorded stories, and of the folklore, singing and oral traditions of some minority peoples in the Russian Federation and its border areas. For this purpose the existing sound recordings in the archives have been used together with the results obtained from new fieldwork expeditions.

At present, many old recordings still remain hidden in private archives and places where the quality of preservation is not guaranteed. In a research project on Endangered Archives, we make part of these recordings available and add them to the database developed in St.Petersburg. The aim of the project is to re-record the material on sound carriers according to up-to date technology and store them in a safe place together with the metadata. The storage facility provided by the project will modernise the possible archiving activities in the Russian Federation and bring them up to date with the present world standards.

The data are added to the existing archive material in Saint-Petersburg and part of it is presented on the Internet and/or CD-ROM. This material thus becomes available for further analysis to researchers working in the field of phonetics, linguistics,

anthropology, history, ethno-musicology and folklore. The information is also important for the development of teaching methods for representatives of the related ethnic groups and for the conservation and revitalisation of their language and culture.

Key words: Endangered Archives, Sound Recordings, Historical Linguistics

Introduction

The work of the Fryske Akademy (Frisian Academy) and the Mercator European Research Centre on Multilingualism and Language Learning is devoted to the study of minority languages in Europe. The primary involvement of the Fryske Akademy lies in the domain of history, literature and culture related to the West-Frisian language. The users of its nearest relatives, the East- and North-Frisian languages in Germany are less numerous and these languages are included into the list of endangered languages of Europe. This list increased significantly after the extension of the European Union with new member states in Central and Eastern Europe. Further eastwards, in the Russian Federation and Eastern Asia, a large number of endangered languages can also be found. This report presents existing and potential projects related to some of these endangered languages, in particular those based on the use of material from sound archives and fieldwork data. After a few case studies on particular endangered languages, a more general section presents the work on language documentation and revitalization by UNESCO and other institutions. This is based on some earlier publications (De Graaf, 2001, 2002a-c; De Graaf and Shiraishi, 2004).

Historical Data in Sound Archives

In the last half of the 19th century a great invention was made by Thomas Edison which changed the possibility of doing linguistic research drastically (De Graaf, 1997: 2002c). This was the phonograph which since 1880 was used for recording sounds. For the first time in human history people were able to store and rehear acoustic data, in particular speech, and to reproduce it to other sound carriers. It was not long after this invention that ethnologists, folklorists, linguists, composers, and amateurs began to use the new machine to collect information on the oral data and music of cultural groups at home and abroad.

Prior to 1890, during linguistic fieldwork, notes were taken by hand after many repetitions of spoken utterances and this was a laborious process for both the investigator and the informant. The phonograph changes all this and with the new method linguists were able to make records instantaneously and obtain an accurate and

objective record of a single performance. Now it was possible to capture the nuances and subtleties of the spoken word and duplicates could be played repeatedly for transcription and analysis, whereas the original recordings could be preserved for future use.

For best results in the reproduction of sound from the old wax cylinders, several modern cylinder players have been built which employ light weight pick-up cartridges for mechanical extraction of the signal. In order to minimise further degradation of cylinders by replay, and also to make contents retrievable from broken cylinders, several optical methods for contactless, non-destructive replay have been developed. The first was introduced by a Japanese research group (Asakura et al. 1986). In 1988 I was invited to work a few months with this group in Sapporo (Japan) and there I could apply this method to some wax cylinders and learn from the experience of my Japanese colleagues.

Using the phonograph over the years from 1902 to 1905, the Polish anthropologist Bronisław Piłsudski recorded the speech and songs of the Ainu people on Sakhalin and Hokkaido on wax cylinders in order to study their culture. These wax cylinders were discovered in Poland and taken to Japan, where the research group of Prof. Asakura contributed to the reconstruction of this valuable material. During my stay in Japan Prof. Kyoko Murasaki introduced me to the last speakers of Sakhalin Ainu, who were living on Hokkaido (Murasaki, 2001) and suggested that we might go together to Sakhalin in order to do fieldwork there. In 1988 Sakhalin was completely isolated from the outside world, but Gorbachov's perestrojka made it possible to organise the first international ethnolinguistic expedition to the island, which I could join in 1990 (De Graaf, 1992). There we did not find any remnants of the Ainu population, but we could visit various parts of Sakhalin where the Nivkh people are living. The following sections of this article will report on the projects related to the use of sound archives for the study of minority languages.

Some European Projects related to Endangered Languages and Sound Archives

Our research group on Phonetics and Ethnolinguistics pays attention to various aspects of the languages spoken in the Russian Federation. In this report we shall describe a few projects, which have been undertaken by the research group and elsewhere for the study of the minority peoples of Russia and for the description of the endangered languages involved. For this purpose data from archives have been used and combined

with results of modern fieldwork in several parts of the Russian North, Siberia, the Russian Far East and the border areas of Russia and Japan. Since 1992 these projects have been financially supported by the Netherlands Organization for Scientific Research (NWO), the Organization INTAS of the European Union and the Sakhalin Energy Investment Company Ltd. We have collaborated with colleagues in Russia and Japan and part of our work is simultaneously related to Japanese research projects.

When recordings were made, it became obvious that a central facility was needed for the preservation of the valuable data which had been collected. At the beginning of the 20th century this led to the establishment of sound archives, the earliest of which in Europe were located in Vienna, Berlin and St.Petersburg. The sound archives of the Russian Academy of Sciences in the Museum of Russian Literature (Pushkinsky Dom) in St.Petersburg contain about 7,000 wax cylinders of the Edison phonograph and more than 500 old wax discs. In addition, an extensive fund of gramophone records and one of the largest collections of tape-recordings of Russian folklore represent the history of Russian ethnography and contain a wide range of materials (De Graaf, 2001, 2002a). Many of these recordings form one of the basic collections used in our joint projects with St.Petersburg.

The first of these projects on the *Use of Acoustic Data Bases and the Study of Language Change* (1995–1998) has been financially supported by the organization INTAS of the European Union in Brussels. We were able to reconstruct some of the many recordings in the Pushkinsky Dom and to make them available for further research, which is not only important for historical and cultural reasons, but also for language description and for the study of possible direct evidence of language change. In a second INTAS project, *St.Petersburg Sound Archives on the World Wide Web* (1998–2001) some of the sound recordings were placed on the Internet and are now available at a special web site for further study (De Graaf, 2004a). In both projects, the Phonogramm archiv of the Austrian Academy of Sciences was both partner and responsible for the technical aspects. For these projects we first completed the reconstruction of the sound archive material of the Zhirmunsky collection. Zhirmunsky was a famous linguist who worked in St.Petersburg/Leningrad in the early years of the 20th century. One of his main interests was the study of German dialects spoken in Russia. In the period between 1927 and 1930 he recorded many utterances, in particular songs by German settlers, on waxed cardboard discs, which were transferred to the Vienna Phonogrammarchiv. Within the framework of the INTAS project, this collection has been copied onto tape and part of the material is now stored in a special

database. A special study covered the language of the Siberian Mennonites (De Graaf 2005). For our third INTAS Project on *The construction of a full-text database on Balto-Finnic languages and Russian dialects in Northwest-Russia* (2000–2003) we prepared an inventory of the Finno-ugric minority languages in the vicinity of St.Petersburg and the southern and middle parts of Karelia. They represent a specific linguistic picture of an area where endangered languages such as Vepsian, Ingrian, Votic, Ingrian-Finnish and Karelian and various types of Russian archaic dialects are spoken in close proximity to this day.

The St.Petersburg sound archives also contain important data on Yiddish, the language of the Jews in Eastern Europe, which at the beginning of this century was spoken by millions of speakers in the Russian empire. In the archives we found an unpublished manuscript *The Ballad in Jewish Folklore*, together with material on corresponding wax cylinders. Together with specialists in St.Petersburg, we further explored the acoustic data in the sound archives and prepared the edition of the book. This took place in the framework of a project with the title *Voices from the Shtetl, the Past and Present of the Yiddish Language in Russia* (1998–2001), for which we have obtained financial support from the Netherlands Foundation for Scientific Research NWO (De Graaf, Kleiner and Svetozarova, 2004).

Modern fieldwork and reconstructed data from sound archives provide important information for the preparation of language descriptions, grammars, dictionaries and edited collections of oral and written literature. During fieldwork expeditions to Northern Yakutia, the Altai Region and Sakhalin we have studied the processes of language shift and language death of the aboriginal populations of Russia, providing us with a lot of interesting data. As mentioned above, our first international expedition in 1990 took place to the island of Sakhalin, where we were looking for the Ainu, Nivkh and Uilta people and making recordings of their languages. We shall first consider the Ainu, their history and the position of the remaining representatives of this ethnic group in Japan.

The Minority Peoples of East Asia, in particular the Ainu in Japan

Originally the northern part of the Japanese main island Honshu was inhabited by Ainu people, whereas there are indications that they also lived on the southern tip of Kamchatka. Traces of the Ainu on Honshu are found in geographic names, but due to political developments they also disappeared from Sakhalin and the Kurile islands (De

Graaf 2004b). In the sixteenth century many Japanese immigrants began to settle on Hokkaido and to engage in large scale fishing and trading. The Japanese area (Wajinchi) was located in the southern part of the island (Matsumae), while the Ainu people lived in the areas called Ezochi: the rest of Hokkaido (the name of the island since 1868), Karafuto (Sakhalin) and Chishima (Kurile islands). The southern islands of Etorofu and Kunashiri are at the moment disputed territories between Japan and Russia. Their original inhabitants were also Ainu and the first map of these islands was made by the Frisian sailorman Maarten Gerritsz de Vries and published by Witsen in his book *Noord en Oost Tartarye* (De Graaf and Naarden, 2007; Witsen, 1705).

In the Meiji era (from 1868 onwards), under a government policy of assimilation, the Ainu were oppressed and exploited by the Japanese. The modernisation of Japan caused the central government to pay serious attention to the exploration and economic development of Hokkaido. For this purpose the Hokkaido Settlement Mission (Kaitakushi) was established as an administrative organisation to rule the region, and a large number of former samurai and farmers emigrated from the Japanese mainland to Hokkaido. *Ainu moshir* (“the people’s land”), where the Ainu had freely hunted and gathered food, became part of the territory of Japan and was given to Japanese immigrants. With the introduction of the Japanese way of life and special compulsory education the traditional system of learning from one’s elders was broken down and the original social and cultural patterns of the Ainu population were destroyed. As a consequence, the Ainu language, together with the traditional life style almost completely disappeared within a couple of generations.

Because the number of people who use the language has been decreasing yearly, Ainu language education is in a very difficult state. For the improvement of Ainu language education, the Foundation for Research and Promotion of Ainu Culture (FRPAC) provides learning opportunities training Ainu language instructors through intensive courses in effective instruction methods based on the grammar and lexicon of the Ainu language, in cooperation with Ainu language researchers. Various descriptions of the Ainu language have been produced (Tamura, 2000). Ainu language classes are offered in various community centers on Hokkaido and in the Ainu Culture Center in Tokyo. These centers are very well equipped with modern facilities, often combined with interesting expositions related to the Ainu culture. In order to disseminate the Ainu language to a general public, the FRPAC provides opportunities for many people to have contact with and to learn the Ainu language.

The Languages of Sakhalin

The island of Sakhalin belongs to the Sakhalin area (Sakhalinskaya Oblast'), one of the most eastern territorial units of the Russian Federation with a size of 87,100 sq.km and a distance from North to South of 980 km. The Kurile Islands are also part of this territory: a chain of 1200 km length with 36 islands. A long-time dispute exists between Japan and the Russian Federation about the ownership of the most southern of these islands. From 1905 to 1945, after the Russian-Japanese war, the southern part of the island (Karafuto) was a Japanese colony and during this period many Japanese immigrants (about half a million) settled there. The original population of Sakhalin consisted of some Paleo-Siberian and Tungusic tribes, in particular the Nivkh (Gilyak) and Uilta (Orok) in the North and Center, and the Ainu in the South. Their numbers were rather small and during the colonisation process by the Russians from the North and by the Japanese from the South, they became soon numerically dominated by these stronger nationalities. Due to their isolated life far from the political center, they could keep their native language and culture for a long time, but since the beginning of the 20th century the assimilation process has gradually become stronger.

In the summer of 1990, I took part in the first international field work expedition to Sakhalin, with the aim to investigate the linguistic and ethnographic situation of the smaller nationalities on the island. The idea was to look for the remnants of the Ainu population and for the other small minority groups, in particular Nivkh (Gilyak), Uilta (Orok). Unfortunately, during our expedition no more Ainu people could be found and the only person representing the Sakhalin Ainu language and culture was probably the informant we met on Hokkaido, Asai Take san (De Graaf, 1992; Murasaki, 2001).

Ainu is the only small endangered indigenous language of Japan, whereas Nivkh is a representative of the many minor languages of Russia. From the available demographic data we could conclude, that in 1989 the aboriginal Peoples of the North formed a very small minority within the total population of Sakhalin: for the Nivkh ethnic group, which is the largest group, the percentage is only 0.3 % (De Graaf, 1992). Among the small nationalities in the Russian Federation, the Minority Peoples of the North play a special role. There are nearly thirty different groups, all living in the northern parts of the country bordering the Arctic Ocean from Scandinavia to the Bering Sea and the Pacific. The Peoples of the North were the last ones to be put under effective Soviet rule. In the early thirties the Soviet regime tried to extend its grip on these peoples and to encourage Russian culture and literacy among them. With this aim

a “Committee for the Assistance and Protection of the Small Peoples of the North” was founded in 1923 and a writing system was developed for many of the minority languages. Initially the Latin alphabeth was used for this purpose, but in the later thirties this was changed to Cyrillic.

The Nivkh language is classified as Paleo-Siberian and spoken by tribes inhabiting the lower reaches of the Amur river in the Far East of the Asian continent and the northern and central parts of Sakhalin island (Gruzdeva, 1998). One of the linguistic complications is the fact that the language has two (or maybe more) rather different dialects: the Amur dialect and the Sakhalin dialect. Both groups are rather small: all together about 4,400 people have the Nivkh nationality, and less than 15 % of them are speakers of the Nivkh language. A very small group speaks the southern Poronaisk dialect and for this dialect it is very difficult to find speakers. After the war, several of them went from their homeland in Southern-Sakhalin to Japan, where Japanese and other non-Soviet linguists studied their language.

The first all-Russian census was organized during the czarist regime in 1897. In that year, the total number of people on Sakhalin, belonging to the Nivkh ethnic group, was counted as 1969. They all gave Nivkh as their mother tongue and probably most of them were monolingual. In the second census mentioned, the one of 1926, which was organized for the first time in the Soviet Union, the total number of Nivkh people was lower, due to the fact that the inhabitants of the Japanese southern part of Sakhalin were not counted. Practically all of them still had Nivkh as their mother tongue. Since that year, however, a decrease in the percentage of Nivkh speakers has set in, whereas the total number of Nivkh on Sakhalin stayed more or less stable (about 2000). In 1989, most Nivkh people (more than 80%) who were not speaking Nivkh any more, mentioned Russian as their first language.

The transition from the Sakhalin Nivkh to the Russian language can be explained in a number of ways. One of the most important factors was the growing contact of the Nivkh population with the other inhabitants on the island. Many of them were Russian-speaking people from the motherland, who came to the island to exploit the many natural resources (oil, coal, wood, fish, caviar). Before that time, the Nivkh people were living as fishermen and hunters in their isolated villages, but they increasingly came into contact with the immigrants, who also started an active policy of educating and influencing the aboriginal inhabitants of the eastern parts of the Russian Federation.

In recent times a development is taking place in favour of the native language and

culture of the small minorities in the Russian Federation, in particular the Nivkh (De Graaf and Shiraishi, 2004). Attempts are being made to revive the Nivkh language, for example by introducing language classes in Nivkh in several schools. In 1980, the Ministry of Education of the Russian Federation initiated a program for primary and secondary schools, for which text books and dictionaries were edited. Special instruction was given to teachers of Nivkh descent about the education of Nivkh children in their own language. This teaching program was introduced in the special boarding schools for children from the ethnic minorities in Nogliki, Chir-Unvd and in Nekrasovka. We were able to visit these schools and to learn about the teaching methods for Nivkh used in the primary education.

During our fieldwork expeditions on Sakhalin, important linguistic material was collected on the languages of the minority groups. Most of the subjects for our research project were elderly people with a strong motivation to use their language, for example as members of a folkloristic group. Practically all young people we met had no active knowledge of the language, and they only communicated in Russian with their parents. During the interviews we made with Nivkh informants, they were very positive about the value of keeping and cultivating their own culture in this way and they want to combine this with a future life as members of the group of nations in the Russian Federation. They agree that Russian language and culture play a very important role in their lives, but they would like to see the survival of their native language and culture stimulated by all possible means.

Voices from Tundra and Taiga

Important activities related to linguistic databases in St.Petersburg concern the recordings of Russian dialects and minority languages in the Russian Federation, such as Nivkh, Tungus, Yakut and others (De Graaf, 2004a). One of our aims is to use these recordings for the construction of a phonetic database of the languages of Russia, which will have many scientific, cultural and technical applications. Within the framework of the research program *Voices from Tundra and Taiga* which started in 2002, we combine the data from old sound recordings with the results of modern fieldwork, in order to give a full description of the languages and cultures of ethnic groups in Russia. The endangered Arctic languages and cultures of the Russian Federation must be described rapidly before they become extinct. Our earlier work on the reconstruction technology for old sound recordings found in archives in St.Petersburg has made it possible to compare languages still spoken in the proposed

research area with the same languages as they were spoken more than half a century ago, which provided a fortunate start of these projects. The sound recordings in the St.Petersburg archives consist of spoken language, folksongs, fairy tales etc., among others in Siberian languages (Burykin et al. 2005; De Graaf, 2004a).

In these projects the techniques developed earlier are applied to some of the disappearing minority languages and cultures of Russia, such as Nivkh and Uilta on Sakhalin and Yukagir and Tungusic languages in Yakutia. Our goal is to set up a phono- and video-library of recorded stories, folklore, singing and oral traditions of the peoples of Sakhalin and Yakutia. Thus the existing sound recordings in the archives of Sakhalin and Yakutia will be complemented by new fieldwork results. The data obtained will be added to the existing archive material in St.Petersburg and partly available on the Internet and CD-ROM.

This research project and the related documentation are carried out in close co-operation with scholars in local centers such as Yuzhno-Sakhalinsk who participate in the archiving of sound recordings and fieldwork expeditions. Specialists from St.Petersburg and the Netherlands visit them setting up new centers for the study and teaching of local languages and related subjects. For this purpose we organised a special seminar for Nivkh teachers in Yuzhno-Sakhalinsk in October 2003.

Spontaneous speech and the reading of prepared texts is collected for (ethno)linguistic as well as for anthropological, folkloristic and ethno-musicological analysis. These data are (video)recorded and analysed and they will thus illustrate the art of story telling and language use. The above described texts will be published in scientific journals and books with audiovisual illustrations on CD-ROM and/or on the internet. The materials will thus become available for further analysis to scholars working in the field of phonetics, linguistics, anthropology, history, ethno-musicology and folklore.

Using a phrase book for school children of Nivkh (Taksami et al. 1982) we recorded a native speaker during our fieldwork trip in 1990. The texts with the illustrations of the book are now shown on the internet together with the acoustic data. The separate phonemes are also supplied on a special table and by selecting one of them, the student can listen to various speech sounds. This has as the advantage that students will be able to learn the distinction between various separate phonemes (e.g. four k-sounds) of Nivkh, which are variants (allophones) of one phoneme in Russian. One of our research students and his Nivkh colleague published a series of books with Nivkh stories, songs and conversation in which for the first time the corresponding

texts are recorded on a CD. The series, *Sound Materials of the Nivkh Language I - III* (Shiraishi and Lok, 2002, 2003, 2004) appeared as a result of the Japanese program on Endangered Languages of the Pacific Rim (ELPR) and the research program *Voices from Tundra and Taiga*. This unique material is not only used by linguists, but also by the language community itself, where it can be applied for teaching purposes. In 2006 Hidetoshi Shiraishi finished a dissertation on this topic with the title *Aspects of Nivkh Phonology*, which he defended in September 2006 at Groningen University (Shiraishi 2006).

For the Nenets community the research group in St.Petersburg has developed a phrasebook where Russian phrases for everyday use are translated into the three main dialects of Nenets. It is possible to listen via the internet to spoken Nenets and to make a choice which dialect one should like to hear. Thus difficult problems related to the standardisation of the language (e.g. a common writing system for different dialects) can be solved on the basis of extensive material obtained from archives and fieldwork. Similar problems have to be considered for other parts of the Russian Federation.

Endangered Archives

In the summer of 2005, we reported on the NWO research project *Voices from Tundra and Taiga*, and we published a catalogue of existing recordings of recorded stories, folklore, singing and oral traditions of the peoples of Siberia (Burykin et al. 2005). This material has thus become available for further analysis by researchers working in the field of phonetics, linguistics, anthropology, history, ethno-musicology and folklore. The information is also highly important for the development of teaching methods for representatives of the related ethnic groups and for the conservation and revitalization of their languages and cultures.

At present, many old recordings still remain hidden in private archives and places where the quality of preservation is not guaranteed. In a new project, which starts from September 2006 has been financially supported by a special Programme on Endangered Languages at the British Library, we propose to make part of these recordings available and to add them to the database developed in St.Petersburg. The St.Petersburg Institute for Linguistic Studies (ILS) is one of the most important Russian centres for the investigation of minority and regional languages in the Russian Federation. Many researchers in this institute have collected sound material and many of these recordings (primary data) are not stored in safe places, whereas the related field notes, manuscripts, card files (secondary data) can be found in the institute or also

in private archives.

Partner in this new project on Endangered Archives has again been the Phonogramm archiv of the Austrian Academy of Sciences. The aim is to re-record the material on sound carriers according to present-day technology (Schüller, 2005) and store them in a safe place together with the meta data, which will be obtained from the related secondary data. The storage facility provided by the project will modernise the possible archiving activities in the Russian Federation and bring them up to date according to present world standards.

The original open reel and cassette tapes have been copied onto hard discs and in the total collection of more than 111 hours (218 GB) of digitized sound material the following languages are represented: Azerbaijani, Balochi, Chagatay, Chatror, Dari (Farsi-Kabuli), Enets, Kati, Kerek, Mendzon, Nenets, Nganasan, Parachi, Pashai, Pashto, Russian, Shugni, Tajik, Udeghe, Vaygali and Wakhi (Vakhan). The data in this digital sound archive provide information about the historical development of these languages and can be used for the purpose of language description, the study of folklore and ethnomusicology. This is in particular the case for many of the endangered minority languages in Russia.

In other parts of Russia similar important collections can be found, not only in established institutions, but many of them are in private hands and often endangered, for example the private collections on Nivkh, which are available in Yuzhno-Sakhalinsk, in Vladivostok, in London and elsewhere. For most of these, it can be said that the quality of preservation is below standard. Following our long-standing collaboration with scholars from Sakhalin, we are also planning to create facilities in Yuzhno-Sakhalinsk for the storage of sound material related to the aboriginal languages of the island. Most important are the above mentioned Nivkh collections, but we should also like to add material on Sakhalin Ainu and Uilta. Of some of these private collections the size is approximately known, but in other cases this first has to be estimated. Within the framework of our project and future new projects, we would like to obtain access to these collections, copy them on modern sound carriers, make a catalogue available and publish part of the material together with the related recordings in St.Petersburg. On Sakhalin and in other parts of Russia, the local scholars will be involved in the preparation of these projects with the support of colleagues in St.Petersburg, Austria, the Netherlands and Japan.

Documenting Endangered Languages

In most parts of the world, speech communities of endangered languages have no or only restricted access to formal education. Even in the other parts very few members of ethnolinguistic minorities are trained linguists. For that reason, the documentation of endangered languages involves the speakers of such languages together with the documenting linguists. Furthermore, various aspects of the research setting need to be taken into consideration. Different types and possible levels of language documentation are often determined by non-linguistic considerations. These conditions include, among other things, the availability of funding for equipment, the logistics of the fieldwork situation (accessibility, security), and the familiarity of field workers with audiovisual technology, etc.

In the spirit of gathering encyclopedic knowledge, as was one of the characteristics of 18th century enlightenment, short word lists of unwritten languages were compiled all over the world during that era. These wordlists are often the sole sources of any information about the language, and are therefore very valuable, despite the inconsistencies in spelling, the lack of analysis of the language's sound system and, of course, the absence of knowledge of its grammatical structure. Some long word lists and grammatical sketches of vanishing languages, collected by travelers and interested amateur philologists, exist in various archives, in Europe and elsewhere. These important sources call for being evaluated and the language data should be made publicly available by putting them onto the World Wide Web.

The Witsen project could serve as an example for such a dissemination effort of linguistic data from historic sources. The project investigates the minor communities of Northeast Asia, their history, natural environment, culture, language and their way of life. It has been triggered mainly by the book "Noord en Oost Tartarije" of the Amsterdam Mayor Nicolaas Witsen (Witsen, 1705). In this book Witsen gives many details on the peoples of Siberia, their languages and cultures, and he provides the first maps of this part of the world. For many of the Siberian languages, for example for Yakut and Tungus, word lists are provided. The fact that this book is written in 17th century, Dutch makes it difficult for readers in Russia to get access to the interesting material it contains, such as the linguistic data on various languages. A few years ago, a group of Dutch scholars began preparing a Russian edition of this work. It has already been translated into Russian and is now being supplemented with comments and annotations by specialists on all details contained in the book. For the historical data

about the peoples in the border areas of Russia with Japan and China and their languages, these data are very valuable (De Graaf and Naarden, 2007).

Only during the 19th and 20th centuries, did reliable and complete grammatical descriptions become available, often combined with dictionaries and text collections. At present these descriptive grammars are the main source of our knowledge of endangered and extinct languages. Much current work is a direct continuation of the tradition which originated in the 19th century, and it produces grammars, dictionaries, as well as more theoretical analyses. Fieldwork is considered the essential part in documenting endangered languages. The 20th century has brought the technological innovation of sound carriers, complemented by video. Languages can be recorded in better quality and the communicative interactions can be captured on film. The possibility of recording interactions has not only enriched our knowledge of grammar, morphology, lexicon, etc., but it also allows for a systematic description of patterns of interactive language use. Materials locked up in sound archives, museum collections and libraries, such as for Nivkh mentioned above, need to be made publicly available, as they can be employed not only to study extinct languages, but also to possibly revive them. In the projects described in the foregoing sections, new technologies have been introduced which can also help preserve language documents and make old materials accessible on new data carriers and available for further research.

Information technology allows for combining different types of information (texts, recordings, visual material) into integrated documentation systems. One of the initiatives which utilizes modern technologies for language documentation is the DOBES project (DOKumentation BEDrohter Sprachen), carried out at the Max Planck Institute in Nijmegen (the Netherlands). This project aims at documenting selected endangered languages according to current scientific standards, but also in a way which allows the analysis of the data. The project attempts to define linguistic and technological standards for the documentation of so far unrecorded language that may also be applied by other scholars working in this field.

The DOBES project is one of several current worldwide initiatives that has supported the documentation of endangered languages and—in doing so—help to safeguard an essential part of human cultural heritage. Other programs are the Hans Rausing Endangered Languages Project at the London School of Oriental and African Studies (Austin, 2002, 2004), the Japanese project on the Endangered Languages of the Pacific Rim (ELPR) and the special programme of the Netherlands Organization for Scientific Research NWO.

Established in 1995, the Foundation for Endangered Languages (FEL) supports, enables and assists the documentation, protection and promotion of endangered languages (see www.ogmios.org). The preamble of the FEL summarizes its objectives as follows: (i) to raise awareness concerning endangered languages, both inside and outside the communities where they are spoken, through all channels and media; (ii) to support the use of endangered languages in all contexts: at home, in education, in the media, and in social, cultural and economic life; (iii) to monitor linguistic policies and practices, and to seek to influence the appropriate authorities where necessary; (iv) to support the documentation of endangered languages, by offering financial assistance, training, or facilities for the publication of results; (v) to collect and make available information of use in the preservation of endangered languages; and (vi) to disseminate information on all of the above activities as widely as possible.

Many European countries of the Council of Europe have ratified the European Charter for Regional or Minority Languages. This Charter has been put forward not only to foster a greater unity between its member states, but also to help European minorities to develop and maintain their heritage languages. Within the European Union (EU), several initiatives have been established in accordance with the principles of this Charter. The European Bureau for Lesser-Used Languages (EBLUL) is a Non-Governmental Organization (NGO) that promotes languages and language diversity in Europe. In addition to the Member State Committees (MSCs), the Mercator Network of three research and documentation centers has been set up. The Mercator-European Research Centre on Multilingualism and Language Learning at the Fryske Akademy should be mentioned here as an institution, which conducts and publishes studies on various questions concerning education for minority speech communities and in minority languages..

Language Maintenance and Revitalization

Maintaining language diversity requires not only the speakers themselves, but also the involvement of linguists, language planners and policy makers. Akira Yamamoto (one of the leading scholars and a committed promoter of fostering the use of endangered languages in the United States) has quite rightly been being demanded for many years that “research in endangered language communities must be reciprocal and collaborative”. Only in working together with the communities are linguists able to contribute to the safeguarding of endangered languages.

Many members of minority communities no longer care for their heritage

languages and linguists often find it difficult to accept this fact. Nevertheless, it is only at the request of the speakers that linguists can assist ethno-linguistic minorities in fostering their threatened languages in meaningful ways. As a first step oral languages need to be analyzed and documented. For this purpose the development of a practical writing system is one of the basic requirements for language documentation and maintenance activities. Linguists may support communities in the development of teaching and learning materials, as well as in teacher training. And finally, members of the speech community might even be trained to become researchers and linguists themselves.

Discussions on the future of their ancestral languages are far more complicated, and quite diverse opinions are expressed by members of ethno-linguistic communities. Those speaking endangered languages often consider their own language to be backward and not functional either for themselves or for future generations. Other communities, however, experience threats to their languages as a crisis and commit themselves to language revitalization activities. They establish environments, such as kindergartens, in which their languages are spoken exclusively in order to stabilize their mother languages among the young generation. Still, an increasing number of ethno-linguistic minorities want more. Many of their members demand control over the terms and conditions which govern research. Also, they further claim rights on research outcomes, and they wish to have a say on how research results should be used and disseminated.

In the educational sector, quite a number of linguists are engaged in implementing mother tongue education programmes to safeguard ancestral languages. Mother tongue education has become more popular in most parts of the world over the past 15 years, and since 1953 UNESCO has been instrumental in this development through its policy statements and related activities. Looking at endangered languages, however, we find that in many Asian and African countries, so-called “mother tongue education” does not refer to the ancestral languages of ethno-linguistic minorities, but to the use of local, provincial, and national dominant languages as the media of instruction. Less than 10% of the approximately 2,000 African languages are currently employed as the medium of instruction in the educational sector, without a single endangered language among them. “Mother tongue education” in many cases further cements the position of languages which spread at the expense of endangered languages. As linguists, we are obliged to support any attempt to use African languages in formal education, but with that we may involuntarily help to threaten the languages of ethno-linguistic minorities, which are

not included among the media employed in “mother tongue education”.

As we have described in the foregoing parts of this review, in a joint effort researchers from Russia and the Netherlands analyze data from audio archives and at the same time apply modern fieldwork techniques in studying endangered languages such as Nivkh, Nenets and Yukagir. The results are language descriptions, grammars, dictionaries and edited collections of oral and written literature on and in these languages. In seminars, the use of these learning and teaching materials within the modern facilities of information technology is passed on to local teachers. Formal language teaching of former mother tongues is directed to those younger members of the communities who have not learned their native language informally at home. Special methods for teaching the former mother tongue as a foreign language have to be applied. Selected parts of the acoustic databases used for these projects are available on the Internet and provide an opportunity for the exchange of information on these languages with institutions from other parts of the world.

Conclusion

Proficiency in nationally and internationally dominant languages will gain importance throughout the world and, for that reason, will continue to spread. This development does not necessarily require the sacrifice of other languages, i.e. mother tongues of ethno-linguistic minorities, since most societies have always been multilingual. However, speakers might decide to abandon their low prestige ethnic tongue for the benefit of social mobility and career opportunities. In these situations, ancestral languages can only survive in the long run if meaningful roles for them can be established in the lives of the community members. Ultimately, in order to maintain and perpetuate the world’s language diversity, these speakers have to find good reasons for keeping their ancestral language alive in natural everyday communication with their offspring.

The world faces new challenges in keeping its languages alive and well. It is time for the peoples of the world to pool their resources and build on the strengths of their linguistic and cultural diversity. This entails pooling the resources at all levels: individual language specialists, local speaker community, NGOs, and governmental and institutional organizations.

At the local community level and over the past several decades, for example, many people have been working to develop language education programmes, usually with extremely limited technical resources. Unlike teachers of major languages of the

world, they lack not only formal training in language teaching, now often required by local governments, but also language curricula and, even more crucially, usable basic language descriptions. The Mercator European Research Centre has the intention to be instrumental in co-ordinating these activities. It will be important to exchange ideas with similar institutes in other parts of the world, such as in China. Together we shall be able to develop an effective and viable strategy for sustaining the world's endangered languages.

References

- Asakura, T. et al. (1986), *Reproduction of sound from old wax phonograph cylinders using the laser-beam reflection method*. Applied Optics, vol.25, no. 5, pp.597–604.
- Austin, Peter K. (ed.) (2002 and 2004), *Language Documentation and Description*. The Hans Rausing Endangered Languages Project, SOAS, London. (Vols. 1 and 2).
- Burykin, A., A. Girfanova, A. Kastrov, I. Marchenko and N. Svetozarova (2005), *Kolleksii narodov severa v fonogrammarxive pushkinskogo doma*. (Collections on the peoples of the North in the phonogram archive of the Pushkinski Dom). Faculty of Philology, University of St.Petersburg.
- De Graaf, T. (1992), small languages and small language communities: news, notes, and comments. *The languages of Sakhalin*. In: International Journal of the Sociology of Languages 94, pp. 185–200.
- De Graaf, T. (1997), *The reconstruction of acoustic data and the study of language minorities in Russia*; in: Language Minorities and Minority Languages. Gdansk: Wydawnictwo Uniwersytetu Gdanskiego, pp 131–143.
- De Graaf, T. (2001), *Data on the languages of Russia from historical documents, sound archives and fieldwork expeditions* In: Murasaki, K. (red.) Recording and Restoration of Minority Languages, Sakhalin Ainu and Nivkh, ELPR report, Japan, pp. 13–37.
- De Graaf, T. (2002a), *The Use of Acoustic Databases and Fieldwork for the Study of the Endangered Languages of Russia*. Conference Handbook on Endangered Languages, Kyoto. Proceedings of the Kyoto ELPR Conference, pp. 57–79.
- De Graaf, T. (2002b), *Phonetic Aspects of the Frisian Language and the Use of Sound Archives*. In: Problemy i metody eksperimental'no-foneticheskikh issledovaniy. St.Petersburg, pp. 52–57.
- De Graaf, T. (2002c), *The Use of Sound Archives in the Study of Endangered Languages*. In: Music Archiving in the World, Papers Presented at the Conference on the Occasion of the 100th Anniversary of the Berlin Phonogramm-Archiv, Berlin, pp. 101–107.
- De Graaf, T.(2004a), *Voices from Tundra and Taiga: Endangered Languages of Russia on the Internet*. In: Sakiyama, O and Endo, F (eds.) Lectures on Endangered Languages: 5 — Endangered

- Languages of the Pacific Rim C005, Suita, Osaka, pp. 143–169.
- De Graaf, T. (2004b), *The Status of Endangered Languages in the Border Areas of Japan and Russia*. In: Argenter, J A and McKenna Brown, R (eds.) *On the Margins of Nations: Endangered Languages and Linguistic Rights*. Proceedings of the Eighth Conference of the Foundation for Endangered Languages, Barcelona, pp. 153–159.
- De Graaf, T., Kleiner, Yu. And Svetozarova, N. (2004), *Yiddish in St.Petersburg: The Last Sounds of a Language*. Proceedings of the Conference “Klezmer, Klassik, jiddisches Lied. Jüdische Musik-Kultur in Osteuropa.” Wiesbaden, Harrassowitz Verlag, pp. 205–221.
- De Graaf, T. (2005), *Dutch in the Step? The Plautdiitsch Language of the Siberian Mennonites and their Relation with the Netherlands, Germany and Russia*. In: Crawhall, N. and Ostler, N. (eds.): *Creating Outsiders. Endangered Languages, Migration and Marginalisation*. Proceedings of the IXth Conference of the Foundation for Endangered Languages, Stellenbosch, 18–20 November 2005: 32–31.
- De Graaf, T. and H. Shiraishi 2004. *Capacity Building for some Endangered Languages of Russia: Voices from Tundra and Taiga*. In: *Language Documentation and Description, Volume 2, The Hans Rausing Endangered Languages Project, School of Oriental and African Studies, London*, pp. 15–26.
- De Graaf, T. and B. Naarden. (2007), *Description of the Border Areas of Russia with Japan and Their Inhabitants* in *Witsen’s North and East Tartary*. *Acta Slavica Iaponica*, Tomus 24, 2005: 220.
- Grenoble, Lenore A. and Lindsay J. Whaley (2006) *Saving Languages. An Introduction to Language Revitalization*. Cambridge: Cambridge University Press. [A general reference guide to language revitalization, not only for linguists and anthropologists, but also for language activists and community members].
- Gruzdeva, E. (1998), *Nivkh*. München: Lincom Europa.
- Hinton, Leanne (1994), *Flutes of Fire. Essays on California Indian languages*. Berkeley, California: Heyday Books. [Articles on the revitalization of California Indian languages and on workshops organized with members of the speech communities].
- Matsumura, Kazuto (ed) (1998) *Studies in Endangered Languages*. Papers from the international symposium on endangered languages, Tokyo, November 18–20, 1995. Tokyo: Hituzi Syobo.
- Murasaki, K. (2001), *Tuytah: Asai Take kojutsu, Karafuto Ainu no mukashi banashi (Old stories of the Sakhalin Ainu)*. Tokyo: Sofukan.
- Schüller, D. (Ed.) (2005), *The Safeguarding of the Audio Heritage: Ethics, Principles and Preservation Strategy* (IASA Technical Committee — Standards, Recommended Practices and Strategies, IASA-TC 03).
- Shiraishi, H. and G. Lok. (2002, 2003), *Sound Materials of the Nivkh Language 1 and 2*. ELPR

Publications A2–15 and 36.

Shiraishi, H. and G. Lok (2004), *Sound Materials of the Nivkh Language* 3. Publication of the International NWO project “Voices from Tundra and Taiga”, University of Groningen.

Shiraishi, H. (2006), *Topics in Nivkh Phonology*. Dissertation at Groningen University, September 2006: 177.

Taksami, Ch.M., Pukhta, M.N., Vingun, A.M. (1982), *Nivkhgu bukvar* '. Leningrad: Prosveshchenie.

Tamura, S. (2000), *The Ainu Language*. Tokyo: Sanseido.

Witsen, N. (1705), *Noord en Oost Tartarye, ofte bondig ontwerp van eenige dier landen en volken, welke voormaels bekent zijn geweest*. Amsterdam: Halma.

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Language Policy, Endangered Languages Research and Teaching Experience in the Russian Federation

Ljubov Radnaeva

Abstract: The work of the Research Group “Languages of the Peoples of Russia” at the Institute for Philology of St.Petersburg State University, is devoted to language research and the study of minority languages in the Russian Federation. A large number of these languages are on the list of the UNESCO Red Book of Endangered Languages. The main aim of the Research Group is a phonetic and phonological study and documentation of these languages, and the development of language teaching resources. This report presents some information on the legal background of the Russian language policy and the author’s linguistic research and teaching experience with the endangered languages Buryat, Evenk, Saami, Khanty, Mansi and Nivkh. From 2001 until 2009, the author visited various places in the Russian Federation and China where these languages are spoken, from the Kola Peninsula in the west to Sakhalin island in the east. During fieldwork, the author collected linguistic materials and conducted phonetic seminars on the study of speech sounds of the languages mentioned and on the use of information technology in language teaching.

Key words: language policy, endangered languages of Russia, language revitalisation

Language Policy in the Russian Federation

According to the 2002 census, the population of the Russian Federation consists of 142.4 million people. In addition to the Russians (79.8%), there are more than 180 other nationalities, which speak more than 100 languages and dialects belonging to the Indo-European, Altaic, and Ural language families, the Caucasian and Paleo-Siberian language groups. The official language of Russia is Russian, which is used as a

language of interethnic communication.

The preservation and development of the languages of the peoples of Russia, and the development of writing systems in the languages of many small indigenous peoples was an important goal and task in Russia during several periods of the 20th century. The change in the political and economic life of Russian society and the development of a democratic basis of Russian statehood since 1990 has again provided a growing role for national and cultural factors. Among these factors, language is a very important one for determining ethnic identity.

The 1990s saw many efforts at the federal level and in the separate republics of the Russian Federation for the creation of language legislation. This was developed for the regulation of language use at various levels, the role of the native languages and the development of ethnic education and culture.

Article 68 of the Russian Federation Constitution says that:

1. The Russian language shall be the state language of the Russian Federation on its whole territory.
2. The republics that form part of the Russian Federation have the right to develop their own state languages. These languages shall be used alongside Russian by their authorities, local governments, and public offices.
3. The Russian Federation shall guarantee to all its citizens the right to maintain their native language and conditions for its study and development.

Minority and regional languages in Russia are proclaimed by the Law of the Russian Federation "About languages of the peoples of the Russian Federation" (25 October 1991, No. 1807-1) belong to the national wealth and property of the country. The elaboration of Laws on Languages in present-day Russia is closely connected with the solution of the global problem on preservation, development and research of the languages of the peoples of Russia and above all the languages of minorities of the country.

In this way the language rights of the peoples of the Russian Federation are officially guaranteed by the Constitution of the Russian Federation. Each person has the right to use his or her native language and to choose freely his or her language for communication and education. Principals of the language policy in the Russian Federation are not only proclaimed in the Constitution of the Russian Federation and the Law "About the State Language of the Russian Federation" (June 2005) but also by various Laws of the several Republics of the Russian Federation.

Since 1990 the following laws have been adopted:

Federal Law “About the State Language of the Russian Federation” (1 June 2005, No. 53);

Law of the Chuvash Republic: “About Languages in the Chuvash Republic” (27 October 1990);

Law of the Tyva Republic: “About the Languages in the Tyva Republic” (14 December 1990);

Law of the Kalmyk Republic: “About the Languages in the Kalmyk Republic” (30 January 1991);

Law of the Buryat Republic: “About the Languages of Peoples of the Republic of Buryatia” (10 June 1992);

Law of the Komi Republic: “About the State Languages of the Republic of Komi” (11 June 1992);

Law of the Republic of Tatarstan: “About the Languages of the Peoples of the Republic of Tatarstan” (8 July 1992);

Law of the Republic of Khakasiya: “About the Languages of the Peoples of the Republic of Khakasiya” (3 November 1992);

Law of the Republic of Sakha (Yakutiya): “About the Languages in the Republic of Sakha (Yakutiya)” (5 November 1992);

Law of the Republic of Altai: “About Languages” (3 March 1993);

Law of the Republic of Adygeia: “About the Languages of the Peoples of the Republic of Adygeia” (31 March 1994);

Law of the Kabardin-Balkar Republic: “About the Languages of the Peoples of the Kabardin-Balkar Republic” (16 January 1995);

Law of the Republic of Mari El: “About the Languages in the Republic Mari El” (26 October 1995);

Law of the Karachaevo-Cherkes Republic: “About the Languages of the Peoples in the Karachaevo-Cherkes Republic” (14 June 1996);

Law of the Republic of Ingushetiya: “About the State Languages of the Republic of Ingushetiya” (16 August 1996).

As a general rule, the official languages of a republic will be Russian and the state language of the title nationality that has given its name to the republic, even though this title nation may not represent an ethnic majority in the republic. In several republics, two or more languages in use inside the republic are recognised as state languages. For example, in Kabardino-Balkaria, two more languages in addition to Russian have official status — Kabardian and Balkar; in Dagestan, this is the case for all the

languages of its constituent nations. The introduction of their own official languages provides for the respective republics an obligation to create conditions for language learning. In this way the lack of knowledge of a language will not play a discriminatory role in employment, education, use of benefits of culture, etc.

Give an example: the Law on the Languages of the Peoples of the Republic of Buryatia contains a provision under which anyone wishing to learn the Buryat language is guaranteed the teaching of the language to the level consistent with his/her job. The law states that the texts of republic-wide laws shall be published both in Buryat and Russian and shall have equal legal force. The two languages, Buryat and Russian, are used to print voting papers and in judicial procedure. Documents and resolutions are prepared by local authorities in either Russian or Buryat depending on the composition of the population.

In spite of the regulations in the Federal Law on Languages and other laws, the situation of the majority of the languages of Russia is gradually becoming worse due to various causes, such as the advance of globalization. As a result, many of these languages are becoming less used in every day life, the number of children learning regional and minority languages is declining, and many of these languages have reached the edge of extinction. As a result, our society faces the threat of a global linguistic problem: the total disappearance of languages of minorities, especially of the spoken varieties of these languages. There is an urgent need for the documentation of these endangered languages, for their linguistic description, and for the development of teaching language resources.

Endangered Languages Research

In St. Petersburg, the Research Group “Languages of the Peoples of Russia” exists to support, enable and assist the documentation, protection and development of endangered languages. The aim of the activities of this Research Group is the creation of a scientific database of sound archives in order to collect, structure and describe the sound materials of various language families and groups.

The main goals of the Research Group are the following:

Documentation of speech sounds of endangered languages for future generations;

Collection of representative sound materials for linguistic research;

Development of reference books and multimedia educational resources.

The aim of our work is the preparation of multimedia teaching materials for the endangered languages, which will stimulate people to study their native language. The

multimedia teaching materials developed by the Research Group have been introduced in schools and applied at scientific seminars. The results have been evaluated and the materials are now used as a new approach to the learning of minority languages.

In St Petersburg, Dr Alexander Asinovsky conducts a Research Group 'Peliken' which is devoted to the protection and study of minority languages of Russia. Information about this seminar can be found at the internet address www.peliken.iphil.ru.

In 2005, the Research Group created a system to describe minority languages. This work was supported by the Russian Humanitarian Fund (grant No. 03-04-00021a). It was used for the documentation of the Itelmen, Kerek and Chukchi languages on three CDs with a database of texts for the Kerek language, the Itelmen language, the Chukchi language.

Spontaneous speech and the reading of prepared texts is collected for (ethno) linguistic as well as for anthropological, folkloristic and ethno-musicological analysis. These data are (video)recorded and analysed and they will thus illustrate the art of story telling and language use. The above described texts will be published in scientific journals and books with audiovisual illustrations on CD-ROM and/or on the internet. The materials will thus become available for further analysis to scholars working in the field of phonetics, linguistics, anthropology, history, ethno-musicology and folklore.

For the Nenets community, the research group in St. Petersburg has developed a phrasebook where Russian phrases for everyday use are translated into the three main dialects of Nenets. It is possible to listen via the internet to spoken Nenets and to make a choice which dialect one should like to hear. Thus difficult problems related to the standardisation of the language (e.g. a common writing system for different dialects) can be solved on the basis of extensive material obtained from archives and fieldwork. Similar problems have to be considered for other parts of the Russian Federation.

Under supervision of Marina Lublinskaja and Tatjana Sherstinova, the Research Group developed several other multimedia databases and on-line dictionaries with financial support from Russian and foreign funds. More information can be found at the internet address www.speech.nw.ru.

In recent years, under supervision of the author, the Research Group developed a phonetic and phonological description of the Buryat language. This work has been supported by the Russian Humanitarian Fund (grant No 03-04-12009B). The author conducted seminars on Khanty, Mansi, Buryat, Nivkh, Evenk and Saami for teachers and students of these minority languages in their region.

Seminars on Teaching Experience

The Research Group aims at phonetic and phonological study and documentation of endangered languages and at the development of language teaching resources by means of special seminars with the support of native speakers. During these seminars native speakers assist with the documentation of their languages and language data are collected and analysed.

From 2001 until 2009, the author visited various places in the Russian Federation and China where these languages are spoken, from the Kola Peninsula in the west to Sakhalin island in the east. She conducted phonetic seminars on the study of speech sounds of some endangered languages, such as Buryat, Evenk, Saami, Khanty, Mansi and Nivkh, and on the use of information technology in language teaching. During fieldwork the author collected data at the following locations:

Khanty-Mansiysk

In March 2003 a Phonetic Seminar was conducted by Professor Liya Bondarko (Department of Phonetics and Methods of Teaching Foreign Languages), St. Petersburg, and by the author at the Scientific Institute of Ugrovedeniya (Khanty-Mansi Autonomous Okrug, Tyumen Region, Russia) in Khanty-Mansiysk. The subjects of the seminar were principles of the analysis and transcription of language material; acoustic databases as a form of storage, preservation and study of languages.

The seminar united 53 native Khanty people: Khanty language teachers from schools, colleges and the university, journalists, and researchers of the Scientific Institute of Ugrovedeniya. During the seminar the phonetic system of the Khanty language and problems of its graphic presentation were discussed.

In September–October 2004, following Phonetic Seminar was held for native Khanty and Mansi researchers at the Scientific Institute of Ugrovedeniya (Khanty-Mansiysk, Tyumen Region, Russia) by the author and by PhD student Anna Dmitriyeva. The subject of the seminar was “An experimental analysis of the phonetic system of the Khanty language”.

Ulan Ude

From 2004–2007, four Phonetic Seminars were conducted by the author on the Buryat and Evenk languages at the Buryat State University in Ulan Ude, Buryat Republic, Russia. She reported on her research related to the Buryat language and collected new data. Topics of the seminars were the same as in the foregoing.

Murmansk Region

In 2005, 2006 and 2007 similar phonetic seminars on the Saami language were conducted by the author and by PhD. students Mariya Pupynina and Maria Valderramo Salgado. They worked at a school and at the Saami Center in the village of Lovozero, Murmansk Region and the city of Apatity, Russia.

Yuzhno-Sakhalisk

The Seminar in Yuzhno-Sakhalinsk, October 2003, was financially supported by the Program “Voices from Tundra and Taiga” of the Netherlands National Science Foundation NWO and Sakhalin Energy Ltd. During this seminar, in introductory classes of phonetics and linguistic fieldwork, teachers from St Petersburg, Groningen and Leiden University (The Netherlands) explained how to study the sound system (Tjeerd de Graaf and the author) and the intonation (Cecilia Odé) of the Nivkh language using modern technology and computer programmes for speech processing. Native speakers and teachers participated in practical exercises. Lectures were given, among others, by the famous Nivkh writer Vladimir Sangi. The Seminar was considered a good example of how to go about stimulating native speakers to do linguistic fieldwork, how to describe the collected data, and how to teach their native language in schools and at home.

Nantun (Inner Mongolia)

The seminar in the North of China in Evenk Khoshun in April 2009, was supported by the Buryat State University. The Evenk language teacher Elizaveta Afanasjeva, the PhD students Saruna Gomboeva and Natalia Malchakitova and the author collected linguistic data from the local Evenk language speakers and conducted a seminar at the Evenk Center.

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Endangered Languages Documentation and Description: Should these Activities be Separated?*

Olga Kazakevich

Abstract: The chapter presents some results of a series of projects on language documentation and description realized at the Laboratory for Computational Lexicography, Computer Research Centre, Lomonosov Moscow State University, in 1996–2010 with financial support from Russian Foundation for Basic Studies, Russian Foundation for the Humanities and Open Society Research Support Foundation. We have been working with local dialects of three contacting Siberian languages: Selkup, Ket and Evenki, which are all severely endangered. Sharing our experience of the fieldwork in the situation of language shift and of the processing of the collected data for computer archiving, we argue that though theoretically in the last decade a demarcating line is drawn between language documentation and language description, in practice these two processes always go side by side. and cannot (and to our understanding should not) be separated.

Keywords: language endangerment, language documentation, language description, local dialect, linguistic data, sociolinguistic data, traditional and modern culture

1. Introduction

Documentation and description of endangered languages of Siberia is one of the research branches of Laboratory for Computational Lexicography of Research Computer Centre, Lomonosov Moscow State University. This branch is being developed in the Laboratory since 1987. At that time the project aimed at creating a full text

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computer database of Selkup was launched. This project (along with the project of creation of a computer database of the Chukot-Kamchatka languages at the Institute of Linguistic Studies in Saint Petersburg) marked the beginning of the use of computers in researches into non-written and new-written languages of Russia (Kazakevich, 1990).

Since then a series of projects were realized, which were aimed at documentation and description of endangered languages of Siberia using modern technologies of audio and video recording, as well as at creation of computerized multimedia archives for preserving the collected field data and for providing a convenient access to the data for their future processing, among them “Bi- and Multilingualism and Code Switching Among Indigenous Minority population of the Turukhansk District” (1998–2000) supported by Open Society Research Support Foundation, “Changes of the language of the Northern Selkups in the XXth century” (2001–2003), “A Multimedia Database of Ket” (2004–2006), “The Changing Russia in life stories of the Ket, Selkup, and Evenki” (2007–2009) supported by the Russian Foundation for the Humanities, “Local dialects of the Northern Selkups: a contrastive description and a data base of sound files” (2001–2003), “Interaction of the segmental and supra-segmental levels in the phonetic systems of Siberian languages (a case study of the contacting languages of the Middle Yenisei and adjacent territories)” (2005–2007) supported by Russian Foundation for Basic Researches. Since 2009 we are working at the project “A multimedia marked text corpus of West Evenki Dialects”, which is also supported by Russian Foundation for Basic Researches.

In the framework of these projects on the basis of the Laboratory 18 linguistic expeditions were regularly organized and led to Western and Central Siberia (to the basins of the Middle-Yenisei, the Middle and Upper Taz, the Middle and Upper Ket and the Middle Tym). The subjects to documentation were local dialects of three contacting languages: Selkup (about 500 speakers with 4,249 strong ethnic group), Ket (about 120 speakers, the ethnic group numbers 1,494 people) and Evenki (about 5,000 speakers, the ethnic group numbers 35,527 people) (the ethnic group strength is given according to the Population Census 2002; the number of speakers is our estimation).

These languages are not related genetically: Selkup belongs to the Samoyedic branch of the Uralic languages, Evenki belongs to the Manchu-Tungus group of the Altaic languages and Ket is the only still surviving member of the Yenisei languages. Typologically Selkup and Evenki have quite a lot in common, whereas Ket differs greatly from them, especially in verb morphology. All the three languages have been documented rather extensively (Prokofiev, 1937; Kuznetsova et al. 1980, 1993, 2002;

Kreinovich, 1968; Werner, 1997, 2002; Vasilevich, 1936, 1948, 1958, 1966, 1968; Konstantinova, 1969; Nedjalkov, 1997; Bulatova, Grenoble, 1999), though not evenly as far as their local dialects concerns.

The contacts of the Selkups, Kets and Evenkis have quite a long history: over three centuries, the Selkup–Evenki contacts concerns, over seventeen centuries, as far as the Selkup–Ket contacts concerns, the latter are supposed to start in the South of Siberia well before the Selkups and the Kets moved to their present-day position (Dybo, 2005), and no less than four centuries as far as the Ket–Evenki contacts concerns (Vasilevich, 1969). Since the XVIIth century all the three peoples also have been contacting with the Russians, though up to the XXth century these contacts were mostly sporadic in the North of the area, especially in the Taz basin. Starting from the mid-1920s they were getting regular, and since the 1950s have been growing more and more intense. At present all the Selkups, Kets and Evenkis are fluent in Russian and for many of them Russian is the only language they speak: in all Selkup, Ket and Evenki communities language shift process is at hand.

2. Language Documentation in the situation of language shift

Our fieldwork area covers the whole territory of residence of the Kets (the Turukhansk district and the Evenki municipal district of the Krasnoyarsk territory), the territory of the residence of the Northern Selkups (the Krasnoselkup and the Pur districts of the Yamalo-Nenets autonomous area, Turukhansk district of the Krasnoyarsk territory) and a part of the territory of residence of the Southern Selkups (the Upper-Ket and Kargasok districts of the Tomsk region) and the territory of residence of the Eastern Evenkis (the Turukhansk and Yeniseisk districts and the Evenki municipal district of the Krasnoyarsk territory, the Krasnoselkup districts of the Yamalo-Nenets autonomous area, the Upper-Ket and Kargasok districts of the Tomsk region). We worked in Selkup, Ket and Evenki communities of 38 settlements with the population varying from some tens to several thousands (Table 1).

In 15 settlements the Selkup (three), Ket (four) or Evenki (eight) communities build the bulk of the population. Never the less, in all the settlements, including those where the autochthonous population represents the overwhelming majority, the main means of communication both at home and in the community life is Russian. Even most of elderly people speak much more Russian than Selkup, Ket or Evenki today. Children are able to speak their ancestral language are scares among the Selkups and

Table 1 Surveyed settlements: population, ethnic language (EL) use, ethnic language classes

Settlements, years of fieldwork	Population	Selkup	Ket	Evenki	Others	School / EL classes	Preschool or outside school EL classes
Krasnoselkup district, Yamalo-Nenets autonomous area (data 2002)							
Krasnoselkup 1996, 2002	5 068 100 %	636 12.5 % ab. 150 EL speakers	0	13 0.3 %	4 476 88.3 %	2 secondary schs / Selkup in 1 sch.	Selkup classes in 1 of the 3 village kindergartens sporadically
Tolka, Krasnoselkup district 1996	3 820 100 %	512 13.4 % ab. 110 EL speakers	0	15 0.4 %	3 293 86.2 %	Secondary sch. / Selkup	Selkup classes in 1 of the 2 village kindergartens sporadically
Ratta 1996, 2002	241 100 %	149 61.8 % ab. 120 EL speakers, children among them	1 0.4 % No EL speaker	30 12.4 % No EL speakers	61 25.4 %	8-grades sch. / Selkup	No EL classes outside school
Pur district, Yamalo-Nenets autonomous area (data 2001)							
Tarko-Sale 2000, 2001, 2009	14 000 100 %	174 1.2 % ab. 40 EL speakers	0	0	13 826 98.8 %	2 secondary (1 boarding) schs / Selkup in board sch.	No EL classes outside school
Tolka, Pur district 2000, 2001	103 100 %	97 94 % ab. 90 EL speakers, children among them	0	0	6 6 %	No school	No EL classes

(To be continued)

Table 1 Surveyed settlements: population, ethnic language (EL) use, ethnic language classes (continued)

Settlements, years of fieldwork	Population	Selkup	Ket	Evenki	Others	School / EL classes	Preschool or outside school EL classes
Turukhansk district, Krasnoyarsk territory (data 2003-2006)							
Turukhansk 1998, 1999, 2003, 2006	5 081 100 %	47 0.93 % ab. 20 EL speakers	125 2.46 % ab. 30 EL speakers	29 0.57 % ab. 15 EL speakers	4 880 96.04 %	2 secondary & 1 primary schs / No EL classes	Ket classes in children's home in the 1990s sporadically
Farkovo 1999, 2003	327 100 %	246 75.23 % ab. 50 EL speakers	19 5.81 % No EL speakers	4 1.22 % 2 EL speakers	58 17.74 %	Secondary sch. / Selkup	Selkup classes in the village kindergarten in the 1990s sporadically
Sovetskaya Rechka 1998, 2006	166 100 %	34 20.5 % 5 EL speakers	3 1.8 % No EL speakers	115 69.3 % ab. 90 EL speakers, children among them	14 8.4 %	Primary sch. / Evenki sporadically	No EL classes outside school
Baklanikha 1999, 2003	43 100 %	2 4.65 % 2 EL speakers	23 53.49 % ab. 10 EL speakers	2 4.65 %	16 37.21 %	Primary sch. / Ket sporadically	Ket classes in the village kindergarten sporadically
Vereshiagino 1999, 2003	201 100 %	0	28 13.93 % ab. 10 EL speakers	0	173 86.07 %	Secondary sch. / Ket sporadically	No EL classes outside school

(To be continued)

Table 1 Surveyed settlements: population, ethnic language (EL) use, ethnic language classes (continued)

Settlements, years of fieldwork	Population	Selkup	Ket	Evenki	Others	School / EL classes	Preschool or outside school EL classes
Surgutikha 1999, 2005	192 100 %	3 1.56 % 3 EL speakers	44 22.92 % 15 EL speakers	1 0.52 % No EL speaker	144 75 %	Secondary sch. / Ket sporadically	Ket classes in the village kindergarten sporadically
Kellog 1993, 2005, 2009	336 100 %	8 2.38 % 2 EL speakers	233 69.35 % ab. 70 EL speakers	0	95 28.27 %	Secondary sch. / Ket	Ket classes in the village kindergarten sporadically
Goroshikha 2003	123 100 %	3 2.44 %	39 31.71 % ab. 6 EL speakers	3 2.44 % 3 EL speakers	78 63.41 %	9-grades sch. / Ket sporadically	No EL classes outside school
Maduika 2006	79 100 %	0	65 82 % ab. 15 EL speakers	3 4 % No EL speakers	11 14 %	No school	No EL classes
Verkhneimbatsk 1993, 2009	614 100 %	0	31 5 % ab. 12 EL speakers	3 0.5 % 1 EL speaker	580 94.5 %	Secondary sch. / No EL classes	No EL classes
Bor 2006	2 635 100 %	7 0.27 %	65 2.47 % ab. 20 EL speakers	16 0.60 % No EL speakers	2 547 96.66 %	Secondary sch. / No EL classes	Ket classes in the Centre for ethnic cultures sporadically

(To be continued)

Table 1 Surveyed settlements: population, ethnic language (EL) use, ethnic language classes (continued)

Settlements, years of fieldwork	Population	Selkup	Ket	Evenki	Others	School / EL classes	Preschool or outside school EL classes
Yeniseisk district, Krasnoyarsk territory (data 2009)							
Sym 2009	140 100 %	0	17 12.1 % No EL speakers	22 15.7 % ab. 5-6 EL speakers	101 72.2 %	Primary sch. / No EL classes	No EL classes outside school
Yartsevo 2009	1 700 100 %	0	10 0.6 % No EL speakers	12 0.7 % 1 EL speakers	1 678 98.7 %	Secondary sch. / No EL classes	No EL classes outside school
Evenki municipal district, Krasnoyarsk territory (data 2005-2008)							
Sulomai 2004, 2006	202 100 %	0	153 75.7 % ab. 14 EL speakers	8 4 %	41 20.3 %	5-grads sch. / Ket	No EL classes outside school
Baikit 2004, 2005	4 237 100 %	0	29 0.68 % No EL speakers	423 9.98 % ab. 100 EL speakers	3 785 89.34 %	Secondary sch. / Evenki	No EL classes outside school
Surinda 2005	514 100 %	0	0	451 87.7 % ab. 300 EL speakers	63 12.3 %	9-grades sch. / Evenki	Evenki classes in the village kindergarten sporadically

(To be continued)

Table 1 Surveyed settlements: population, ethnic language (EL) use, ethnic language classes (continued)

Settlements, years of fieldwork	Population	Selkup	Ket	Evenki	Others	School / EL classes	Preschool or outside school EL classes
Poligus 2005	413 100 %	0	3 0.48 % No EL speakers	262 63.44 % ab. 100 EL speakers	149 36.08 %	9-grades sch. / Evenki	Evenki classes in the village kindergarten sporadically
Tura 2007, 2008	5 616 100 %	0	21 0.1 % No EL speakers	1 079 19.2 % ab. 150 EL speakers	4 530 80.7 %	2 secondary (1 boarding) & 1 primary sch. / Evenki in board. sch	Evenki classes in the boarding school out of the school curriculum sporadically
Chirinda 2007	278 100 %	0	0	225 81 % ab. 100 EL speakers	53 19 %	Primary sch. / Evenki	Evenki classes in the village kindergarten sporadically
Ekonda 2007	335 100 %	0	0	313 93 % ab. 170 EL speakers	22 7 %	Primary sch. / Evenki	Evenki classes in the village kindergarten sporadically
Tutonchany 2008	298 100 %	0	0	156 52 % ab. 45 EL speakers	142 48 %	Secondary sch. / Evenki	Evenki classes in the village kindergarten sporadically
Kislolan 2008	193 100 %	0	1 0.5 % No EL speakers	118 61 % ab. 25 EL speakers	74 38.5 %	9-grades sch. / Evenki	Evenki classes in the village kindergarten sporadically

(To be continued)

Table 1 Surveyed settlements: population, ethnic language (EL) use, ethnic language classes (continued)

Settlements, years of fieldwork	Population	Selkup	Ket	Evenki	Others	School / EL classes	Preschool or outside school EL classes
Vanavara 2007	3 302 100 %	0	0	315 10 % ab. 40 EL speakers	2 987 90 %	Secondary sch. / Evenki	Evenki classes in the children's home (for nursery group)
Strelka-Chunia 2007	202 100 %	0	0	94 46.5 % 25 EL speakers	108 53.5 %	9-grades sch / Evenki sporadically	Evenki classes in the village kindergarten sporadically
Mutorai 2007	79 100 %	0	0	41 52 % 10 EL speakers	8 274 48 %	Secondary sch / Evenki sporadically	No EL classes outside school
Upper-Ket district, Tomsk region (data 2010)							
Belyi Yar 2010	8 443 100 %	152 1.8 % No EL speakers	1 0.01 % No EL speaker	17 0.2 % 2 EL speakers	8 274 98 %	2 secondary sch. / No EL classes	No EL classes outside school
Stepanovka 2010	2 353 100 %	95 4 % 1 EL full-speaker, one half-speaker	0	14 0.63 % 2 EL half-speakers	2 244 95.37 %	Secondary sch. / No EL classes	No EL classes outside school

(To be continued)

Table 1 Surveyed settlements: population, ethnic language (EL) use, ethnic language classes (continued)

Settlements, years of fieldwork	Population	Selkup	Ket	Evenki	Others	School / EL classes	Preschool or outside school EL classes
Centralnyi 2010	382 100 %	2 0.5 %	0	9 2.4 % 3 EL half-speakers	371 97.1 %	9-grades sch. / No EL classes	No EL classes outside school
Kataiga 2010	1 801 100 %	60 3.3 % 1 EL full-speaker	6 0.3 % No EL speakers	23 1.3 % No EL speakers	1 712 95.1 %	Secondary sch. / No EL classes	No EL classes outside school
Kargasok district, Tomsk region (data 2010)							
Kargasok 2010	9 673 100 %	372 3.8 % No EL speakers	0	10 0.1 % No EL speakers	9 291 96.1 %	Secondary sch. / No EL classes	No EL classes outside school
Novoyugino 2010	630 100 %	32 5 % No EL speakers	0	0	569 95 %	Secondary sch. / No EL classes	No EL classes outside school
Napas 2010	302 100 %	71 23.5 % No EL speakers	0	13 4.3 % No EL speakers	218 72.2 %	Secondary sch. / No EL classes	No EL classes outside school
Molodezhnyi 2010	604 100 %	18 3 % No EL speakers	0	0	586 97 %	Secondary sch. / No EL classes	No EL classes outside school

Evenkis and absolutely absent among the Kets. In some local ethnic communities (e.g. Selkups of Napas) the inter-generational language transmission was broken no less than 60 years ago, in some (Kets of Sulomai and Mutorai, Selkups of Farkovo) no less than 40 years ago and in others (Evenkis of Ekonda, Surinda, Chirinda) no more than 10 to 15 years ago. It should be mentioned that the numbers of ethnic language speakers given in the table include not only full speakers but also semi-speakers – all those who are able to say just something in their ethnic language. The number of full speakers is much smaller; e.g. there are only four Ket full-speakers in Maduika, three Evenki full-speakers in Mutorai and one Selkup full-speaker in Kellog.

Our expeditions usually have from four to eight participants (about half of them are students of linguistics or anthropology) and last about a month. With the time we developed a standard approach to the data collection. In every community we start with a sociolinguistic survey, which gives us an overview of the linguistic situation in the settlement in the whole and in the community as a part of the settlement. The survey also helps to find language consultants and to pass to the main task of our expeditions – the recording of linguistic data, whereby we also try to collect ethno-cultural data.

2.1 Sociolinguistic survey

Our sociolinguistic surveys begin with the analysis of demographic data and households lists provided by the administration of the settlements (as a rule, local authorities are cooperative). Then we pass to the survey properly. The questionnaires are filled by the expedition participants in the course of interviews with community members. We do not ask our respondents to fill the questionnaires themselves in order to make the process more vivid for them and to receive informative answers to all the questions. Our questionnaire contains 32 points, which provide sociological information on the respondent (age, sex, education level, profession, occupation), his/her linguistic biography (place of birth, places of residence, family language(s) in the childhood, language(s) of school in the classes and outside classes, etc.), mother tongue, language(s) used in various situations presently, self-evaluation of the competence in all the languages spoken or just understood, knowledge of folklore texts, attitudes towards the ethnic language, ethnic language classes and ethnic language preservation. To make our survey representative we try to question at least one third of ethnic community members of all ages, men and women, so that we could have a picture of the situation in every family of the community. In small communities we question all the elderly and middle-aged people and one third of young people and

children over seven. During our interviews we get acquainted with community members, which helps us to choose our future linguistic consultants. We go on with the survey throughout our stay in the village, parallel with our linguistic work.

The filled questionnaires give us subjective information on linguistic situation in the communities, they show what people say and how they feel about their ethnic languages. The best way of getting objective information is to work with community members as language consultants. Video-recording of speech behaviour of community members gives additional information on the linguistic situation in the community.

It should be stressed that we keep a clear picture of the linguistic situation in every settlement where we work for an integral part of language documentation: a comprehensive text corpus and lexical data of every local variety of the documented language should be supplemented by sociolinguistic data on the functioning of this local variety.

It cannot be said that the problem of heritage language attrition does not worry the communities. The attitude of the ethnic community members towards the heritage language is mostly positive, the majority of parents say they want their children to speak their ancestral language, but even those parents who are able to speak the ancestral language themselves choose to speak Russian with their children. Thus, though the ancestral language is regarded as desirable for children it is Russian that is considered obligatory. Actually, people do not believe that anything can be done to stop the shrinking of the use of their ancestral languages. Many of them just state their heritage language is dying. The prejudice that to learn the language of the majority, which gives access to education, professional career and prosperity, is only possible abandoning the ancestral language is still wide-spread both inside and outside ethnic minority groups, it is wide-spread in different social strata including educational authorities.

2.2 Linguistic data collection

Three points should be stressed as far as the linguistic data collection concerns:

- first, all the linguistic data collected in the field is audio-recorded, texts are also video-recorded;
- second, we try to work with as many language consultants as possible, so that linguistic material could be received from representatives of all the generations, in which the language is still preserved at least to some extent;
- third, we work not only with full-speakers, but also with half-speakers of the

documented language, which allows us to better understand the process of language attrition.

Linguistic data is collected through the audio and video recording of spontaneous or quasi-spontaneous speech (an example of quasi-spontaneous speech is folklore texts performance) and through the audio recording of thematically sorted word lists; to get additional information on some lexical or grammar issues we also use linguistic questionnaires for elicitation experiments.

2.2.1 Texts

Texts are the documentation material of “the first category”, most desirable for linguists, as all types of information on the language can be extracted from texts, especially if they are audiorecorded and not just transcribed, which was the case a century or even some tens of years ago. Moreover, texts contain precious extra-linguistic information on history, traditional culture, innovations and just on everyday life of the communities. Working in the field we try to record as many texts as possible irrespective of their topic. We record monologues, dialogs and polylogues, though the two latter categories are underrepresented in our textcorpora. One of the reasons for this underrepresentation is the fact that people do not speak much in their ancestral language today. Sometimes our language consultants “perform” quasi-spontaneous dialogues for us, but as a rule, they sound a bit “unnatural”. The other reason is that we do not record people talking to each other without their permission, and when they give us the permission they often stop talking or just stop talking “vividly”.

As for the monologues, we record all kinds of folklore texts (epics, legends, fairy tales, songs, riddles, etc.), life stories (authorbiographies, biographies of parents or some other relatives, reminiscences of the childhood, hunting stories), stories about old traditions and traditional ways of life, stories about the life changes evaluating the changes. The fact that we not only audio record, but also video record the story-telling process seems to help to involve people into our work. Most of our story-tellers enjoyed watching themselves on the screen of the video camera after the recording seance, many of them wished their children or grandchildren could see them (We always send copies of video recordings to the story-tellers as soon as we make them, and as far as I know, these copies are preserved in family archives and shown to the guests).

The extra-linguistic value of folklore texts is well-known and accepted. It seems however the extra-linguistic value of life stories should not also be underestimated.

Actually they are a sort of documents of the epoch: in life stories of the people living in the far-away tiny villages surrounded by the taiga and tundra the life of a person or of a family being a part of the community life appears to be represented against the background of the events relevant for the whole countries, so the stories give us a new dimension in understanding the world history. They make us better understand how the decisions of the politicians in the centre of the countries influence (or not influence) the life in their far-away corners.

Text recording is the first (and possibly the easiest) part of the texts collection. The second part of it is the transcribing and translating of the audio recorded texts, a hard and time-consuming work, which should be done by the linguist in the field with the help of language consultants who can be the story-tellers themselves (it happens not so often, especially if the story-tellers are elderly people), their relatives or community people speaking the same local dialect. Even if a linguist is fluent in the documented language it seems to be wise to transcribe and translate audio recorded texts with a language consultant, especially if the texts are in a local dialect different from the local dialect the linguist has learned. Luckily, some language consultants enjoy that kind of work. Pretty often these are people who spoke the language in their childhood, since then lost the ability to speak it fluently for the lack of practice, but preserved the ability to understand what is said by the others. Transcribing and translating audio recorded texts demand attentiveness, patience and cooperativeness both from the linguist and the language consultant, and it is the linguist's task to create a cooperative atmosphere during this work.

2.2.2 Sounding word lists

For each language we use two versions of the word lists: the full version containing over 2000 lexemes with diagnostic grammar forms for verbs and nouns and phrases illustrating the use of the lexemes, and the reduced version containing 400 lexemes with diagnostic word forms and illustrations. Both the full and the reduced variants of the word lists contain the 100-words Swadesh list (Swadesh, 1971: 283). The lexemes in the lists are sorted thematically, thus representing a sort of a thesaurus, whereby Russian is used as a meta-language, so that we actually have Russian-Selkup, Russian-Ket and Russian-Evenki thesauri. As a basis for the bilingual word lists compilation we used some of the existing dictionaries of Selkup, Ket and Evenki (Kuznetsova et al., 1993; Werner, 2002; Vasilevich, 1958; Boldyrev, 1994, 2000). The word lists for the three languages slightly differ as far as specific traditional economic

or cultural features concerns.

The full version of the word list is used for the work with full speakers of the documented local dialect of the language, whereas the reduced version is used for the work with half-speakers and serves as a sort of linguistic test allowing defining the level of linguistic competence of the informant.

The audio recording of the word lists in the field is done as follows: the informant working with us is given a Russian word from the respective word list as a stimulus and asked to pronounce an equivalent of this word in his/her local dialect three times with pauses (so that this material could be used for phonetic studies in future). If the informant is unable to give a local equivalent, he/she is given another stimulus – a Selkup, Ket or Evenki equivalent from the word list, whereby we explain that the word possibly belongs to another local dialect and apologize for our improper pronunciation of it. Quite often it helps: the informant recognizes the word, comments on the wrong way the word has been pronounced, and then pronounces it in his/her own way, according to the norms of the documented local dialect.

If the informant wants to give a synonym or some contextual use of the word, we record all that together with the informant's explanation of the meaning details (as a rule, such explanations are given in Russian). We also audio record the diagnostic word forms from the lists (e.g. plural forms of all the Ket nouns from the thesaurus, dual forms of Selkup nouns, inclusive and exclusive forms of Evenki personal pronouns, verbs and nouns with possessive suffixes, some conjugation forms of verbs in all the languages are regularly asked).

When we started working with the word lists in 2001, we planned to audio-record no less than eight full sounding thesauri for every local dialect: four from men and four from women of various age, so that the pronunciation, grammar and lexicon of both genders and all ethnic language speaking generations could be reflected in our materials. However, we found out quite soon that for some local dialects of the documented languages (e.g. the Yelogui dialect of Selkup (Kellog), Northern dialect of Ket (Maduika), Sym dialect of Evenki (Sym, Belyi Yar), see Table 1), we just could not find as many speakers as that. In such cases we had to satisfy ourselves with the possible number of audio recorded variants of the thesauri.

The audio recording of a full word list takes from ten to twenty five hours. It is a tiresome process for an informant, as it demands concentration, attention and accurate pronunciation. As a rule, people can work no more than two – two hours and a half at a time, so about a week is needed to fulfill the recording. Still, many of our informants

felt interested in remembering the words of their ethnic language, which they rarely use now. Quite often they opened the following seance of the recording with some words that they could not recollect the day before, but managed to remember between the seances. When at last the recording was completed some of them thanked us for creating a situation for them to remember their language. It is worth mentioning that some elderly people whose competence in their ethnic language was obvious taking into account their linguistic biography, but who could not produce any text in it switching to Russian in the middle of the first phrase as for many years they spoke only Russian, resumed their ability to speak the language after the completion of the audio recording of a full word list from them.

2.3 Language documentation and local communities

Our experience of the last decade allows to state that linguistic fieldwork done in an ethnic community elevates the prestige of the ethnic language in it. Young people unable to speak their ethnic language suddenly realize that the competence in the language of their ancestors, which some of them kept for useless, can be an object of interest outside the community, moreover, it can be paid for. Elderly people, fluent speakers of their ancestral language, sometimes regard the work with linguists as one of the few (if not the only) communicative situations where they have an opportunity to use this languages. Some of them are very enthusiastic about their stories being audio and video recorded, they say they want their knowledge to be fixed and preserved for the future generations. *“My children and grandchildren are not interested in my stories, but my great grandchildren may want to know how we lived and spoke. Let my word go farther to my great grandchildren, may it remain after I am gone to the ancestors”*, these are the words of Olga Latikova (1917–2007), a great Ket language consultant who worked with several generations of linguists and ethnologues generously sharing her knowledge of the language and traditional culture (We were priveleged to work with her in 2004 and 2006).

3. Archiving field materials and digitalizing traditional archives

Thanks to the new technologies of audio and video recording of linguistic materials we are able to collect a serious amount of linguistic data in the field. We feel responsible for this data, primarily to the ethnic community members. Meanwhile, processing the collected data becomes a “narrow place” in our work, and we try to involve students of linguistics into it. The text processing starts with the supplementation and correction of

the field transcriptions and translations. Listening to the audio recordings again and again, we come at last to some decision, though sometimes “dark” fragments remain, and we return to them at the following stage of the text processing – its morphological annotation. Annotated texts are loaded into the *Elan* format and placed on the web portal <http://languedoc.philol.msu.ru>. Now we are developing a system of discours glosses to be added to the morphological glosses.

The seances of the audio recording of the word lists are transformed into sounding lexical databases. Demo versions of the Selkup, Ket and Evenki databases can be found on the web site <http://minlang.srcc.msu.ru>. The databases are designed to be multimedia archives of linguistic data, they can be used for instrumental analysis of the phonetics of the languages as well as for practical purposes as teaching material in the ethnic language classes both on the school and on the university level.

Parallel with the work at the “fresh recorded” texts and lexical data we work at the description and computerization of “traditional” archives containing Selkup (Kazakevich, 2009; Kuznetsova, Helimsky, 1989) and Ket (Galiamina, 2010) materials recorded during the 20th century. We plan to start working with Evenki archives in the nearest future. The archival materials give us a diachronic perspective of language description, allowing to trace structural changes in the local dialects of the documented languages during the last century (see e.g. Kazakevich, 2005).

4. Conclusion: Interrelation between documentation and description of languages

The history of linguistics knows several crucial points of separations of different parts of its object (language use from language structure, language levels from each other etc.) done in order to better understand how each of the separated parts is constructed and to develop a simplified model explaining its structure and/or functioning, so that later on the initial model could be substituted by a more sophisticated one, taking into account the existing relations between the separated parts of the whole. Now, we are at such a point once again, this time trying to separate language documentation from language description (Himmelman, 1998; Austin, 2003). The idea of language documentation as an activity, which does not coincide with the collection of linguistic data for producing a grammar and a dictionary of the language, but is somehow broader aiming at fixation as much linguistic material as possible, so that in the future it could be used by generations of linguists for various purposes including the language reconstruction in case the language stops to be used, is quite understandable. However,

it seems that it is time to pass by the point of separation and to realize once again that the two activities are tightly interrelated, based upon each other and can successfully develop only implementing each other's results. Actually, in most of our projects language documentation goes side by side with language description, and it seems to bring its fruit.

References

- Austin, P. (ed.) (2003), *Language Documentation and Description*, Vol. 1, (The Hans Rausing Endangered Languages Project).
- Boldyrev B.V. (2000), *Evenki-Russian Dictionary* (Эвенкийско-русский словарь), Novosibirsk (Academic Press, Siberian department 'GEO').
- Boldyrev B.V. (1994), *Russian-Evenki Dictionary* (Русск-эвенкийский словарь), Novosibirsk (Nauka).
- Bulatova N., Grenoble L. (1999), *Evenki*. LWM 141 (Lincom Europa).
- Galiamina Ju. E. (2010), 'Forgotten notebook: Unic Ket materials in archival recordings of the 1940–1941' (Забывтая тетрадь: Уникальный кетский материал в архивных записях 1940–1941 года), in *Theoretical and applied linguistics: the ways of development: Conference Proceedings* (Теоретическая и прикладная лингвистика: пути развития: Материалы конференции), Moscow (Moscow University Press), 103–105.
- Dybo A.V. (2005), Some 'Sprachbund' phenomena in the territory of the Sayany – Altai – the Upper Yenisei – the Eastern part of the Ob-Irtysh area, in *Sprachbunds in Eurasia and ethno-cultural interaction (history and the contemporary situation)*, Moscow (Некоторые 'союзные' явления на территории Саян – Алтая – Верхнего Енисея – Восточной части Обь-Иртышья, in Языковые союзы Евразии (история и современность).
- Himmelmann, N. (1998), 'Documentary and descriptive linguistics' *Linguistics* 36, 161–195
- Kazakevich, O.A. (1990), *The use of computers in studies of unwritten and new-written languages (A case study of Selkup)* (Использование ЭВМ для исследования бесписьменных и младописьменных языков. (На материале селькупского языка)), Moscow (Moscow University Press)..
- Kazakevich, O.A. (2005), 'Changes of language structure in the situation of the restricted language use' (Изменение структуры языка с ограниченной сферой употребления) in *Minority languages: Existence at the brink* Issue 1, Linguistic problems of minority languages preservation and documentation (Малые языки и традиции: существование на грани, Выпуск 1, Лингвистические проблемы сохранения и документации малых языков), Ed. by A.E. Kibrik, Moscow (New Press),. 122–134.

- Kazakevich, O.A. (2010), 'Archive of E.D. and G.N. Prokofievs: Samoyedic linguistic materials' (Архив Е.Д. и Г.Н. Прокофьевых: самодийские языковые материалы) in *Finnisch-Ugrische Mitteilungen*, Band 32/33. Hamburg (Helmut Buske Verlag), 257–278.
- Konstantinova O.A. (1964), *Evenki. Phonetics. Morphology* (Эвенкийский язык. Фонетика. Морфология), Moscow-Leningrad (Nauka).
- Kreinovich E.A. (1968), *The Ket Verb* (Глагол кетского языка), Moscow (Nauka)
- Kuznetsova A.I., Helimski E.A. (1989), 'Selkup materials in the L.A. Varkovitskaya Legacy' (Селькупские материалы в рукописном наследии Л.А. Варковицкой), *Soviet Finno-Ugristics*, Vol. 25, 1.
- Kuznetsova A.I., Helimski E.A., Grushkina E.V., Kazakevich O.A., Ioffe L.Yu. (1980, 1993, 2002), *Selkup. The Taz Dialect*, Vol. 1–3 (Очерки по селькупскому языку. Тазовский диалект. Том 1–3), Moscow (Moscow University Press).
- Nedjalkov I. (1997), *Evenki*. London (Routledge).
- Swadesh, M. (1971). *The origin and diversification of language* (Edited post mortem by J. Sherzer). Chicago (Aldine).
- Vasilevich, G.M. (ed) (1936), *Materials on the Evenki (Tungus) Folklore* (Материалы по эвенкийскому (тунгусскому) фольклору), Leningrad (Institute of the Peoples of the North Press).
- Vasilevich, G.M. (1948), *Sketches of Evenki (Tungus) Dialects* (Очерки диалектов эвенкийского (тунгусского) языка), Leningrad (Uchpedgiz).
- Vasilevich, G.M. (1958), *Evenki-Russian Dictionary* (Эвенкийско-русский словарь), Moscow (State Editorial House of Foreign and National Dictionaries).
- Vasilevich, G.M. (ed) (1966), *Historical Folklore of the Evenkis: Sagas and Legends* (Исторический фольклор эвенков: Сказания и предания), Moscow; Leningrad (Nauka).
- Vasilevich, G.M. (1969), *The Evenkis* (Эвенки), Leningrad (Nauka).
- Werner H. (1997), *Die Ketische sprache*, Wiesbaden (Harrassowitz Verlag).
- Werner H. (2002), *Vergleichendes wörterbuch der jennisj-sprachen*, Wiesbaden (Harrassowitz Verlag).
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Globalization and Language Preservation —A case study of Naxi^①

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Abstract: The situation of language loss around the world has led to the suggestion that language contact resulting from globalization could be a cause of language endangerment. However, in the case of the Naxi language, globalization might have a positive effect on language preservation.

Naxi is a Tibeto-Burman language spoken principally in the area of Lijiang City, Yunnan Province, China. Based on the 2000 census, the total Naxi population is 308,839. There are very few records regarding the situation of Naxi speakers. However, it is generally believed that most Naxi speakers living in rural or mountainous areas are monolingual. Other speakers who live in towns can speak Chinese as well as Naxi. Since the 1980s, Naxi children in Lijiang Old Town have started to acquire Chinese as their first language because their parents thought that learning Naxi would affect their children's study of Mandarin Chinese, which is crucial for advanced education and economic opportunities. Although some children in Lijiang may still understand Naxi to some extent, they cannot use Naxi to communicate effectively. This indicates that preservation of the Naxi language is at considerable risk.

Over the last 10 years, tourism has developed rapidly in Lijiang. With the arrival of visitors from all over the world, Naxi people have begun to reflect on their culture and have become aware that it is important to maintain their language. Meanwhile, recent changes in official policy have also encouraged the promotion of minority language and culture. As a result, Naxi has become more and more popular, especially among the younger generation. Naxi is taught in primary school and some training

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classes are also provided for those who are interested in the language. Nowadays, there are Naxi pop songs, Naxi movies (translated from Chinese), and Naxi television and radio programs. The use of Naxi in different settings indicates a reinvigoration of the language, thus leading to its continued preservation. Although the reasons for this are likely to be multifactorial, it appears that globalization, in the form of tourism, is beneficial to language preservation in the case of Naxi.

Key words: Globalization, Language preservation, Naxi

Introduction

It is estimated that there are about 6,909 languages currently spoken in the world (Lewis, 2009). However, 4% of these languages are used by about 96% of the world's population, while most of the remaining languages have very small numbers of speakers, with some having fewer than one hundred speakers. These small language groups usually belong to ethnic minorities, and are disappearing rapidly owing to different reasons. Language endangerment and language loss have therefore become important issues in linguistic circles. Within the past two decades, there has been growing interest and research in “documentary linguistics”, *i.e.* the study of endangered and undocumented languages (Himmelman, 1998).

There are many possible causes of language loss. Natural disasters such as earthquakes might lead to a sudden decrease in the speakers of a certain language. Severe epidemics may result in a major loss of speakers within a speech community. Language policy may also play a role in language loss, *e.g.* when the use of a language is prohibited. Case studies have indicated that language contact resulting from globalization could also be a cause of language endangerment. As a result of globalization, people living in remote areas are no longer isolated from the outside world. They may migrate to big cities, or people from other regions may visit their areas. Developments in technology such as the telephone, television, and internet also decrease the distance between remote areas and big cities. People may prefer to use the dominant language in order to access mainstream media. Increasing contact with the dominant language will result in a decline in the number of speakers, leading to language endangerment and eventual extinction.

However, globalization may also have a positive effect on language preservation in some cases. In this paper, globalization and its impact on the Naxi language is discussed. Instead of accelerating language decline, globalization, in the form of tourism, has enabled people to become more aware of the value of their mother tongue,

and has encouraged them to preserve and protect their unique linguistic heritage.

1. The Naxi ethnic minority

Naxi is one of the 56 ethnic groups officially recognized in China. According to the census of 2000, the total population of the Naxi ethnic group was 308,839. Most of the Naxi people live as homogeneous communities in Yulong Naxi Autonomous County and in the Gucheng District of Lijiang City in Yunnan Province, while the rest are scattered in Ninglang and Yongsheng Counties of Lijiang City; Weixi, Xianggelila (former Zhongdian), Deqin Counties of the Diqing Tibetan Autonomous Prefecture; and Heqing, Jianchuan and Lanping Counties of the Dali Bai Autonomous Prefecture in Yunnan Province. Some Naxi also live in Yanyuan, Yanbian and Muli Counties of Sichuan Province, while a small number live in Mangkang County of the Tibetan Autonomous Region near Yunnan Province.

Lijiang is located in the northwest of Yunnan Province, a province of great ethnic and linguistic diversity in China. Of the 55 officially recognized minority ethnic groups in China, 25 are found in Yunnan Province. According to the Yunnan Ethnic Affairs Commission and Yunnan Statistical Bureau, the total number of residents belonging to ethnic minorities was 14,159,000, which comprised 33.43% of the total population of Yunnan (based on the 2000 census). Many areas include residents belonging to more than one ethnic group. In Lijiang, there are a total 12 ethnic groups in addition to the Naxi. According to the Lijiang Statistical Bureau, in 2005 the total number of the ethnic minorities in Lijiang was 697,600, comprising 58.9% of the total population of Lijiang, which was 1,202,600.

Most of the Naxi people live in Lijiang City. Before 2003, Lijiang Naxi Autonomous County was the only Naxi Autonomous County in China. After that the former Lijiang Prefecture was changed to Lijiang City at the administrative level. As a consequence, Lijiang Naxi Autonomous County was divided into the Yulong Naxi Autonomous County and the Gucheng District. The Old Town of Lijiang, which is also known as the Dayan Town and was historically the economic and cultural centre of the Naxi minority, is now the site of the municipal government of Lijiang City.

2. The Naxi language

The Naxi language belongs to the Tibeto-Burman branch of the Sino-Tibetan language family. Based on a survey conducted in the 1950s, it was identified as a language of the Yi group in China, although this is still controversial among certain linguists (Michaud

and He 2007; Sun 2001). Generally speaking, the Naxi language is divided into the western and eastern dialects. Each dialect can be further divided into several vernaculars. The western dialect group comprises the Dayanzhen, Lijiangba and Baoshanzhou vernaculars, whose speakers can communicate with each other. The eastern dialect group comprises the Yongningba, Beiquba and Guabie vernaculars (He 1985). Most Naxi speak the western dialect. Only the Naxi who live in Ninglang County (also known as the Moso people) speak the eastern dialect. Intelligibility between the two dialects is low. Among the 1,527 commonly used vocabulary items, there are 946 cognates, comprising 62 percent of the total, with 38% being non-cognates (He 1985). As the Old Town of Lijiang was historically the cultural and economic centre of the Naxi ethnic group, the Dayanzheng variety of the western dialect is considered to be the standard dialect.

Statistics concerning Naxi speakers usually do not distinguish between the two dialect groups. According to a survey of the Naxi in Sichuan Province conducted in 1986, there were about 30,000 Naxi Moso living in the border area of Yunnan and Sichuan Provinces. Yang Zhengong, a Moso researcher, estimated that there were about 40,000 Moso people in the two provinces in the late 1990s (personal communication, 2009). Some among the Bai, Tibetan, Pumi and Yi ethnic groups in Lijiang can also speak Naxi. Although Shi (2002) claimed that there were 110,465 monolingual Naxi speakers and the *Ethnologue* also gave an estimate of 100,000 monolingual Naxi speakers, the precise numbers of monolingual and bilingual Naxi speakers and the numbers of those whose first language is Naxi have yet to be determined. In general, most monolingual Naxi speakers live in mountainous and rural areas. People living in urban areas are usually bilingual, speaking both Naxi and a dialect of Mandarin, *Yunnan Hua*. The Naxi dialect discussed in this paper is the western dialect.

The Naxi are famous for their unique culture, which is known as the Dongba Culture. Dongba is a primitive religion practised by the Naxi people. The writing system used by the priests to write the scriptures is called the Dongba script. Dongba script is a pictographic system of writing. Naxi also has a Romanized writing system, Naxi Pinyin, which was created in the late 1950s by the Chinese government.

3. Naxi language use

To most Naxi speakers, both Naxi and Chinese play an important role in daily communication. Chinese is used when Naxi speakers interact with the outside world

while Naxi is retained as the main communicative tool within the community.

Although Naxi has its own writing system, written Chinese is still an important means of communication in Naxi society. This is not only due to the importance of Mandarin Chinese as the national language, but the Naxi people have also had a long history of close contact with the Han Chinese people politically, economically and culturally, especially over the past few centuries.

There is a clear difference in language use between rural and urban areas. As has been mentioned above, most monolingual Naxi speakers live in rural and mountainous areas. The relatively isolated environment has enabled good preservation of the Naxi culture and language. As most people seldom leave their villages, they do not have many opportunities to speak Chinese or any other language. Therefore, Naxi is the main language used in these areas except in schools, where Mandarin Chinese is used as the medium of instruction.

More recently, however, the situation is changing with the development of infrastructure in rural areas, with increasingly exposure of Naxi villagers to Mandarin Chinese. They can listen to radio broadcasts or watch television programmes in Chinese. Improvement in transport facilities has meant that increasing numbers of young folk have chosen to leave their villages to seek employment in cities. Education in Mandarin Chinese has also played a part. Young Naxi speakers are gradually becoming bilingual in Naxi and Chinese, which will lead to a decrease in the number of monolingual Naxi speakers. Furthermore, some of the children of Naxi from rural areas who work in the city can only speak Chinese (personal conversation with a taxi driver who is from a Naxi village in Lijiang city in 2010).

In contrast to monolingual Naxi speakers, bilingual Naxi speakers usually live near the centre of Lijiang City or nearby areas. The central area is where the government offices are located, mainly the Gucheng District in Lijiang City. It is also the cultural and economic centre of Lijiang. Bilingual Naxi speakers who are highly proficient in Mandarin Chinese are often teachers or civil servants. Mandarin Chinese is the official language for government affairs, schools and public services such as hospitals. Although Naxi is to some extent still widely spoken in Naxi families and among Naxi people, it is gradually losing its place as the main language in Naxi households. Many children do not speak Naxi any longer, even though their parents are fluent Naxi speakers. Both Naxi and Chinese are used in these families. Table 1 shows the language use among different generations.

Table 1 Language use in Naxi family in the city (C=Child)

speakers	Grandparents-C	Parents-C	Grandparents-parents	Between parents
language	Naxi, Chinese	Chinese	Naxi	Naxi, Chinese

From Table 1 we can see that both Naxi and Chinese are used in almost equal proportions. Grandparents, even if they cannot speak Chinese fluently, will still use Chinese with their grandchildren. If they speak Naxi to the child, the child may understand but will respond in Chinese for s/he cannot speak Naxi. In the case of mixed marriages, when only one parent is Naxi, Chinese is the common language within the household. For those Naxi living in Kunming City or Beijing, their children usually do not speak Naxi even though they are identified as Naxi. Around 10,000 Naxi have shifted to speaking only Chinese (Shi 2002).

With regard to writing, Chinese characters are the main communicative tool for most Naxi in their daily lives. Neither the ancient pictographic Dongba script nor the new Naxi Pinyin is used regularly. Before the establishment of the People's Republic of China, the Dongba religion was practised by most Naxi, but even then the Dongba script was only used by the priests. A Dongba priest should be able to read the Dongba scriptures and conduct different Dongba rituals. It takes about fifteen years of training to become a Dongba priest, and Dongba priesthood is only passed onto the son. Therefore the script was not widely used by ordinary Naxi people. During the Cultural Revolution, the use of the Dongba script was banned and thousands of manuscripts were destroyed. Nowadays, Dongba characters are only used for commercial purposes, *i.e.* in producing tourist products such as T-shirts and wooden ornaments. These users of the Dongba script may not be Naxi themselves and may not even know the meaning of the pictographic characters.

In the 1980s, Naxi Pinyin was taught in literacy programmes in some Naxi villages. In the late 1980s, however, these programmes were phased out by the Chinese government. Nowadays only a limited number of Naxi can use the Naxi Pinyin system. Hence, Chinese is the dominant writing system for the Naxi people.

4. Naxi and the threat of language endangerment

Naxi has long been associated with Han Chinese, Tibetan and Bai ethnic groups in the past. This can be seen from the loan words in Naxi (He 1985). Nowadays it is more and more affected by Chinese, as evidenced by the increasing number of Chinese loan

words in Naxi.

Owing to the geographical isolation of Lijiang in the past, the Naxi had successfully preserved their culture and tradition, including their language. Since the 1980s, however, with the implementation of the open door policy of China, large numbers of visitors are flocking to Lijiang. This has led to rapid changes in the usage situation of the Naxi language. One of the results of frequent cultural contacts is the increase in Chinese loan words in Naxi, with Chinese becoming increasingly dominant in the lives of the Naxi.

Since the early 1980s, many Naxi children in Lijiang Old Town have begun to acquire Chinese as their first language, as their parents believed that speaking Naxi would affect their ability to learn Chinese, a knowledge of which is crucial for advanced education and economic opportunities. As a result, Naxi is used in fewer and fewer settings by young people, which threatens the continued maintenance of the language. According to Xiong (2007), only 30% of Naxi students in the primary and middle schools of Gucheng District in Lijiang City can speak Naxi. In 2009, a test of proficiency in Naxi and Chinese was conducted among Naxi residents in Lijiang Old Town (HALA Project website). The results revealed that very few Naxi young people in the Old Town of Lijiang were able to speak Naxi, but were fluent in Chinese instead. Middle-aged Naxi were proficient in both Naxi and Chinese, while those who were elderly could speak Naxi better than Chinese. Those from the younger generations also used more Chinese loan words than those from older age groups (Zhao, 2010). Although these results were drawn from only a proportion of Naxi speakers, they were indicative of a developing trend in the Naxi language: a decline in language use in the younger age groups.

The UNESCO document, *Language Vitality and Endangerment*, lists intergenerational language transmission as the first of the major evaluative factors of language vitality. According to the classification based on these factors, Naxi, especially the variety used in Lijiang Old Town, is “definitively endangered”. The most significant threat to Naxi is the loss of young speakers. Even though some Naxi children in the city can still speak and understand Naxi to a certain extent, Naxi is no longer their first language. It is clear from this that inter-generational transmission will be in danger when this generation becomes adults. With the increasing number of bilingual speakers and the shift to Chinese, maintenance of Naxi will be increasingly endangered.

In addition, comprehensive documentation of Naxi is lacking. Differences exist

between the documentation of its spoken and written forms. Owing to the existence of the Dongba script, the Dongba culture, including the writing system, ancient books and rituals, has been studied by scholars both from China and abroad since the early 1900s. The most significant works on the documentation of the Dongba script are the dictionaries, including *A Nakhi-English Encyclopedic Dictionary* by Joseph F. Rock (1963), *A Dictionary of Naxi Pictographic Characters* (Naxi Xiangxing Wenzi Pu) by Fang Guoyu (1985), and *A Dictionary of Naxi Pictographs* (Moxi Xiangxing Wenzi Zidian) by Li Lincan (1953). In 2000, a hundred volumes of *An Annotated Collection of Naxi Dongba Manuscripts* (Naxi Dongba Guji Yizhu Quanji) were published.

Compared with the written Dongba script, relatively little attention has been accorded to spoken Naxi. The only research on spoken Naxi was a survey in the 1950s. The task of the survey was “to provide the linguistic basis for the ongoing work of nationality status recognition and the creation of writing systems for minority communities” (Zhou, 2003). Based on the survey in 1957, an alphabetic writing system, Naxi Pinyin (*Naxizu Wenzi Fang'an*, the writing system of the Naxi language) was created. However, it was not until 1985 that *A Brief Description of Naxi* (Naxiyu Jianzhi) by He Jiren and Jiang Zhuyi was published. Other materials on spoken Naxi include *A Basic Naxi Grammar* (Naxiyu Jichu Yufa) by He Zhiwu (1987), *A Study of the Naxi Language* (Naxiyu Yanjiu) by Yang Huandian (2004), and *A Naxi-Chinese-English Glossary* by SIL linguist Thomas Pinson (1998). As yet, no dictionary of spoken Naxi has been published.

5. Globalization and language revitalization

Before the implementation of the open door policy of China, Lijiang was a remote and quiet minority area, situated far from the provincial capital city of Kunming. The distance between the two cities is about 600 km, and in the late 1980s, two days were required to travel between Lijiang and Kunming by bus, with passengers having to stay overnight in the city of Dali to transfer between buses. The improvement of public transport facilities has led to better communication between Lijiang and the outside world. A new highway between Lijiang and Kunming was constructed. In 1995, Lijiang Airport was opened. From January 1st, 2010, a direct railway service to Lijiang was also available. These have all contributed to the development of tourism in Lijiang, with increasing numbers of tourists flocking to the Old Town.

Another factor which has promoted tourism was the recognition of Lijiang Old Town as a *Site of World Historical and Cultural Heritage* by UNESCO in 1997. Since

then, Lijiang has become more well-known and more tourists from different countries are coming to visit. Globalization has therefore had a major impact on Lijiang. The development of tourism has led to changes in the use of Naxi, with Chinese being used in more settings than before.

However, tourism has also enabled more Naxi people to value their culture. Different aspects of these positive changes will be described in more detail below.

5.1 Popularization of the Dongba script

Firstly, changes have occurred in the use of the Naxi Dongba script. The development of tourism in Lijiang has promoted the Dongba culture, in that the Dongba script has come to symbolize Naxi culture. In order to meet the increasing demands of tourism, many young men, both Naxi and non-Naxi, have started to learn Dongba characters for commercial purposes, with Dongba training classes being held in Lijiang. The government has also promoted the protection of Dongba culture, with the establishment of an institute for the study of Dongba culture. In December 2005, a document entitled *Regulations on the Protection of Naxi Dongba Culture (Dongba Wenhua Baohu Tiaoli)* was issued, stipulating the use of the Dongba script. Different kinds of books using the Dongba script have also been published. Some have been translated into Chinese, while others have been translated into other languages including English and Japanese.

5.2 The use of Naxi in education

5.2.1 The use of Naxi in primary schools and in universities

A significant change affecting Naxi language use is that Naxi has entered the education system. It has been mentioned above that the use of Naxi differs between urban and rural areas. In urban schools, the medium of instruction is Chinese. In rural schools, although all the textbooks are in Chinese and teachers are required to teach in Chinese, they have to use both Chinese and Naxi in their explanations, so that students can understand. However, this kind of bilingual instruction does not apply to the Naxi writing system, but only to spoken Naxi.

In 1999, a Naxi mother tongue pilot project was implemented in Xinren Primary School in Lijiang Old Town (Yang, 2010). It started as an after-school class, and only those who were interested in learning Naxi attended. Every week they had two classes after school. In the class, the Romanized writing system, Naxi Pinyin, was taught alongside the spoken language. In the same year, a Dongba culture programme was established in Huangshan Primary School, located in a suburb near Lijiang Old Town.

Apart from the Naxi language, some basic knowledge about Dongba culture including Dongba pictographic characters, dancing and music, was also taught in this programme (*ibid.*). From the beginning of the academic year in 2003, the Naxi mother tongue programme has been promoted in the elementary schools of the Gucheng District where there is a high proportion of Naxi students. In 2002, an undergraduate programme in Naxi Language and Literature and Dongba Culture was also established at the Yunnan Nationalities University. In 2003, a graduate programme was offered at the South Western University and nineteen students had enrolled by 2010 (personal communication with a PhD candidate on this programme, He Yihua).

5.2.2 Publication of Naxi textbooks

In conjunction with the implementation of the mother tongue programme, pedagogic materials were compiled, edited and published. One important publication was the *Preschool Naxi Textbook* (Xueqian Naxi Wen Jiaocai) compiled by He Xueguang (2006). This textbook was designed for children to learn the Naxi writing system first, so that they can use it in reading and writing. Another popular publication was the *Naxi Culture Chanting Book* (Naxi Wenhua Songdu Ben) by Guo Dali and Yang Yihong (2006). In this book, Naxi materials were presented in several different ways, including Dongba characters, IPA and Naxi Pinyin, with Chinese translations. It was reprinted in 2009 along with an audio CD.

In 2003, the provincial Department of Education also launched a bilingual programme for eighteen ethnic minority languages in Yunnan, one of which was Naxi. The main purpose of the programme was to translate Chinese primary school textbooks into these languages. The bilingual textbooks were designed to help minority students in studying Chinese while simultaneously learning their native languages. Chinese- Naxi bilingual textbooks for the first to fifth grades have now been published.

5.2.3 Training of mother tongue teachers and Naxi-Chinese bilingual teachers

Teachers are critical in any language revitalization programme. The Naxi language is taught via the Naxi Pinyin writing system in different programmes. However, Naxi Pinyin has not been popularized in the Naxi community, as primary school teachers were used to teaching in Chinese. Although the teachers could speak Naxi, they could not read or write it. Therefore, one of the priority tasks in the mother tongue programme was the training of teachers to read and write.

Before the mother tongue programme was launched in primary schools, the

education departments of Gucheng District and Yulong Naxi Autonomous County jointly held a training class for mother tongue teachers. Eighty-eight primary school teachers from these two areas attended the training. In the classes, the Naxi Pinyin system, together with information on the Naxi language and culture was introduced. A similar training class was held in 2004 (Yang, 2010).

The provincial Department of Education also included the training of bilingual teachers as part of their programme. During the summer of 2003, the provincial department held training classes for bilingual teachers from different ethnic minority language communities in Kunming. For each training session, around ten Naxi teachers were selected from the mother tongue programme to participate in the training. At present, there are at least two Naxi mother tongue or bilingual teachers in each primary school where Naxi is being taught. However, despite these training programmes, there is still a growing need for mother tongue and bilingual teachers (conversation with teachers in Zhongxin Primary School in Lijiang Old Town, 2009).

5.3 Use of the Naxi language in media

The Naxi language has been used in media including newspapers, television programmes, and radio broadcasts. After an interval of almost twenty years, work on the Naxi language resumed in the 1980s. The Naxi Pinyin writing system was revised in 1982 and was taught in literacy programmes in various Naxi villages. In order to provide reading materials for the people in Naxi Pinyin and to promote the use of the writing system, the *Lijiang Newspaper* was issued in the Naxi language in 1985. Unfortunately, publication ceased in 1998 for various reasons.

Since 2001, a news programme in Naxi has been aired on Lijiang Broadcast Station. Every hour there is a five-minute news bulletin in Naxi. In the same year, the *Naxi Weekly Headline News Review* was launched by the Lijiang County (currently Yulong County) Television Station. According to a recent survey conducted by the author, a new programme *Learn to Speak Naxi* was started on January 1st, 2011. This programme is repeated eight times a day.

Despite the use of Naxi in some radio and television programmes, media exposure is still very limited. In recent years, however, other novel forms of media using Naxi are being popularized among the Naxi. The emergence of Naxi pop songs is a typical example. These songs combine traditional Naxi folk songs and modern popular music to express the interactions and conflicts between Naxi culture and modern living. As these songs are composed in Naxi, they are welcomed by both younger and older

generations. When the first CD *Naxi Pure Land* (Naxi Jingdi) was produced, five thousand copies were sold in a week. Even young Naxi living in the cities began to show increasing enthusiasm for learning Naxi (Yang 2007). There are now many Naxi singers and bands in the Naxi community. The author has ascertained that over thirty different CDs or VCDs in Naxi are available on the pop music market.

Apart from pop songs, some films have also been translated from Chinese into Naxi. This began with the translation of three films into Naxi in 1985. However, this work ceased and did not resume for two decades. In 2005, three films translated into Naxi were aired on television under the supervision of the Lijiang Broadcasting Bureau. The Broadcasting Bureau also sent a team to show the translated films from village to village. By 2008, about fourteen films, including twelve dramas and two science documentaries, have been translated into Naxi.

Other forms of Naxi used in the media include drama and other folk arts. From 2004 to 2008, a radio project was implemented by UNESCO and the local government of Lijiang Municipality. The main goal of the project was to produce a play about HIV/AIDS, trafficking and drug prevention in Naxi (please see the International Labour Organization website). Another part of this project involved the organisation of a fortnight's training programme to teach a group of 25 potential actors and actresses how to read and write the Romanized Naxi writing system. In 2008, a CD entitled *The Sigh of the Snow Mountain*, was issued and broadcast by the Lijiang Radio Station after completion of the project.

5.4 Language documentation

Documentation of the Naxi language is still inadequate and much remains to be done. Most of the Naxi folk stories available in the literature are all in Chinese. In recent years, efforts have been made by local Naxi researchers to document their own language, with several books being published as a result. One of these is a volume of *Naxi Children's Songs* (Naxi Tongyao) collected by He Dongmei (2007), a teacher from Bailongtan Primary School in the Gucheng District of Lijiang City, which is now being used as an auxiliary textbook in schools. Under the sponsorship of the Chen Yet-Sen Family Foundation in Hong Kong, He Dongmei and other researchers collected more Naxi children's songs and a VCD was published. Other publications include *A Collection of Naxi Proverbs* (Naxi Yanyu Ji) by He Jiezheng (2009), with Romanized Naxi pinyin and Chinese translation, and *Collected Naxi Idioms* (Naxizu 'Kekao' Huicui) by He Ren (2009).

5.5 Language transmission

Naxi advocates and a number of non-governmental organizations have also played an important role in the maintenance and revitalization of Naxi. Guo Dalie is a Naxi researcher known for his outstanding contribution to Naxi studies, especially the Dongba culture. He is also an advocate for and an active speaker of the Naxi language. In 2000, he established the Dongba Wenhua Chuanxiyuan (Institute for the Transmission of Dongba Culture) to teach Dongba culture and the Naxi language in Huangshan Primary School and Xinren Primary School. A year later in 2001, He established the Lijiang Naxi Wenhua Chuanxi Zhongxin (Lijiang Centre for the Transmission of Naxi Culture). In addition, many other individuals and organizations have also been involved in promoting transmission of Naxi.

The past decade has witnessed much progress in the maintenance and transmission of the Naxi language, which has had much impact on the Naxi community as well as the local government. 2007 heralded the beginning of an annual celebration known as the International Mother Language Day of Naxi. Since then, increasing numbers have participated in the festival each year. The local government has also begun work on the protection of Naxi. The Department of Education of Gucheng District in Lijiang City hosted the International Mother Language Day celebration in 2010, and the Department of Culture will host it in 2011 (information provided by Ms. Yang Yihong, Department of Education, Gucheng District, Lijiang City).

Conclusion and discussion

The causes of language change are multifactorial. As can be seen from the above description, the revitalization of Naxi, coupled with the changing attitudes of the Naxi community and the local government, is certainly encouraging. The attitude of the Naxi towards their own language has become much more positive. In the past, Naxi was considered useless by many, but more and more Naxi are now aware that it is an important and unique part of their cultural heritage. The government's concern about the future of Naxi has helped to promote the use of Naxi in different domains, of which the bilingual education programme and the Naxi mother tongue programme in primary schools are representative examples. Without the permission and support of the government, it would be impossible to teach Naxi in schools. This change in language attitudes is primarily a result of the development of tourism in Lijiang. Because of the increasing demands of tourism, Naxi language and culture are now valued and promoted. The Naxi community and the local government have begun to respect their

culture and distinctive ways of thinking. In this sense, therefore, tourism has exerted a positive effect on cultural preservation and language maintenance.

Not only has the open-doors policy attracted tourists to Lijiang, but it has also brought together experts in different fields. In recent years, the Naxi language has received more scholarly attention both within China and internationally, including the American linguist Thomas Pinson from SIL International and Alexis Michaud from France. Pinson and his family have lived in Lijiang for about twenty years, and Alexis Michard has conducted fieldwork in Lijiang on several occasions. Students from other universities in China have also chosen Naxi as their research topic. Increasing numbers of papers on the Naxi language are being published. However, compared with the considerable volume of literature on Dongba culture, the numbers are still small. Nevertheless, these experts are playing an important role in language revitalization. As stated by a researcher, “the more a culture is studied by scholars, the better it is for the protection and development of the ethnic group” (He, 2008). There is still an urgent need for more experts to be involved in the study and documentation of the Naxi language, both from within the community and from non-native scholars.

Compared to the work of the local government in preserving the Dongba culture, there has been less emphasis on protection of the Naxi language. For most of the tourists in Lijiang, Dongba culture is the most attractive part of Naxi culture. There is a Dongba Culture Museum, an Institute of Dongba Culture, and Regulations for the Protection of Dongba Culture. The unique nature of the pictographic Dongba script has led to its commercialization and widespread use in tourist products. While the Dongba script is a tangible feature of Naxi culture, spoken Naxi is intangible. The protection of intangible cultural heritage is a difficult task and needs more government support. In the case of Naxi, although support from the local government has already begun, it must be an ongoing process.

David Crystal (2003) stated that economic success such as tourism may foster language maintenance. Tourism emphasizes diversity and prizes local cultures, which in turn leads to an increase in cultural pride and self-esteem. It is usually assumed that tourism will have a negative impact on local culture. In the case of Naxi, however, it has produced some positive benefits.

Despite the revitalization of Naxi through the effects of globalization and tourism, the language is still endangered. According to a language proficiency study of Naxi in Lijiang Old Town (Zhao, 2010), only very few young people can speak Naxi. Many Naxi parents choose Chinese as their children’s first language. One reason for this is

the pressure from the dominant language, as they believe that speaking Naxi would affect their children's ability to speak Mandarin Chinese, which is crucial for advanced education and economic opportunities. As a result, some children may understand Naxi, but have difficulties speaking it. Whether Naxi will survive with the further development of tourism in Lijiang remains to be seen.

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References

- Crystal, David (2000), *Language Death* (United Kingdom: Cambridge University Press).
- Dongba Culture Institute (2000), *An Annotated Collection of Naxi Dongba Manuscripts* (Naxi Dongba Guji Yizhu Quanji) (Kunming: Yunnan Renmin Chubanshe).
- Fang, Guoyu (1985), *A Dictionary of Naxi Pictographic Characters* (Naxi Xiangxing Wenzipu) (Kunming: Yunnan Renmin Chubanshe).
- Guo, Dalie and Yang, Yihong (2006), *Naxi Culture Chanting Book* (Naxi wenhua songdu ben) (Kunming: Yunnan Minzu Chubanshe).
- He, Dongmei (2007), *Naxi Children's Songs* (Naxi tongyao) (Dehong: Dehong Minzu Chubanshe).
- He, Jiezheng (2009), *A Collection of Naxi Proverbs* (Naxi yanyu ji) (Kunming: Yunnan Minzu Chubanshe).
- He, Jiren and Jian, Zhuyi (1985), *A Brief Description of Naxi* (Naxiyu jianzhi) (Beijing: Minzu Chubanshe).
- He, Ren (2009), *A Collection of Naxi Idioms* (Naxizhu 'kekao' Huicui) (Kunming: Yunnan Minzu Chubanshe).
- He, Xueguang (2006), *Preschool Textbook for Naxi Language* (Xueqian Naxi wen jiaocai) (Kunming: Yunnan Minzu Chubanshe).
- He, Zhiwu (1987), *A Basic Grammar of Naxi* (Naxiyu jicu yufa) (Kunming: Yunnan Minzu Chubanshe).
- He, Zhonghua (ed.) (2008), *Ethnic Women/gender study and I* (Wo yu minzu funv/shehui xinbie yanjiu), *Gender and sustainable development* (Shehui xinbie yu kechixu fazhng) (Kunming: Yunnan education publishing house).
- Himmelman, Nikolaus (1998), *Documentary and Descriptive Linguistics* (Linguistics 36:161–195).
- Lewis, M. Paul (ed.) (2009), *Ethnologue: Languages of the World*, Sixteenth edition. Dallas, Tex.: SIL International. Online version: <http://www.ethnologue.com/>.

- Lijiang Statistic Bureau (Lijiang Shi Tongji Ju), *One Percent Sample Statistics of Lijiang City*, Publicized information (Gongkai Mulu) page (published online 22 September 2008) http://lj.xxgk.yn.gov.cn/canton_model17/newsview.aspx?id=60562, accessed 26 March 2011.
- Li, Lincan; Zhang, Kun and He, Cai (1953) *A Dictionary of Naxi Pictographs* (Moxie Xiangxing Wenzi Zidian) (Hong Kong: Shuowenshe).
- Michaud, Alexis; He, Xueguang (2007), 'Reassociated tones and coalescent syllables in Naxi (Tibeto-Burman)' *Journal of the International Phonetic Association*, vol. 37, No 3.
- 'Minority Language Radio Project for HIV/AIDS, Trafficking and Drug Prevention in the Greater Mekong Sub-region (GMS)', *International Migration Programme*, International Labor Organization http://www.ilo.org/dyn/migpractice/migmain.showPractice?p_lang=en&p_practice_id=67).
- 'Naxi Scripts', *Omniglot: writing systems and languages of the world* <http://www.omniglot.com/writing/naxi.htm>
- Pinson, Thomas M. (1998), *Naxi-Chinese-English Glossary* (Naqxi-Habaq-Yiyu GeezheeQ Ceeqhuil) (Dallas: Summer Institute of Linguistics).
- Rock, Joseph F. (1963), *A Naxhi-English Encyclopedic Dictionary* (Rome: Instituto Italiano per il Medio ed Estremo Oriente).
- Shi Zhengfeng (ed.) (2002), 'Zhongguo De Yuyan Zhengce Yu Shaoshuminzhu Yuyan Huoli', *Ge guo yuyan zhengce* (Taipei: Qianwei Chubanshe). Sun, Hongkai (2001), 'The Historical Position of Naxi in Tibeto-Burman Language' (Naxiyu Zai Zangmian Yuzu Yuyan Zhong Xe Lishi Diwei) *Yuyan yanjiu* (Language study) 42: 90–99.
- 'The Naxi ethnic minority', *Ethnic Minorities in Tibet* http://www.tibetinform.com/tibetz/ssmz_en/naxi/001.htm, accessed 26 March 2011.
- 'The HALA Project: Hawaii Assessment of Language Access', UHM Department of Linguistics, <http://www.ling.hawaii.edu/hala-project-hawaii-assessment-language-access>, accessed 26 March 2011.
- Xiong, Yuyong (2007), *The Preservation and Development of the Yunnan Minority Languages and Scripts—Present Situation and Consideration*, Paper presented at the international conference on minority, November 24–28, Beijing, China.
- Yang, Fuquan (2007), 'Wu Yu Muyu', *Aisixiang* (published online 28 May 2007) <http://www.aisixiang.com/data/detail.php?id=14545>, accessed 26 March 2011.
- Yang, Guoqing (2010), 'Review on the ten years' work of Lijiang Dongba Culture Preservation Institute' (Lijiang Dongba Wenhua Chuanxiyuan Chuangban Shinian Pingxi) *Ethnic Groups in Yunnan* 13: 64–68
- Yang, Huandian (2004), *A Study on Naxi Language* (Naxiyu yanjiu) (Beijing: Dangdai Zhongguo

Chubanshe).

Zhao, Qinglian (2010), *A Study on Bilingual Situation of Naxi in the Old Town of Lijiang*, Paper presented on the third international workshop on endangered languages in Yunnan, Yuxi City, Yunnan, June 11–13, 2010.

Zhou, Minglang (2003), *Multilingualism in China: The Politics of Writing Reforms for Minority Languages 1949–2002* (New York: Mouton de Gruyter).

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A Case Study of Language Heritage Maintenance

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Abstract: This paper discusses heritage maintenance of the Hani language by using Hani orthography in literacy training and translation practice. This is exemplified by the Hani Adult Literacy Training Programme and the translation of 1,266 proper names in Lüchun County from Chinese into Hani. These translated terms include the names of administrative units, public services, and private businesses. These terms were welcomed and accepted by participants in the programme, and the process of translating these terms using Hani orthography also improved the ability of participants to express themselves in Hani.

Key words: Hani Orthography, Heritage Maintenance

1. Introduction

1.1 The Hani Language and Orthography

The Hani are one of the 55 ethnic minorities in China, with over 1.5 million Hani living in Yunnan Province. Hani is the official term for the whole ethnic group, which includes over a dozen sub-branches with distinguishing cultural traits. The Hani language also comprises distinct dialects and sub-dialects, and belongs to the Yi-Burmese subgroup of the Tibeto-Burman group within the Sino-Tibetan language family. It is closely related to Yi, Lahu, Lisu, Jino and Naxi. Three main dialect groups have been described in China: Hani-Yani, Haoni-Baihong and Biyue-Kaduo (Dai Qingxia:1957). The Yani sub-dialect is generally known as Akha and is distributed in Xishuangbanna, Yunnan Province, and also in Myanmar, Thailand, and Laos. Some sub-dialects are mutually intelligible.

The Hani people did not have a written language until 1957, when a Hani

orthography was devised by linguists in China, who organized comprehensive surveys of Hani areas. The Lüchun Dazhai variant was selected as a standard for designing the Hani orthography. This is based on the Chinese Romanized *pinyin* system, which facilitates transfer of Chinese loanwords. This system was also used for many new orthographies which were designed for other ethnic minorities during this period. Since then, the Hani people have been using this orthography, and have also adopted the rules of writing Chinese *pinyin*. In the 1980s, this orthography underwent revision and reduction.

The revised Hani orthography is illustrated in the following tables.

Consonants:

C	b	p	m	f	w	d	t	n	l	z	c	s	ss
IPA	b	ph	m	f	w	d	th	n	l	dz	tsh	s	z
C	j	q	ni	x	y	g	k	ng	h	hh	bi	pi	mi
IPA	dz	tch	ɲ	ç	ʒ	g	kh	ŋ	x	ɣ	bj	phj	mj

The above table shows that Hani has a number of unique consonants which are not present in Chinese. For these, double letters are used, e.g. ss, hh, and bi, pi, mi and ni.

Vowels:

V	ii	i	ei	yu	a	e	ee	u	o	ao
IPA	ɿ	i	ɛ	ø	a	ɤ	ɯ	u	o	ɔ
V	iiv	iv	eiv	yuv	av	ev	eev	uv	ov	aov
IPA	ɿ̚	i̚	ɛ̚	ø̚	a̚	ɤ̚	ɯ̚	u̚	o̚	ɔ̚

The above table shows that Hani has some monophthongs, such as ɿ, ɛ, ø, ɯ, ɔ, which do not occur in Chinese. These are represented respectively by double letters, e.g. ii, ei, yu, ee, and ao. Moreover, Hani has creaky (tight) vowels, such as ɿ̚, i̚, ɛ̚, ø̚, ɯ̚, ɔ̚, to which—v is added, e.g. iiv, iv, eiv, yuv, eev, and aov respectively.

Tones:

Tones	Letters	Example	Gloss	Example	Gloss
High	-l	bal	to attend a festival		
Mid	zero	ba	white	bav	a mistake
Low	-q	baq	thin	bavq	to bring
Rising	-f	baf	to do office work		

1.2 Location of the Case Study

The Hani people are distributed in the mountainous area between the Honghe and Mekong Rivers in Yunnan Province. This area lies between 21–26 degrees north and 99–104 degrees east, and includes the following regions which have Hani majority: Honghe, Yuanyang, Lüchun and Jinping Counties in the Honghe Hani-Yi Autonomous Prefecture; Mojiang, Jiangcheng, and Pu'er Counties in Pu'er Municipality; Yuanjiang, Xiping and Eshan Counties in Yuxi Municipality, and Xi Shuangbanna Dai Autonomous Prefecture. Hani also live in Hongta District, Yimen and Tonghai in Yuxi Municipality; Jinning and Luquan Counties in Kunming Municipality; Jianshui and Shiping Counties in Honghe Hani-Yi Autonomous Prefecture; and Shuangbo County in Chuxiong Yi Nationality Prefecture.

The case study was conducted among the Hani community of Lüchun County, which is located between 22°33'–23°08' north and 101°48'–102°39' east. This area lies south of the Ailao Mountains, and neighbours Honghe, Yuanyang and Jinping Counties of the Honghe Hani-Yi Autonomous Prefecture. Lüchun County also neighbours Mojiang Hani Autonomous County and Jiangcheng Hani-Yi-Dai Autonomous County of Pu'er Municipality. It has an area of 3,096.86 square km, and borders Vietnam and Laos in the Great Mekong Subregion.

According to the latest data, the population of Lüchun County numbers 223,271 and includes the Hani, Yi, Yao, Lahu, Dai and Han Chinese ethnic groups. Within this population, 220,198 belong to ethnic minorities (98.2%), with 196,040 being Hani (88.2%). Therefore, Lüchun County is also known as the Home of the Hani, the Hani Standard Language Point, the Hani Religious Site and the Centre of Hani Culture. Administratively, the county comprises 8 townships and 1 town, with 81 village clusters and 6 communities with a total of 769 villages.

The centre of the county is Daxing Township, which lies at an elevation of 1,620m above sea level, 450km from the provincial capital of Kunming, and 300km from the prefecture capital of Mengzi.

2. Application of the Hani Orthography in Literacy Programmes

In order to preserve the Hani language and culture, Yuxi Normal University conducted extensive research on Hani and its dialects, and launched the Hani Literacy Project in 2000.

2.1 The First Short Term Training Class

In March 2001, Yuxi Normal University trained 24 Hani language teachers, of whom 15 were from Hani villages in Yuxi Municipality, 7 from the Honghe Hani-Yi Autonomous Prefecture, 1 was Akha from Thailand, and 1 was from Canada. The majority were primary school teachers, while some were researchers in Hani folklore. They acquired a basic knowledge of the Hani orthography and learnt how to read and write in Hani.

After 20 days of intensive training, some were able to write proverbs, stories, love songs and ballads in Hani. One of the students, Mr. Ni Weishun was 46 years old when he attended the training class and has since acquired extensive experience. He was Director of the Cultural Centre in Yangjie Township of the Yuanjiang Hani-Yi-Dai Autonomous County in Yuxi Municipality but could not read or write a single Hani word. After the class, not only was he able to read and write Hani, but he also created a number of art projects. His artistic skills and creativity led to an invitation to become an honorary Professor of Art and Dance and to instruct the students in the Department of Music and Dance at Yuxi Normal University (Yang, Shihua & Bai, Bibo 2003).

2.2 The Second Short Term Training Class

In March 2002, the second Hani literacy training class was conducted in a Hani community in Lüchun County instead of Yuxi Normal University. There were two classes which included 66 participants. Class A comprised 30 directors and staff members from local cultural centres and government offices, whose first language was Hani. Class B comprised 36 local Hani farmers, most of whom had never had the opportunity to go to school and some could not even read or write Chinese. After 20 days of intensive training, many of the participants were able to record their daily activities, children's rhymes, proverbs, riddles, folk stories, poems, and recipes. This enabled the instructors to compile a collection of Hani essays at the end of the course. It was an amazing achievement and this class became a model for others wanted to learn Hani. Later, six farmers also became teachers at the Hani Literacy Centre.

Inspired and encouraged by the successful outcomes of these two training classes in Lüchun County, in March 2002, the Institute of Ethnic Cultures and Social Development of Yuxi Normal University assisted the Hani village farmers to establish the first Hani Literacy Centre in a Hani village in Lüchun. Its goals were to establish a learning community in Hani society, to train Hani farmers, to teach Hani, and to compile and print reading material for all. From 2002 to 2005, the Hani Literacy

Centre taught Hani farmers the Hani orthography. The project was financially supported by other Hani. Six farmers became very active teachers and visited several other villages, including Gaoqma (Guangma), Tavqzaq (Dazhai), Aqlaoq Naqhhal (Aluona), Naqlolgov (Naluogo), Aqlaoq Puvteil (Aluo Potou) and Niuqhaoq (NiuHong) in order to teach Hani in the evenings. They have now taught a total of 16 classes, and trained over 600 Hani farmers.

In addition, the team of six Hani farmer-teachers started work on a Hani-Chinese bilingual paper, Haqniq Yeillul Soqhhaq (Hani Culture Reader in Chinese and Hani) for literate adults. Since July 2002, they have received financial support from friends. Mr. Bai Song (Deiq Cul in Hani) and Bai Jinshan (Ju Sal in Hani) are the chief editors of this bilingual paper, which has been warmly welcomed by the Hani. For their excellent work on Hani literacy, both have been invited by the Lüchun County Government to serve as members of the local Hani Cultural and Historical Society. In 2003, eight farmer-teachers were also invited to attend a two-week study tour and cultural exchange programme with the Akha people in Northern Thailand.

Mr. Bai Song, who is over 50 years old, was invited by the Yunnan Provincial Education Commission to become a member of the Hani-Han Textbooks Compilation Committee, and to participate in checking and translation for Hani-Chinese Primary School Textbooks. He was also invited to become a Hani translator by the Yunnan Ethnic Publishing House.

2.3 The Third Short Term Training Class

In 2006, Yuxi Normal University, in collaboration with La Trobe University, conducted a Hani Writing Class at the Hani Literacy Centre in Lüchun County. Their aim was to encourage participants to express their ideas in written Hani. After a month of intensive and comprehensive training classes, over 30 attendees made excellent progress in reading and writing Hani. Each participant wrote stories about his/her daily life and other short texts which were then prepared for publication.

The Hani Literacy Centre has become a place where Hani farmers could learn to read and write Hani, collate Hani linguistic and cultural materials, and introduce new ideas through translation. All of these activities will assist in language maintenance and preservation. Over the past few years, the Centre has collected over 7,000 lines of Hani Death Ritual Texts (Haqniq Colsil Neivqtl Doq). Locally, 500 copies of 28 issues of a Hani Culture Reader were printed in Hani and Chinese, providing good reading material for the newly literate. Some farmer-teachers from the Hani Literacy Centre

have become cultural leaders, forming an excellent team to work towards maintenance of their language and cultural heritage.

3. Translation of Proper Names

In 2008, 1,266 proper names in a Hani community were translated from Chinese into Hani. These new names were not traditional Hani terms, but represented Chinese concepts and terms, which had gradually been introduced into Hani society over the past few decades. They included the names of administrative units, schools, clinics, civil services and private businesses in an administrative area of Lüchun County.

This translation project was on the agenda of the local government and is now a requirement for local cultural construction and developments in Hani areas. A preliminarily survey of the project showed good acceptance of new concepts by the Hani.

3.1 Categories of New Terms

The new terms translated by farmer-teachers from the Hani Literacy Centre in the Proper Name Translation Project which was initiated by the local government in 2008 comprised the following three categories:

- a. Government Administration Units, including three sub-categories :
 - Names of County Administrative Units (281 entries)
 - Names of Township Administrative Units (226 entries)
 - Names of Village Cluster Organizations (162 entries)
- b. Collective Enterprises (139 entries)
- c. Public Services and Private Businesses (358 entries)

In the following sections, examples are presented from each category. The descriptions for each term includes the Chinese name (source language), Hani translation (target language), International Phonetic Alphabet (IPA), English gloss and an English translation.

3.1.1 Government Administrative Units

- a. 绿春县人民代表大会常务委员会

DOLNIA	SSAQLAOL	COLHAOL	ZYUQDUQ
do ⁵⁵ na ³³	za ³¹ lɔ ⁵⁵	tsho ⁵⁵ xɔ ⁵⁵	dzø ³¹ du ³¹
Lüchun	people	representative	committee
The Standing Committee of the People's Congress of Lüchun County			

b. 绿春县大兴镇人民政府

DOLNIA	DAQSIL	PUVZAOQ	SSAQLAOL	ZYUQYAOL
do ⁵⁵ na ³³	da ³¹ si ⁵⁵	pu ³³ dzo ³¹	za ³¹ lo ⁵⁵	dzø ³¹ jo ⁵⁵
Lüchun	Daxing	township	people	government
The People's Government of Daxing Township of Lüchun County				

c. 中国共产党牛洪村总支部委员会

ZAOLGOQ	GAOFCADA	NIUQHAOQ	PUVMA	ZYUQDUQ
dzo ⁵⁵ go ³¹	go ²⁴ tsha ³³ da ³³	nu ³¹ xo ³¹	pu ³³ ma ³³	dzø ³¹ du ³¹
China	communist party	Niuhong	village cluster	committee
The Niuhong Village Chinese Communist Party Branch Committee				

d. 绿春县人民政府扶贫开发领导小组办公室

DOLNIA	MILHAOQ	CYUQSSAQ	CIILTUL	DUQ
do ⁵⁵ na ³³	mi ⁵⁵ xo ³¹	tshø ³¹ za ³¹	tshŋ ⁵⁵ thu ⁵⁵	du ³¹
Lüchun	territory	poor people	help	office
The Lüchun County Office for Poverty Alleviation				

3.1.2 Collective Enterprises

a. 绿春县建筑工程公司

DOLNIA	MILHAOQ	JILCUV	YAOLSAL	AOLBA
do ⁵⁵ na ³³	mi ⁵⁵ xo ³¹	dzi ⁵⁵ tsu ³³	zo ⁵⁵ sa ⁵⁵	o ⁵⁵ ba ³³
Lüchun	territory	house-building	house-safe	group
Lüchun County Construction and Engineering Company				

b. 绿春县供销社南疆商贸有限公司

DOLNIA	MILHAOQ	GEEBAQ	ZEIQSAL	DALQEIV	YOBA
do ⁵⁵ na ³³	mi ⁵⁵ xo ³¹	gu ³³ ba ³¹	dze ³¹ sa ⁵⁵	da ⁵⁵ tçe ³³	jo ³³ ba ³³
Lüchun	territory	southern	border	money-earning	measure group
Lüchun County Southern Border Supply and Marketing Cooperative & Commercial Trading Co. Ltd.					

c. 绿春县大水沟乡供销合作社

DOLNIA	MILHAOQ	DAQSYUGEL	PUVZAOQ	HHELLAVQ	LAVQBAO
do ⁵⁵ na ³³	mi ⁵⁵ xɔ ³¹	da ³¹ sə ³³ gɿ ⁵⁵	pɯ ³³ dzo ³¹	ɣɿ ⁵⁵ la ³¹	la ³¹ bɔ ³³
Lüchun	territory	Dashuigou	township	business	group
Supply and Marketing Cooperative of Dashuigou Township of Lüchun County					

d. 红绣坊制衣行

PEILNIL	PEILZAOQ	GUVQDUQ
phe ⁵⁵ ni ⁵⁵	phe ⁵⁵ dza ³¹	gu ³¹ du ³¹
clothes	fashion	sewing
Costume Fashion Company		

3.1.3 Public Services and Private Business

a. 哈尼族传统风味

HAQNIQ	ZALKEEL	ZALNIUV
xa ³¹ ni ³¹	dza ⁵⁵ khur ⁵⁵	dza ⁵⁵ ni ³³
Hani	tasty food	delicious food
Traditional Hani Cuisine		

b. 戈奎土特产专卖店

GEEKYUL	HHOQCYUQ	HHOQZAL	AOQDUQ
gu ³³ khə ⁵⁵	yo ³¹ tshə ³¹	yo ³¹ dza ⁵⁵	ɔ ³¹ du ³¹
Gekui	dishes	food	shop
Gekui Local Produce Shop			

c. 宝莲饭店

BAO	LIEIQ	ZAQDUQ
pɔ ³³	lje ³¹	dza ³¹ du ³¹
Bao	Lian	restaurant
Bao	Liao	Restaurant

d. 天客隆超市

TIEILKEIQLAOQ	MIAOQGAOQ	AOQDUQ
thie ⁵⁵ khɿ ³¹ lɔ ³¹	mjɔ ³¹ gɔ ³¹	ɔ ³¹ du ³¹
Tiankelong	super	market
Tiankelong Supermarket		

3.2 Analysis of Hani Translations

Over the past six decades, many new concepts and expressions have been introduced into Hani. They occur frequently and are standardized. The following are commonly used:

中国共产党	Zaolgoq Gaofcada	Communist Party of China
绿春	Dolnia, Lüchun	county name
人民	ssaqlaol	(of the) people
政府	zyuqyaol	government
委员会	zyuqduq	committee
组织部	zyuqssaq hhezaoduq	Department of Human Resources
宣传部	zyuqmiaoq geehuqduq	Department of Publicity
县	milhaoq	county, district
局	zyuqlov	bureau
乡, 镇	puvzaq	township, town
村委会	puvma zyuqba	committee of village cluster
It can be seen that the Hani translation follows the Chinese word order.		

3.2.1 Coinage:

Coinage refers to the creation of totally new words which correspond to concepts in the source language (Chinese), by using existing word segments to create new words based on Chinese ideas. For example:

绿春县发展和改革局

DOLNIA	MILHAOQ	AOLDAV	AOLPAL	ZYUQLOV
do ⁵⁵ na ³³	mi ⁵⁵ xɔ ³¹	ɔ ⁵⁵ də ³³	ɔ ⁵⁵ pha ⁵⁵	dzɔ ³¹ lɔ ³³
Lüchun	territory	increase	change	bureau
Lüchun County Development and Reform Bureau				

As the concepts of “县, county”, “发展, develop”, “改革, reform”, and “局, bureau” are new, there are no equivalent words for translating them into Hani. Thus, Hani words that are close in meaning to the original Chinese have been used to translate these terms.

绿春县经济贸易局

DOLNIA	MILHAOQ	ZEIQ	SSOL	HHELLAVQ	ZYUQLOV
do ⁵⁵ na ³³	mi ⁵⁵ xo ³¹	dze ³¹	zo ⁵⁵	ɣr ⁵⁵ la ³¹	dzø ³¹ lɔ ³³
Lüchun	territory	money	and	buying-and-selling	bureau
Lüchun County Economic and Trade Bureau					

As the concepts of “经济, economy” and “贸易, trade” are new, existing Hani synonyms meaning “money” and “buying and selling” are used.

绿春县教育局

DOLNIA	MILHAOQ	MEIQ	SIQ	MEIQ	KYUL	ZYUQLOV
do ⁵⁵ na ³³	mi ⁵⁵ xo ³¹	mɛ ³¹	si ³¹	mɛ ³¹	khø ⁵⁵	dzø ³¹ lɔ ³³
Lüchun	territory	teach	knowing	teach	intelligent	bureau
Lüchun County Education Bureau						

As the modern concept “教育, education” is difficult to translate into Hani, a descriptive phrase is used, *lit.* “to teach to become knowledgeable and intelligent”.

3.2.2 Borrowing

Borrowing refers to the direct transfer of words from the source language, and may be partial or complete. The majority of the proper names consist of partial loans, where both Hani and Chinese words are used, but with a Chinese word order, as in the following examples:

中国共产党绿春县委员会

ZAOLGOQ	GAOFCADA	DOLNIA	ZYUQDUQ
dzø ⁵⁵ go ³¹	gø ²⁴ tsha ³³ da ³³	do ⁵⁵ na ³³	dzø ³¹ du ³¹
China	Communist Party	Lüchun	Committee
Chinese Communist Party Committee of Lüchun County			

The above phrase is entirely new, and is a composite of Hani and Chinese loans. Thus, the Chinese loan “ZAOLGOQ GAOFCADA, Chinese Communist Party” with the Hani phrase “DOLNIA ZYUQDUQ, Lüchun Committee”.

天慈宝贵童装

TIELCIIQ	BAOYUF	SSAQGUQ	DAOPIAOL	AOQDUQ
thje ⁵⁵ tsh ³¹	bɔ ³³ kø ²⁵	za ³¹ gu ³¹	dɔ ³³ phjɔ ⁵⁵	ɔ ³¹ du ³¹
Tianci	Baogui	children	dressing	selling-shop
Tianci Baogui Children's Clothes Shop				

The words “Tianci, Baogui” are Chinese loans, which are transliterated into Hani.

绿春县科学技术局

DOLNIA	MILHAOQ	KOLXOQ	LAVQQIVQ	ZYUQLOV
dɔ ⁵⁵ na ³³	mi ⁵⁵ xɔ ³¹	ko ⁵⁵ ço ³¹	lɛ ³¹ tɕi ³¹	dzø ³¹ lɔ ³³
Lüchun	territory	science	technique	bureau
Science and Technology Bureau of Lüchun County				

As the concepts of “科学, science” and “技术, technology” are new, the Chinese loan for “KOLXOQ, science” and an existing Hani word “LAVQQIVQ, skillful” were used.

Several complete loans are also necessary, as in the following examples:

a. 双拥文化广场

XUALYAOL	WEIQHUAF	GUACA
çua ⁵⁵ jɔ ⁵⁵	wɛ ³¹ xua ²⁴	kua ³³ tsha ³³
shuangyong	cultural	square
Shuangyong Cultural Square		

b. 自由街角

ZIIFYEQ	GEILJOQ
tsɿ ²⁴ jɿ ³¹	kɛ ⁵⁵ tɕo ³¹
free	corner
Leisure Square	

In conclusion, the above data show that Hani has been greatly influenced by Chinese. Prolonged language contact has led to a large number of Chinese loans in Hani. The current situation might be the first stage of borrowing, with the scale and scope increasing with time. The 1,266 entries provide good examples of borrowing from Chinese, which is not restricted to individual vocabulary items, but also includes concepts and expressions. Therefore, even in a remote Hani community, the use of Chinese is increasing while that of Hani is declining. As a result, increasing language contact between Hani and Chinese, along with the availability of compulsory education, may further propel Hani along the road to extinction.

Conclusion

This paper has demonstrated the important social function of the Hani orthography in literacy programmes and translation of new terms. The Hani orthography is fulfilling a significant role in local government policies, and have led to a change in the attitude of the Hani towards their own language and culture. Cultural events and activities have attracted more people from within China and abroad, and have awakened their awareness of the importance of continuing to use their language and of safeguarding their cultural heritage.

In addition, the Hani have also benefitted from increased opportunities after becoming literate in Hani. Some have become tutors, while others have been invited to assist in collaborative language projects. Some are employed as guides, and others are interpreters and informants for researchers of the Hani language. The use of the Hani orthography provides a way of improving literacy among Hani communities. It raises the status of Hani, and confers dignity to its users.

Lastly, several newly literate Hani have acquired computing skills which will enable them to access the internet and use emails for communication. Mr Beiq Jusal, Beiq Deiqcul, Beiq Pilsal and Ceiq Lacel were able to edit the Hani Culture Paper (Haqniq Yeillul Soqhhaq) on the computer. This improves communication with the outside world and provides access to global resources. These farmer-teachers have become good interpreters and translators and were key players in the literacy programmes and translation projects described above.

Thus, the use of written Hani provides an excellent way of language preservation and maintenance. However, these projects have their limitations. Hani is not taught in schools and there is limited investment in Hani language projects. The majority of Hani are unaware of the existence of the Hani orthography, and have not yet had the

opportunity to learn to read and write it. Nevertheless, the success of the projects described offer grounds for optimism.

References

Dai, Q. X.(1995). *An Introduction to the Hani Language*. Yunnan Nationalities Publishing House.

Yang, S.H and Bai, B.B.(2003). *Hani Cultural Studies of Yuxi Municipality*. Yunnan Nationalities Publishing House.

Lewis, P. & Bai, B.B.(1996). *Hani-English/English-Hani Dictionary*. Kegan Paul International, London.

Bradley, D.(2005). *Heritage Maintenance for Endangered Languages in Yunnan, China*. La Trobe University, Australia.

Xu, X. M. (2007). *Records and Transmission of Ethnic Groups*. Second Symposium Heritage Maintenance for Endangered Languages in Yunnan, China. La Trobe University, Australia

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The Maintenance of Written Hani and Resilience Thinking —A Case Study of the Hanitanlan Website

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Abstract: We live in a constantly changing world where social and ecological systems are inextricably linked. Changes in one domain of either of these two systems will inevitably have an impact on the other. Language is no exception. When ethnic languages are affected by unexpected changes, the people involved must respond actively in order to survive in the new environment.

This study discusses the function of the Hanitanlan website in the maintenance of Hani cultural and linguistic diversity, the attitudes of its users, and their assessment of its value. Suggestions are made for the ongoing work of Hani language resource management and heritage maintenance within a dynamic social environment. The data were collected from web databases. The findings provided evidence that most users had positive attitudes and evaluations of the Hani website. They were aware of the importance of linguistic and cultural protection, and appreciated the pivotal role of the online forum in creating an ethnic language environment on the worldwide web. As many Hani were eager to learn the orthography, e-reading materials and online learning resources could be provided. Innovations in language maintenance and the ongoing growth of written Hani are also discussed. This case study of the maintenance of written Hani and the Hanitanlan website may be considered to be a type of resilience thinking as proposed by Walker and Salt (2006).

Keywords: Maintenance of Written Hani, The Worldwide Web, Resilience Thinking.

1 Introduction

1.1 Background

Language decline and endangerment are inevitable consequences of a more global language environment. Factors including compulsory education, urban sprawl, economic development, industrialization and globalization have resulted in language loss in minority communities in China. As language is an essential feature of an ethnic group, language loss represents a loss of ethnic traits, traditional knowledge, and linguistic diversity.

China is a nation of many ethnic groups, languages and orthographies, comprising 56 ethnic groups who speak more than 120 languages, use 54 orthographies, and display distinctive cultural characteristics. However, the acceleration of urban sprawl, the popularity of the media, and the development of the worldwide web has led to a decrease in cultural diversity. The use of minority languages has declined, and some languages are disappearing. Both traditional and newly-created orthographies are losing their social functions among ethnic minorities due to increasing use of Chinese, the dominant language.

1.2 The Hani People

The Hani are one of the 55 ethnic minorities in China, with a population of 1.4 million (2000). There are also about 400,000 Akha in Myanmar, 90,000 in Thailand, 60,000 in Laos, and a few thousand in Vietnam (Kya Heh, 2005). Linguistically and ethnologically, those known as the Ahka in these countries are very closely related to the Hani in China.

The Hani mainly live in Yunnan Province in southwest China, with 700,000 in the Honghe Hani-Yi Autonomous Prefecture. These constitute half of the total Hani population in China. The vast majority (over 90%) of the Hani population live in close communities in the remote counties of Honghe, Yuanyang, Luchun and Jinping on the south bank of the Red River (Ge Bu, 2005); the districts of Mojiang, Pu'er, Zhenyuan, Jingdong, Jiangcheng and Lancang in Pu'er Municipality; the districts of Jinghong, Mengla and Monghai in Xishuangbanna Dai Autonomous Prefecture; the Yuanjiang Hani-Yi-Dai Autonomous County, and the Xinping Yi-Dai Autonomous County in Yuxi Municipality. In addition, there are scattered Hani groups in the counties or districts of Jinning, Luquan, Shuangbai, Hongta, Eshan, Yimen, Tonghai, Jianshui, Shiping, Simao, Menglian and Jinggu. There are various terms by which the Hani call themselves:

Haoneng, Heni, Budu, Suobi, Bukong, Ashou, Baihong, or Biyue. To non-Hani speakers, they are known as Hani or Woni.

The Hani language is part of the Southern Ngwi (Yi) branch within the Tibeto-Burman family in the Sino-Tibetan phylum. Three major dialects have been described by Chinese linguists: the Ha-Ya, Hao-Bai and Bi-Ka dialects. The Ha-Ya dialect has been further divided into the Hani and Yani or Akha sub-dialects, which comprise several varieties.

The Hani did not have a written language until 1957. Cultural transmission was conducted through oral teaching and memorization before linguists appointed by the Chinese government created the Hani orthography, which was based on the local variety spoken in Dazhai in Luchun County, one of many varieties within the Hani sub-dialect. The Hani orthography is a Romanized alphabetic orthography, which would facilitate transfer to standardized Chinese *pinyin*. Postscript consonant letters were used to indicate tones. Revisions to the original orthography were made in 1958 and 1983.

In the 1960s, 1980s and 1990s, written Hani was taught in some primary schools and in two universities. It has also been used in social literacy, broadcasting, film production, television, literary publications and the arts. Despite these efforts, most Hani are still illiterate although they can speak Hani proficiently.

1.3 The Hanitanlan Website

The Hanitanlan website was created by Hani who had attended three literacy training workshops. The first workshop was organized by the Research Centre for Endangered Languages of Yuxi Normal University in 2001, which aimed to train 25 adults to read and write. Participants were selected from local primary schools, Hani villages and government departments. The second workshop was organized by the Literacy Centre of Luchun County in 2003, with the aim of teaching over 100 farmers to read and write. The third workshop was held in 2006, and instructed those who were already literate to record Hani literature, including stories, folk songs, riddles and proverbs. They also acquired basic computing skills at No.1 Middle School of Luchun County.

After attending the training workshops, a small group of Hani decided to buy their own computers with the proceeds obtained from selling agricultural produce. As they started using the Internet to acquire information, they realized that the establishment of a Hani website would be beneficial to language maintenance and assist those who wanted to learn the orthography. Using the online forum, newly literate Hani wrote

stories, recorded aspects of their culture and language, and posted them on the website. Online resources could reach wider audiences compared to traditional forms of media. Previously, almost all the available material on the internet was written in Chinese. The Hani website would enable Hani culture and language to be preserved and shared by large numbers of people. This was created in May 2006 by two Hani, at the following address: <http://hanitalan.yxnu.net/>. The homepage included Chinese, Hani and English. Up to the beginning of March 2011, there have been 110,119 visitors to the website.

2 Web Resources and Research Questions

The following linguistic and cultural resources can be found on the Hanitanlan website in March 2011:

Hani in Brief: Hani in Brief (4 documents), A History of Hani (1 document), Hani Terraces (6 documents), Distribution and Population (6 documents), the Hani Economy (1 document and 9 photographs), Hani Education (1 document and 3 photos) and Hani Science (1 document).

Hani Terraces: Studies of Hani Terraces (123 documents and 131 photographs, 16 videos), Information on Rice Plots (2 documents), Special Topics (3 documents), Terrace Regulations (1 document), Terraced Tea Houses (24 documents).

Traditional Culture: Festivals and Ceremonies (22 documents and 13 photographs), Handicraft and Costumes (38 documents and 49 photographs), Religion (11 documents and 6 photographs), Customs (30 documents), Village Culture (16 documents and 6 videos), Food (17 documents, 4 photographs and 1 video), Traditional Medicine (3 documents), Genealogy (2 documents).

Hani Literature: Hani Literature (25 documents), Poems (124), Prose (75 documents), Novels (3), Folk Stories (22), Others (17 documents), Commentaries (11 documents).

Hani Studies: Hani Theses (90 documents), History (3 documents), Video (1), Historical Figures (4 documents), Modern Heroes (18 documents), Legends of Hani Masters (31 documents and 1 video).

Hani Arts: Studies of Arts (32 documents), Videos (25), Folk Arts (3 documents), Artists (22 documents, 1 photograph and 1 video), Calligraphy and Painting (4 documents).

Ethnic Minorities in China: Ethnic Minorities (55 documents), Related Documentaries (26 documents and 1 Video).

Beautiful Hani Sites and Travel Destinations: Luchun (5 documents), Yuanyang (5

documents), Mojiang (2 documents), Menghai (1 documents), Jiangchen (1 document), Travel Diaries (24 documents), Travel Guides (4 documents), Others (3 documents).

Entertainment: Video Bar (73 documents), Audio Bar (8 documents).

Hani Writing: 14 documents (on the Hani homepage)

English Writing: 10 documents (on the English homepage)

The above linguistic and cultural categories and sub-categories showed an abundance of resources covering many topics on the Hani website. There were also 14 documents on the Hani homepage containing news, folk stories, poems and daily activities, along with 10 documents on the English homepage introducing the Hani, their literature and special events.

The purpose of this study was to answer the following questions:

- (1) What are the attitudes of different communities towards the Hanitanlan website? How would they evaluate its success?
- (2) What roles has the Hanitanlan-web played in the maintenance of Hani heritage, cultural and linguistic diversity?
- (3) What constructive suggestions might be provided for the authors of the Hanitanlan website in the ongoing work of Hani language resource management and heritage maintenance?

3 Data Collection

Data were collected from the web databases on the Hanitanlan website in order to answer the three questions listed above. A survey of the responses was conducted in March 2011, with the data consisting of messages, documents, articles, theses, diaries and other posted materials. The web managers were also interviewed with regard to their plans for future development.

Quantitative research methodology was used to analyze the attitudes and evaluations posted by web users, including both positive and negative comments, and suggestions for further work. Messages were left by users in the Message Bar and e-papers were posted on the website. Interviews were conducted with administrators, native Hani speakers and other interested parties.

4 Results and Analysis

4.1 The Attitudes and Evaluations of Web Users

Hundreds of thousands of messages were posted on the Message Bar. They were analyzed with respect to the three research questions being asked. The following are

excerpts from selected messages:

(1) Hi, Hani guys, you have done a very good job for the Hani people. On the Hanitanlan website, I can see familiar landscapes and hear our favourite songs, Hani Laba (Hani folk songs).

(2) I am from Beijing. I am an MA candidate in linguistics. Setting up a Hani website is a good idea. I can visit many Hani areas in southwest China and read related theses in Beijing. I can also share abundant resources from the web. It is really good for Hani people to maintain their culture.

(3) I am Han Chinese and grew up in Jiangsu Province. I cannot speak Hani, but my mother is Hani. She was born in a Hani area and can speak Hani. She likes the website very much. She likes listening to the music and watching the videos of remote Hani areas. But I wonder if we should develop websites for ethnic minority languages when everyone in China is learning Chinese.

(4) I am very thrilled to see that the Hani have such a good website describing Hani culture and with such beautiful writing. You Hani guys have done a wonderful job. I like seeing the Hani terraces on the high mountains. Anyone who sees the pictures will certainly want to visit them.

(5) Hi, Hani brother, I am Hani and work in Hunan. I love visiting the Hani web. It is very good for the Hani to protect our culture and language. I am proud of it. I think that our culture and language can be archived and transmitted for many years through this route, so that our descendants can see them in the future. It is really amazing work.

The above provided evidence that indicated visitors' attitudes and evaluations were mostly positive. Both Hani and non-Hani users strongly supported the Hani website and enjoyed the display of distinctive Hani traits. They were aware of the need for language and cultural protection, and felt that the establishment of the Hanitanlan website was a good idea. The website was also identified as important tool for Hani language maintenance. However, a few users wondered if it was necessary to develop ethnic minority languages and cultures, as Chinese is the national language and is used by most people in China.

4.2 The Functions and Roles of the Website

The functions and roles played by the website were also discussed in the messages and e-papers which were posted by users. The following are excerpts from selected messages:

(1) Many people pay more attention to major issues, such as development of

scientific technology, spacecraft, modern computers and information industry, rather than language decline and endangerment. The Hanitanlan website is a good place for native speakers to protect their mother tongue and culture.

(2) Every ethnic minority in China should take care of their native language. The Hanitanla website has set a good example for the other ethnic minorities.

(3) From the website, I learned that Hani has a newly-created orthography which helps researchers record Hani oral literature. This is good news for the Hani people. I want to learn written Hani. Please let me know about the next training workshop. Thanks.

(4) I am Hani. I have been writing Hani poems in Chinese and Hani since I learned to read and write in Hani in the 1990s. *My Mother Tongue* is my first book which has been published in Hani and Chinese. Thanks for the Hanitanlan website. Now more Hani poems can be posted on it and I can share them with my people. I feel comfortable writing in Hani.

(5) I am very proud that I can write in Hani. I never thought that my work *My Father* could be posted on the website. Thanks for the training workshops, thanks for the website. *The Spoken Hani* on the website helps us to remember our language. Before I attended the training workshops, I thought my native language was useless as we were all learning Chinese.

(6) Language is the means by which cultural expression can occur. Language itself has the functions of recording, embodying and transmitting information. As language is always changing, language preservation requires both an orthography and the technology required to promote it. The Internet is one of the best ways to preserve our language.

The functions and roles that the website has played in language preservation and maintenance were predominant concerns in the above excerpts from selected messages, as exemplified by the above comments.

4.3 Suggestions from Web Users

Visitors to the website also made several suggestions for improvement. The following are excerpts from selected messages:

(1) I think that the Hanitanlan website is one of the best minority websites created so far in China, as there is an abundance of material in Chinese, Hani and English, which is helpful for readers worldwide. However, it is important to provide more Hani or bilingual (Hani and Chinese) textbooks in the future.

(2) I am Hani and can speak Hani, but I cannot read and write in Hani. Do you have online learning resources for distance-learning?

(3) The Hani and Akha are from the same ancestral line. They have the same genealogy, share the same language and enjoy the same customs. Some 600,000 Akhas live in Myanmar, Thailand, Laos and Vietnam. However, the Hani and Akha use different orthographies. I wish the website can use a unified orthography so that the Hani and Akha living in different countries can communicate with each other via the website.

(4) The resources provided on the Hanitanlan website are mainly in Chinese rather than in Hani. In my opinion, it would be better for you to provide more bilingual material so that both Chinese and Hani can read and understand it.

(5) Most Hani can speak their own language but cannot read and write. Therefore, I would suggest posting e-learning textbooks at different levels, together with a variety of reading materials. This would be good for beginners, intermediate and advanced learners.

The above excerpts showed that there were Hani who were eager to learn the orthography. There were suggestions for the provision of bilingual textbooks, more e-reading materials and online learning resources. They also expressed a desire to unify the Hani/Akha orthographies as different versions are being used in Southeast Asia.

5 Theoretical Framework of Resilience Thinking

The Hani live in a world that is rapidly changing. Ecological and social systems are inextricably linked, so that changes in one domain will have effects on the other. Language is no exception. When ethnic languages are affected by unexpected changes, ethnic groups must respond actively in order to survive in the new global environment. The maintenance of written Hani and the Hanitanlan website may be considered to be a type of resilience thinking as proposed by Walker and Salt (2006).

Resilience thinking is a new theory in the understanding of complex ecological and social interactions and changes. So far it has been applied mainly to the study of ecosystems (Walker and Salt, 2006) and community environmental knowledge (Berkes, 2008). Resilience is defined as “the capacity of a system to absorb disturbance and still retain its basic function and structure” (Walker and Salt, 2006). This is also relevant for the response to social changes which occur in language decline and endangerment. Such changes may be inevitable. Sometimes they occur very rapidly, and may have serious effects on the structure and use of endangered languages. Many communities

around the world are facing a crisis, with drastic changes in the structure and use of their languages, together with the loss of much traditional knowledge. A resilience approach, empowering the community and giving it the respect, control and resources to document and use its traditional knowledge and make its own decisions about language, may allow many groups to achieve a new stability in the face of linguistic and cultural globalization and top-down language policies (Bradley, 2010).

Therefore, the theory of resilience thinking provides us with a different way of understanding the world around us, along with management of our linguistic and cultural resources. It encourages language communities, language professionals and governments to think in an appropriate way when managing living language resources. It also provides a foundation for achieving sustainable patterns of web-resource use which enables ethnic minorities to maintain an equilibrium between using national and minority languages. Bilingual education may be a good solution. The need to protect linguistic diversity is not simply an important national concern, but is one of global significance.

Conclusion

This study indicated that the majority of visitors to the Hanitanlan website showed positive attitudes and evaluations towards it. They strongly supported the display of cultural diversity on the website. They had an awareness of the importance of linguistic and cultural protection. They realized the pivotal role played by the internet in creating an ethnic language environment within a rapidly changing society. Messages posted by users showed that many Hani were eager to learn the Hani orthography, and wished to see more bilingual textbooks, e-reading materials and online learning resources. The need to unify the Hani/Akha orthographies was also one of the issues raised by visitors to the website.

In conclusion, the website provided an online platform for archiving, recording and transmission of linguistic and cultural resources. It is a quick and efficient method of acquiring information in the current era. The study provided information about innovations in language maintenance and written Hani. The study also examined the connection between the Hanitanlan website and resilience thinking. To some extent, the website was successful in this regard. However, more bilingual materials and e-learning resources materials are still awaited, in order to increase the impact of the website both in China and abroad.

References

- Berkes, F. (2008). *Sacred Ecology*, 2nd edition. New York & London: Routledge.
- Bradley, D. (2010). Resilience Thinking and Language Endangerment. *The Third Conference on Heritage Maintenance for Endangered Languages in Yunnan, CHINA*
- Ge B. (2005). *A Survey of Hani orthography*. The 5th Hani/Akha International Conference. Mojiang, China.
- Kya, H. (2005). *The status of Akha orthography*. The 5th Hani/Akha International Conference. Mojiang, China.
- Walker, B. & David S. (2006). *Resilience Thinking, how can landscapes and communities absorb disturbance and maintain function?* Washington, Covelo & London: Island Press.

Author: Xu Xianming, professor, Research Centre for Endangered Language of Yuxi Normal University [xxming110@yahoo.com.cn].

Using Information Technology to Salvage and Protect Nü Shu

Zhu Zongxiao, Wang Jiangqing (朱宗晓, 王江晴等)

Abstract: Nü Shu (*lit.* women's script) is a special written language used and understood only by women in Jiangyong County, Hunan Province. Discovered by linguists 30 years ago, this mysterious language has been handed down from mother to daughter for generations. However, it is now facing the threat of extinction. In order to protect and disseminate information about Nü Shu, a character set for the language was designed to produce a computerized record of Nü Shu. An input method was then used for editing. Using the character set and input method, a website and virtual steles were developed to publicize various aspects of Nü Shu, including its graphemes, phonetics, semantics, and songs.

Key words: Nü Shu, Character Set, Input Method, Website, Virtual Reality

1 The Value of Nü Shu

Nü Shu is a character system which can demonstrate gender awareness in a unique manner. It is a script invented and used only by women, and has been handed down by local women for many generations. It is distributed in several townships of Jiangyong County and some neighbouring counties in Hunan Province, South Central China. Male residents of this region are unable to read or understand the characters of Nü Shu. It was only in the 1980s that this language was discovered by linguists.

Each character in the language had to undergo a long period of revision and augmentation before reaching its final form. The characters reflect the collective wisdom of the women who invented them. The distinctiveness of Nü Shu lies in the fact that it does not belong to a specific nationality, but instead is distinguished by the gender of their users. In addition, these characters are not taught in schools, but are

handed down from woman to woman. The cultural value of Nü Shu, which derives not only from its uniqueness but also its persistence over a long period, merits its continued protection as a non-material cultural heritage (Li, 2003: 90–94).

1.1 Anthropological and sociological value

Nü Shu is distributed in the rural areas of Shangjiangxu Township in Jiangyong County in Hunan Province. The language, culture and living environment of these areas show certain distinctive characteristics. Southwest Mandarin and the local Southern Hunan dialect are spoken here. This region is not only bounded geographically by three counties in three different provinces, but it is also an area where there is merging of the Confucian culture of the Central Plains with southern ethnic minority cultures.

The Han Chinese and Yao ethnic groups co-exist peacefully in this region, with customs from both cultures being integrated into their daily lives. Nü Shu has developed from this integrated culture, and truly unusual women's script has been preserved through female friendships, songs, and needlework. Nü Shu reflects a lifestyle which has been preserved in writing, recording the thoughts of female friends, songs proclaiming spiritual happiness, and with needlework as its material basis.

Nü Shu is a subculture within the mainstream culture with men at the centre. Convergence of the psychology and culture of women who had been constrained to the bottom rung of society gives Nü Shu its cohesiveness and ensures its survival. Nü Shu unites rural women through the process of making female friends, which ultimately strengthens their collective identity and group consciousness.

Through the sharing of confidences and exchange of opinions, Nü Shu helps to ease the psychological pressure experienced by women who have to bear heavy burdens in their daily lives. It brings consolation and provides support for those rural women who belong to the bottom rung of the social and economic ladders. Even in modern society, Nü Shu is still fulfilling an important social function. Thus, by providing a means of communication, entertainment, and the transmission of customs, Nü Shu promotes cohesion among female communities and has significant sociological value (Xie Zhimin, 2003: 90–92; Xie Zhimin, 2001: 31–33).

1.2 Philological value

Nü Shu is first and foremost a set of characters. It is a set of systematic characters which are used to symbolize elements of the lives of rural women.



Fig.1 Jiangyong women use Nü Shu to exchange ideas

There are only four strokes in Nü Shu: the bit, vertical, oblique, and arc, as opposed to the eight different strokes used in Chinese. Its most characteristic stroke is the “arc”, whose radius is variable, and can be long or short.

Each character usually takes the form of a long, oblique diamond, with its peak in the upper right corner and its end in the lower left corner. Nü Shu characters are written from top to bottom, and from right to left. There are no punctuation marks and no dividing paragraphs. All the characters are written without any gaps.

Nü Shu characters are thin and beautiful, appearing neat and well-balanced. There is a certain classical elegance in the Nü Shu script, which encompasses the style of xiaozhuan characters [the Official Script of Qin], as well as the forceful and vigorous style of inscriptions found on bones or tortoise shells.

Not only has the discovery of Nü Shu provided new material for philological research, but it has also raised some important academic questions. Topics that would benefit from further study include the relationship between Nü Shu and the inscriptions on bones or tortoise shells, the association between Nü Shu and the ancient Yue ethnic group or the Miao and Yao ethnic groups, and the relationship between Nü Shu and Chinese characters.

1.3 Literary value

The literature in which Nü Shu characters are used comprises mainly conversations and songs, which take place in courtyards and are designed for self-recreation. Nü Shu is

unique, not only because it is only used by women, but because it arose out of the experiences of a poorer group who have not had opportunities for formal education.

Nü Shu is an emotive language, revealing the strong feelings of married women to the south of the Five Ridges and including descriptions of their social interactions, religious beliefs, and folk customs. The growing academic and international recognition of Nü Shu has brought hope to women with hard and bitter lives.

2 A crisis in the preservation of Nü Shu

Since the 1980s, the value of Nü Shu has been increasingly recognised. However, preservation of Nü Shu has fallen short of both academic and local expectations. When Nü Shu was discovered, those with a comprehensive knowledge of Nü Shu, Gao Yinxian and her six “sworn” sisters, were still alive. Several years ago, however, with the demise at over 90 years of age of the last surviving member of this group, Yan Yihuan, many unsolved secrets in Nü Shu may remain hidden. When Hu Meiyue, one of Gao Yinxian’s granddaughters, was interviewed, she said that with the loss of this group of Nü Shu writers, fewer and fewer women can now read or write Nü Shu. With the lack of sufficient funding, manpower and organization, it is unclear how long the transmission of Nü Shu will continue.

3 The Nü Shu documentation project

In order to preserve the unique features of Nü Shu for future generations, the authors decided to create a computer program which will allow the inputting of Nü Shu characters. This will provide a way in which Nü Shu may be typed, printed and recorded digitally.

In order to accomplish this, a character set for Nü Shu had to be created. An input method was then designed, so that Nü Shu can be used in computers. A website was then designed in which materials in the form of letters, pictures and videos could be posted and publicized. This will enable Nü Shu to be taught, as well as promoting communication between scholars and non-academic readers. In addition, virtual reality technology will be used to preserve important Nü Shu literature in the form of virtual steles. Through the website and virtual steles, the characters, pronunciation and songs in Nü Shu can be publicized.

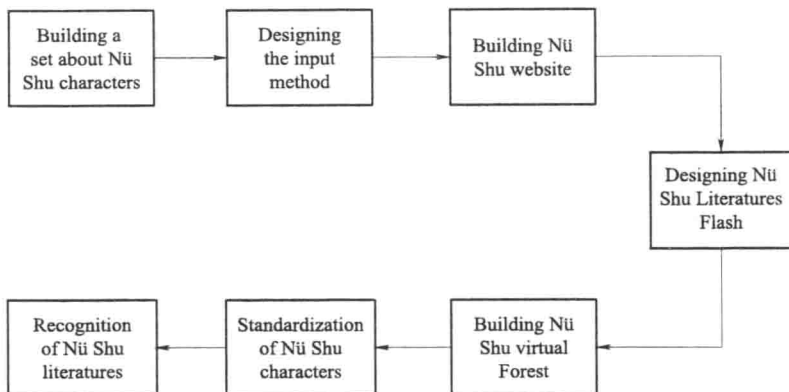


Fig.2 The Nü Shu Preservation Project

4 Creation of a Nü Shu character set

In creating a Nü Shu character set, it was important that only genuine Nü Shu characters would be included. As most ancient books of Nü Shu have been lost with very few existing historical records, it has been difficult to conduct historical research into Nü Shu. After much consideration, the following work was adopted as the source of our Nü Shu character set: the *Chinese Nü Shu Dictionary*, representing half a lifetime of effort by Professor Xie Zhimin.

The compilation of the dictionary began with a glossary of Nü Shu characters in 1983, and was completed by the end of 2006. The material used includes the following:

(1) Professor Xie Zhimin's own collection: 25 Nü Shu works dating from before 1983, and comprising 36,462 characters; Gao Yinxian's copies of 390 ancient Nü Shu works, comprising of 84,008 characters; Gao Yinxian's 45 Nü Shu works, comprising 8,937 characters; Yi Lianhua's copies of 117 ancient Nü Shu works, comprising 10,287 words; and Yi Lianhua's 5 Nü Shu works, containing 5294 words. There are 582 ancient traditional Nü Shu works altogether, totally 144,988 characters.

(2) *China's Nü Shu Collection* (compiled by Zhao Liming, Zhonghua Book Company, 2005). The first volume consists of 62 anonymous Nü Shu works handed down from previous generations, with 35,000 characters; the second volume, Gao Yinxian's 180 Nü Shu works, contains 62,000 words.

After careful and extensive analysis of the above materials, Professor Xie selected 2,435 individual Nü Shu characters. The original appearance and structure of each character was retained, with its phonetic notation and meaning being provided by Gao Yinxian and Yi Lianhua. The source of each character was also clearly documented.

This dictionary was sponsored by the General Administration of Press and Publication of the People's Republic of China, and is published by the Ethnic Publishing House.

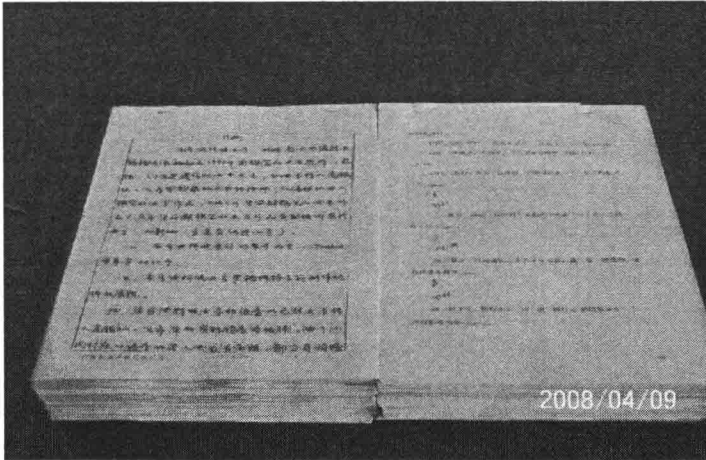


Fig.3 Xie Zhimin's manuscript of the Chinese Nü Shu dictionary

In addition to the above, a set of handwritten Nü Shu characters was also required to serve as a templates for recording or reproduction. In order to preserve their original forms and reason, the granddaughter of Gao Yinxian, Ms. Hu Meiyue was invited to the South-Central Ethnic University to act as a research consultant for the project. Using the technique of writing Nü Shu said that her grandmother Gao Yinxian had taught her. Ms Hu was able to write all 2,435 Nü Shu characters for us. Every single character was carefully examined by Professor Xie to ensure its accuracy.



Fig.4 Gao Yinxian teaches Nü Shu to her granddaughter Hu Meiyue.



Fig.5 Professor Xie Zhimin discusses handwritten Nü Shu with Ms.Hu Meiyue.

•SE107	•SE108	•SE109	•SE110	•SE111	•SE112	•SE113	•SE114	•SE115	•SE116	•SE117	•SE118	•SE119	•SE120
衣	衣	也	衣	衣	衣	衣	衣	衣	衣	衣	衣	衣	衣
•SE118	•SE119	•SE120	•SE121	•SE122	•SE123	•SE124	•SE125	•SE126	•SE127	•SE128	•SE129	•SE130	•SE131
衣	衣	衣	衣	衣	衣	衣	衣	衣	衣	衣	衣	衣	衣
•SE132	•SE133	•SE134	•SE135	•SE136	•SE137	•SE138	•SE139	•SE140	•SE141	•SE142	•SE143	•SE144	•SE145
衣	衣	衣	衣	衣	衣	衣	衣	衣	衣	衣	衣	衣	衣
•SE146	•SE147	•SE148	•SE149	•SE150	•SE151	•SE152	•SE153	•SE154	•SE155	•SE156	•SE157	•SE158	•SE159
衣	衣	衣	衣	衣	衣	衣	衣	衣	衣	衣	衣	衣	衣
•SE160	•SE161	•SE162	•SE163	•SE164	•SE165	•SE166	•SE167	•SE168	•SE169	•SE170	•SE171	•SE172	•SE173
衣	衣	衣	衣	衣	衣	衣	衣	衣	衣	衣	衣	衣	衣
•SE174	•SE175	•SE176	•SE177	•SE178	•SE179	•SE180	•SE181	•SE182	•SE183	•SE184	•SE185	•SE186	•SE187
衣	衣	衣	衣	衣	衣	衣	衣	衣	衣	衣	衣	衣	衣
•SE188	•SE189	•SE190	•SE191	•SE192	•SE193	•SE194	•SE195	•SE196	•SE197	•SE198	•SE199	•SE200	•SE201
衣	衣	衣	衣	衣	衣	衣	衣	衣	衣	衣	衣	衣	衣

Fig.6 The Nü Shu character set

5 Designing an input method for Nü Shu

An input method was required to display Nü Shu characters on a computer screen. The process of digitalization is essential to enable continued teaching, transmission, and development of Nü Shu. Every character had to be individually designed, and inputting would not depend on the installation of Chinese character sets.

The pronunciation of every character was also indicated using the International Phonetic Alphabet, based on the pronunciation of Gao Yinxian and Yi Lianhua. However, as the IPA is not commonly used in China, Professor Xie Zhimin had used IPA symbols

together with Mandarin Chinese *pinyin*. We also decided to adopt this approach, and “translated” the IPA symbols for the Nü Shu characters into Chinese *pinyin* using her comparison tables. An input method based on this “Nü Shu *pinyin*” was designed.

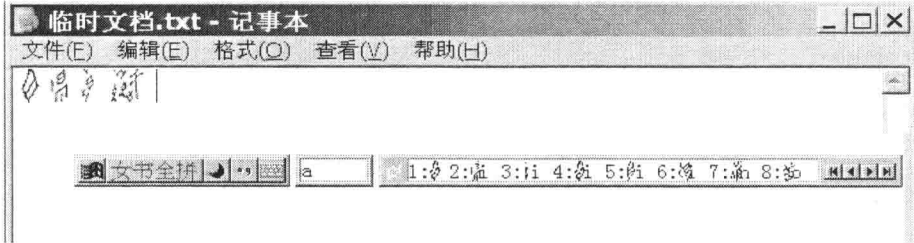


Fig.7 Input method for Nü Shu based on *pinyin*

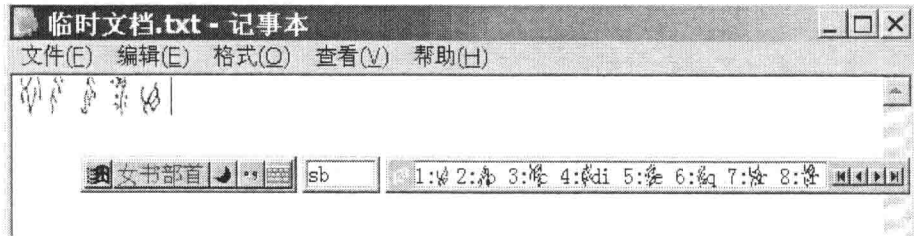


Fig.8 Input method for Nü Shu based on individual components of the characters

However, as it may be difficult for users to become familiar with the pronunciation of more than 2,300 Nü Shu characters in order to use the *pinyin* input method, another input method based on individual components of each character was designed. This was similar to the Five-Stroke input method for Chinese characters. Nü Shu characters were broken down into different components in accordance with certain rules. Inputting of these components in a specific order will enable display of complete Nü Shu characters. These two input methods were used to input more than 200 Nü Shu works, comprising more than 30,000 characters.

6 Construction of a Nü Shu Website

Although Professor Xie Zhimin had worked hard to introduce Nü Shu both within China and abroad for some 20 years, through academic papers, monographs, lectures, and teaching, he was only able to reach a fairly small audience within certain geographical confines. With the growth of information technology, however, the internet has now become the best channel for dissemination of knowledge to users throughout the world.

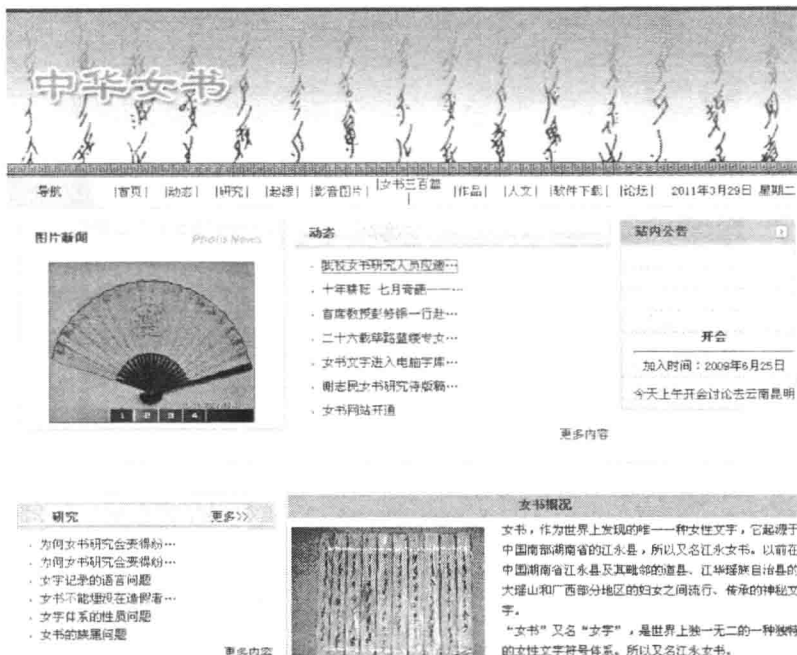


Fig.9 The Nü Shu website: <http://womenwritings.scuec.edu.cn/>

Therefore, the Nü Shu character set and input method were used to create a Nü Shu website with a dynamic, interactive design. The data used on this website comprises the following:

(1) 272 pieces of original Nü Shu texts, comprising about 90,000 characters. These represent the very essence of Nü Shu.

(2) 51 pieces of recorded Nü Shu materials, comprising reading and singing files by Gao and Yi.

(3) Other Nü Shu language data: over 10,000 vocabulary items, on 26 tapes.

(4) Historical data concerning Nü Shu. These comprise 15 tapes of Jiangyong customs, 5 tapes relating to women's culture, and other materials related to Nü Shu study, including family trees, and tablet inscriptions.

(5) More than 3000 cards of documents and materials related to Nü Shu study and original spoken language materials in locations such as Fuchuan, Jianghua and Jiangyong.

(6) Local chronicles of the geographic area where Nü Shu is distributed.

(7) Professor Xie ZhiMin's Nü Shu blogger website <http://xiezhimin.vip.bokee.com>.



Fig.10 The Initial Frame in the Nü Shu Literature Flash File

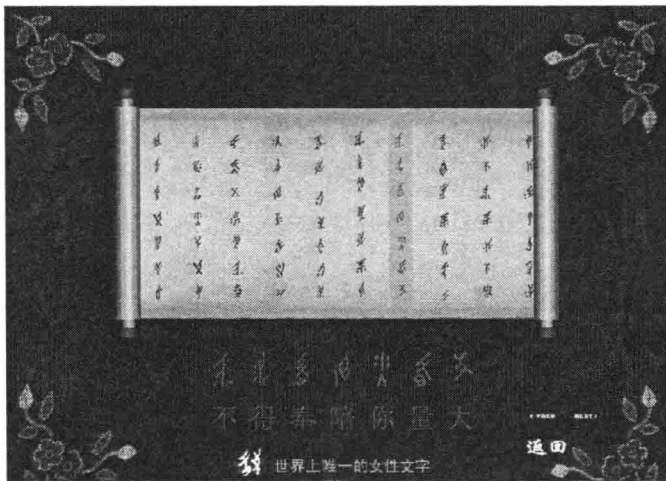


Fig.11 One of the Picture Frames in the Nü Shu Literature Flash Scroll

7 Recording Nü Shu in Virtual Reality with a “Forest of Steles”

Stone engravings and tablets have long been used to store information. This is exemplified by the Forest of Steles in Xi’an and the pictographs of the Mayans which were carved on stone tablets. Professor Xie Zhimin had hoped to select the 300 most representative texts in Nü Shu literature and engrave them on stone tablets in Nü Shu, Chinese, and English, to be preserved as a permanent record. However, finances for this ambitious project would be difficult to obtain.

In recent years, virtual reality technology has become very popular, providing users with realistic experiences and enabling users to travel to remote places which would have been beyond their reach.

The design of the virtual forest of Nü Shu steles may be divided into three distinct stages: establishing a 3D model for the stele, designing the virtual reality system, and adopting immersion virtual reality. For the first stage, we are currently using comparatively simple models. However, in future, we hope to invite 3D graphics specialists to design every tablet and their layout to achieve a better overall effect.

The Windows virtual reality system has a relatively high resolution and has a low cost. The observer comes to regard the computer screen as a window through which a fictitious realm can be observed. However, the sense of immersion is weak, as the participant will be distracted by the surrounding environment. Currently, when users click on the characters on the stone tablet, a Nü Shu recording of the corresponding sentence can be heard.



Fig.12 Nü Shu Virtual Steles based on FLASH

An immersion virtual reality system uses audiovisual equipment or a helmet display device to enhance hearing and other sensory stimuli, producing an illusion that the user is actually in a fictitious environment rather than in the real world. The “Forest of Steles” of Nü Shu were realized in the Virtual Reality Laboratory of the College of Computer Science, South-Central Ethnic University (K Zhong, 2009).

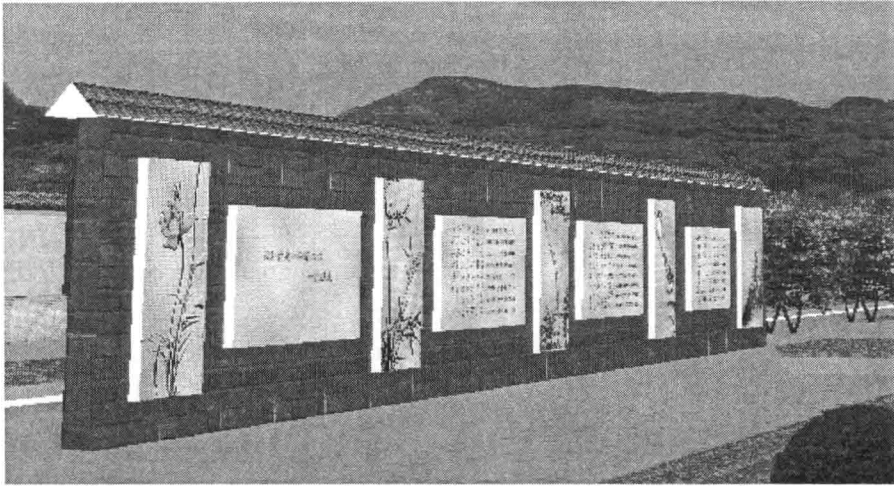


Fig.13 The Forest of Steles of Nü Shu in Virtual Reality

Conclusion

Documentation and archiving of Nü Shu using digital information technology is an inter-disciplinary project involving linguistics, philology, ethnology, codes, statistics, and computer skills. Our goal is both to protect and develop the use of Nü Shu, a unique cultural heritage which is an integral part of Chinese culture.

Acknowledgements

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Reference

- K Zhong, M Zong, Z Guo, Z Wang.(2009), *Realization of Human-Computer Interaction Functions in Virtual Reality* [C]. 2009 International Conference on Research Challenges in Computer Science, 2009, Shanghai,China.
- Li qingfu. (2003), *20 years research of Nüshu culture*, Study of Ethnicity in Guangxi, 72:2, 90–94 (李庆福.女书研究二十年[J]. 广西民族研究, 2003 年第 2 期: 90–94)
- Dong Fang. (2005), *Research on the Informationization and Construction of Shui Character Standard*. Journal of Qiannan Normal College of Nationalities, 05, 59–62. (董芳, 水书文字规范标准建设与信息化的研究[J]. 黔南民族师范学院学报, 2005 年第 5 期, 59–62)
- Luo Chun-han. (2006), *Saving the Characters of Sui People and Exchanging Views on it*. Journal of

Guizhou University for Ethnic Minorities (Philosophy and Social Science), 95, 15–18. (罗春寒, 水书的抢救及存在问题浅议[J]. 贵州民族学院学报, 2006 年第 1 期, 15–18)

Xie Zhimin. (2003), *The Status Quo and Problems in Researches into Female Scripts*, Journal of South-central University For Nationalities (Philosophy and Social Science), 23: 4, 90–92. (谢志民, 女书研究的现状和存在的问题[J]. 中南民族学院学报, 2003 年第 4 期, 90–92.)

Xie Zhimin. (2001), Nüshu, *Women's Secret Script*, Women of China, 08, 31–33.

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Report on the Academic Session on
Issues of Language Endangerment, 28-29 July 2009

by Tjeerd de Graaf and Xu Shixuan, Session Chair and Organisers

I. Presentations 28 July

9:00 – 10:30 Section 1

Chair: Tjeerd de Graaf

Discussant: Alexis Michaud

Agranat, Tatjana

The Saami Languages in Finland after One and a Half Centuries

Dodykhudoeva, Leila

Minor Iranian Pamiri languages: Case study of the Sociolinguistic and Cultural
Situation

Kazakievich, Olga

Endangered Languages Documentation and Description: Should these Activities
be Separated?

11:00 – 12:30 Section 2

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Discussant: Melissa Lin

El Kirat, Yamina

Optimal Measures for the Maintenance and/or Revival of Endangered Languages:
The Case of the Amazigh Language in Morocco

Faquire, Razaul Karim

Effects of Language Contact on some Tibeto-Burman Languages in Bangladesh

Michaud, Alexis and Latami Dashi

A Description of Endangered Phonemic Oppositions in Mosuo (Yongning Na)

Zhu Zongxiao, Wang Jiangqing, Liu Sai, Tian Wei, and Cheng Li

Using Information Technology to Salvage and Protect Nü Shu

14:00 – 15:30 **Section 3**

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Discussant: Melissa Lin

Blundell, David

Mapping Endangered Languages of the Pacific: Cases Studies in Taiwan, Orchid Island, and the Batanes

De Graaf, Tjeerd

The Use of Sound Archives for the Study and Teaching of Endangered Languages

Kaneko, Tohru

Nivkhs Today and Future: Slides from my book *Nivkh -- our northern friends*

Radnaeva, Ljubov

Endangered Languages and Linguistic Data Documentation

16:00 – 17:30 **Section 4**

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Legère, Karsten

Language Endangerment in Africa: Lessons from Tanzania

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Some Differences between Sakizaya and Amis

Ibanez-Angulo, Monica

Endangered Local Speech Forms:

The Unification of the Basque Language and the Status of Regional Variations

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Discussant: Cecilia Brassett

Rai, Vishnu S

Language Loss and Their Preservation: An Example from Nepal

Suzuki Hiroyuki

“Endangered Dialects” in Tibetan: A Case of Eastern Kham Vernaculars

Xu Shixuan and Cecilia Brassett

Structural Decline in Endangered Languages as Exemplified by Structural Changes in Southern Tujia

11:00 – 12:30 **Section C2**

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Discussant: Xu Xianming

Li Linjing

Lexical Contrast between Haozhen Dialect and Qilleng Dialect in Hezhe

Deng Xiaoling

Languages of the She Minority: A Review of the Literature

Zhao Qinglian

Globalization and Language Preservation: A Case Study of Naxi

14:00 – 15:30 **Section C3**

Chair: Sun Hongkai

Discussant: Bai Bibo

Genxia Wengmu

Tibetan Buddhism's Influence on Tibetan Languages

Bai Bibo

A Case Study of Language Heritage Maintenance

Xu Xianming and Chen Xie

The Sustainable Development of Language Maintenance under IT Environment

A Case Study of Hani Language

16:00 – 17:30 **Section C4**

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Discussant: Xu Shixuan

Gao Huiyi

Character Endangerment——*Zhushu* of *Lisu* Nationality

Sun Hongkai

The Anong Language is Heading towards Extinction

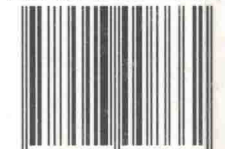
Huang Chenglong

The Issues of Language Documentation and Conservation in China: The Case of the Qiang language

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