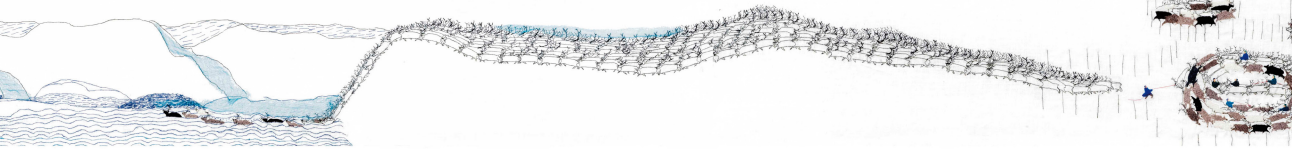# DIEĐUT

Working with Traditional Knowledge: Communities, Institutions, Information Systems, Law and Ethics

Edited by
Jelena Porsanger
Gunvor Guttorm

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Sámi allaskuvla
Sámi University College

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Working with Traditional Knowledge: Communities, Institutions, Information Systems, Law and Ethics

Writings from the Arbediehtu Pilot Project on
Documentation and Protection of
Sami Traditional Knowledge

Edited by
Jelena Porsanger
Gunvor Guttorm

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Many individuals, local Sami communities and institutions have contributed to the Árbediehtu pilot project in the period from 2008 to 2011. One of the important objectives of the project has been to listen to and take into account what Sami people expect from the work on documentation and protection of their traditional knowledge. Special gratitude is owed to communities and individuals in the Norwegian, Swedish and Finnish parts of Sápmi, who eagerly participated in community meetings and other project activities. Sami communities have been important partners in the project, which would not have been possible without their support, collaboration and genuine interest. We are grateful to the communities and all individual *árbečeahpit* (tradition-bearers) in the following places:

In the Coastal Sami area c/o the Sea Sami Centre of Expertise:
Jáhkovuotna/Kokelv, Čuđegieddi/Kistrand, Billávuotna/Billefjord, Cuoppogieddi/Sandvik, Jovnnanjárga/Jonsnes, Ráigešája/Igeldas, Rávttošnjárga/Stabbursnes, Leavdnja/Lakselv, Breannjá/Brenna, Keaisa/Kjæs.

In the Lule Sami area c/o the Árran – Lule Sami Centre:
Ájluokta/Drag, Gásluokta/Kjøpsvik, Ájládde/Hellandsberg, Måsske/Musken, Vuodnabahta/Hellemobotn.

In the Northern Sami area c/o the museum association RiddoDuottarMuseat:
Kárášjohka/Karasjok, Näkkäläjärvi, Áidejávri, Guovdageaidnu/Kautokeino.

In the Southern Sami area c/o Saemien Sijte (South Sami Museum and Cultural Centre):
The following reindeer herding communities:
Luvlie-Nåamesjen Båatsoe/Østre Namdal, Åarjel-Njaarke/Vestre Namdal, Fovsen-Njaarke/Fosen, Låarte/Luru, and Trollheimen Sijte.

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Njukčamánnu 2011, Guovdageaidnu
March 2011, Kautokeino

</div>

Jelena Porsanger   *Gunvor Guttorm*
Editor and Project Manager   Editor

Contents

JELENA PORSANGER & GUNVOR GUTTORM

Árbediehtu-fágasuorggi huksen

Álggahus

Dát girji sisttisdoallá čállosiid árbevirolaš dieđuid ja máhtuid dokumenteremis. Artihkalčoakkáldat lea Árbediehtu-pilohtaprošeavtta boađus (gč. gova 1). Čállit govvidit geavatlaš ja teorehtalaš beliid árbedieđuid dokumentašuvnnas, ee. dáin fáttáin:

- árbevirolaš sámi doahpagat ja diehtoteoriijat,
- lagaš gulahallan báikegottiiguin,
- ehtalaš ja juridihkalaš gažaldagat,
- árbedieđuid ja kulturmuittuid oktavuohta báikkálaš identitehtii,
- digitála diehtovuorkkáid hábmen,
- servodatstruktuvrrat mat dorjot dahje hehttejit árbedieđuid ceavzima ja ovdáneami.

Dát artihkalčoakkáldat lea lávki hukset árbediehtu-fágasuorggi. Prošeavtta ovttasbargoguoimmit leat vásihan ahte Sámis lea stuorra dárbu bagadallamii ja gelbbolašvuođa

Building up the Field of Study and Research on Sami Traditional Knowledge (*árbediehtu*)

Introduction

This book contains articles on the documentation of traditional knowledge and skills. The collection of articles is the result of the Árbediehtu Pilot Project (see Picture 1). Articles were originally written in many languages: North Sami, Norwegian, Swedish and English. In the English texts, we use the term Sápmi which is the North Sami word for the land of the Sami people, or Samiland. Sápmi refers to the traditional living areas of the Sami in four countries: Norway, Sweden, Finland and North-Western Russia.

The authors of the articles examine practical and theoretical aspects of

loktemii árbevirolaš dieđuid ja máhtuid dokumenteremis ja sihkarastiimis. Prošeaktabargiid, árbečehpiid ja báikegottiid oktasaš oaidnu lea leamaš ná: árbedieđut galget leat ávkin sámi báikegottiid ceavzilis ovdáneapmái, iešdovdui ja loaktimii.

Árbediehtu-pilohta-prošeavtta ulbmil

Váldoulbmil lei ovddidit vuogi duođaštuhttit sámi árbedieđuid, mat leat ealli sámekultuvrra oassin ja galget boahtte áiggis ge ealihit báikegottiid. Prošeakta fokuserii fuopmášumi gulahallamii báikegottiidguin, dokumenterenbargui ja vurkema eavttuid čielggadeapmái. Prošeavtta riektevuođđu lea Ovttastuvvon Našuvnnaid Konvenšuvdna biologalaš máŋggabealatvuođas ja erenoamážit artihkal 8 (j) árbedieđuid *in situ* (báikki alde) seailluheamis (*UN Convention on Biological Diversity*, www.cbd.int). Prošeavtta metodalaš vuođu hábmen oaččui inspirašuvnna eamiálbmot metodologiijain, akšuvdnadutkamis ja eamiálbmotdutkama bohtosiin máilmmeviidosaččat.

Pilohtaprošeakta fátmmastii mátta-, julev- ja davvisámi guovlluid Norgga beale Sámis, sihke rittus ja siseatnamis. Dát máŋggabealatvuohta lea leamaš prošektii stuorra riggodahkan. Dát lea jámma ožžon

documenting traditional knowledge, in e.g. the following spheres:

- traditional Sami concepts and epistemology,
- close communication with communities,
- ethical and legal issues,
- the connection of traditional knowledge and cultural monuments and relics with local identity,
- the creation of digital information systems,
- social structures that are significant for the sustenance and development of traditional knowledge.

This collection of articles is a step towards building up a field of knowledge called *árbediehtu* ('Sami traditional knowledge'). The various experiences from the project indicate that there is a great need for guidance and enhancement of competence in the documentation and securing of traditional knowledge and skills in Sápmi. The project workers, the tradition bearers and the local communities involved in the project have all been of the opinion that traditional knowledge should contribute to firm, sustainable development as well as improved self-esteem and well-being in local Sami communities.

Govva 1: Árbediehtu-prošeavtta ruovttusiidu, www.arbediehtu.no, doaimmai prošeavtta ovttas-bargoguimmiid oktasaš deaivvadan-báikin.

Picture 1: The partners of the project used the website of the Árbediehtu Project, www.arbediehtu.no, as their meeting place.

The objective of the Árbediehtu Pilot Project

The main objective was to develop methodology for the documentation of Sami traditional knowledge, which is a present, and hopefully future, intrinsic part of living Sami culture. The project focused on documentation through close collaboration with local communities, as well as on evaluation of pre-conditions for the design and construction of information systems for storage of documented *árbediehtu*. The UN Convention on Biological Diversity and especially its Article 8 (j) on the in-situ conservation of traditional knowledge shaped

buot ovttasbargoguimmiid jurdda-šit ja vuhtii váldit ahte Sápmi lea girjái. Dát vásáhusat leat váikku-han dokumenterenvugiid váldo-prinsihpaid hábmemii. Árbe-virolaš dieđuid ja máhtuid doku-

menterema váldoprinsihpat pilohta-prošeavttas leat leamaš ná:

- báikkálaš árbevieru ja giela dovdamuš,
- lagaš ovttasbargu báikegottiiguin ja árbečehpiiguin,
- báikkálaš hálddašeapmi ja dieđuid bisuheapmi báikegottiin,
- geabbilvuohta,
- dárbu reflekteremii.

the legal framework for the pilot project (see www.cbd.int). The methodological basis of the project is the methods, ideas and experiences from indigenous methodologies and action research, and the results of indigenous research worldwide.

The pilot project covered both coastal and inland areas of the South, Lule and North Sami regions of the Norwegian part of Sápmi. This diversity has enriched the project in many ways. It has made all the participants continuously reflect on and take into consideration the great cultural variety in Sápmi. This experience has influenced the formulation of the main principles for documentation. In the pilot project, we have applied the following key principles in documenting traditional knowledge and skills:

- good knowledge of local traditions and languages
- close cooperation with communities and tradition bearers
- creation of conditions for local control and ensuring that documented information will stay in the communities
- flexibility
- the need for reflexivity.

Árbediehtu, birgejupmi ja árbečeahpit: doahpagastin

Concepts of traditional knowledge, livelihood and tradition bearers

Prošeakta lea metodalaččat bohciidan eamiálbmot metodologiijain. Eamiálbmot doahpagiid, dieđuid ja vásáhusaid geavaheapmi ođđa dieđuid buvttadeamis (*knowledge building*), teoretiseremis ja ákkastallamis lea eamiálbmot metodologiijaid vuođđoprinsihppa. Dás čuovvu maiddái eamiálbmoga krediteren konseapttaid ja dieđuid ovddas, báikkálaš gullevašvuođa árvvus atnin ja siskkáldas maŋggabealatvuođa čalmmustahttin.

Árbevirolaš dieđut ja máhtut -doahpagii leat sámegielas oanehis molssaeavttut. Davvisámegielas leat doahpagat *árbediehtu* dahje *árbemáhttu*, máttasámegillii lea *aerpiemaahtoe* ja julevsámegillii fas *árbbediehto*. Dán čállosis geavahuvvo davvisámegiel doaba árbediehtu, man min prošeaksta introduserii fágalaš geavaheapmái 2008 rájes sihke sámi akademiijas ja Norgga našunála ja riikkaidgaskasaš birrasiidda mat barget *traditional knowledge* -suorggis (gč. maiddái Wikipedia, http://no.wikipedia.org/wiki/%C3%81rbediehtu).[1]

The project has been inspired by indigenous methodologies. The basic principle of indigenous methodologies is the use of indigenous concepts, indigenous knowledge and experiences in knowledge building, theorising and argumentation. This also entails giving credit to indigenous peoples for their knowledge, respecting the knowledge belonging to a particular local community, and making Sami internal cultural diversity visible.

In the North Sami language there is a term for traditional knowledge and skills, namely *árbevirolaš dieđut ja máhtut*. There are also shorter variants, like *árbediehtu* or *árbemáhttu* in North Sami, *aerpiemaahtoe* in South Sami, and *árbbediehto* in Lule Sami. In this article, we use the North Sami word *árbediehtu,* which literally means 'inherited knowledge'. Our project introduced this concept to academic use in 2008 both for Sami academic circles and for Norwegian and international researchers in the field of Sami traditional knowledge (for more about the concept, see also

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1 Árbediehtu-sáni čálalaš geavaheami birra, gč. omd. J. Porsanger čállosis dán čoakkáldagas.

Árbediehtu lea sámeálbmoga viisodat ja máhtut, maid olbmot leat jahkečuđiid čađa ovddidan iežaset birgejupmái. Árbediehtu lea fievrriduvvon buolvvas nubbái njálmmálaččat ja bargguid bokte. Dát jotkkolašvuohta čatná vássán-, dálá ja boahtte áiggi oktii árbediehtu-konseapttas.

Prošeakta lanserii árbediehtu-konseaptta ee. čuovvovaš fága- ja sámepolitihkalaš birrasiidda:

- Ruoŧas: *Centrum för biologisk mångfald* ja Sámediggi (2008, Östersund), Upmi universitehta Sámi dutkamiid guovddáš Vaartoe (2009, Upmi)
- Suomas: Lapppi universitehta ja erenoamážit Arktalaš guovddáš (2009 ja 2010 Roavvenjárga)
- Norggas (ee. BioForsk, NORUT, Tromssa universitehta, Finmárkku allaskuvla, Finmárkku opmodat, Stáhta luonddubearráigeahčču *Statens naturoppsyn*, Finnmárkku fylkamánni ja gielddat, Norgga Kulturráđđi, Norgga UNESCO doaimmahat)
- riikkaidgaskasaš dásis ee.: Sámi Parlamentáralaš Ráđđi (2008, Roavvenjárga), Sámiráđđi (2009, Guovdageaidnu), Tebtebba Foundation (*Indigenous Peoples' International Centre for*

Wikipedia, http://no.wikipedia.org/wiki/árbediehtu).[1]

Árbediehtu is the collective wisdom and skills of the Sami people used to enhance their livelihood for centuries. It has been passed down from generation to generation both orally and through work and practical experience. Through this continuity, the concept of *árbediehtu* ties the past, present and future together.

The project launched the concept of *árbediehtu* in the following academic and Sami political circles:

- In Sweden: the CBM Swedish Biodiversity Centre (*Centrum för biologisk mångfald*) and the Sami Parliament (2008, Östersund), the Centre for Sami Research/Vaartoe of the University of Umeå (2009, Umeå);
- In Finland: the University of Lapland and especially the Arctic Centre (2009 and 2010, Rovaniemi);
- In Norway: BioForsk, the Northern Research Institute NORUT, the University of Tromsø, Finnmark University College, the Finnmark Estate,

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1 About the use of the word *árbediehtu* in writing, see for example J. Porsanger's article in this book.

Policy Research and Education, Philippines, www.tebtebba.org) (2010, Kárášjohka), ON Bistevaš Forum eamiálbmotáššiin (2010, New York), Kanada eamiálbmotmáhtu áššedovdit *En'owkin Center* bokte (2010, British Columbia, Okanagan indiánaid kultur- ja giella-guovddáš), WINHEC, *World Indigenous Nations Higher Education Consortium* (www.win-hec.org) (2010, Guovdageaidnu), World Commission of Protected Areas (2010, Anár).

- prošeavtta partnerásahusat leat gaskkustan árbediehtu-konseaptta iežaset fágalaš kanálaid ja oktavuođaid bokte.

Statens naturoppsyn / the Norwegian Directorate for Nature Management, the county council and local councils of Finnmark, the Arts Council of Norway, the Norwegian UNESCO Office, etc.;

- Internationally: the Sami Parliamentary Council (2008, Rovaniemi), the Saami Council (2009, Kautokeino), the Tebtebba Foundation, Philippines (Indigenous Peoples' International Centre for Policy Research and Education, www.tebtebba.org) (2010, Karasjok), the UN Permanent Forum on Indigenous Issues (2010, New York), Canadian experts on indigenous knowledge via the En'owkin Centre, Okanagan Cultural and Language Centre (2010, British Columbia), WINHEC, World Indigenous Nations Higher Education Consortium (www.win-hec.org) (2010, Kautokeino), the World Commission of Protected Areas (2010, Inari), etc.

- The partner institutions in the project have promoted the concept of *árbediehtu* through their own information channels and contacts.

Dát doaba lea jo cieggan fágagillii, vuosttažettiin davvisámesámegillii. Lea mearkkašahtti ahte árbediehtu-tearbma lea luoikkahuvvon maiddái dáro- ja ruoŧagillii. Davvisámegiel doahpaga sáhttá oaidnit dain dáro- ja ruoŧagiel teavsttain mat leat sámi árbevirolaš dieđuid ja máhtuid birra.[2] Sápmelaččat leat árbevirolaččat viežžan birgejumi luonddubirrasis. Árbe-dieđut gullet lunddolaččat buot árbevirolaš birgenvugiide ja ealáhusaide. Dan sivas go árbediehtu lea nu viiddis ja máŋggalágán, de oanehis pilohtaprošeavttas mii fertiimet válljet fokusa ja ráddjet bargguid. Mii bijaimet váldofuopmášumi árbe-dieđuide, mat gusket birgejupmái: ekonomiija ja/dahje servodateallima dáfus.

Árbevirolaš sámi áddejumis birge-jupmi lea máŋggabealat ollis-vuohta ja lea čadnon ceavzilis ovdáneapmái, árvvuide, resurssaid ceavzilis geavaheapmái ja sosiála fierpmádahkii. Ollisvuohtan birge-jupmi ii leat čadnon ekonomalaš vuoitui. Deaddu bearehaga ekono-malaš vuoitui livččii biđgen (frag-menteren) birgejumi-doahpaga ádde-jumi. Birgejupmi-konseapttas lea

The concept of *árbediehtu* has already become an established academic term, first of all in North Sami. Notably, the term *árbediehtu* has also been borrowed into Norwegian and Swedish. The North Sami term is found in Norwegian and Swedish texts that deal with Sami traditional knowledge and skills.[2]

Traditionally, the Sami have used nature as their source of livelihood. Traditional knowledge is an inevi-table part of all traditional means of livelihood and ways of living. As traditional knowledge is a compre-hensive and complex phenomenon, the scope of the work of our pilot project must be limited. We decided to focus on the traditional knowledge connected with the concept of *birgejupmi* (a North Sami term for 'life sustenance, livelihood') in the spheres of economy and/or social life.

In the traditional Sami understanding, *birgejupmi* (maintaining a livelihood) is a complex phenomenon and a process, which is connected with

2 *Centrum för biologisk mångfald* ja Ruoŧa Sámediggi almmuhedje áiddo baliid (2010) girjji ruoŧagillii "Árbediehtu: *samiskt kulturarv och tradisjonell kunskap*" (sámi kulturárbi ja árbediehtu), man Åsa Nordin Jonsson doaimmahii. Girjjis geavahuvvo tearpma *árbediehtu*, man gullevašvuohta davvisámegillii ii boađe ovdan.

2 *Centrum för biologisk mångfald* and the Swedish Sami Parliament published recently (2010) a book called "*Árbediehtu: samiskt kulturarv och tradisjonell kunskap*" (Árbediehtu: Sami Cultural Heritage and Traditional Knowledge) in Swedish. The book is edited by Åsa Nordin Jonsson. The publishers use the Sami term *árbediehtu* consistently, without explaining however that the concept comes from North Sami.

Birgejupmi lea olbmuid (indiviiddaid ja servošiid) vuohki ceavzit ja ovdánit dihto guovllus ja dihto resurssaiguin, mat leat dahje sáhttet gávdnot luonddu- ja sosiála birrasis. Birgejumi eaktun lea máhtolašvuohta, geabbilvuohta, fágalaš ja sosiála gelbbolašvuohta. Birgejupmi čatná oktii olbmuid/servošiid, duovdagiid ja luonddubirrasa, ekovuogádaga, dearvvaslaš sosiála ja vuoiŋŋalaš ovdáneami ja identitehta.

Birgejupmi is to be understood as livelihood, survival capacity, and the way people (individuals and communities) maintain themselves in a certain area with its respective resources, which exist or can be found in the natural and social environment. It requires know-how skills, resourcefulness, reflexivity and professional and social competence. It ties together people/communities, landscape and natural environment, the ecosystem, healthy social and spiritual development, and identity.

baicce dehálaš ahte luonddubirrasa ja servodaga ballánsa (dássedeaddu) doalahuvvo ja ahte rumašlaš, psykalaš ja sosiála dearvvasvuohta fuolahuvvo. Birgejupmi lea nappo čadnon ovttaskas olbmuid ja servoša eallinvuohkái, mas leat ekonomalaš, sosiála ja vuoiŋŋalaš bealit. Birgejupmi lea proseassa, mas luonddu- ja sosiála resurssaid geavaheapmi rievdá áiggis áigái ja dilálašvuođas nubbái. Dát gáibida gelbbolašvuođa, geabbilvuođa ja báikkálaš árbedieđuid geavaheami ja ovddideami *in situ*.[3]

sustainable development, values, the sustainable use of resources, and the social network. As a whole, livelihood is not limited to economic profit alone. Too much emphasis on economic profit would have fragmented the traditional notion of *birgejupmi,* maintaining a livelihood. Instead, the concept of *birgejupmi* necessitates maintaining a balance between the natural environment and society and attending to people's physical, mental and social health. This is because livelihood is primarily connected with the individual's and community's way of living that involves economic, social and spiritual aspects. *Birgejupmi* is a flexible process in which the use of natural and social

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3 Birgejupmi-doahpaga čilgehusa vuođđun lea ee. prošeavtta nuppi jođiheaddji ja koordináhtora Liv Østmo almmutkeahtes guorahallan birgejumi birra.

Prošeavttas álggu rájes evttohuvvui árbečeahppi-doaba bargoreaidun, "informánta"-tearpma sadjái. Sánit *giellačeahppi*, *silbačeahppi*, *láhkačeahppi*, *dihtorčeahppi* leat movttiidahttán min duddjot árbečeahppi-doahpaga.

> **Árbečeahppi** lea olmmoš gii vuđolaččat hálddaša árbe-virolaš dieđuid ja máhtuid, ja gean báikkálaš servodat atná čeahppin iežas suorggis.[4]

resources varies from time to time adapting to changing conditions and circumstances. It requires competence, resourcefulness and the use and development of local traditional knowledge *in situ*.[3]

Right at the outset of the project, the project participants decided to use the term *árbečeahppi* ('tradition bearer') as a conceptual tool instead of the term "informant". We were inspired to create this term by such Sami words as *giellačeahppi* ('master of language'), *silbačeahppi* ('silversmith', literally 'master of silverwork'), *láhkačeahppi* ('lawyer', literally meaning 'master of law'), *dihtorčeahppi* ('computer specialist', literally 'master of computers').

> **Árbečeahppi** is a person who is, in a profound sense, a master of traditional knowledge and skills and who is considered to have skills in his/her own field by his/her community.[4]

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4 Diehtima ja máhttima birra árbedieđuid oktavuođas, gč. G. Guttorm čállosa dán čoakkáldagas.

3 These considerations about the concept of birgejupmi are based on Liv Østmo's (the project manager and coordinator of the Árbediehtu Pilot Project) unpublished report on livelihood.

4 For more on knowing and skills in connection with traditional knowledge see G. Guttorm's article in this book.

Sámegiela ovddideapmi čálalaš giellan hástala ja gáibida ođđa sániid (tearpmaid) duddjoma. Njálmmálaš sámegiella lea rikkis gáldun fágatearpmaid duddjomii sihke sáme-dutkama ja čálalaš sámegiela várás muđui ge. Maiddái ođđa dilálašvuođat bohcciidahttet dárbbu ođđa sániide, dalle go ovdamearkka dihtii vuorrasiid čehppodat ja vásáhusat gaskkustuvvojit čálalaččat. Árbediehtu-fágasuorggis lea dárbu ođđa tearpmaide, maid geavaha dokumenteremis, vurkemis ja digitála diehtoteknologiijain.

Árbečeahppi-doaba lea goit eambbo go duššefal ođđa sátni. Prošeakta-bargiid oainnu mielde "informánta"-doaba deattuha fápmorelašuvnnaid eahpedássásašvuođa. "Informánta" lea diehtoaddi, guhte addá oasi iežas čehppodagas ja dieđuin earáide. Dát dieđuid sirdin dáhpahuvvá dábálaččat ovtta guvlui ja čuovvu dábálaš ja sajáiduvvan dutkanparadigma, mas oassebealit eai leat dásseárvosaččat, vaikko diehtoaddi adnojuvvošii árv-vus ja oaččošii muhtinlágán gutni. "Árbečeahppi"-doahpaga bokte mii viggat čalmmustahttit eará para-digma. Árbečeahppi diehtá ja máht-tá, gaskkusta dieđuid, neavvu ja bagadallá (gč. gova 2). Sus lea áššedovdi autoritehtta báikkálaš servošis. Son lea ovttasbargoguoibmi dokumenterenvugiid ovddideamis.

Prošeavtta jurdda lea leamaš ahte árbečeahpit nevvot ja bearráigehččet

The development of the Sami language as a written language entails the design of new words (terms). Spoken Sami is a rich source for creation of professional jargon both for Sami research and also for written Sami in general. New situations create the need for new words, e.g. when the expertise and experiences of the elders are to be disseminated in writing, which is a new form of dissemination of traditional knowledge. In the *árbediehtu* field of knowledge, there is a need for new terms that can be used in documentation work, in recording and in digital information technology.

However, the concept *árbečeahppi* is much more than just a new word. According to the project workers, the term "informant" implies unequal power relations. An "informant" is a person who provides information by giving part of his/her skill and knowledge to others. Such transfer of information usually takes place in one direction and complies with the usual and established research paradigm in which the parties are not equal, even though the provider of information might be appreciated and credited in some way. Through the concept *árbečeahppi* – "bearer of tradition" – we try to make another paradigm visible. A bearer of tradition knows, has skills, disseminates knowledge, guides and gives advice (see Picture 2). In the

Govva 2: Osvald Sundnes, 83 jagi boaris árbečeahppi Mearrasámi guovddáža prošeavttas 2009s, Nuorinjárga, Billávuotna.
Govven: Sigvald Persen.

Picture 2: Osvald Sundnes, 83-years old tradition bearer in the project of the Sea Sami Centre of Expertise in 2009, Nuorinjárga, Billávuotna.
Photo: Sigvald Persen.

ahte dokumenterenvuogit leat báikegotti oainnus dohkkálaččat, vástidit sin eavttuide ja dárbbuide, ja dáhkkidit árbedieđuid báikkálaš hálddašeami. Dánu árbečeahppi lea lunddolaš oassebealli dokumenterenbarggus, man bohtosat galget leat sutnje ja su báikegoddái ávkin.

community he/she is an expert who has authority. He/she is a partner in the development of documentation methods.

One of the objectives of the pilot project has been to secure the participation of tradition bearers with the following objectives: to give advice and to ensure that the documentation methods are acceptable to the community and agree with its requirements and needs, and that local control of traditional knowledge is secured. Thus, the tradition bearers are equal partners in documentation, the results of which must benefit both the knowledge holders themselves and their community.

Prošeavtta ovttasbargoguoimmit

Vihtta sámi ásahusa ja báikkálaš árbečeahpit mátta-, davvi- ja julev-Sámis Norgga bealde čađahedje dán prošeavtta ovttas (gč. gova 3). Ovttasbargoásahusain ledje iežaset dokumentašuvdna-prošeavttat. Muhtin prošeaktaoasit ledje čadnon Árbediehtu-ovttasbargui ná:

- *Árran* – julevsáme guovdásj Divttasvuonas oassálasttii iežas prošeavtta bokte árbevirolaš rituálaid birra, mat leat čadnon olbmo eallimii riegádeami rájes hávdádeami rádjái (*"Fra vugge til grav"*). Árbediehtu-bargui válljejuvvui erenoamážit konfirmašuvdnii ja jápmimii guoski rituálat.
- *Saemien Sijte* – máttasámi musea ja kulturguovddáš Snåasas oassálasttii iežas prošeavtta bokte mas árbedieđuid ja kulturmuittuid ovttastahttin gehččojuvvui máttasámiid identitehta nannejeaddjin (*"Saemieh Saepmesne – I det samiska rummet"*). Árbediehtu-bargui válljejuvvui ehtalaš neavvagiid ja servodatdialoga vugiid ovddideapmi.
- *RiddoDuottarMuseat* – musea-ovttastus Oarje-Finnmárkkus (Jáhkovuonas, Porsáŋggus, Kárášjogas ja Guovdageain-nus) oassálasttii guovtti prošeavtta bokte: árbedieđut

The partners in the project

The project was carried out by five Sami institutions together with local bearers of tradition from the South, North and Lule Sami regions of Norway (see Picture 3). The partner institutions ran their own documentation projects. Parts of the projects were connected with the Árbediehtu Project in the following way:

- *Árran – julevsáme guovdásj,* a Lule Sami Centre in Divtasvuodna/ Tysfjord, participated through its own project on traditional rituals which take place in a person's life from birth to death (*Fra vugge til grav*, "From cradle to grave"). Documentation of rituals dealing with confirmation and death was chosen as part of the Árbediehtu Project.
- *Saemien Sijte,* a South Sami museum and cultural centre in Snåsa, participated in the cooperation through its project which examined how the involvement of traditional knowledge in the documentation of cultural landscape could strengthen South Sami identity (*Saemieh Saepmesne – I det samiska rummet* / In the Sami Space). Development of ethical guide-lines and methods for com-munity dialogue were chosen for cooperation activities in the Árbediehtu Project.

darfegoađi huksemis ja bohcco-ja njurjonáhkki dikšunteknologiijas. Árbediehtu-barggu olis deattuhuvvui erenoamážit filbmenvugiid ovddideapmi árbedieđuid dokumenteremis.

- *Mearrasámi diehtoguovddáš* Billávuonas Porsáŋggus oassálasttii iežas prošeavtta bokte njuorjoterminologiija birra. Árbediehtu-barggu olis vuoruhuvvui árbedieđuid vurken, systematiseren ja gaskkusteapmi báikegoddái.

- *Sámi allaskuvla* Guovdageainnus koordinerii ovttasbarggu. Árbedieđuid dokumenterenvugiid ovddideapmái čađahuvvui prošeavttaš Guovdageainnu dálonsámiid meahcceáddejumis. Erenoamáš fokusa lei gulahallamii báikegottiin.

Ovttasbargoásahusaid iežaset báikkálaš prošeavttat leat leamaš iešguđetláganat viidodaga ja fáttáid dáfus. Muhto bargovásáhusaid vuođul mii leat dihtomielalaččat viggan ovddidit dakkár dokumenterenvugiid, mat doibmet sámi servodagain ja leat bures boahtimat báikegottiide. Prošeavtta árbečeahpit ja báikegottit ledje Snåasa, Divttasvuona, Porsáŋggu, Kárášjoga ja Guovdageainnu guovlluin.

- *RiddoDuottarMuseat*, a museum association in Western Finnmark (in Kokelv, Porsanger fjord, Karasjok and Kautokeino), participated through two projects: one on the traditional methods of building of a turf hut, and another one on the treatment and conservation of skin (reindeer and seal). For the purposes of the Árbediehtu Project, the development of filming methods was given particular priority in the documentation of traditional knowledge.

- *Mearrasámi diehtoguovddáš*, a Sea Sami Centre of Expertise in Billefjord, Porsanger, participated through its project on seal terminology. In the context of the Árbediehtu Project, the focus was on the recording and systematisation of traditional knowledge and local dissemination to the community.

- *The Sámi University College* in Kautokeino was responsible for the coordination of the collaboration. In order to develop and test methods of documentation of traditional knowledge in a practical way, a sub-project was conducted on the settled Sami's (*dálon* in North Sami) understanding of stewardship of nature. The focus was on communication with the community.

Govva 3: Prošeavtta ovttasbargo-guoimmit Mihcamáreahkeda Guovda-geainnu eanu gáttis, bargoseminára geassemánus 2010. Govas gurut-rávddas olgešguvlui badjin: Liv Østmo, Lis-Mari Hjortfors, Hartvig Birkely, Sylvi Granaas, Erik Norberg; vuollin: Bjørg Pettersen, Jelena Porsanger, Káren Elle Gaup, Anne May Olli, Mariana Olofsson, Berit Ravna Länsman.
Govven: Prošeavtta govvavuorká.

Picture 3: Partners of the project on Midsummer night on the Guovda-geaidnu River, in connection with a joint working seminar, June 2010.
Photo: Project's photoarchive.

The local projects of the partner institutions have varied in scope and themes. We have nevertheless, on the basis of the experience gained during the project, consciously tried to improve the documentation methods that work well in and are welcomed by Sami communities. The tradition bearers and the communities involved in the project were from the regions of Snåsa, Tysfjord, Porsanger, Karasjok, and Kautokeino.

Pilohtaprošeavtta fágalaš fierpmá-
daga nanosmahtiimet guovtti
ovttasbargoásahusa bokte, Sámi
allaskuvlla dutkiidjoavkku ja maiddái
bovdejuvvon áššedovdiid bokte.
Nana fágalaš doarjjan prošektii
ledje guokte máhttoásahusa: *Gáldu*
– Álgoálbmotvuoigatvuođaid gelb-
bolašvuođaguovddáš Guovda-
geainus, ja *Fávllis* – sámi guolástus-
dutkanfierpmádat Sámi dutkamiid
guovddážis, Romssa universitehtas.
Dát ovttasbargoásahusat ja pilohta-
prošeavtta bargit serve oktasaš fágalaš
lágidemiide, nugo semin áraide ja
konferánssaide. Ásahusat geavahedje
iežaset diehtojuohkinkanálaid gask-
kustit dieđuid partneriid doaimmaid
birra, main lei oktasaš beroštupmi ja
relevánsa árbediehtu-bargui.

Sámi allaskuvlla fágabiras searvvai
pilohtaprošektii álggu rájes dutkiid-
joavkku bokte. Dutkiidjoavkku
ulbmil lei digaštallat fágaáššiid árbe-
diehtu-barggus, nanosmuhttit pro-
šeavtta kvalitehta ja ehtalaš beliid
ja sihkkarastit prošeavtta fágalaš ovdá-
neami. Dutkiidjoavku árvvoštalai
ja rávvii prošeavtta organiserema
ja ovddideami, doaimmai ságas-
tallanguoibmin áššedovdiseminárain,
mat jámma lágiduvvojedje pilohta-
prošeavtta barggu olis.

Prošeakta bovdii dárbbu mielde
maiddái olggobeale áššedovdiid ee.
čuovvovaš fágasurggiin: juridihkka,
etihkka, informašuvdnavuogádagat
ja datavuorkkát, interneahta, filbmen

The professional network of the pilot
project was strengthened through
two other partner institutions, a
research team at the Sámi University
College and also invited experts.
The following two institutions
provided professional support for
the pilot project: *Gáldu* – Resource
Centre for the Rights of Indigenous
Peoples in Kautokeino, and *Fávllis*,
a Sami fisheries research network at
the Centre for Sami Studies in the
University of Tromsø. These partner
institutions and those involved in
the pilot project participated in
joint professional meetings such
as seminars and conferences. The
institutions used their own channels
for disseminating information
about the activities of the partners,
which were of common interest and
relevance in the field of traditional
knowledge.

From the very beginning, the Sámi
University College established a
research team to give professional
support to the pilot project. The
objective of this group was to discuss
research matters in the project work,
to strengthen the quality and ethical
aspects of the project, and to ensure
the professional progress of the
project. The group assessed and
provided advice on the organisation
and progress of the project and was
a discussion partner in the expert
seminars, which were regularly
arranged in connection with the
project.

(govven ja čuohppan), resurssa-hálddašeapmi, ekonomiija, servo-datásahusat, oahpahus, publi-seren, diehtojuohkin, mediat jna. Áššedovdit ovdanbukte iežaset fágalaš guorahallamiid bargobajiin. Prošeavtta ovttasbargoguoimmit miehta Norgga dábálaččat serve bargobajiide video- ja jietnastudio bokte. Dáid fágalaš ságastallamiid vuođul máŋga áššedovdi čálle dieđa-laš artihkkaliid, maid lohkki gávdná dán čoakkáldagas (G. Guttorm, J. B. Henriksen, J. Å. Riseth, Å. Nordin Jonsson).

Báikegottit ja árbečehppodat

Ovttasbargoguoimmit leat vásihan prošeaktaáigodagas ahte Sámis lea stuorra dárbu loktet oidnosii árbe-virolaš dieđuid ja máhtuid árvvu ja legitimitehta. Hástalussan lea fuomášuhttit eiseválddiid dohkkehit ja duohtan dahkat ahte árbedieđut leat legitiima ja jáhkehahtti diehto-gáldu.

Prošeaktabarggu vuođđojurdda lea leamaš loktet báikegottiid oidnosii. Báikkálaš árbečeahpit – ovttaskas olbmot ja servošat – galget beassat vásihit ahte sin dieđuide lea dárbu otná servodagas. Sii galget ieža leat mielde hábmemin vugiid, maid bokte sin árbevirolaš dieđut ja máhtut sáhtášedje nannet ja fámuidahttit sámi servodagaid, vai dat cevzet

When necessary, the project also engaged outside experts in the following fields: law, ethics, information systems and databases, the Internet, film-making (shooting and editing), resource management, economics, social institutions, education, publishing, dissemination of information, the media, etc. The experts presented their study results at workshops. The project partners from the different parts of Norway attended the workshops, usually with the help of video and audio conference technology. On the basis of these professional discussions, several experts (G. Guttorm, J. B. Henriksen, J. Å. Riseth, and Å. Nordin Jonsson) wrote academic articles to be found in this book.

Communities and traditional expertise

During the project, the partners have noticed that there is a great need in Sápmi for making visible the value and promoting the legitimacy of traditional knowledge and skills. The challenge is to get the authorities to recognise and treat traditional knowledge as a legitimate and authoritative source of information.

The project work has been based on the idea of making communities visible. The aim was to provide local bearers of tradition – individuals and communities – with the experience

eamiálbmotservodahkan ja ovdánit iežaset eavttuid vuođul.

Sámeeatnamis dokumentašuvdna lea dahkkon ovdalaš áiggiid ge. Ollu dieđut gávdnojit musea- ja arkiiva-vuorkkáin sihke Sámis ja dan olggo-bealde. Muhtin dieđut leat máŋg-galogijagi dahje čuohtejagiid boarrá-sat, eará dieđut fas gullet ođđasut áigái. Dát dieđut leat riggodahkan. Lea eahpitkeahttá dárbu kártet musea- ja arkiivavuorkkáid, mat sisttisdollet sámi árbedieđuid. Seammás lea dárbu geahčadit vurkejuvvon dieđuid viidodaga ja kvalitehta. Lea goittotge dovddus ášši ahte dieđuid vurken ja eahpevuoiggalašvuohta leat dávjá "vázzán giehtalagaid" miehtá Sámi. Sámis lea vásihuvvon ahte vurkejuvvon diehtu dávjá "jávká" máilbmái ja stuorat servodagaid iežaset ásahusaide ja vurkenvuogádagaide. Sámi árbečeahpit ja báikegottit leat atnán unohassan ahte sii leat hárve beassan vásihit iežaset dieđuid boahtit sidjiide ruovttoluotta, vaikko sii leat rabasmielain juogadan iežaset dieđuid earáiguin.

Árbediehtu-pilohtaprošeavttas mii leat ovttas árbečehpiiguin ja báikkálaš sámi ásahusaiguin viggán gávdnat vuogi sihkarastit ahte vurkejuvvon árbedieđut bohtet vuosttažettiin ávkin ja atnui dan báikegoddái, gosa dieđut gullet lunddolaččat, *in situ* (gč. gova 4). Báikkálaš dokumentašuvnna

that their knowledge is needed in today's society. We wanted them to participate in creating the methods through which their traditional knowledge could strengthen and empower Sami societies so that these would continue as indigenous societies and develop on their own terms.

In Sápmi, documentation has also taken place earlier. There is a great deal of information stored in museums and archives both within and outside Sápmi. Some of this information is decades or centuries old, while some is more recent. All this information is a treasure in many ways. Obviously, there is a need to map museum and archival collections that contain Sami traditional knowledge. At the same time, we also need to examine the scope and quality of such recorded information. However, we know that injustice and the documentation of information have often "walked hand in hand" in Sápmi. It has been a common experience in Sápmi that information has "disappeared" into the outside world, to benefit the outside institutions and enrich information banks of mainstream societies. Sami tradition bearers and communities have considered it inappropriate that their information has seldom returned to them, although they have willingly shared their knowledge with others (see picture 4).

Govva 4: Álbmotčoahkkimis Guovda-geainnus čakčamánus 2010, govas gurut rávddas olgeš guvlui: Nils Aslak Mathisen Skum, Johan Daniel Isaksen Triumf ja Isak Mikkelsen Hætta. *Govven: J. Porsanger.*

Picture 4: After a community meeting in Kautokeino čin September 2010, from the left to the right: Nils Aslak Mathisen Skum, Johan Daniel Isaksen Triumf and Isak Mikkelsen Hætta. *Photo: J. Porsanger.*

In the Árbediehtu Project we have, together with tradition bearers and local Sami institutions, attempted to find ways to ensure that the recorded traditional knowledge will first and foremost benefit and be accessible to the community to which the knowledge naturally belongs (*in situ*). The local documentation projects have shown how important the local language is: documentation should be carried out in the language which is natural for the tradition bearer, so that all the concepts, words and actions will be presented in a traditionally comprehensive way. This sets certain requirements for documentation.

prošeavttain lea boahtán ovdan man dehálaš álbmoga giella lea: dokumentašuvdna berre dahkkot dan gillii, mii lea árbečeahppái lunddolaš, vai visot doahpagat, sánit

ja dagut boađášedje lunddolaččat ovdan. Dát bidjá dihto gáibádusaid dokumenterenbargui.

Giella lea diehttelas maiddái gulahallama gaskaoapmi. Gulahallan ja nana ovttasbargu báikegottiiguin ja árbečehpiiguin lei prošeavtta vuolggasadji. Gulahallan báikegottiiguin lea maiddái hástaleaddji bargu, danin go eaktun lea gulahallan guovtteguvlui. Báikegottit leat iežaset árbedieđuid vuoiggalaš oamasteaddjit ja hálddašeaddjit. Jus vurkejuvvon dieđut galggašedje leat ávkin ealli ja doaibmi servošiidda, de dokumentašuvdna ii galgga dahkat árbedieđuid "jápma diŋgan" digitála datavuorkkáide dahje museaide, arkiivaskáhpaide dahje girjehilduide. Vurkejuvvon diehtu berre baicce doaibmat ceavzilis ja geabbilis diehtogáldun mii lea olámuttus báikki olbmuide ja sidjiide buorrin.

Árbedieđuid vurkema ektui leat prošeavtta ovttasbargoguimmiid gaskkas leamaš čielga ovttaoaivilvuohta. 2009 čavčča ovttasbargoásahusat ovddidedje oktasaš cealkámuša Norgga Sámedikki gulaskuddamii digitála diehtovuorkáid ja registtariid ráhkadeamis árbedieđuid vurkema várás.[5] Cealkámušas dán gulaskuddamii deattuhuvvo ahte

Language is, of course, also a means of communication. Communication and close cooperation with communities and bearers of tradition was the starting point of the project. Communication with communities is also a challenge, as it requires reciprocal relationships. Communities are the legal owners and possessors of their traditional knowledge. If the purpose is to make the recorded information benefit indigenous communities, documentation should be conducted in a way that does not turn traditional knowledge into artefacts or objects for digital databases, museums, filing cabinets in archives and bookshelves in libraries. Instead, the stored knowledge should be an easy and flexible source of information which is accessible by and beneficial to the local people.

All partners in the project have shared one common opinion concerning digital storage of the recorded traditional knowledge. In the autumn of 2009, the partner institutions submitted a joint statement to the Norwegian Sami Parliament on the parliamentary hearing about the design of digital databases and registers for storage of documented traditional

5 Gulaskuddan áššis "*Grunnlag for utvikling av dataregister for forvaltning av dokumentert samisk tradisjonell kunnskap* / Vuođđu dihtorregistara ovddideapmái duođaštuvvon sámi árbedieđuid hálddašeami várás.

árbevirolaš dieđut galget nannet sámi báikegottiid eaige galgga váldojuvvot sis eret. Danne lea dárbu oččodit dakkár vugiid árbedieđuid vurkemii maid bokte báikegottit buoremusat beasašedje iežaset árbedieđuid hálddašit ja dain ávkkástallat. Árbedieđuid vurkema áššis Árbediehtu-prošeakta čuovvulii fágalaš ákkastallama, mii boahtá ovdan guorahallamis man Solveig Joks čađahii Sámi allaskuvlla ja Norgga Sámedikki ovddas áigodagas 2007–2008.[6]

Pilohtaprošeavttas háleštuvvui maiddái, mii lea ávkin báikegottiide. Ávki lea jurddašuvvon stuorát oktavuođas go ruđalaččat: árbečeahpit galget min oainnu mielde áinnas oažžut mávssu dan áiggi ovddas, maid sii geavahit dieđuideaset juogadit ja neavvut. Muhto árbedieđuid seailluheami, suddjema ja gaskkusteami dáfus ”ávki” ii sáhte mihtiduvvot ruđaiguin, maid ovttaskas árbečeahppi dahje muhtin joavku fidne bargoáiggi ovddas. Sáhka lea árbedieđuid geavaheamis báikkálaš resursan servoša buresbirgejupmái ja ceavzimii. Ávkki

knowledge.[5] The statement from the Árbediehtu Project partners emphasised that traditional knowledge must strengthen Sami communities. Traditional knowledge shall not be alienated or taken away from local communities. It is therefore necessary, when documenting traditional knowledge, to apply methods that make it easier for communities to keep control over their traditional knowledge and to benefit from it. This argumentation was based on the evaluation conducted in 2007–2008 by Solveig Joks on behalf of the Sámi University College and the Norwegian Sami Parliament.[6]

Partners in the pilot project have also discussed what is to be considered as

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6 Gč. Sámi allaskuvlla raportta vuođđoeavttuid birra vurkejuvvon árbedieđuid hálddašeapmái, Solveig Joks (2009) *Rapport om grunnlag for forvaltning av dokumentert tradisjonell kunnskap,* http://www.arbediehtu.no/article.php?id=118. Raporta čállojuvvui ovdal pilohtaprošeavtta álggaheami, Norgga Sámedikki gohččuma (oppdrag) vuođul. Bjørg Pettersen čálii raportii kapihttala digitála diehtoteknologiijaid birra.

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5 A parliamentary hearing on the development of a database for the management of documented Sami traditional knowledge, Grunnlag for utvikling av dataregister *for forvaltning av dokumentert samisk tradisjonell kunnskap / Vuođđu dihtorregistara ovddideapmái duođaštuvvon sámi árbedieđuid hálddašeami várás,* Sami Parliament of Norway.

6 See the report of the Sámi University College on the conditions for the management of documented Sami traditional knowledge, Solveig Joks (2009), *Rapport om grunnlag for forvaltning av dokumentert tradisjonell kunnskap,* http://www.arbediehtu.no/article.php?id=118. The report was written for the Norwegian Sami Parliament before the launching of the Árbediehtu Project. The report included a chapter on digital information technology, written by Bjørg Pettersen.

sáhttá oaidnit báikkálaš ásahusaid dásis ge. Pilohtaprošeavtta bokte vihtta sámi ovttasbargoásahusa leat ovddidan iežaset máhtu ja gelbbolašvuođa. Min oainnu mielde dát kapasitehtahuksen galgá leat ávkin ja buorrin báikegottiide.

Álbmotčoahkkimat, báikegottiid gálledeamit ja ságastallamat árbečehpiiguin leat čájehan ahte ovttaskas olbmot, báikkálaš servošat, sámi giella- ja kulturguovddážat, iešguđet almmolaš searvvit ohcalit rávvagiid ee. sámi árbedieđuid vurkemis, dokumenterema etihkas, árbedieđuid juridihkalaš stáhtusas ja dokumenterema teknihkalaš čovdosiin.

beneficial for communities. Here, benefiting is understood as something wider than pure financial benefits: in the view of our project partners, tradition bearers should naturally get paid for the time that they spend sharing their knowledge and supervising. However, in the preservation, protection and dissemination of traditional knowledge, "benefiting" cannot be measured by the money that an individual bearer of tradition or a group receives for the time that the work takes. The issue is about the use of local traditional knowledge as a rich local resource for the good of the community and for its sustainable development. Benefiting can also take place at the level of local institutions. For example, through the pilot project, five Sami partner institutions have enhanced their skills and competence. In our mind, such capacity building will be of true benefit to the local communities.

Open meetings, visits to communities and discussions held with tradition bearers have shown that individuals, local communities, Sami language and cultural centres and a variety of local societies and organisations are seeking advice on the documentation of Sami traditional knowledge and for information on its legal status, and on relevant ethical questions, technical support and documentation solutions, etc.

Eamiálbmogat ja árbedieđuid dokumenteren

Árbediehtu-pilohtaprošeakta vuolggahuvvui das go Norgga stáhta lei viggamin ollašuhttit iežas geatnegasvuođaid, mat Norggas leat Ovttastahttojuvvon Našuvnnaid (ON) Biokonvenšuvnna dohkkeheami (1993) geažil. Sámi ásahusaide Norgga bealde lei lunddolaš searvat dán bargui ja vuoruhit árbedieđuid dokumenterema, eandalii danin go sámit nugo eará ge máilmmi eamiálbmogat leat rahčamin iežaset árbedieđuid seailluhit, čohkket ja hálddašit iežaset eavttuid vuođul (gč. gova 5).

Eamiálbmogiid árbedieđuid kollektiiva luondu lea máilmmiviidosaččat leamašan hástalussan. Lea dovddus ahte váldoservodagaid našunála lágat leat duddjojuvvon indiviida rievtti suodjaleapmi vuođul, ja omd. pateantaláhka lea váldoáššis huksejuvvon dán prinsihpa ala. Miehtá máilmmi eamiálbmogat leat čalmmustahttán ahte sin árbevirolaš dieđut ja máhtut seailluheamis ja suddjemis leat máŋgga čuolmma maid berre čoavdit: ee. árbedieđuid riektesuodjalus ja duođašteapmi, kollektiiva oamasteami vuhtii váldin, árbedieđuid legitimitehta ja jáhkehahttivuođa lokten, diehtovuorkkáid ceggen ja hálddašeapmi, árbedieđuid kommersiála geavaheami eavttuid čielggadeapmi. Dát áššit leat

Indigenous peoples and documentation of traditional knowledge

The Árbediehtu Project was started as a result of the work of the Norwegian government aimed at the implementation of the United Nations Convention on Biological Diversity, which entered into force in 1993. It was natural for Sami institutions in Norway to participate in this work and to give priority to documentation of traditional knowledge, especially as the Sami, like other indigenous peoples in the world, are struggling to preserve, collect and control this knowledge on their own terms (see Picture 5).

The collective nature of indigenous traditional knowledge has been a challenge all over the world. It is generally known that the national laws, designed by the mainstream societies, are based on the protection of the rights of individuals, and that e.g. patent laws are primarily built on this principle. Internationally, indigenous peoples have drawn the world's attention to many unsolved issues that concern the preservation and protection of their traditional knowledge and skills. These are, for example, the issues of providing legal protection and evidence for traditional knowledge, taking collective ownership into consideration, enhancing

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Govva 5: Julevsámi árbečeahpit Lill-Tove Paulsen ja Elise Knutsen goarruba konfirmašuvdnagávtti Trond-Edvard Paulsenii miessemánus 2010.
Govven: Lis-Mari Hjortfors.

Picture 5: Lule Sami tradition bearers Lill-Tove Paulsen and Elise Knutsen sew a confirmation gáppte (Lule Sami term for traditional Sami dress) for Trond-Edvard Paulsen in May 2010.
Photo: Lis-Mari Hjortfors.

juo badjel 20 jagi leamašan fáddán dakkár riikkaidgaskasaš arenain go omd. ON Konvenšuvdna biologalaš máŋggabealatvuođas, WIPO (Máilmmi intellektuála opmodaga organisašuvdna), UNESCO (ON Oahpahus-, Dutkan- ja Kulturorga-

the legitimacy and authority of traditional knowledge, design of databases and control over them, and evaluation of the terms of possible commercial exploitation of traditional knowledge. For more than twenty years, these issues have been discussed in such international arenas as the UN Convention on Biological Diversity, the World Intellectual Property Organisation WIPO, the UN Educational, Scientific and Cultural Organisation UNESCO, and the UN Permanent Forum on Indigenous Issues.

nisašuvdna) ja ON Eamiálbmogiid Bistevaš Foruma.

ON Biokonvenšuvnna olis leat 2010s dohkkehuvvon ehtalaš neavvagat eamiálbmogiid árbedieđuid suddjema ja seailluheami várás. Neavvagat, mat leat measta logijagi gulahallamiid boađus, leat ožžon nama *Tkarihwaié:ri*, mii mohawk indiánaid gillii lea "rievttes/njuolga vuohki" (*the proper way*, gč. http://www.cbd.int/doc/decisions/cop-10/cop-10-dec-42-en.pdf). Neavvagiid duogáščilgehusas deattuhuvvo ahte eamiálbmogat galget ain beassat geavahit iežaset árbevirolaš guovlluid luondduresurssaid ja iežaset árbevirolaš dieđuid ja máhtuid. Dát lea eaktu árbedieđuid seailluheapmái ja biologalaš máŋggabealatvuođa suddjemii.

Pilohtaprošektii lei mávssolaš geavahit láhkačehpiid, geat ovdalis namuhuvvon internašunála instrumeanttaid ja forumiid lassin leat čalmmustahttán árbediehtu-suorgái relevántta riekteinstrumeanttaid riikkaidgaskasaččat, ee. ON konvenšuvnnaid olmmošvuoigatvuođain, siviila ja politihkalaš vuoigatvuođain, ekonomalaš, sosiála ja kultuvrralaš vuoigatvuođain. Maiddái ON Eamiálbmotvuoigatvuođaid julggaštus deattuha vuoigatvuođaid kulturárbái ja árbevirolaš dieđuide, máhtuide ja geavadiidda.

With regard to the UN Convention on biodiversity, a code of ethical conduct was adopted in 2010 in order to protect and preserve indigenous traditional knowledge. The code, which is the result of almost ten years of discussion, has been called *Tkarihwaié:ri*, which means "the proper way" in Mohawk (http://www.cbd.int/doc/decisions/cop-10/cop-10-dec-42-en.pdf). It is emphasised in the preamble to this code of ethical conduct that indigenous peoples must be able to continue using both the natural resources of their respective traditional territories and their traditional knowledge and skills. This is a condition for the preservation of traditional knowledge and the protection of biological diversity.

It was important for the pilot project to use legal experts who have studied legal instruments that, in addition to the above-mentioned international instruments and forums, bear relevance to the field of traditional knowledge. They include, for example, the UN conventions on human rights, civil and political rights, and economic, social and cultural rights. The UN Declaration on the Rights of Indigenous Peoples emphasises the right to cultural heritage and traditional knowledge, skills and practices.

Pilohtaprošeavtta olis oassepro-šeavttaid bokte mii vásiheimmet máŋga hástaleaddji dilálašvuođa, mat bohciidahtte juridihkalaš gažaldagaid árbedieđuid oamasteamis, copyright-vuoigatvuođain erenoamážit filbme-ma oktavuođas, ruđalaš buvttadusas árbečehpiide, árbevirolaš tekno-logiijaid patenteremis, árbevirolaš dálkkodandieđuid geavaheami vejo-lašvuođain, sensitiiva dieđuid suodjaleamis jna. Pilohtabargu lea nappo identifiseren máŋgga čuolm-ma, maiguin boahtte áiggis berrešii bargat systemáhtalaččat.

Eamiálbmogiid árbedieđuid suorggis lea vásihuvvon ee. dieđuid buorrin-ja boasttogeavaheapmi, kommersia-liseren ruhtamárkana gálvun, aka-demalaš dieđu legitimeren ja árbedieđuid doallevašvuođa eahpá-dusat. Eamiálbmogat leat maŋe-muš áiggiid gidden máilmmi fuopmášumi dasa ahte sin riekti ja geatnegasvuohta lea iežaset árbe-dieđuid hálddašit. Dát eaktuda doaibmi hálddašanmekanismmaid ja mielddisbuktá gelbbolašvuođa dárbbu hui máŋga fágasuorggis. Dát artihkalčoakkáldat lea okta rievssatlávki gelbbolašvuođa hukse-mii.

In the pilot project, while working on the subprojects, we ran into many challenging situations that raised legal questions about the ownership of traditional knowledge, copy rights, especially in connection with filming, financial compensation to tradition bearers, the patenting of traditional techniques, the possibilities of utilising traditional medicinal knowledge, the protection of sensitive information, etc. The pilot project has indeed identified many issues that should be dealt with systematically in future by lawyers and other legal experts.

Indigenous peoples have experienced that their traditional knowledge has been exploited, misused and commercialised into a commodity to be bought and sold, and that academic knowledge is usually given priority and legitimacy, while the validity of traditional knowledge is viewed with suspicion. Recently, indigenous peoples have called the world's attention to their right and obligation to control their own traditional knowledge. This requires effective control mechanisms. It also necessitates enhanced competence and professional skills in numerous fields. This collection of articles is a small step towards the building of such competence.

”Olmmoš oahppá guovtti soabbái”: maid dán girjji čállosat muitalit

”*Olmmoš oahppá guovtti soabbái*” lea gáivuotnalaččaid sátnevájas eallima ja oahppama birra: olmmoš oahppá nu guhká go eallá ja oahppamii ii gávdno rádji. Dán artihkalčoakkáldahkii lea ollu diehtu čohkkejuvvon. Čállosat sáhttet leat buorrin álgun árbediehtu-fágasuorggi nanosmahttimii. Muhto – nugo sámi álbmotviisodat deattuha – de oahppat ja diehtit sáhttá hui ollu. Okta soabbi lea gal doarvái, muhto olmmoš sáhttá ”*vaikko guovtti soabbái*” oahppat. Dánu suokkardallamat dán girjjis sáhttet movttiidahttit fágalaš ságastallamiid ja árbediehtu-suorggi viidásut ovdáneami.

Pilohtaprošeavtta olis mii leat suokkardallan ee. daid gažaldagaid:

- Gávdnogo riektesuodjalus árbedieđuide?
- Makkár ehtalaš vuođđoprinsihpaid berre čuovvut vurkenbarggus?
- Mii lea ”riekta” ja ”boastut” vurkenbarggus Sámis?
- Sáhttágo ráhkadit digitála vuorkká sámi árbedieđuide?
- Makkár servodatmekanismmat dáhkidit árbedieđuid ceavzima?
- Makkár bealit servodatvuogádagas sáhttet leat árbedieđuide áittan?

”One can learn for two walking sticks”: What do the articles of the book deal with?

”One can learn for two walking sticks” is a saying that the Sea Sami of Gáivuotna (Kåfjord) have about life and learning: one learns as long as one lives and there are no limits to what one can learn. This collection of articles contains a great deal of information. The texts in this book can provide a good basis for developing the field of research and study on *árbediehtu*. But, as Sami collective wisdom emphasises, one can learn and know much more. One walking stick is usually enough, but anyone can learn even ”for two walking sticks”. In this way, the writings of this book may inspire professional discussions and may lead to the further development of the field of *árbediehtu*.

In the pilot project the following issues have been discussed, among others:

- Is traditional knowledge protected by law?
- What kind of ethical guidelines should be followed when recording such knowledge?
- What is ”right” and ”wrong” when carrying out documentation in Sápmi?

- Mo árbedieđut leat čadnon birgejupmái?
- Makkár čanastat lea árbedieđuid ja ealáhusaid gaskkas?
- Mo sáhttá atnit árbedieđuid báikkálaš gullevašvuođadovddu nannet?
- Mo sáhttá sámi árbedieđuid geavahit dutkamis analyhtalaš bargoneavvun?

Dás vuollelis lea oanehis árvvoštallan das, mo artihkkalat vástidit pilohtaprošeavtta fágalaš vuoruhemiide. Doaimmaheaddji-guovttos fuomášahttiba árvvoštallamiid loahpas, makkár relevánssa lea artihkkaliin árbediehtu-suorggi ovddideapmái boahtte áiggis.

- Is it possible to create digital storage for Sami traditional knowledge?
- What kind of social mechanisms will guarantee the survival of traditional knowledge?
- What social mechanisms and institutions can pose a threat to traditional knowledge?
- How is traditional knowledge interlaced with livelihood and survival capacity?
- What connections are found between traditional knowledge and means of livelihood?
- How can traditional knowledge strengthen a sense of belonging in the local community?
- How can Sami traditional knowledge be used as an analytical tool in research?

In the following, there is a brief assessment of how the articles of this book correspond to the objectives of the pilot project. At the end of each assessment, the editors of the book comment on the relevance of the article on the development of the *árbediehtu* field in the future.

Duodjedutki **Gunvor Guttorm** lea artihkkalisttis suokkardallan árbediehtu- ja árbevierru-doahpagiid, erenoamážit duodjebargguid oktavuođas. Su vuolggasadji lei diehtima proseassa juohku guovtti doibmii, namalassii *diehtimii* ja *máhttimii*. Čálli oainnu mielde diehtit-doaba čatnasa eanemus teorehtalaš máhtolašvuhtii, muhto máhttit-doaba laktása geavatlaš čehppodahkii. Jus olmmoš diehtá juoganu birra, de dát ii sáhte dáhkidit ahte olmmoš máhttá juoga nu. Suokkardallan buktá ovdan ahte árbedieđuid dokumenterema várás galget árbečeahpit čájehit ja čilget iežaset máhtolašvuođa (man nu áššis mas sis lea sihke teorehtalaš máhttu ja geavatlaš vásáhusat). Vurkema bokte máhtolašvuođa goit šaddá diehtun. Dát mielddisbuktá gažaldaga árbedieđuid seailluheamis: jus vurkejuvvon árbediehtu galgá leat ealli kultuvrra oassin ja leat ánus dálá ja boahtte áiggis, de vurkema (dokumenterema) lassin berre leat vuogádat, man bokte čehppodaga sáhtášii gaskkustit geavatlaččat. Dalle diehtu ovttastuvvo geavatlaš máhtuiguin, ja árbediehtu joatká dalle doaibmi ja dievaslaš eallima.

Gunvor Guttorm, who carries out research on *duodji*, Sami arts and handicrafts, has examined the concepts of *árbediehtu* (traditional knowledge) and *árbevierru* (tradition) especially in connection with Sami handicraft work. She approaches her subject by dividing knowing into two concepts, *knowing* and *having skill*. According to the author, the Sami concept of knowing (*diehtit*) is mostly connected with a theoretical capacity, while the concept of having skill (*máhttit*) is linked with practical expertise. Thus, knowing about something does not guarantee that one has the skill to do or perform it. The article reflects on the fact that, for the documentation of traditional knowledge, tradition bearers need to show and explain their skills (in something of which they have both theoretical knowledge and practical experience). However, through the process of documentation, skill turns into knowledge. This raises the following question on the maintenance of traditional knowledge: if we want the recorded traditional knowledge to be part of the living culture and to be used both today and in future, there is a need, in addition to documentation, for a system that will enable passing down the skill in practice. Then, knowledge will be united with practical skills, and traditional knowledge will continue to have an active and full life.

Boahtte áiggis livččii dárbu iskat geavadis, mo sámi báikegottiid, árbečehpiid ja ealáhusbirrasiid oassalastin árbediečuid dokumenteremii váikkuha diečuid gaskkusteapmái ja fievrrideapmái ođđa buolvvaide.

In future, we would need to study how the participation of Sami communities, tradition bearers and groups with a common livelihood in the documentation of traditional knowledge affects the passing down and transmitting of knowledge to new generations.

Servodatgeográfa ja áššedovdi digitála informašuvdnavuogádagain, **Bjørg Pettersen** guorahallá makkár digitála čovdosat lea heivvolaččat árbediečuid vurkemii, hálddašeapmái ja seailluheapmái. Čálli buktá muhtin ovdamearkkaid digitála diehtovuorkkáin Meksikos, Kanadas, Austrálias ja Indias. Suokkardallan čájeha ahte ođđa teknologiijat addet meastá ráddjemeahttun vejolašvuođaid govva-, jietna-, teaksta- ja filbmenmateriála vurkemii. Stuorámus hástalussan lea duddjot teknologalaš čovdosiid, mat vástidit eamiálbmogiid iežaset vuoruhemiide ja dárbbuide sin árbediečuid vurkema, suddjema ja gaskkusteami várás. Čálli ákkastallá ee. feministtalaš ja kritihkalaš (critical) teoriijaid vuođul ahte teknologalaš čovdosiid duddjonbarggus berre vuhtii váldit ehtalaš ja kultuvrralaš beliid, bidjat deattu diečuid kontekstii, proseassaide ja geavadiidda, ja sajuštit árbečehpiid ja sin diečuid ja čehppodaga guovddážii (*knower–centred*). Diečuid vurken amasmahttá árbediečuid lunddolaš konteavsttas (*ex situ*, mii oaivvilda lunddolaš gulle-

Bjørg Pettersen, who is a social geographer and an expert on digital information technologies, examines what kind of digital solutions can be used in the documentation, control and preservation of traditional knowledge. The author presents examples of digital databases from Mexico, Canada, Australia and India. Her discussion shows that new technology opens up almost unlimited possibilities for the recording of images, sound, text, film and other visual and audio material. The greatest challenge is to develop technological solutions that comply with the priorities and needs of indigenous peoples themselves regarding the documentation, protection and transmission of their traditional knowledge. On the basis of e.g. feminist and critical theories, the author states that in creating technological solutions one needs to take into account ethical and cultural aspects, to emphasise the context, processes and practices of knowledge, and to place tradition bearers and their knowledge and skill in the centre, that is, to be

vašvuođa olggobealde, *off-site*). Eamiálbmogiid dieđuid ja máhtuid suddjema dáfus ferte váruhit amaset informašuvdnavuogádagat rivvet árbečehpiin ja báikegottiin kontrolla árbedieđuideaset badjel. Lea dehálaš maid gozihit ahte vurkejuvvon dieđut leat sajuštuvvon ja čadnon báikái, sosiála ja historjjálaš kontekstii. Hástalussan lea gávdnat dahje duddjot/ráhkadit ođđa heivvolaš sániid ja tearpmaid (ee. ohcansániid), maid bokte sáhttá diehtovuorká sisdoalu meroštallat ja vuorká siste dádjadit. Dakkár govvádus gohčoduvvo ontologiijan. Digitála informašuvdnavuogádagat berrejit dahkat vejolažžan árbedieđuid viidásut geavaheami ja movttiidahttit ođđa teknologalaš čovdosiid atnui váldima árbedieđuid suodjaleamis ja gaskkusteamis.

Boahtte áiggis lea hástalus čiekŋaleabbo guorahallat diehtoteknologiijaid sámaidahttima, nu ahte dát dáhkkidivčče sámi árbedieđuid vurkema ávkin báikegottiide.

knower-centred. The documentation moves traditional knowledge away from its natural context (*ex situ*, which means outside the location to which it naturally belongs, *off-site*). With regard to the protection of indigenous knowledge and skills, one has to beware that information systems do not take away the control of the traditional knowledge from the tradition bearers and communities. It is also essential to ensure that the documented information is located in and tied to a place and a social and historical context. Furthermore, it is a challenge to find or create suitable new words and terms (entries) that will make it possible to define the content of a digital information system and to make the system searchable. Such a description is called ontology. Digital information systems should make it possible to use traditional knowledge to a greater extent. They should also motivate and inspire to apply new technology to the protection and dissemination of traditional knowledge.

In future, the challenge will be to analyse more comprehensively how information technologies can be made more suitable for the purposes of documentation of Sami traditional knowledge, in order to guarantee that the recording of such knowledge will benefit local communities.

Servodatdutki **Åsa Nordin Jonsson** guorahallá makkár ehtalaš neavvagat leat árbediеđuid vurkenbarggus. Son deattuha ahte árbediеđuid dokumenterenbarggus eamiálbmot berre leat guovddáš mearrideaddjin ja hálddašeaddjin. Čálli vuođušta suokkardallama eamiálbmotmetodologiijaid jurddašeapmái ja neavvu ahte etihka vuođđun berrejit leat álbmoga iežaset eavttut. Čálli suokkardallá ehtalaš hástalusaid čohkkejeaddji ja árbečehpiid/báikegottiid gaskkas. Vurkenbarggu etihka vuođđoprinsihppa lea ahte eamiálbmoga kultuvra ii galgga buorrin geavahuvvot ja ahte vurkenbargu galgá leat báikegottiide ávkin ja galgá čuovvut sin dárbbuid, norpmaid ja eavttuid. Vurkenbarggu eará dehálaš eaktu lea máhcahit diеđuid ruovttoluotta báikegoddái (reporting back). Čálli deattuha lagaš gulahallama báikegottiin ja árbečehpiiguin sin árvvoštallamiid ja vuoruhemiid birra. Dát gulahallan ja šiehtadallamat berrejit dahkkot jo vurkenbarggu plánenmuttus ja maiddái vurkenbarggu čađaheamis ja vurkejuvvon diеđuid gaskkusteamis ge. Čálli buktá ehtalaš neavvagiid ovdamearkkaid: sihke eamiálbmogiid iežaset bagadallamiid ee. *kahniakehaka*-álbmoga (mohawk indiánaid), mi'kmaq indiánaid ja inuihtaid ehtalaš neavvagiid, ja maiddái riikkaidgaskasaš ja našunála dási neavvagiid (ee. ON Biokonvenšuvnna olis, arktalaš guovllus, Alaskas jna.). Eamiálbmot

The social scientist **Åsa Nordin Jonsson** examines ethical guidelines relevant to the documentation of traditional knowledge. She maintains that indigenous people should be the principal decision makers and controllers when such knowledge is documented. Her view arises from the thinking of indigenous methodologies, and she suggests that ethical guidelines should be based on the people's own terms. The author reflects on the ethical challenges that are found between the documenter and the tradition bearers/communities. The primary principle of the ethics of documentation is that indigenous culture must not be exploited and that documentation must benefit local communities and comply with their needs, norms and conditions. Reporting back is another important condition of documentation. The author stresses the need for close communication with the community and the tradition bearers, especially with regard to their evaluations and priorities. Such communication and negotiations should take place already at the planning stage and continue during the documentation process and the dissemination of knowledge. The author presents examples of ethical guidelines: she deals with both indigenous guidelines, for example those of the Kahniakehaka (Mohawk), the Mi'kmaq nations and the Inuit, and with international and national ethical guidelines (e.g.

konteavsttas árbedieđuid vurkema etihkkaprinsihpaid berre suokkardallat ođđasit. Eamiálbmogiin sáhttet leat iežaset gáibádusat anonymitehtii, vurkejuvvon dieđuid hálddašeami ortnegiidda, gudnejahttimii ja árvvus atnimii, jna. Dát gáibádusat sáhttet spiehkastit das masa dutkanmáilbmi lea hárjánan ja masa lea oahpahuvvon. Sámi konteavsttas deattuhuvvo ahte ferte leat rabasmielat báikkálaš máŋggabealatvuhtii. Seammás deattuhuvvo ahte vurkenbargu galgá dahkkot dan giela bokte mii lea árbečehpiide ja báikegoddái lunddolaš. Giellagáibádusat gustojit maiddái dieđuid vurkenvuogádagaide ja gaskkusteapmái. Árbedieđuid vurkenbarggu etihkka berre vuhtii váldit ee. dieđuid kollektiiva oamasteami, ollisvuođa (holistic), konteavstta ja sohkabeali mearkkašumi. Lea dárbu neavvagiidda, mo šiehtadit buvttadusa ja krediterema birra dieđuid ovddas, jna. Dutki ii oainne vejolažžan ráhkadit čavga njuolggadusaid etihkkii. Su ulbmil lea baicce buktit rávvagiid vurkenbarggu etihka hábmemii ja movttiidahttit etihkkaneavvagiid ovddideami ja heiveheami báikkálaš kontekstii ja álbmoga iežas norpmaide. Son fokusere fuopmášumi ovttaskas olbmuid dássái árbedieđuid dokumenteremis.

the UN Convention on Biological Diversity, the Arctic, Alaska, etc.). In the context of indigenous peoples, the ethical principles of the documentation of traditional knowledge should be re-evaluated. Indigenous peoples may have their own demands for anonymity, for control systems, and for the respect and appreciation for documented knowledge, etc. Such demands may differ from what the research community is used to and has learnt to expect. In the Sami context, the need to be open-minded about local diversity is highlighted. At the same time, it is also stressed that documentation should be carried out in the language that is natural for the bearers of tradition and the community. Such a language criterion must also be applied to the digital information systems and the dissemination of knowledge. The ethics of documentation of traditional knowledge must take into consideration, for example, the collective ownership and context of such knowledge. It must consider traditional knowledge as a whole, in a holistic way. Gender must also be taken into account. There is a need for guidelines on how to decide about compensation and credit for providing knowledge, etc. According to the author, it is not possible to set strict ethical rules. Instead, she aims at giving advice on how to formulate ethics for the documentation work. She also encourages developing

Boahtte áiggis lea hástalus dárki-leabbo guorahallat dokumenteren-barggu ehtalaš beliid kollektiiva (báikegottiid, servošiid) dásis.

ethical guidelines and adapting them to the local context and the norms of the people themselves. She focuses attention on the documentation of traditional knowledge at the individual level.

In future, the challenge will be to examine the ethical aspects of documentation more comprehensively at the community or collective level.

Jurista ja eamiálbmot vuoigat-vuođaid áššedovdi **John Bernhard Henriksen** guora-hallá riektegažaldagaid, mat leat čadnon eamiálbmogiid árbe-dieđuide. Láhkačeahppi buktá ovdan unnimus dási gáibádusaid árbedieđuid riektesuodjaleamis. Ságastallamat sámiid ja eará eami-álbmogiid rivttiin sin árbevirolaš dieđuide ja máhtuide leat bohciidan maŋemuš moaddelogi jagis. Nana oktavuohta sámi árbedieđuid ja sámiid birgejumi gaskkas lea vuođđu riektegažaldagaid suokkar-dallamii. Go sámi árbediehtu lea ánus, de dat seailluhuvvo ja ovdána *in situ*. Dát eaktuda ahte olbmuin lea vejolašvuohta geavahit iežaset guovlluid ja daid resurssaid iežaset sosiála, ekonomalaš, rumašlaš ja vuoiŋŋalaš birgejupmái ja kultuvrralaš doaimmaide. Čálli buktá oidnosiid internašunála konvenšuvnnaid ja julggaštusaid, erenoamážit Ovttas-tahttojuvvon Našuvnnaid olis, mat nannejit riektevuođu sámi árbe-

John Bernhard Henriksen, who is a lawyer and an expert on indigenous rights, deals with legal issues connected with indigenous traditional knowledge. He presents the lowest level of demands (minimum demands) for the legal protection of traditional knowledge. The rights of the Sami and other indigenous peoples to their traditional knowledge and skills have been widely discussed during the past twenty years. The discussion on such legal issues is based on the strong connection between Sami traditional knowledge and Sami livelihood. When Sami traditional knowledge is utilised, it is also maintained and developed *in situ*. This cannot happen if people cannot use their own traditional territories and resources for their social, economical, physical and spiritual well-being and for cultural activities. The author discusses international conventions and declarations (especially those of the United

dieđuid ceavzimii, geavaheapmái ja *in situ* seailluheapmái. Láhkačeahppi deattuha erenoamážit daid osiid riikkaidgaskasaš riekteinstrumeanttain, mat dorjot ja vuođuštit eamiálbmogiid (ja sámiid) rivttiid iežaset árbedieđuide, mat čatnet sin iežaset eatnamiidda ja eallinvugiide. Čálli suokkardallá ee. gažaldaga ovttaskas olbmo ja kollektiiva vuoigatvuođain, mii lea hui relevánta fáddá árbediehtu-suorgái. Dihtomielalaš ja ovddalgihtii šihttojuvvon mieđiheapmi (FPIC) deattuhuvvo eamiálbmogiid vuđoleamos olmmošvuoigatvuohtan, ja čadno árbedieđuid oamastanvuoigatvuođaide. Internašunála olmmošvuoigatvuođat leat vuođđu našunála stáhtaid vugiide, mo olmmošvuoigatvuođaid čoavdit iežaset riikarájáid siskkobealde. Norgga lágaid suokkardallan čájeha ahte stáhta lea geatnegahtton láhčit sámiide vejolašvuođaid sihkarastit sin kultuvrra, mas árbediehtu lea lunddolaš oassi. Čálli konkludere ahte Norgga láhkavuogádat ii goittotge dáhkit riektesuodjalusa sámi árbedieđuide, ja addá ráddjejuvvon vejolašvuođaid árbedieđuid geavaheapmái ja gaskkusteapmái *in situ*. Guorahallan čalmmustahttá máŋga čuolmma árbedieđuid riektesuodjaleamis ja stáhtusas.

Nations) that consolidate the legal grounds for the survival, use and *in-situ* preservation of Sami traditional knowledge. He especially emphasises the sections of international legal instruments that support and provide a basis for the rights of indigenous peoples (including the Sami) to their own traditional knowledge as regards their lands and ways of living. For example, the author reflects on the issue of individual and collective rights, which is extremely relevant to the field of traditional knowledge. FPIC, or *free, prior and informed consent* is stressed as being the most fundamental human right of indigenous peoples, and it is linked with the right of ownership to traditional knowledge. International human rights are the basis that national states rely on when settling human rights issues within their national borders. An analysis of the Norwegian legislation shows that the state is obliged to provide the Sami with an opportunity to maintain their culture, of which traditional knowledge is a natural part. Nevertheless, the author concludes that the legal system of Norway does not guarantee legal protection of Sami traditional knowledge; it also provides limited opportunities for the utilisation and transmission of traditional knowledge *in situ*. The analysis shows that there are many problems related to the legal protection and the status of traditional knowledge.

Dáid riektečuolmmaid čoavdin leat láhkačehpiide hástalus Árbediehtuprošeavtta joatkkabarggus.

Solving these legal questions will be certainly a challenge for legal experts in the work after the *árbediehtu* project.

Luondduresurssaid ekonomiija dutki **Jan Åge Riseth** suokkardallá, makkár sosiála ásahusat dahjege servodatásahusat (*social institutions*) Norgga beale Sámis dahket vejolažžan dahje hehttejit árbediеđuid atnui váldima resurssaid hálddašeapmái. Dás lea sáhka rámmaid ja sosiála eavttuid birra resurssahálddašeamis, sihke árbevirolaš sámi ja lágaid bokte vuođuštuvvon hálddašeamis. Dutki fuomášuhttá ahte dálá áigge lea árbedieđuide biddjon eambbo fuopmášumi sihke riikkaidgaskasaš proseassaid geažil ja našunála stáhtapolitihka dásis. Árbevirolaš dieđut ja máhtut leat áiggiid čađa leamaš diehtovuođđun sámi luondduhálddašeapmái. Eiseválddit goit atnet dán diehtovuođu "alternatiiva" lassediehtun, ja hábmejit resurssahálddašeami rámmaid ja eavttuid luonddudiehtagii vuođuštuvvon dieđuid vuođul, mat šaddet dan bokte legitiima diehtun. Maiddái gilvu eatnamiid ja resurssaid geažil ja eiseválddiid stivren sámi guovlluin leat dagahan váttisvuođaid árbedieđuid atnui váldimii ja seailluheapmái. Dutki buktá máŋgga ovdamearkka sámi ealáhuseallimis ja riektegažaldagaid čoavdimis. Son doarju máŋga

Jan Åge Riseth, a natural resources economist, analyses what kind of social institutions in Norwegian Sápmi enable or prevent the use of traditional knowledge in resource management. He deals with the framework and the social conditions of resource management, both in traditional Sami nature management and with management that is regulated by legislation. The author rightly points out that traditional knowledge has recently gained much attention, both as a result of international processes and of national state policy. Traditional knowledge and skills have always been the information basis of Sami nature management. However, the authorities consider this knowledge as "alternative", complimentary information. They set the framework and conditions of resource management on the basis of information that relies on natural science, making this information into legitimate knowledge. Competition over lands and resources and the fact that the traditional Sami territories have been governed by the state have made it difficult to use and maintain Sami traditional knowledge. The researcher presents several examples of Sami livelihoods

dutki oainnu das ahte sámi árbedieđuid seailluheapmi eaktuda árbevirolaš servodatásahusaid seailluheami dahje ealáskahttima. Beroškeahttá sámi árbedieđuid dohkkeheamis eiseválddiid dásis, lea dutki oainnu mielde árbedieđuide unnán sadji luondduresurssaid hálddašanvuogádagain, mat leat hierárkkalaččat ja leat guovddáš-stivrejuvvon (*centralized*). Dutki evttoha váldit atnui *oktasašhálddašeami*. Dát evttohus lea bohciidan luonddu-hálddašandiskurssa internašunála ságastallamiin, sihke máilmmiviido-saččat ja erenoamážit eamiálbmot-guovlluin. Oktasašhálddašeapmi eaktuda ahte resurssaid geavaheaddjit geain lea geavatlaš máhttu ja diehtu (árbemáhttu ja -diehtu) servet hálddašeapmái seammá dásis go formála oahpu gazzan háldda-šeaddji byrokráhtat, ja ahte resurssa-geavaheaddjit sáhttet ieža oažžut ovddasvástádusa hálddašeami ovddas.

Artihkal láhčá metodalaš vuođu resurssahálddašeami ja árbedieđuid čanastagaid guorahallamii, mii livččii okta dárbbašlaš joatkkadoaibma Árbediehtu-prošeavtta bohtosiid vuođul.

and how some legal issues were solved. He supports the view of many researchers that, without the preservation or the revival of traditional social institutions, Sami traditional knowledge cannot be maintained. Even if Sami traditional knowledge may be accepted by the authorities, there is, according to the author, little room for it in the hierarchical and centralised resource management systems. The researcher suggests the launching of co-management systems. This idea has arisen in international discussions on nature management in many parts of the world, especially in connection with indigenous peoples. Co-management entails that the resource users who have practical skills and knowledge (traditional skills and knowledge) participate in management on equal terms with the formally educated bureaucrats involved. Co-management also entails that the resource users themselves are granted responsibility for the management of resources.

The article creates a methodological basis for an analysis of the connection between resource management and traditional knowledge. In further development of the *árbediehtu* field of knowledge, more analysis of institutional relationships would be needed, which will utilise the results of the Árbediehtu Project.

Arkeologiija ja historjjá dutkit **Birgitta Fossum** ja **Erik Norberg** leaba čilgen metodalaš vuođu, mii lei Saemien Sijte -ásahusas "Saemieh Saepmesne" -prošeavtta plánemis ja čađadeamis. Čálliguovttos deattu-heaba ahte máttasámi guovllus lea kulturmuittuid ja dáidda čadnon árbediеđuid dokumenteren dehálaš, danin go guovllus lea ain dárbu duođaštit ee. eanangeavahanrivttiid ja loktet máttasámiid iešdovddu ja diehtovuođu iežaset kulturárbbi hárrái. Čállosis boahtá ovdan mo báikkálaš olbmot serve prošektii ja ledje mielde ovddideamen vugiid mo dokumenteret iežaset álbmoga ja guovllu vássánáiggi. Dokumenteren duođaštuhttá dološ historjjá joatkkalašvuođa dálá áigái ja cuvge máŋgga čuočuhusa máttasámiid ovdahistorjjás, mat leat adnojuvvon diehttelassan. Historjjálaš joatkkalaš-vuohta oažžu vuoiggalaš ja báike-gottiide divrras duođaštusa ee. dalle go kulturmuittuide čadnon árbe-dieđut buktojit oidnosii. Dán barggus lea árbečehpiin ja báikegottiin dehálaš rolla. Gulahallan báikegottiiguin, ja maiddái gula-hallan ja ovttasbargu árbečehpiid ja ásahusa prošeaktabargiid gaskkas lea leamaš dat bargovuohki, mii buvttii sihke ovdamuniid ja hástalusaid prošeaktabargui. Dutki-guovttos fuomášuhttiba bargovásá-husaideaskka vuođul, ahte gulahallan gáibida gávnnademiid ja goappát guoimmi oaiviliid ja bargovugiid vuhtii váldima. Čálli-guovttos

Birgitta Fossum and **Erik Norberg**, who are archaeologists and histo-rians, have explained in their article the methodological basis that their institution Saemien Sijte applied in the planning and implementation of the "Saemieh Saepmesne" project. The authors underline the importance of documenting cultural monuments and relics and the traditional knowledge connected with them in the South Sami region, where there is still a need to prove land use rights and to raise the self-esteem and awareness of the South Sami regarding their cultural heritage. The article explains how local people participated in the project and contributed to the development of ways of documenting the past of their own people and the landscape. The documentation proves that there is a continuity from prehistory to today, contradicting many claims about South Sami prehistory that have been taken for granted. Histo-rical continuity is verified both legally and in a way that is significant for the local communities, for example, when the traditional knowledge that is connected with the cultural landscape is made visible. In this work, bearers of tradition and local communities play an important role. Communication with the com-munities and communication and cooperation between the tradition bearers and the project workers of the institution Saemien Sijte has both benefited and brought

oaidniba dákkár bargovuogi nana beallin iežaska prošeavttas. Kulturmuittuid dokumenteremis dutkiguovttos deattuheaba ahte árbediedut leat dehálaččat konteakstualiseremii. Viggamuš čatnat kulturmuittuid, máttasámiid dološ ja dálá historjjá, árbedieduid, eanadaga, duovdagiid ja máttasámiid identitehta lea bargovuohki, mii lea "Saemieh Saepmesne"-prošeavtta erenoamášvuohta.

Čállosis suokkardallon bargovásáhusat sáhttet movttiidahttit earáge ásahusaid hásttuhit báikegottiid ja árbečehpiid lagaš ovttasbargui, mii nannešii báikkálaš identitehta ja iešdovddu. Guorahallan sáhttá movttiidahttit eará dutkiid čalmmustahttit diehttelassan adnojuvvon čuoččuhusaid sámi ovdahistorjjá birra ja bidjat dáid čuoččuhusaid gažaldaga vuollái.

challenges for the project work. The researchers noticed during the work that communication required meetings and taking each others' opinions and ways of working into consideration. According to the authors, such a way of working was a strength in their project. Regarding the documentation of cultural landscape, the authors stress the importance of traditional knowledge for contextualisation. The special feature of the "Saemieh Saepmesne" project work was as follows: it attempted to link together cultural monuments and relics, the ancient and the present history of the South Sami, traditional knowledge, landscape and South Sami identity.

The experiences reflected on in the article may also encourage other institutions to involve local communities and bearers of tradition in close collaboration that would strengthen local identity and self-esteem. The study may also inspire other researchers to demonstrate and examine claims about Sami prehistory that have been taken for granted.

Oskkoldathistorjjá dutki **Jelena Porsanger** hástala lohkki geahččat kritihkalaččat mo suokkardallat oktavuođa árbevieru ja modernitehta gaskkas. Son suokkardallá sámi doahpagiid, teoretisere eamiálbmoga áddejumi árbevieruin (*tradition*) ja árbedieđuin (*traditional knowledge*), ja lahkona dáid konseapttaid ja modernitehta gaskavuođa sámi ja eamiálbmot vuolggasajis. Son lea geahččan mo dán áiggi sápmelaš dutkit ja dutkit geat beroštit sámeáššiin leat suokkardallan ja teoretiseren sápmelaš árgabeaivvi, vássán ja dálá áiggis. Dutki oaivvilda ahte sirren ja guoktejuohku (dikotomiseren) gullet akademalaš dutkanmáilbmái sajáiduvvan dutkanparadigmii. Muhto go eamiálbmot kritihkalaš vuolggasajis geahččá árbevieru, árbedieđu ja modernitehta doahpagiid, de ii leat doallevaš dahkat guoktejuogu (dikotomiija) árbevieru ja modernitehta gaskkas. Čálli hástala čuoigat eamiálbmotdutkamis ođđa láhtuid, iige su mielas lea dárbu čuovvut šalkejuvvon oarjemáilmmi dutkanparadigmaid. Nuppe dáfus eamiálbmotdutkan sáhttá ávkkástallat buot ovdalaš dutkanbohtosiin, muhto ovddidit suokkardallan- ja teoretiserenvugiid eamiálbmogiid diehtoteoriijaid vuođul ja buvttadit dieđuid main lea relevánsa eamiálbmogiid dárbbuide ja sin ákkastallanvugiide. Čálli geavaha *problematiserema* ovdamearkan das mo sáhttá kritihkalaččat

The religious historian **Jelena Porsanger** challenges the reader to look critically at how the connection between tradition and modernity is reflected on. She examines Sami concepts, and theorises the indigenous understanding of traditions and traditional knowledge, approaching the relationship between these concepts and modernity from a Sami and indigenous starting point. She has examined how today's Sami researchers and others involved in Sami research have discussed and theorised both the past and present everyday life and livelihood of the Sami. According to the author, classification and dichotomies are part of the established research paradigm that prevails in the academy. But when one looks at the concepts "tradition", "traditional knowledge" and "modernity" from an indigenous, critical point of view, the division into a dichotomy of tradition and modernity is not valid. The author argues for breaking free from the established research paradigms of the Western world, and encourages making new tracks and trying new paths in indigenous research. On the other hand, indigenous research can make use of all the earlier research results but, at the same time, utilise ways of discussion and theorisation that are based on indigenous epistemologies and provide knowledge that is of relevance to indigenous needs and ways of argumentation. The

geahččat sajáiduvvan lahkonanvugiid omd. eamiálbmot fáttáide. Dás son vuođušta iežas suokkardallama eamiálbmot metodologiijaid ja kritihka bokte.

Boahtte áiggis livččii dárbu sámi doahpagiid ja epistemologiija čiekŋalis diehtoteorehtalaš suokkardallamii iešguđetge sámegielain ja sámi guovlluin.

Árbediehtu-barggu višuvnnat

Prošeavtta fágabirrasat ovttasráđii árbečehpiiguin ja báikegottiiguin oidnet dárbbu systemáhtalaš bargui sámi árbedieđuid dokumenteremii ja ávkkástallamii. Min višuvdna lea ahte sámi báikegottit leat aktiivvalaččat mielde dán barggus, ja ahte gávdnojit oahppofálaldagat, bagadallanbálvalusat ja eará fágalaš doarjalusat árbediehtu-suorggis. Dán várás lea dárbbu ahte gávdno fágalaš doarjjavuogádat ja ahte leat ceggejuvvon ásahusat, mat dáhkidit ahte sámi árbedieđut ovdánit ja bohtet atnui servodateallimii ja luondduhálddašeapmái. Ásahussan oaivvildit ee. gelbbolašvuođa guovddážiid, bagadallanfierpmá-dagaid, lágaid, njuolggadusaid, gelb-bolašvuođa gáibádusaid orgánaide mat barget sámi árbedieđuiguin.

author uses *problematisation* as an example of how it is possible to look critically at established approaches to e.g. indigenous issues. Here, her discussion is based on indigenous methodologies and criticism.

In future, there is a need for a comprehensive epistemological discussion on the theory of knowledge and Sami concepts in the various Sami languages and Sami groups.

The visions of the Árbediehtu Project

The professional circles involved in the project, as well as the tradition bearers and the local communities agree that there is a need for systematic documentation and use of Sami traditional knowledge. Our vision is that Sami communities will participate actively in this work and that education and training, advisory support services, and other professional support measures will be provided in the *árbediehtu* field. This entails professional support systems and the establishment of institutions that guarantee the promotion and use of Sami traditional knowledge in social life and in nature management. By institutions, we mean here, for example, competence centres, supervising networks, laws, regulations, and competence criteria (the qualifications required) for bodies

Báikegottit galget searvat dihto-mielalaččat dárkumin ja bearrái-geahččamin iežaset kulturárbbi suodjaleami ja gaskkusteami boahtte-vaš buolvvaide. Lea dehálaš ahte eiseválddit láhčet ja sihkkarastet vuogádagaid, mat dahket báikegottiid dihtomielalaš oassálastima vejolaž-žan. Jus árbedieđuid dokumenteren dahkko dáid eavttuid vuođul, de sáhttá badjánit duostilis ja doaim-malaš servodatmobiliseren. Dákkár mobiliseren sáhttá sihkkarastit árbedieđuid vuoiggalaš dokumen-terema, árbedieđuid geavaheami servodahkii ávkin ja atnui váldima aŋkke báikkálaš dásis ee.: oahpahussii, politihkkii, servodatplánemii, luond-duhálddašeapmái, ealáhusaid ovddi-deapmái.

Pilohtabarggus leat vuos dahkkon muhtin lávkkit ovddidit vugiid árbedieđuid duođaštuhttit nu ahte sámi árbečeahpit ja báikegottit bidjet iežaset premissaid ja sihkkarastet árbedieđuid viidásut eallima báikki alde. Pilohtaprošeavtta olis leat čalmmustuvvon ollu gažaldagat, mat badjánit go álgá eamiálbmoga árbedieđuid dokumeret. Vástá-dusaid gažaldagaide sáhttá gávdnat go árbediehtu-fágasuorgi ovddiduvvo miehta Sámi, báikegottiid, ásahusaid, sámi akademiija ja eiseválddiid dásis, sihke báikálaččat ja našunála dásis.

which work with Sami traditional knowledge.

Communities should monitor and be actively involved in the protection of their cultural heritage and its transmission to future generations. It is essential that the authorities establish and guarantee systems that will enable the informed participation of local communities in this process. If the documentation of traditional knowledge fulfils these conditions, we may witness courageous and effective social mobilisation. This may ensure the fair and ethically correct documentation of traditional knowledge. This may also result in the use of this knowledge for the benefit of local communities. In future, traditional knowledge should be applied at the local level, e.g. in education, politics, social planning, nature management, and the develop-ment of sources of livelihood.

The pilot project has taken a few steps towards developing ways of documenting traditional knowledge so that tradition bearers and local communities can set their own premises and ensure that traditional knowledge will continue its life locally. The project has raised numerous questions concerning documentation of indigenous traditional knowledge. Answers to these questions might be found when the *árbediehtu* field of knowledge has reached all of Sápmi

and prevails at the level of local communities, institutions, Sami academia, and local and national government.

Eambbo dieđut min ruovttusiiddus

Prošeakta doaimmai borgemánu 2008 rájes gitta cuoŋománnui 2011. Dán artihkalčoakkáldaga lassin leat ovttasbargoásahusat buvttadan metoda-girjji "*Diehtogiisá: Neavvagat sámi árbediehuid dokumenterenbargui*" sáme- ja dárogillii. Girji lea oaivvilduvvon buot berošteddjiide, sámi kultur- ja giellaguovddážiidda, museaide, skuvllaide, alitoahpu ásahusaide, báikkálaš servviide, ovttaskas olbmuide. Girjjis gávdná rávvagiid vurkenproseassas, ee.: ehtalaš norpmain, báikegottiid ja árbečehpiid dihtomielalaš mieđiheamis, riikkaidgaskasaš ja našunála riekteinstrumeanttain, báikkálaš vurkema vejolašvuođain, video- ja eará rusttegiid geavaheamis.

More information on our website

The project lasted from August 2008 to April 2011. In addition to this collection of articles, the partners of the project have produced a method handbook called *Diehtogiisá: Neavvagat sámi árbediehuid dokumenterenbargui* (Guidelines for documentation of Sami traditional knowledge) in North Sami and Norwegian. The handbook is meant for all those who are interested in the documentation of traditional knowledge. It is aimed at Sami cultural and language centres, museums, schools, institutions of higher education, local organisations and individuals. The book gives advice on the process of documentation, on ethical norms, on the informed consent of the local communities and bearers of tradition, on international and national legal instruments, on the possibilities of local storage of information, on the use of video and other technical equipment, etc.

Pilohtaprošeavttas lea hábmejuvvon evttohus joatkkaprográmmii "Árbedieđut ceavzilis báikegottiide ja hálddašeapmái". Dás evttohuvvojit doaibmabijut mat dáhkidit ahte:

- sámi árbedieđut leat diehtogáldun sámi servodagaid ceavzimii ja buresbirgejupmái,
- árbediehtu ovdána fágasuorgin,
- gelbbolašvuohta árbediehtufágas lea eaktun buot ásahusain sámi guovlluin,
- sámi árbedieđut gullet lunddolaččat diehtovuđđui resurssaid hálddašeapmái, guovlluid ja servodagaid ovddideapmái ja plánenbargguide, ja
- sámi árbedieđut leat diehtovuođđun politihkalaš mearrádusaid ráhkkanahttinbargui.

Prográmmaevttohus ovddiduvvo gulaskuddamii sámi ásahusaide ja báikegottiide ja maiddái fágalaš ja politihkalaš birrasiidda miehtá Sámeeatnama, gos bargojuvvo sámi árbedieđuiguin.

The pilot project has proposed the launching of a capacity programme *Árbedieđut ceavzilis báikegottiide ja hálddašeapmái* (Traditional knowledge for sustainable local communities and for management), as a continuation of the pilot project. The programme is intended to take measures to ensure that:

- Sami traditional knowledge will be used as a source of information for the sustainable development and well-being of Sami communities.
- The *árbediehtu* field will advance as a field of study and research.
- Competence in the *árbediehtu* field will be a required qualification criterion in all institutions in Sápmi.
- Sami traditional knowledge will be used as an information basis in resource management and regional and communal development and planning activities.
- Sami traditional knowledge will be applied as a relevant source of information for political decision making.

The programme proposal will be submitted for discussions in Sami institutions and communities across Sápmi, as well as to the professional and political circles that work with Sami traditional knowledge.

Govva 6: Prošeaktabargit Guovda-geaineanu johkagáttis Mihcamár-eahkeda 2010.
Govven: Prošeavtta govvavuorká.

Picture 6: Partners of the project on Midsummer night on the Guovda-geaidnu River, June 2010.
Photo: Project's photoarchive.

More information about the programme and the results of the pilot project is available on our website:

www.arbediehtu.no

There one can find, for example, the method handbook in a digital form, suggested readings, and other products of the pilot project.

Eambbo dieđuid joatkkaprográmma ja pilohtaprošeavtta bohtosiid birra fidne min ruovttusiiddus:

www.arbediehtu.no

Ruovttusiidui biddjojit ee. metodagirji digitála hámis, ávžžuhuvvon girje-listtut ja eará prošeaktabuktagat.

GUNVOR GUTTORM

Árbediehtu (Sami traditional knowledge) – as a concept and in practice

I would like to start this article with a brief narrative from the Swedish part of Sámi Land (*Sápmi*), from an area we can call *Jávregaska*. *Jávregaska* consists of two large lakes. Between the lakes there is a *muotki* (strip of land), which is also the dividing line between the areas where two separate groups of Sami people have lived and shared the surrounding natural resources. *Jávregaska* is an area of *jávrrehasat* and reindeer herders. *Jávrrehasat* were settled people, living off their small farms and the resources of the surrounding areas. They also owned the homestead land, the so-called ”*hemman*” from where they could fetch materials, firewood, etc. For the reindeer herders, this was their summer pastures. At the time when it was customary for herders to also keep goats, they could leave them with the settled Sami during the winter. They also shared an area which was not part of the ”*hemman*” and they used this area as needed. The *jávrrehasat* sometimes needed the outlying areas as extra hayfields; though this need would vary somewhat. They also had permanent net fishing sites and had authority over these sites. There are also a good many cloudberry bogs in the area. Where to pick berries was based on an unspoken or spoken agreement between families and groups. Sometimes people would ask each other if they could take birch bark, for example, from a certain area, while on other occasions, people would start using a specific area, perhaps because it was near a fishing site they had used, and then others would accept that this family or group could do so in what we could call an unspoken agreement. Reindeer herders also used the same area; in addition to pastures, they needed the area to fish, pick berries and obtain other necessities. The reindeer herders chose the area as being suitable for their summer pastures as it was close to water. But they also needed an area with woods in order to obtain materials for their *goahti* (dwelling) and other needs. The *jávrrehasat*

were skilled boat builders and built boats for the reindeer herders. They could also undertake other practical projects, such as building a school (*skuvlagoahti*) in the locality.

Thus both the *jávrrehasat* and the reindeer herders used the area as needed, one group making a living from a farm and the outlying areas, the other from the reindeer. They used the area jointly, and also helped each other so that both groups would *birget* (manage, survive). They needed to fish, pick berries and obtain materials for various crafts and they had to agree on the use of the area, but they also exchanged services. One generation "inherited" the use of a cloudberry bog, for example, from another generation and as children they would learn to find the way to (*dádjadit*) the bog to pick berries there.

Without doubt many people have experienced this kind of land use, where different user groups share the surrounding resources. Here I have described an area and its use at a time when people lived exclusively from the resources of an area, i.e. they survived in the sense of *birget*. By living in and off an area, people gradually enhanced their skills and knowledge, and learned how to manage this knowledge and the area. This is not only a question of traditional knowledge, but also of the management of knowledge by an indigenous people.

Here, I intend to briefly present some views on how concepts related to *árbediehtu* may be relevant to the elaboration of the phenomenon of «traditional knowledge» in the *Árbediehtu* project at the Sami University College. *Árbediehtu* (in general, traditional knowledge) and *árbečehppodat* (traditional skill) are concepts which relate to possessing knowledge, i.e. having knowledge about something (*diehtu*) and having knowledge in something (*máhttu*). Choosing the term *árbediehtu* in the context of documentation and collection implies that collected and preserved knowledge is often knowledge of something rather than knowledge in something.

The Sami University College project on Sami traditional knowledge has chosen the term *árbediehtu* as a common term for both traditional know-ledge and traditional skills. The documentation includes both revitalised traditional knowledge and traditional knowledge which has had continuity. The *Árbediehtu* project aims to develop methodologies for the collection, preservation, protection and further development of *árbediehtu*. The project will also provide a close link to how traditional knowledge is perceived in UN documents such as the Declaration on the Rights of Indigenous Peoples and

the Convention on Biological Diversity. Article 8 (j) of the Convention on Biological Diversity specifically addresses indigenous traditional knowledge and the need for *in situ* preservation of and respect for such knowledge and also the need for local communities to consent to and participate in the use of traditional knowledge. The Convention is a global agreement on conservation and the sustainable use of biological diversity (*Convention on Biological Diversity* 1992). The text of Article 8 (j) reads as follows:

> "Subject to national legislation, respect, preserve and maintain knowledge, innovations and practices of indigenous and local communities embodying traditional lifestyles relevant for the conservation and sustainable use of biological diversity and promote their wider application with the approval and involvement of the holders of such knowledge, innovations and practices and encourage the equitable sharing of the benefits arising from the utilization of such knowledge, innovations and practices." (*Convention on Biological Diversity* 1992.)

Indigenous and local peoples are important players in the implementation of the Convention, since indigenous and local communities have developed and preserved traditional knowledge (Tunón 2004, 93). Although this convention emphasises biodiversity, several bodies have expressed a desire to consider nature and culture together and not as dichotomies. The Declaration on the Rights of Indigenous Peoples stresses the rights of indigenous peoples to the conservation, protection and development of their cultures. Article 11 expresses it as follows:

> "Indigenous peoples have the right to practise and revitalize their cultural traditions and customs. This includes the right to maintain, protect and develop the past, present and future manifestations of their cultures, such as archaeological and historical sites, artefacts, designs, ceremonies, technologies and visual and performing arts and literature." (*United Nations Declaration on the Rights of Indigenous Peoples* 2007.)

According to this, indigenous peoples have the right to make use of, and develop their cultural traditions, customs, skills and other manifestations of their civilisation. In many projects concerning traditional knowledge, the retransmission of knowledge is part of the self-determination process.

In Sami contexts, a great deal of literature has been published which focuses on Sami traditional knowledge, viewing the concept of traditional knowledge from different perspectives and disciplines (see Borgos 1993, 7–21; Dunfjeld 1993, 23–35; Kalstad 1993, 35–46; Kalstad & Viken 1996, 31–44; Kalstad 1996, 21–43; Helander 1996; Bjerkli 1999; Bergstrøm 2001; Dunfjeld 2001; Lund 2001; Somby 2003; Triumf 2004; Eira 2004; Magga 2006; Joks 2007; Porsanger 2007; Balto 2008; Kuokkanen 2009). Common to all of these studies is that they to some extent consider *árbediehtu* as it was in the self-sufficient society, or as it is used today, with continuity to the present day.

My approach and contribution to this concept will involve the distinction between the Sami concepts of knowing something and knowing about something, respectively *máhttit* and *diehtit*.

The concepts of *máhttit* and *diehtit*

A person may know a great deal about something, but will not necessarily know it. This may sound a little strange. But the distinction between *diehtit* and *máhttit* can be expressed briefly as the difference between, on the one hand, knowledge of an action and on the other hand, the ability to perform the action, i.e. bodily knowledge. *Diehtit* and *máhttit* express theoretical and practical knowledge (Guttorm 1993; Guttorm 2001; Dunfjeld 2001). Somebody may know (*diehtit*) how to make e.g. a *gietkka* ('Sami cradle'), even though this person has never made one themselves. He or she can learn this by looking at cradles, being instructed in how to do it or reading about it in books, etc. However, if he or she actually also makes a *gietkka*, he or she will gain hands-on personal experience, i.e. knowledge through action (Molander 1996; Guttorm 2001). In the example of the *gietkka*, *máhttit* in my opinion demands a certain skill to carry out the work. *Čehppodat* ('practical skill') is a Sami word used to express that a person is good at something, e.g. *giehtačehppodat* ('handy'), *čállinčehppodat* ('good at writing'), *lávlunčehppodat* ('good at singing'), and it therefore deals with the concept *máhttit*.

We may say that personal experience is a prerequisite for the assertion that a person possesses a certain skill (*máhttu*). In theorizing about ways of knowing, this knowledge is often described as tacit knowledge (Molander 1996, 33–54; Polanyi 2000; Dunfjeld 2003; Fors 2004). However, in this context, I have chosen not to use the term tacit knowledge, because the idea of silence can be misleading. *Máhttit* is thus a more accurate term to describe a person's

own experience. The preconditions for understanding an action one has not previously performed or experienced at first hand are firstly that one perceives what is happening and secondly, in order to fully understand this, one must actively participate.

A person may know that the marks in a book are letters, and he or she may very well have enough skill to draw (write) the letters, but still does not know what they mean, and thus cannot combine them into words and hence is unable to read and understand the words and text. Once a person masters the art of reading, i.e. has that specific skill, he or she can also acquire knowledge (*diedut*) from books on e.g. how to make a *gietkka*. But not until he or she has actually made a *gietkka* can we say with certainty that he or she has the skill (*máhttu*) to make one. On the other hand, if a *duojár* (here: 'craftsperson') who has never made a *gietkka* is asked to make one; he or she may well succeed, because this person has experience of *duddjot* (to create). In other words, we cannot draw a sharp line between *diehtit* and *máhttit* by saying that some knowledge requires personal experience (*máhttit*) and that other knowledge does not (*diehtit*), because there are different degrees of both *diehtit* and *máhttit*. When for example a parent lets a child go somewhere where the child has never been before, the parent first considers whether the child will find the way (*mánná dádjada*). The parent may have given the child instructions about the way, and the child understands the instructions. This requires that the child has experience in receiving instructions, understands what the parent says and can imagine what the terrain looks like through listening to the instructions. In this case, we can say that the child has the skill to find the right way based on previous experience in walking in similar terrain, understanding instructions and assessing the area himself. The child combines his own knowledge and skills and copes (*son birge*). The child understands and can evaluate the difference between the north and south sides of a river, knows the difference between a big stone and a rock, etc. Experience is therefore not always associated with exactly the same tasks, but similar ones.

Traditional knowledge thus includes both skills and knowledge. In the *Árbediehtu* project, *máhtolašvuohta* ('having a skill') will be documented, but once it is collected, it also becomes knowledge (*diehtu*).

Árbevierru – Árbediehtu – máhttu – álgoálbmot diehtu

There are different terms, such as *árbevierru* (tradition), *árbevirolaš diehtu* or *árbediehtu* and *máhttu* (traditional knowledge), *álgoálbmot árbediehtu* (indigenous traditional knowledge) and *álgoálbmotdiehtu* (indigenous knowledge). My goal is not to define these concepts fully, but rather consider some aspects of these concepts and how *árbediehtu* is reflected in reality. I shall concentrate solely on what is considered as indigenous traditional knowledge.

Álgoálbmot diehtu and *máhttu*, and *álgoálbmot árbebevirolaš diehtu* and *máhttu* are often considered to be identical concepts, but in my opinion they are not. *Álgoálbmot diehtu* is a broader concept than álgoálbmot *árbevirolaš diehtu* and *máhttu*.

Tradition

Árbevierru and *árbediehtu* are relatively new terms in the Sami language. People certainly did not think or said that something of what they did in their everyday life was *árbevierru*. When it became necessary to explain and refer to knowledge and skills, there was a need for a suitable term which could cover skills, thoughts and actions. The traditional expression *árbevierru* covers the concept of tradition. *Árbevierru* and *árbediehtu* do have something in common, but must also be viewed as two separate concepts with different content. The two terms have one word in common, *árbi* (inheritance), and in addition *vierru* (custom) and *diehtu* (knowledge) respectively. *Diehtu* is related to knowledge, while *vierru* is connected to customs, habits, etc. *Árbevierru* means that we have inherited customs, habits and usage, while *árbediehtu* is the knowledge we have inherited.

The concept of tradition is often and generally speaking related to «transmission» and more particularly «transmission from generation to generation». Certain content is transmitted, but this content varies. The Swedish Encyclopedic Dictionary divides tradition into inner tradition (e.g. views, values, beliefs, ideals) and outer tradition, i.e. manifestations such as verbal tradition (words, texts), behaviour (morals, customs, work practice), institutional tradition (community structure, ranking systems, organisation) and object traditions (buildings, clothing, tools, etc.) (*Nationalencyklopedin* 1995: entry: tradition). This division thus deals with the concept at different levels, firstly the inner level of thoughts, beliefs, etc. which are abstract and

reflect the inner attitudes and beliefs of man or of individuals. The second, outer level also contains abstract traditions, such as morals, customs and work practice, together with texts, stories, linguistic expressions, and concrete objects. According to the Encyclopedic Dictionary's division of tradition, many of our social actions may be tradition, which may take place in various social settings. I take this division as my starting point.

If we consider traditional knowledge within tradition, it is the knowledge in the tradition which is transmitted. *Árbevierru* has been repeated and passed on from generation to generation. People pass on what they have in some way inherited themselves. This implies that a tradition requires repetition, but that in time the tradition will also change, cf. the concept of «traditions then and now» which of course alludes to change over time. One can discuss tradition at several levels. The general sense of tradition is that of a social practice, belief, institution, or object that is passed on from generation to generation. Asbjørn Klepp divides tradition into several levels; one may refer to the tradition of a particular culture, such as the Sami tradition, or the British university tradition, or a tradition of content, such Christmas traditions, or tradition as a characteristic or indeed as a cultural process (Klepp 1980, 196).

The outcomes/products of such "traditions" are not necessarily considered to be traditional knowledge. The term tradition is for instance used in such a field as modern design, but then referring to a specific form of design or "school". But this does not mean that the design itself is traditional; this is more a question of an institutional tradition.

Dábit and *vierut*

The Sami language contains the terms *vierut* and *dábit*. In Konrad Nielsen's dictionary, *vierru* is translated as custom or habit (Nielsen 1975: entry: *vierro*). The same translation is found in the Sami–Norwegian dictionary from 1995 (Kåven et al. 1995: entry: *vierru*). *Dáhpi* is also perceived as custom and habit. I cannot remember any mention of our *árbevierut* from my childhood days, but on the other hand both *vierru* and *dáhpi* are familiar concepts, which emphasised behaviour, morals, etc. Johan Turi also uses *vierru* in describing a "tradition":

> "And in the old days it was customary, when a young man came courting, for the girl to go to meet him and unharness his reindeer,

and that was a sign that she would take him." (Turi 1931, 205; the original text in Sami, see Turi [1910] 1987, 165.)

Here he uses *vierru* in the sense of "custom". He states that the Sami since the old days (*dološ áiggis*) have had this custom when someone is courting. *Dološ áiggis* implies that the narrator is old and remembers far back. With our present-day concepts, we would certainly call this a tradition. *Dáhpi* is also perceived as a custom or habit, and in my view can also be seen as a characteristic or form of behaviour.

However, in some disciplines, there are also semantic differences between *árbevierru*, *dábit* and *vierut* (I use the terms *dábit* and *vierut* in the plural because it is not just a matter of one *dáhpi* or one *vierru*). Bertil Rolf (1991, 140) has interpreted Polanyi regarding the latter's distinction between tradition and habit, and considers that tradition is deeper than habit. A tradition lasts longer and must, according to Polanyi, have been repeated for three generations before it can be seen as such. Maja Dunfjeld also uses this as a criterion for calling something a tradition (Dunfjeld 2001). A tradition includes a social contract between generations (Dunfjeld 2001, 157–158). This contract reveals the content of the tradition and what actions those involved will take in the handing down, e.g. the roles of the deliverer and receiver of the tradition. The social contract also shows cultural continuity.

Giddens is also of the opinion that tradition has certain criteria (Giddens 1994, 62–66). He points out that within the concept of tradition there are entities which preserve and lend authority in order to ensure that everything is done correctly, and that people adhere to certain rules. He therefore also finds that the person who receives the tradition has great confidence in the authority; this is also mentioned by Rolf (Rolf 1991). Another criterion for tradition, in Giddens' view, is the existence of a common memory. In order for something to be considered a tradition, it must be experienced as a special event by more than one person, and for it to become a living tradition, there must be at least one person to hand it down (Giddens 1994, 65, see also Rolf 1991). For a tradition to be passed on, certain ritual aspects are necessary, so that things are done in a particular order (Giddens 1994, 65). Giddens emphasises the fact that in the transmission of traditions, social contacts are an important part of the process and rituals give rise to guidelines and communication (Giddens 1994, 79). This also means that authorities and the social group can make interpretations, and in the case of rituals, these must be so clear that the people concerned understand the ritual and its meaning. However, Bertil

Rolf interprets Polanyi as meaning that rituals are not required in order to pass on a tradition. Considering *vierru* in the way Johan Turi has used the term, I understand his story of *soakŋu* ('courtship') as an old "custom" that has had continuity for generations, i.e. what Rolf via the Polanyi texts and Giddens mean by tradition. In the *soakŋu* example you will find authority like a *soakŋoalmmái* ('matchmaker; marriage-broker') who knows the ritual, and people involved in the ritual, who maintain the rituals and follow the rules.

As Turi suggests in the quotation above (1931, 205), we are concerned with a phenomena which has lasted for some time, has had continuity for at least two generations (as he uses the term *dološ áiggis*, i.e. "in the old days") and which also existed in his time. But on the other hand, *vierru* does not necessarily have continuity, but can be e.g. the particular habit of an individual. We might call a Sami festival a *festivalavierru* ('festival custom') and if it lasts long enough, it ends up being an *árbevierru* ('tradition'), if the criterion is the duration. But can we know for certain that everything that we call tradition has a certain duration and how long this duration will be? How can we be quite sure whether an 18th century tradition really lasted three generations, by interpreting the sources? *Vierru* and *dáhpi* can be seen as synonymous with *árbevierru* (tradition) and in the example used, Turi uses *vierru* in a way which may be considered as tradition. But *vierru* can refer to a shorter period of time and thus allows for the view that things may change and that new traditions may be created.

Árbediehtu

As I pointed out in the beginning of this article, there is a distinction between *diehtit* and *máhttit*, and *diehtu* and *máhttu*. *Diehtu* is knowledge, but when something is considered *árbediehtu* ('traditional knowledge'), it is something other than mere knowledge. When considering the árbediehtu of indigenous peoples in their own context their experience as indigenous peoples must also be emphasised.

Mikkel Nils Sara approaches Sami traditional knowledge by considering the characteristics of traditional Sami society (Sara 2003, 124–127). His view is that the old self-sufficient Sami society was a traditional society. He thus relates *árbediehtu* to a life of self-reliance. He considers various forms of traditional knowledge, or *árbediehtu*; in a social group, where there is some common knowledge. People take into account the local environment; this is something

all groups have in common. People use nature, and agree on such use. Thus he means that the exchange of views is a hallmark of traditional society. Sara also sees that there are skills that are directly related to livelihood activities. He believes that people in the traditional society exploited the surrounding area in order to *birget* (survive). One way of viewing traditional knowledge is thus to take nature into account and study peoples understanding of life in nature. Using nature as the starting point for an examination of traditional knowledge also has a basis in the Convention on Biological Diversity.

Many scholars who have discussed *árbediehtu* in the Sami context have emphasised the holistic aspect and the place of man in nature; they have highlighted interaction with nature as an important factor in traditional knowledge (Sara 2003; Kuokkanen 2006; Nergård 2006; Joks 2007; Balto 2008). In his book on the use of *árbediehtu* in school, Asta Balto stresses that man›s place in nature is part of *árbediehtu* - how to subsist in nature, how to find one's way in nature, how to observe and interpret natural phenomena, how to communicate with nature, etc. (Balto 2008, 47). With regard to *árbevierru*, we can see that there are both ethical and moral aspects involved, and the traditions may be ideological or spiritual, and they may be institutional or object traditions; and in all these forms of tradition, knowledge is handed down. Within *árbediehtu* we must operate with the distinctive concepts of knowledge (*diehtu*) and experience-based knowledge (*máhttu*). If we consider this knowledge in relation to the Convention on Biological Diversity, much of árbediehtu will be in the context of nature.

I shall return to my introductory narrative to ascertain what kinds of *árbediehtu* and *máhttu* are to be found there. Approaching this I used the term *birget* as a starting point to discover the different niches of *árbediehtu* revealed in this account. I mentioned that the people engaged in agriculture also used outlying fields as additional land for hay and they had the ability to decide which particular area was most suitable for this purpose. They also had knowledge of the hay itself, when it could be used, e.g. as a supplement to the summer supply of fodder, or for a year with poor growth (*birget*). This is knowledge associated with a particular livelihood activity as described by Mikkel Nils Sara (Sara 2003). Similarly, reindeer herders assess the terrain in relation to their needs. The reindeer herders and farmers also had common interests such as cloudberry picking. They knew where the berries grew, they had learned which bogs had berries, where the berries ripened early, and where they ripened subsequently. Such knowledge can partly be acquired through learning blindly from the previous generation, but also through

personal experience by observation from year to year, i.e. reading nature, so to speak. This can be compared to any observation over time where the results are subsequently systematised.

The use of an area is a social contract requiring interpersonal action. The names of bogs can sometimes give us an insight into these social contracts. One example is "*Elle áhku jeaggi*". Why is a bog given such a name? The name tells us that *Áhku Elle* (grandmother Elle) made it her *vierru* to pick berries in that bog, and everyone accepted this, because she had bad legs and couldn't get to bogs farther away. There is thus a story behind it which is contextual. But ethical attitudes are also revealed here, i.e. a woman with weak legs "gets" a swamp to help her survive (*birget*). Bjerkli describes the local population in Manndalen as having an understanding of how the area in Svartskogen is to be used and this use has changed over time according to needs (Bjerkli 1999, 187). Even though he does not use the term *birget* in his account of the traditions of the area, the knowledge of the use of the area is still related to the art of survival (*birget*).

In *árbediehtu* there is a spiritual dimension. Grete Gunn Bergstrøm argues that the distinction between traditional local knowledge and traditional indigenous knowledge is precisely a question of emphasis on the spiritual dimension of traditional indigenous knowledge (Bergstrøm 2001). This spiritual aspect is not necessarily tied to a particular religion. Rauna Kuokkanen has used the Sami term *láhi* ('gift') as an entry point for understanding the relationship between man and nature, and also, in my interpretation, the spiritual aspect. In Kuokkanen's opinion, *láhi* demonstrates the affinity the Sami have traditionally had with nature. The relationship between man and nature must be balanced if it is to persist (Kuokkanen 2006, 24). *Láhi* is related to what we receive from nature, and our ability to share nature's benefits. This is a question of sharing with one another both at the material and the spiritual level. In the North Sami language, we have a word to express this sharing with others: *oassi* which means part, not only a specific part, but it is also used in expressions such as *luonddu oassi*, meaning what nature should have, or what is connected to luck. A group of people fishing may for example agree that everyone will be "partial owners" of all catches. *Luonddu oassi* is the part that one releases to nature, e.g. by not fishing more than one needs. But it can also serve as a thought, or consolation, when it is possible to catch more fish, but the fishers are out of luck, and have to be content with what they get. The relationship between man and nature is preserved in individual or communal rituals where central elements are sharing the gifts provided by nature and

letting nature keep her part (Kuokkanen 2006, 24). As mentioned above, the Swedish Encyclopedic Dictionary (*Nationalencyklopedin* 1995) differentiates between inner and outer tradition, where the interior is attitudes and ideals. The category of inner tradition will include the spiritual aspect in the sense that we as human beings see ourselves as part of nature and act accordingly. In order to survive (*birget*), to maintain our luck or *vuorbi* ('destiny'), we gain knowledge through certain rituals and the guidance associated with them.

We also take part in this knowledge today through the handing down of outer traditions, which include language, objects and organisations, according to the Encyclopedic Dictionary. Today, when we take part in ideals, attitudes, etc., we find the relevant knowledge precisely in terms such as *láhi*, *vuorbi* and *luonddu oassi*. The knowledge is also of course to be found in various *duodji* and practical objects which again have different niches of knowledge (Dunfjeld 2001; Guttorm 2001; Guttorm 2006), such as the choice of material, knowledge of an area, the actual skill involved, the use, ethical factors, the economic aspect and ideals.

Ways of collecting, preserving and developing

In considering Sami traditional knowledge and explaining its forms of expression in the Sami community, a suitable approach may be to ascertain how it is expressed in the Sami language, as Rauna Kuokkanen and Mikkel Nils Sara have done. Inherent in the understanding of *láhi* as described by Kuokkanen is the idea is that people share their knowledge with others (Kuokkanen 2006; 2009, 106–117). This knowledge has evolved in a social context where the bearer of the knowledge is the authority, as has also been suggested by Bertil Rolf (1991) and Giddens (1994). Gry Fors has used the term *čalbmi* for the knowledge bearer (Fors 2004). As I understand her explanation of *čalbmi* (which literally means "eye"), the bearer of knowledge has the overview and experience, and in the context of transmitting the knowledge, will always have an overall picture of a situation (Guttorm 2001, 45–62), and the ability to assess what is necessary for the work to be performed correctly. Sara uses assessment as an important criterion for traditional knowledge, and as I understand "assessment" in relation to e.g. knowledge transmission, the authority has an overview and can thus assess what needs to be done. In the context of the collection and preservation of traditional knowledge, we must ask ourselves what kind of knowledge we want to collect and what the collection will be used for. An *árbečeahppi* ('knowledge bearer') may not be

able to give a theoretical explanation of snow, but will easily be able to explain snow in the context of his work. The person who documents traditional knowledge has one role, and the person who participates in a transmission context has another role. In the following, I shall use a particular project as an example of the collection, documentation and transmission of traditional knowledge. This project is called *Goahtehuksen* ('building a turf hut'), and is one of the sub-projects carried out by the museum association *RiddoDuottarMuseat* (RDM), one of the partners in the *Árbediehtu* Project (RDM 2010, see also the *RDM Annual Report* 2009, 13).

Documentation and transmission as preservation

One of the goals of the *Árbediehtu* Project is the development of a methodology for preservation and documentation. In the discussion of how best to preserve *árbediehtu* and the methods to be used in the documentation, an understanding of preservation is central. I shall draw on experience from the documentation of turf hut building (*goahtehuksen*) as an example of how to document, preserve and transmit both a tradition and *árbediehtu*.

A *goahti* ('turf hut') is in itself a tradition, an outer tradition as defined by the Swedish Encyclopedic Dictionary (*Nationalencyklopedin* 1995). At the same time a *goahti* with its architecture can also be regarded as an embodiment of traditional knowledge. The construction of a *goahti* requires knowledge of the area, the materials, the earth, the seasons etc. The *Goahtehuksen* project had as its objective to document how to rebuild a *goahti*. It was completed at *Gilišillju* (Kautokeino Village Museum), where such an old *goahti* was rebuilt in 2009. Three huts were to be built, two sheep huts and one dwelling hut. For this project, the RDM could call upon three experienced and talented *goahti* builders (*goahtečeahpit*, 'people who know how to build a *goahti*'): Aslak Anders Gaino, Per Mikkelsen Utsi and Jon Ole Andersen. Parts of the building process were filmed, such as the fetching of *bealjit* ('curved poles'), the construction process, choosing the birch bark, obtaining *lavdnji* ('turf'), demolition of an old *goahti* and reconstruction of the *goahti*. Solveig Joks was responsible for most of the filming and the editing of the documentation. Nils John Porsanger filmed the collection of *bealjit*. Different people were involved in the documentation of *árbediehtu*, e.g. the *goahtečeahpit* and the person whose task it was to document this. The Sami University College participated with students on the 2009 Bachelor course in *duodji* (Sami handicraft), and the author, as their handicraft teacher, was responsible for the participation

of the students. The College contacted RDM to offer help in building the *goahti*. The bachelor course includes the learning of various traditional skills, and the *Goahtehuksen* project offered the possibility of a large-scale learning activity such as the building of a *goahti*. Through the participation of the students, another factor in the *Goahtehuksen* project was realised, namely the transmission aspect. The students were to work with the tradition bearers Aslak Anders, Per and Jon Ole. Jon Ole's role was to transmit the knowledge, and in this way he was also the authority on *goahtehuksen*. At the same time, Aslak Anders and Per were transmitters of knowledge of the work process.

The project started in early summer 2009, when fetching the wood for the *bealjit* was filmed and documented. The College joined the project at the stage of the demolition and reconstruction of the *goahti*. The first meeting between the RDM, *árbečeahpit*, the film-maker Solveig Joks and the college students took place on the land where the *goahti* would be built. Karen Elle Gaup, the director of RDM, presented the project, its objective and the roles of the people involved in it. This sequence was of great importance for the project, as everyone present came to realise what the project consisted of and could all feel involved in it. Jon Ole, Per and Aslak Anders had an overview of the elements of the work process and said that we would be able to build the *goahti* in a week since the students were taking part. They had this overview at all times, while we (the students and I) could only follow the instructions given by Jon Ole, Per and Aslak Anders.

In my view, the film (*RiddoDuottarMuseat* 2010) had two functions: it is a documentation of how to build a *goahti*, but it also conveys how traditional knowledge is preserved in a social context, e.g. how things are done in a certain order, such as how the authorities position themselves, and the inauguration of the *goahti*).

The *Goahtehuksen* project can serve as a good example of the possibility of a systematic study of different layers of traditional knowledge within the larger *Árbediehtu* project.

Final thoughts

The Sami University College's *Árbediehtu* project emphasises that local actors must decide what should be collected and how the collected material is to be analysed. The question then arises as to what can be collected and what

methods can be used to collect traditional knowledge, and what to do with the material collected.

We may have an idea of what *árbediehtu* is, i.e. the knowledge passed down from one generation to the next which is considered by many in a community to be *árbediehtu*. *Árbediehtu* is also subject to change; each generation gives a new interpretation to the information handed down and passes it on according to its own interpretations and practices.

In the overall discussions about *árbediehtu* and in drafting of future projects about traditional knowledge we face a challenge, namely to find methods which take into consideration both information (*'dieđut'*) and experiences (*'máhtut'*) in such a way that the documentation of traditional knowledge benefits local communities. The local communities can participate in collecting and documentation of traditional knowledge, and I believe that this is an important measure in the capacity building within local communities.

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JOHN BERNHARD HENRIKSEN

Árbediehtu: Some legal reflections

Introduction

The debate concerning the rights of indigenous peoples has hitherto essentially addressed questions relating to their rights to land and territories, resources, language and culture. It is only in the past 20 years that the international debate has gradually begun focusing on legal issues related to indigenous peoples' traditional knowledge. Questions concerning the rights of the Sami people to traditional knowledge have gradually become part of the academic, political and legal debates in the Nordic countries.

This development is expressed in, among other things, the form of a pilot project conducted by the Sámi allaskuvla / Sami University College in collaboration with other Sami institutions and local communities in Norway. The pilot project, entitled "Árbediehtu: the mapping, preservation and use of Sami traditional knowledge" – which is essentially state financed – addresses in particular the importance of traditional Sami knowledge (*árbediehtu*) for the development and survival capacity (*birgejupmi*)[1] of Sami local communities. Article 8 (j) of the UN *Convention on Biological Diversity* of 1992 has acted as an overarching legal frame of reference for the pilot project. Among other things, Article 8(j) recognizes that the application of indigenous peoples' knowledge, innovations and practice can contribute towards the conservation and sustainable use of biological diversity.

The knowledge, innovations and practices of indigenous peoples are often directly connected with the natural environment inhabited or used by the indigenous people concerned. Such knowledge and practices have the greatest significance in the actual areas where they were developed in the form of in-

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1   About this term, see the introduction to this volume.

situ management of the eco-system. The opportunity of the Sami people to preserve and maintain their own traditional knowledge in an *in-situ* context is contingent on having the required access and right to use their own areas and natural resources for *birgejupmi* and cultural purposes.

This article has been prepared within the framework of this pilot project, and its aim is to identify some key legal issues related to the relationship between *árbediehtu* (traditional knowledge) and *birgejupmi* (survival capacity). However, the analysis goes beyond an assessment of traditional knowledge in the light of the Convention on Biological Diversity in that it also includes other relevant international principles and provisions.

The UN Convention on Biological Diversity: Knowledge, innovations and practices

The UN Convention on Biological Diversity uses the term "traditional knowledge" to identify knowledge that has been developed through generations by a group of people living in close touch with nature. Traditional knowledge within the meaning of the Convention is in other words to be understood as collective knowledge developed by a group of people through their traditional ways of life. Such knowledge includes classification systems, empirical observations of the local natural environment, and the people's own system of stewardship of the natural resources (CBD, Note 1997, section 84). The concept of traditional knowledge is often given the following characteristics:

1) the knowledge provides information on the physical, biological and social aspects of the natural environment in question;
2) knowledge-based norms that govern the use of the natural environment in a sustainable manner;
3) the knowledge forms the basis of systems that regulate the relationship with other users in the area;
4) the knowledge has resulted in user technologies that meet the needs of the group for sustenance, health, trade and rituals; and
5) the knowledge is based on an overarching and holistic view of existence which forms the basis for long-term and holistic decisions (CBD, Note 1997, section 85).

The term "indigenous peoples' innovations" identifies the result of indigenous peoples' traditional knowledge developed through empirical methods of surveying, testing and research. Such innovations are often expressed in the form of traditional technologies. The secretariat of the UN Convention on Biological Diversity identifies the following link between indigenous peoples' knowledge and technologies: "In the context of knowledge, innovations are a feature of indigenous and local communities whereby tradition acts as a filter through which innovations occur." (CBD, Note 1997, section 86.)

The term "indigenous peoples' practices" seeks to identify the manifestation of the knowledge and innovations of indigenous peoples, or a defined action or decision-making pattern with a basis in indigenous peoples' knowledge and innovations (CBD, Note 1997, section 86).

Article 8(j) of the Convention on Biological Diversity recognizes that the combination of indigenous peoples' accumulated knowledge, innovations and practices, along with the corresponding knowledge developed within the framework of modern science, can help to identify methods for the conservation and sustainable use of biological diversity. Article 17(2) therefore commits the parties to the Convention to paving the way for an exchange of information on indigenous peoples' knowledge to take place. Furthermore, Article 18(4) establishes that the parties to the Convention shall encourage and develop methods for cooperation aimed at developing and using technologies, including the traditional technologies of indigenous peoples, in the endeavour to meet the principal objective of the Convention – a sustainable use of biological diversity.

Árbediehtu, árbemáhttu and traditional Sami stewardship practice

There is no conclusive definition of the Sami term *árbediehtu*. However, it is natural to understand the term as designating specific Sami knowledge that has developed over generations. Such knowledge is often closely related to the local natural environment, and it is essentially empirically-based knowledge and understanding developed through continuous interaction between the group in question and the natural environment inhabited or used by the group. Árbediehtu embraces the knowledge of how and for what purposes land areas and natural resources can best be utilized sustainably. Consequently, the term

must be regarded as falling within what the UN Convention on Biological Diversity designates as traditional knowledge of indigenous peoples.

Just as "indigenous peoples' innovations" originate from their "knowledge", Sami *árbemáhttu* (traditional skills, proficiency and technology) is based on *árbediehtu* (traditional knowledge). *Árbemáhttu* is a manifestation or a result of *árbediehtu*. It is therefore assumed here that *árbemáhttu* without doubt falls within what the UN Convention on Biological Diversity designates as "indigenous peoples' innovations". Up until relatively recently local Sami communities have managed their own land areas and natural resources in line with their *árbediehtu* and *árbemáhttu*. Current national legislation and administrative practice in countries inhabited by the Sami have, however, deprived the Sami of the opportunity to manage their own land areas and natural resources in a way that corresponds to their *árbediehtu* and *árbemáhttu* – or their traditional stewardship systems.

The states' obligations under the Convention on Biological Diversity

The UN Convention on Biological Diversity recognizes the important role of indigenous peoples in the conservation and sustainable use of biological diversity. Article 8(j) of the UN Convention on Biological Diversity establishes that the contracting states have an obligation to respect, preserve and continue, and promote a broader application of, indigenous peoples' knowledge, innovations and practices provided that the relevant indigenous peoples' consent to it. The provision also establishes a commitment on the part of the contracting states to encourage or seek solutions for an equitable sharing of the benefits arising from the utilization of such knowledge, innovations and practices.

The states' obligations under Article 8(j) are expressed in the form of three key obligations:

1) Respect, preserve and maintain knowledge, innovations and practices of indigenous and local communities embodying traditional lifestyles relevant for the conservation and sustainable use of biological diversity;

2) Promote their wider application with the approval and involvement of the holders of such knowledge, innovations and practices;

3)   Encourage the equitable sharing of the benefits arising from the utilization of such knowledge, innovations and practices.

In addition to this, the Convention on Biological Diversity articulates a number of other related obligations. Article 10(c) determines that the states shall protect and encourage the use of biological resources in accordance with traditional cultural practices that are compatible with the Convention's requirements relating to the conservation and sustainable use of biological diversity. Article 10 reads as follows:

> "Each Contracting Party shall, as far as possible and as appropriate: ... (c) Protect and encourage customary use of biological resources in accordance with traditional cultural practices that are compatible with conservation or sustainable use requirements."

Article 17(2) includes indigenous peoples' traditional knowledge in the matters the Convention requires the contracting parties to exchange information on in the endeavour to conserve and encourage the sustainable use of biological diversity. Article 18(4) obliges the states to encourage and develop methods of cooperation for the development and use of technologies, including indigenous and traditional technologies, in pursuance of the objectives of the Convention.

The key weakness of the Convention on Biological Diversity – viewed from an indigenous peoples' perspective – is that the state's legal obligation to respect indigenous peoples' traditional knowledge, innovations and practices is subject to extensive reservations. The obligations are limited to, "as far as possible and as appropriate", to respecting, preserving and maintaining indigenous peoples' knowledge, innovations and practices. Article 8 states:

> "Each Contracting Party, shall, as far as possible and as appropriate:...
> (j) Subject to its national legislation, respect, preserve and maintain knowledge, innovations and practices of indigenous and local communities embodying traditional lifestyles relevant for the conservation and sustainable use of biological diversity and promote their wider application with the approval and involvement of the holders of such knowledge, innovations and practices and encourage the equitable sharing of the benefits arising from utilization of such knowledge, innovations and practices."

This reservation allows extensive freedom for the state to assume subjective and practical evaluations of whether the obligation applies in individual cases. Furthermore, the obligation in Article 8(j) has been made *"subject to [the state's] national legislation"*. In practice, this provision sets a precedent in favour of current national legislation. These reservations have resulted in the states taking very little account of, or doing little to facilitate the use of, indigenous peoples' knowledge, including Sami árbediehtu, when preparing legislation and administering natural resources in indigenous peoples› areas. The Norwegian Act relating to the management of biological, geological and landscape diversity of 2009 (see *The Nature Diversity Act*[2] 2009) is an example in this regard.

Despite the provision in Article 8(j) being formulated in a way that establishes a vague legal commitment on the part of the state to respect, preserve and maintain indigenous peoples' knowledge, innovations and practices, the provision is nonetheless extremely important in that it recognizes that indigenous peoples' knowledge, innovations and practices are significant for the preservation and sustainable use of biological diversity. Among other things, this recognition is relevant when applying other international provisions governing indigenous peoples' rights to their own knowledge, culture, land areas and resources. Article 22(1) of the Convention on Biological Diversity is also clear in the sense that it establishes no limits on the obligations the contracting parties may have on the basis of other instruments under international law. This means, among other things, that it is natural to consider the state's overall commitments vis-à-vis the Sami taking into account other international conventions and instruments, including the state's obligations under international human rights law.

Indigenous peoples' free, prior and informed consent

As stated above, the Convention on Biological Diversity imposes requirements for the consent of indigenous peoples in cases where others seek to apply their knowledge, innovations and practices. The principle of indigenous peoples' *Free, Prior and Informed Consent* (FPIC) is recognized in several international human rights instruments and legal practice under international law, including *ILO Convention No 169 concerning Indigenous and Tribal Peoples in Independent*

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2   Unofficial translation.

Countries (referred to below as the ILO Convention; see *ILO Convention* 2003[3]) and the United Nations Declaration on the Rights of Indigenous Peoples (The Indigenous Peoples Declaration) of 2007 (see *Declaration* 2007).

Article 16(2) of the ILO Convention refers to FPIC in relation to enforced relocations. Article 7 of the ILO Convention also states that indigenous peoples shall "have the right to decide their own priorities for the process of development as it affects their lives, beliefs, institutions and spiritual well-being and the lands they occupy or otherwise use." Traditional knowledge must be considered to fall within the provision of Article 7 (even if this is not expressly stated in the text), because traditional knowledge is to a great extent tied in with the land areas indigenous peoples inhabit, and traditional knowledge must also be considered to fall within what are here designated as "institutions". Indigenous peoples' right to decide their own priorities for their own process of development must be considered as meaning, among other things, that FIPC applies to external decision-making processes that affect indigenous peoples, i.e. processes where others than the indigenous peoples themselves have decision-making authority in issues that concern them.

Furthermore, Articles 2, 6 and 15 of the ILO Convention oblige the states to consult indigenous peoples in order to gain their informed participation and consent. Article 6(2) provides that such consultations shall be undertaken in good faith and in a form appropriate to the circumstances, with the objective of achieving agreement or consent to the proposed measures.

The United Nations Declaration on Indigenous Peoples goes slightly further than the ILO Convention in its recognition of the FPIC Principle, in that this principle is included in several of the declaration's provisions:

- Article 10 [FPIC in connection with enforced relocations]
- Article 11(2) [FPIC in connection with initiatives aimed at remedying violations of indigenous peoples' cultural, intellectual, religious and spiritual property]
- Article 19 [FPIC before adoption and implementation of legislative or administrative measures that may affect indigenous peoples]
- Article 28(1) [FPIC in connection with the adoption of measures to remedy violations of indigenous peoples' rights to land areas and resources]

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3   Translation of this publication into Norwegian, see *ILO-konvensjon* 2008.

- Article 29(2) [FPIC relating to storage of harmful materials in indigenous peoples' land areas]
- Article 32(2) [FPIC in connection with projects affecting their lands or territories and other resources]

Moreover, the Declaration on Indigenous Peoples contains several provisions that refer to the state's obligation to consult indigenous peoples in matters that affect them.

Article 4 of the Declaration on Indigenous Peoples recognizes that, in the exercise of their right to self-determination, indigenous peoples have the right to autonomy or self-government in matters relating to their "internal and local affairs." It seems natural to assume that indigenous peoples' traditional knowledge falls under the concept of indigenous peoples' "internal and local affairs". Furthermore, the free pursuance of their economic, social and cultural development, cf. Article 3 of the Declaration on Indigenous Peoples, is closely linked to managing their own traditional knowledge.

Several of the United Nations human rights monitoring bodies refer to the FPIC Principle in their legal practice. As an example, the UN Committee on the Elimination of Racial Discrimination expresses the following (CERD: General Recommendation XXIII, section 4 (d):

> "[T]he Committee on the Elimination of Racial Discrimination calls upon States to ensure that members of indigenous peoples have rights in respect of effective participation in public life and that no decisions directly relating to their rights and interests are taken without their informed consent."

Árbediehtu is an important part of the Sami cultural heritage. The UN guidelines for protection of the cultural heritage of indigenous peoples (Draft Principles 2000) assert that indigenous peoples must have control of research concerning their cultural heritage, and that their free, prior and informed consent is a precondition for conducting research in areas related to their cultural heritage:

> "The prior, free and informed consent of the [indigenous] owners should be an essential precondition of any agreements which may be made for the recording, study, display, access, and use, in any form

whatsoever, of indigenous peoples' heritage." (*Draft Principles* 2000, section 9.)

The proposed guidelines state furthermore that researchers shall not publish information they have obtained from indigenous peoples or research findings achieved with the assistance of indigenous peoples without their consent:

> "Researchers must not publish information obtained from indigenous peoples or the results of research conducted on flora, fauna, microbes or materials discovered through the assistance of indigenous peoples, without the traditional owners and obtaining their consent to citation or publication and provide compensation when commercial benefit is generated from such information." (*Draft Principles* 2000, section 31.)

This is of key importance to projects or processes where the objective is the preservation of *árbediehtu* outside the area in which it was developed.

The FPIC Principle comprises four conditions, all of which must be met before the consent of indigenous peoples can be regarded as free, prior and informed consent: (1) that it has been granted freely; (2) that it was granted in advance (prior to initiation); (3) that it was granted on an informed basis; and (4) that it is to be regarded as consent.

The condition for the consent to have been granted freely entails among other things that no form of coercion, force or pressure by external forces must have been involved, including the offer of economic advantage (unless this is part of an agreement or contract). There must be no suggestion of "sanctions" vis-à-vis the person or group in question should they choose not to grant their consent.

The condition whereby consent must have been granted prior to the initiation of the project (prior consent) means that the relevant indigenous people must have granted their free consent prior to the start-up of the project or initiative. The project must not be initiated furthermore before the group in question has completed its internal process, and a conclusive agreement has been entered into for the implementation of the project or initiative.

The condition whereby consent must have been granted on an informed basis means among other things that the group in question shall have access to all available information (facts, figures, advantages, disadvantages, etc), and

sufficient time to obtain points of view and opinions from the members of the group. The information must be available in their own language or the language that is most common among the members of the group.

The condition whereby consent must have been granted by the relevant indigenous people means that a conclusive agreement or contract must exist with their representatives and in accordance with the relevant group's structure or decision-making processes.

Article 67 of ILO Convention No. 169 establishes an obligation to consult in matters that may have a direct impact on indigenous peoples and contains provisions as to how the consultation process with indigenous people should be handled. This provision also provides guidelines with respect to FPIC Processes, although the content of the FPIC Principle goes further than the principle on ordinary consultations. The principle states that the government shall consult the people in question by means of appropriate procedures, and particularly through their representative institutions, when considering the introduction of legislation or administrative measures that may affect them directly. In addition, the provision states that the consultations taking place shall be held in good faith, in forms adapted to the prevailing conditions and with the objective of achieving agreement on or consent to the proposed initiatives. Consultations shall be held with affected groups of indigenous peoples. It is for example insufficient to only consult the Sami Parliament or the Sami Council on the question of mapping, preservation and use of local Sami traditional knowledge. In the first instance, it is the affected Sami individuals, groups or communities that need to be consulted in these cases.

The question of which procedures to apply when consulting indigenous peoples is equally important as the question of who to consult: the procedures to be applied when consulting the group in question will depend on the circumstances. If the consultation is to serve its purpose, it needs to be adapted to the individual circumstances, as well as being meaningful, sincere and transparent (The ILO Convention, Handbook 2008, 17).

Indigenous peoples' representative institutions may include such traditional institutions as *siida*, village councils, popularly elected representatives, locally elected or appointed leaders plus more modern institutions such as the Sami Parliament. The decision as to which institutions should be regarded as "representative" must always be made in the light of the situation at hand,

where among other things account must be taken of the type of knowledge in question.

The key point is that the possessors or owners of Sami traditional knowledge, or the relevant Sami community, must grant their free, prior and informed consent to the mapping, archiving and use of such knowledge and that they fully understand the significance and consequences of handing over this knowledge to others. The FPIC Principle also entails that external actors and interests must accept the right of the possessors of traditional knowledge to decline to grant their consent, and to subsequently withdraw their consent if, for example, they become aware of circumstances that were unknown at the time they gave their consent.

The UN Human Rights Council's Expert Mechanism on the Rights of Indigenous Peoples (EMRIP) differentiates between consultations and the FPIC Principle in their study of indigenous peoples' right to partake in decision-making processes that affect them. EMRIP concludes that the FPIC Principle must be interpreted in the light of the right of indigenous peoples to self-determination, and establishes that FPIC is more comprehensive than the right to be consulted. EMRIP articulates the following, among other things:

> "The right of indigenous peoples to free, prior and informed consent forms an integral element of their right to self-determination. Hence, the right shall first and foremost be exercised through their own decision-making mechanisms. As the right to free, prior and informed consent is rooted in the right to self-determination, it follows that it is a right of indigenous peoples to effectively determine the outcome of decision-making processes impacting on them, not a mere right to be involved in such processes." (EMRIP, 2010, section 41)

Who owns the rights to Sami traditional knowledge?

The FPIC Principle actualizes *inter alia* issues related to questions concerning the ownership of traditional knowledge. As an example, the question may be raised regarding who should be considered as the right person to grant free, prior and informed consent to the mapping, archiving and use of traditional Sami knowledge? This issue is also closely related to the question of establishing databases for *árbediehtu*. In general, it may be said that it is the

person or group that possesses or owns such knowledge that is the correct authority in an FPIC Principle context.

It must be assumed that all *árbediehtu* has owners or custodians, either in the form of Sami individuals, families, groups, local communities or the entire Sami people. Who it is that possesses, acts as custodian of or owns, depends on the knowledge in question. For example, *árbediehtu* relating to limited and very local matters may be possessed/owned by an individual person, family or small group, whereas other forms of information of a more general nature may be possessed by a far larger group. It is difficult to assume that all traditional Sami knowledge is collective knowledge that is possessed or owned by the entire Sami people. The question as to who is the right person/group to grant its consent for the mapping, archiving and use of Sami traditional knowledge must therefore be decided in each specific case.

Such an approach would accord with recognized international principles for the protection of the cultural heritage of indigenous peoples:

Every element of an indigenous peoples' heritage has owners, which may be the whole people, a particular family or clan, an association or community, or individuals, who have been specially taught or initiated to be such custodians. The owners of heritage must be determined in accordance with indigenous peoples' own customs, laws and practices. (*Draft Principles* 2000).

Various interdependent international standards

Árbediehtu is, as already mentioned, often closely related to and developed through the Sami›s cultural or traditional use of the natural environment. The Sami's opportunity to utilize and make practical use of their own territory and associated resources is not just an important precondition for the preservation and use of traditional Sami knowledge, but also constitutes an important material precondition for the Sami culture and way of life.

Árbediehtu is not just part of the material basis of Sami culture, but also represents the exercise of Sami culture. *Árbediehtu's* multifaceted nature and role ensures that its preservation and application is not limited to the conservation of biological diversity, because it also has other important aspects that can be articulated in terms of law, particularly in the light of international human rights standards. The following factors indicate that it

is also natural to assess the rights of the Sami to their own knowledge in the light of international human rights standards:

1) *Árbediehtu* is often linked to and developed through the Sami›s use and stewardship of the natural environment. Therefore, the Sami people's right to use their own areas, water and natural resources is a vital requirement for their possibility to preserve, use and pass on such traditional knowledge.

2) Sami culture is closely related to the use and exploitation of the Sami's own lands, water and natural resources. Therefore, the use of lands, water and natural resources constitutes another key material precondition for Sami culture, at the same time as which such use and exploitation is also a precondition for the preservation, use and development of certain aspects of *árbediehtu*.

3) *Árbediehtu* is part of Sami culture, while also constituting a material precondition for Sami culture. The maintenance of Sami culture and *árbediehtu* depends on the Sami territories also being used for traditional purposes in the future for the pursuance of traditional livelihoods, lifestyles and forms of harvesting in line with Sami stewardship systems.

4) International human rights instruments and practices recognise the rights of indigenous peoples to land areas, natural resources and culture. Human rights recognise that indigenous peoples have a unique relationship with their territories, and that their culture is often expressed through their use of their own territories and natural resources, including through their lifestyles, hunting, trapping, fishing and utilization of other natural resources.

The United Nations Declaration on the Rights of Indigenous Peoples

Article 31 of the United Nations Declaration on the Rights of Indigenous Peoples (Indigenous Peoples Declaration) recognizes that indigenous peoples have the right to maintain, control, protect and develop their traditional knowledge. The provision also recognizes corresponding rights in relation to

several correlated issues, including cultural expressions, technologies, genetic resources, designs, etc.:

> ''(1) Indigenous peoples have the right to maintain, control, protect and develop their cultural heritage, traditional knowledge and traditional cultural expressions, as well as the manifestations of their sciences, technologies and cultures, including human and genetic resources, seeds, medicines, knowledge of the properties of fauna and flora, oral traditions, literatures, designs, sports and traditional games and visual and performing arts. They also have the right to maintain, control, protect and develop their intellectual property over such cultural heritage, traditional knowledge, and traditional cultural expressions. (2) In conjunction with indigenous peoples, States shall take effective measures to recognize and protect the exercise of these rights.'' (*Indigenous Peoples Declaration* 2007, Article 31.)

Thus, Article 31 determines that indigenous peoples have the right to maintain, control, protect and develop their cultural heritage, traditional knowledge and traditional cultural expressions, as well as the manifestations of their sciences, technologies and cultures, as expressed through human and genetic resources, seeds, medicines, knowledge of the properties of fauna and flora, oral traditions, literatures, designs, sports and traditional games and visual and performing arts. Indigenous peoples also have the right to maintain, control, protect and develop their intellectual property over such cultural heritage, traditional knowledge, and traditional cultural expressions. The provision also determines that the states shall take effective measures to recognize and protect the exercise of these rights in conjunction with indigenous peoples. The rights affirmed in the Declaration on Indigenous Peoples are recognized as minimum standards for the survival and dignity of indigenous peoples (*Indigenous Peoples Declaration* 2007, Article 43).

International human rights

The principle of territorial sovereignty is the historical basis of international law, including in relation to the dispositions of the State. However, the advance of convention-based protection in the field of human rights, including the rights of indigenous peoples, has considerably reduced national states' freedom of action. The protection of indigenous peoples' rights under international law goes beyond legally binding conventions. For example, it

applies to the United Nations Declaration on the Rights of Indigenous Peoples. The Declaration on the Rights of Indigenous Peoples is not a legally binding convention, but it has nonetheless a significantly binding effect on the state in that it is in principle limited to applying existing legally binding human rights standards to the specific historical, cultural, economic and social circumstances of indigenous peoples (Anaya 2008, sections 34–43; EMRIP 2009, sections 27-40, Annex section 7).

International human rights articulate the rights and freedoms of individuals (individual rights) and peoples (collective rights). These apply regardless of legal or societal systems (Opsahl 2002, 25; Høstmælingen 2003, 27–28). In other words, human rights are to be considered as universal rights that establish barriers for the interventions a national state can make in those rights, or permit others to make.

Indigenous peoples' right to culture

Indigenous peoples' right to culture is robustly protected by international law. This protection also comprises the material basis of the culture, and is laid down in Article 27 of the International Covenant on Civil and Political Rights (ICCPR), and associated legal practice. Article 27 of ICCPR holds that "In those States in which ethnic, religious or linguistic minorities exist, persons belonging to such minorities shall not be denied the right, in community with the other members of their group, to enjoy their own culture, to profess and practise their own religion, or to use their own language". The practice of the United Nations Human Rights Committee – the monitoring body of the ICCPR – shows that indigenous peoples are able to invoke rights under ICCPR Article 27 despite the wording of the provision referring only to minorities.

The cultural protection laid down in Article 27 also comprises the *material basis of* the Sami culture. The Human Rights Committee has on several occasions stated that indigenous peoples' special affiliation with their own traditional land areas and natural resources are important to the state's duty to protect their right to enjoy their own culture. This appears *inter alia* in the Committee's general comments on Article 27 ICCPR *(UN HRC, General Comment No. 23)*:

> "The enjoyment of the rights to which article 27 relates does not prejudice the sovereignty and territorial integrity of a State party. At the same time, one or other aspects of these rights of individuals protected under that article – for example, <u>to enjoy a particular culture may consist in a way of life which is closely associated with territory and use of its resources. This may particularly be true of members of indigenous communities constituting a minority.</u>" [4]

This means among other things that the traditional use of the natural resources that forms a large part of *birgejupmi*, "the art of survival", falls under the protection of culture in Article 27 ICCPR. This interpretation of Article 27, along with the Committee's statements in a number of individual complaint cases, makes clear that the states are obliged to protect the material basis of indigenous peoples' culture, including their traditional lifestyles, livelihoods and use of lands and resources (*UN HRC, Communications* 1984–2001).

In considering a Sami complaint against the Swedish State in 1984–85, the UN Human Rights Committee established for the first time the connection between Sami culture and reindeer husbandry – in the so-called Kitok case. The Committee concluded that Sami reindeer husbandry falls under Article 27 because it forms a vital part of the Sami culture (*Kitok v Sweden* 1985). In the Kitok case the Committee stated that although the regulation of economic activities is normally a matter for national authorities, the economic activity itself will nonetheless come under the protection of Article 27 if it is important to the culture of the indigenous people in question. There are no reasonable legal grounds to limit this to Sami reindeer husbandry because in this context reindeer husbandry must be placed on an equal footing with other forms of traditional, culturally based Sami utilization of natural resources in Sami territories.

This indicates that Article 27 establishes clear limits as regards the freedom of the state to regulate traditional Sami utilization of their own territories. The key principle is that the state shall neither adopt nor permit measures that could significantly harm the basic conditions for Sami culture and Sami livelihoods. The UN Human Rights Committee has maintained this interpretation of Article 27 ICCPR in a number of subsequent individual complaints by indigenous peoples (*UN HRC, Communications* 1984–2001).

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4   Underlined by the author.

Norwegian legislation and international covenants

The legal obligations of the state towards the Sami, including with respect to their cultural rights, are not limited to international law, since the state also has internal legal obligations with regard to creating conditions to enable Sami culture to be preserved and passed on to future generations. This obligation also applies to *árbediehtu,* as traditional Sami knowledge is an important part of Sami culture.

It follows from section 110(a) of the Norwegian Constitution that "[I]t is the responsibility of the authorities of the State to create conditions enabling the Sami people to preserve and develop its language, culture and way of life."[5] The provision sets forth an obligation on the part of Norwegian authorities to create conditions for the preservation of Sami culture. There is also broad consensus that Article 27 ICCPR and the Norwegian Constitution, section 110(a) impose identical requirements on the state as regards protection of Sami cultural rights and the obligation to create conditions enabling the preservation of Sami culture (Smith 1990, 507 ff.). In other words, the provision must be interpreted on the basis of the state's obligations under international law.

Section 110(c) of the Norwegian Constitution and the Norwegian Human Rights Act of 1999 contribute to reinforcing the position of human rights in Norwegian legislation. Section 110(c) of the Constitution determines that it is incumbent on the Norwegian authorities to respect and ensure human rights and that specific provisions on the implementation of international treaties thereon shall be determined by law. This provision has been followed up by subsequent legislation, including the Human Rights Act (Act No. 30 of 21 May 1999). The Human Rights Act gives the International Covenants on Civil and Political Rights (ICCPR), and Economic, Social and Cultural Rights (ICESCR) respectively, equal status with Norwegian law. Section 3 of the Human Rights Act also affords these covenants precedence in cases where there may be a difference between the covenants' provisions and Norwegian legislation. The principle of precedence differs from the principle that normally regulates the relationship between Norwegian and international laws. The general principal rule in Norway is that in the event of discrepancy, Norwegian law takes precedence over international human rights covenants.

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5   This provision was included in the Norwegian Constitution in 1988.

In other words, it follows from international law, the Norwegian Constitution and the Human Rights Act that the state has a legal duty to give the Sami real opportunities to protect and develop their culture, including *árbediehtu*. Current Norwegian law establishes no effective legal protection for *árbediehtu*, however, and creates conditions to only a minor extent enabling the preservation, use and maintenance of such knowledge.

With the exception of the right to undertake reindeer husbandry, the Sami are to a great extent equal to the rest of the population as regards the right to utilize the natural resources in their own territories. This has directly negative consequences for the preservation and use of *árbediehtu*. In many ways, the Norwegian Nature Diversity Act is an expression of the state's lack of understanding and respect for the Sami's rights to culture, land and resources. Although the Nature Diversity Act is a legislative measure that has arisen partly out of Norwegian obligations under the UN Convention on Biological Diversity, the Act is essentially silent regarding the Sami's rights and interests in matters that fall under the objective scope of the Act. The same problem emerges in relation to other Norwegian legislation that is of immense significance for the conditions governing the use and preservation of *árbediehtu*, such as the Finnmark Act, the Act on motorised traffic in outlying areas and river systems[6], the fishery legislation, the Act relating to salmon fishing and inland fishing, the Wildlife Act.

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ÅSA NORDIN JONSSON

Ethical guidelines for the documentation of *árbediehtu,* Sami traditional knowledge

Documentation of the traditional knowledge of indigenous peoples is becoming increasingly common; one reason for this is that such knowledge is becoming ever weaker and even in some cases disappearing. This is partly due to the increasing influence of Western ways of life on indigenous communities and the passing away of the older generation, taking with them a great deal of the knowledge. Indigenous peoples themselves are today often in the forefront in demanding that traditional knowledge be collected, preserved and passed on to the younger generations, and the indigenous peoples also want to be primarily responsible for such work (Burgess 1999). Traditional knowledge ranges from the limited traditions of specific families or areas to the more comprehensive traditions which the Sami people have in common, regardless of district affiliation. A Sami tradition can be very local in character and thus only apply to a small geographic area. Other Sami may not be familiar with the tradition, because they come from a locality where different customs developed (Gaup 2008). A myriad of different traditions is an expression of cultural wealth, and is also a reflection of how knowledge is adapted to the distinct ecological niches or environments found in *Sápmi* (Samiland).

The aim of the present article is an attempt to create guidelines for how *árbediehtu* (Sami traditional knowledge) should be documented without exploiting the culture. The article must therefore be regarded as a contribution to an ongoing discussion.

Conceptual Framework

This article employs certain concepts which are explained below.

Traditional knowledge can be found in all indigenous and other local communities. It is knowledge which was created out of local living conditions and passed on from generation to generation. It is adaptive knowledge, transmitted orally, containing both abstract and practical elements. The knowledge of indigenous peoples, including the Sami, is often more vulnerable than e.g. the traditional knowledge of Swedish local communities (such as pastoral farming in the Hälsingsland area of Dalarna), because Swedish traditional knowledge forms part of the norms of the majority society.

The Sami word *árbediehtu* means basically "traditional knowledge" and is increasingly used for the traditional knowledge of the Sami people. We can easily ascertain from the use of the term whether Sami knowledge or traditional knowledge in a more general sense is being referred to. *Árbi* means heritage and *diehtu* knowledge. *Árbediehtu* "[...] clarifies knowledge as both information and the process, emphasizes different ways to gain, achieve or acquire knowledge. The concepts indicates indissoluble ties between the past, the present and the future, which is validated by *árbi* 'heritage: inheritance' " (Porsanger 2010, 435).

Árbediehtu is knowledge inherited between generations which is often the foundation of Sami life and times. For the owner of such knowledge, it offers a clear link between the Sami past and present. In this article, *árbediehtu* is used as a common concept for both practical and theoretical knowledge of Sami traditions.

Árbečeahppi (plural: *árbečeahpit*) is a person who has, or can perform, *árbediehtu*. Other Sami words are also to be found in the article; these are explained in the brackets following the words.

Documentation of indigenous traditional knowledge

Traditional knowledge documentation is becoming increasingly common, partly because indigenous people themselves realise that much of their specific stores of knowledge will be lost if not passed on and preserved for future generations. Apart from the indigenous peoples themselves, others

have recognised that indigenous traditional knowledge includes much which may be of great importance for other societies; one example is the prominence given to indigenous knowledge on sustainable use of natural resources in many different contexts. Traditional indigenous knowledge takes into account the specific conditions that prevail in each area; in other words, it is not universal knowledge that can be applied everywhere regardless of local conditions. There is a tendency to document primarily material traditional knowledge – this applies also to *árbediehtu* – but the collection of non-material knowledge is of equal importance. What is documented depends on who conducts the documentation and his or her interests. A person who belongs to the culture may consider that one form of *árbediehtu* should be documented, while people outside the culture may judge other activities to be more interesting. Such traditional knowledge documentation from different perspectives should be considered positively as a strength, because the researchers thus have different approaches and emphasise different events in the documentation work. Irrespective of who conducts a documentation project, the guiding principle should be its usefulness and value for the communities involved. "Finally, those who collect indigenous knowledge should not do so solely for their own reasons, but always incorporate into their research aspects which are of benefit to the community" (Maundau 1995, 5). Before documentation work commences in the field, the researcher should ask the question: For whom is this work being done? The answer will determine the entire documentation process, from the method employed to the final product.

In the past, but even today, traditional knowledge has been collected without any benefit for the indigenous people involved:

> "Researchers have, in the past, typically violated Indigenous communities' sense of ownership over cultural property through their personal and individualistic appropriation, reconstruction and publication of knowledge shared" (WINHEC 2009, 5).

As a consequence of such procedures, many indigenous peoples and their institutions, e.g. in Canada, have reacted and developed ethical guidelines that researchers or collectors have to relate to and follow, in order to obtain permission to document traditional knowledge. This is an attempt on the part of indigenous peoples to protect their culture from exploitation by gaining

control and influence over current and future projects. For the guidelines to be useful and serve their purpose, i.e. to protect indigenous peoples' traditional knowledge, they must of necessity be accepted by the indigenous peoples themselves.

> "Recognizing also that any measure to respect, preserve and maintain the use of traditional knowledge, such as codes of ethical conduct, will stand a much greater chance of success if it has the support of indigenous and local communities and is designed and presented in terms that are comprehensible (and enforceable)" (UNEP/CBD/WG8J/6/4).

Indigenous peoples demand that documentation projects should be based on their needs and perceptions of what they consider to be valuable research or documentation.

> "Indigenous peoples now require that research dealing with indigenous issues has to estimate from the needs and concerns of indigenous communities instead of those of an individual researcher or the dominant society" (Kuokkanen 2008, 49).

If the traditional knowledge of indigenous people is to be preserved from their own perspective, a project must have its foundation in the indigenous communities themselves. This may result in established paradigms being challenged and changed, and new knowledge paradigms may arise. However, to base documentation work on an indigenous paradigm does not mean that Western paradigms are rejected (Kuokkanen 2000).

> "*Indigenous paradigm* is to raise questions of relevant research regarding indigenous communities and to contribute our understanding of different ways of knowing and theorizing. It can introduce new perspectives to research by challenging and deconstructing dominant values, world views and knowledge systems" (Kuokkanen 2000, 414).

The starting point should thus be the indigenous peoples' own values when traditional knowledge projects are planned, implemented and disseminated. If the starting point is close to the values of a particular culture, this is a good basis for the researcher to reflect the knowledge in his work in a way which is acceptable to the tradition bearers involved. The indigenous paradigm should not replace the Western paradigm, but rather develop methodologies

to enable the preservation of traditional knowledge based on the norms and values of the culture bearers themselves.

> "The main aim of indigenous methodologies is to ensure that research can be carried out in a more respectful, ethical, correct, sympathetic, useful and beneficial fashion, seen from the point of view of indigenous people" (Porsanger 2004, 107).

The starting point for the documentation of *árbediehtu* is the values of the local communities involved. Sami values may vary between different local communities or groups; an example of this can be seen in the perception of reindeer and fish. A Sami who has mainly lived on fish will have a more detailed knowledge than a reindeer herder of all aspects of fish, e.g. their behaviour and movements, and also of where, when and how to fish. This does not imply that one *árbediehtu* is more correct than another, but that each one has value in itself, being based on distinct ecological conditions. "Sami traditional knowledge is not the knowledge of the scientific world about the Sami, but the Sami people's own tradition-borne knowledge and experiences of the surrounding environment and its impact on living conditions" (Utsi 2007, 61). If the particular values of a culture are not taken into account, the essence of the knowledge can be lost in the documentation process. Using an indigenous approach means that the researcher bases his work on the indigenous peoples' own values and the ethics of the culture, which in turn determines the choice of theory and method (Porsanger 2004; Brant Castellano 2004). Earlier documentation on Sami practices was often conducted from a top-down perspective, where the main goal was to preserve Sami knowledge (Nordin Jonsson [2010]). There are often source-critical problems in the collected material. Whose views are represented? Is the material a "knowledge clip" of more general traditional knowledge? These are the kind of questions the researcher must consider when working with data collected in the past and found in archives.

Contextualisation

Each project to document *árbediehtu* will have its own context, so it is not possible to develop ethical guidelines to cover every possible situation that may arise during the documentation of traditional knowledge. The guidelines developed for *árbediehtu* are therefore rather general, permitting adaptation to the various aims of different documentation projects. The goal of ethical

guidelines for the documentation of *árbediehtu* is not to create uniformity with regard to documentation and traditional knowledge. Since *árbediehtu* itself is dynamic and varies between regions, individuals, etc., the guidelines must also be flexible and adaptable; otherwise there is a risk that the diversity of the traditional knowledge will be lost in the documentation process. In the context of the *árbediehtu* project, the main point is that it is not possible to develop ethical guidelines based on only one Sami community, but rather guidelines which are so open that they can be applied to most of the various Sami communities. The guidelines should not be made too narrow. They should spring from general Sami norms and values to enable them to be acceptable to the majority of the Sami population and also to those working with documentation of *árbediehtu* or otherwise involved in work on Sami traditional knowledge. This benefits the preservation and dissemination of *árbediehtu* in the long term. One example is that the guidelines specify that the language of documentation should be Sami in those areas where this is possible. If the guidelines stated that all documentation of *árbediehtu* was to be conducted in Sami, they could not be applied in certain areas of *Sápmi*. The guidelines should be considered as a guide and inspiration. Each individual context will determine the guidelines to be used.

Ethical guidelines for the documentation of *árbediehtu*

No one culture has exactly the same structure another culture. Each culture is unique, which makes it impossible to develop general guidelines for the traditional knowledge of all cultures. Rather, each culture must develop guidelines based on its own values, norms, etc. Established ethical guidelines for the documentation of indigenous traditional knowledge can serve as inspiration when other indigenous peoples develop their own guidelines. The objective of ethical guidelines in a wider perspective is to ensure that indigenous peoples are no longer exploited, whether intellectually, materially or culturally, by the claim that the research or documentation is done in the name of science, which was common in the past (Kuokkanen 2008): "(...) indigenous research ethics are a matter of autonomy; taking control of our own affairs and knowledge" (Kuokkanen 2008, 55). Through the development of ethical guidelines in e.g. the *árbediehtu* project, Sami researchers and other cultural workers are attempting to take responsibility for not allowing Sami traditional knowledge to be exploited in various ways. This is, however, a

discussion that must take place together with the Sami general public if the guidelines are to be accepted and have real significance.

The holistic perspective

In indigenous communities the holistic perspective has been of great importance. "(...) the practice of Indigenity as a 'whole system' is the best real protection for maintaining Indigenous identity and knowledge from loss, erosion and exploitation" (Armstrong 2010, 84). All aspects of life, both tangible and intangible, are interconnected and cannot be separated from one another.

> "Indigenous knowledge is therefore holistic; deeply related to land, stories and ancestors where the past is made manifest in life within the local environment, family or even through these connections of past, present and future" (WINHEC 2009, 7).

The holistic perspective is also present in Sami culture and society. Man and the environment (the surroundings) are interrelated and cannot be separated. A holistic starting point or perspective is almost a necessity when *árbediehtu* is to be documented. In order to build on indigenous peoples' own understanding, we must adopt a holistic approach that includes language, culture, practices, spirituality, mythology, customs and habits, as well as the social organisation of the community (*Native Science* 2009). The documentation should include the preparatory work, the implementation and the follow-up work of the selected activity to be documented by the project. If only part of the implementation of the activity is documented, it will be taken out of context. One example is the process for preparing skins; it is not just a question of the skin preparation itself, but the knowledge in fact begins with the selection of skins and what they will be used for, which bark is to be used, how the bark is utilised, the actual tanning process, and the subsequent knowledge of how the skins are softened, stored, etc. A person who later learns from the collected material must be able to follow the documentation work and perform the same task himself, which will be impossible if parts of both the preparatory and follow-up work are missing. A documentation which merely reveals selected parts of the process can be regarded as a "knowledge clip". However, the theme of a documentation project could also be e.g. the selection and peeling of bark, without the necessity of describing the skin preparation process. It is the responsibility of the researcher to ensure that a documentation project

is not just a knowledge clip of a specific activity, but also includes a holistic perspective.

Male and female *árbediehtu*

Traditional knowledge is developed in close harmony with the living conditions that prevail or used to prevail for each individual, and there is thus a difference between the traditional knowledge held by women and men (Grenier 1998, 37–41). Sami male and female *árbediehtu* differ, which means that the traditional knowledge of both genders must be documented systematically. The differences in *árbediehtu* are partly because the genders have/had different responsibilities, tasks and roles in life. The Sami woman's traditional knowledge can be linked to the family, the home/hut and the vicinity of the settlement(s), since she was/is more stationary. The Sami man has other responsibilities and tasks and hence different knowledge. It was/ is a natural division of responsibilities and tasks to facilitate the daily life of the family, as everyone knew what was expected of them (Hirvonen 1996, 7–12). These areas of responsibility and work were learnt by each individual during his or her upbringing in a natural way (children were involved in daily life, learning by observation and trying out various tasks according to their ability), with the goal of eventually enabling the individual to subsist independently in the area (*Reindriftskvinner i Norge* 2010, 4). There are of course also individuals who have learnt the duties or responsibilities of the opposite gender for various reasons. The researcher planning to document *árbediehtu* should be aware of whether it is female or male *árbediehtu*, as this will for example facilitate the selection of informants. Female traditional knowledge has generally been documented to a lesser extent than male traditional knowledge (Grenier 1998, 37–41).

Contact with *árbečeahpit*/the local community

The collector of knowledge in a documentation project is directly dependent on a local community and the willingness of its members to share their *árbediehtu*. It has been and still is common procedure that those wishing to document traditional knowledge have contacted the local community and potential knowledge bearers (*árbečeahpit*) after they have received funding for the project, which many indigenous people want to see changed. A requirement commonly found in indigenous ethical guidelines is that the

affected community and its members at an early stage should be informed and consulted on the proposed project and thus have the opportunity to participate in influencing its content and structure (*Inuit Tapiriit Kanatami and Nunavut Research Institute* 2007; *Principles for the Conduct of Research in the Arctic* 2008; Longley Cochran [2009]). "Traditional knowledge bearers must play a central role in shaping the project and be involved as equal partners in terms of consultation and decision-making" (Oskal & Turi & Sundset 2007). If the community members and tradition bearers have increased influence, the projects can be of more value to them, since traditional knowledge documentation may then be directed to issues and activities they consider to be of major importance. In determining what should be documented, the basic rule must be that the local community has influence (IIRR 1996; *Inter Tribal Health Authority* 2005); a top-down perspective can thus be avoided. Involving the local community at an early stage is beneficial; the people affected may then feel more involved in the project and acquire a particular interest in it. The opportunity to carry out a documentation project on traditional knowledge and benefit from the knowledge of tradition bearers should be regarded as a privilege (Longley Cochran [2009]). Not everyone who works on a documentation project has the privilege of being allowed to share in the unique knowledge of a culture by those who really know it, because there is sometimes a fear of sharing *árbediehtu* with outsiders. Tradition bearers should be treated with respect, as should their culture and society, even after the documentation project is completed. The collector of knowledge is responsible for carrying out the documentation in a professional and humble way, so that the *árbečeahpit* may have a positive experience of participating in such projects.

It may be important to consult with the local community and its members as to when it would be suitable for them to document their knowledge (*Inuit Tapiriit Kanatami and Nunavut Research Institute* 2007). The documenter should be flexible and consider when it suits the *árbečeahpit* to participate, and when specific knowledge is performed most naturally. Participating in an activity can provide a completely different insight than simply listening to someone talk about it. It is easier to show how to do things, what to think about, etc. if the activity is actually performed. If knowledge is transmitted orally, parts of it are easily forgotten. The opportunity to participate actively can give a better end product even if it means using other methods than those which may have been originally planned. There are thus many advantages to being in contact with prospective *árbečeahpit* before the project begins, in order to achieve the best possible result for the documentation work.

Agreement between the parties concerned

Many of the ethical guidelines stress the importance of free, prior informed consent (*Inuit Tapiriit Kanatami and Nunavut Research Institute* 2007; *Alaska Native Knowledge Network* 2009*; Principles for the Conduct of Research in the Arctic* 2008; Longley Cochran [2009]; *ITC (Inuit Tapirisat of Canada) Research principles for community-controlled research with the Tapirisat Inuit of Canada*, further refered as ITC [no date]). In the process of free, prior informed consent, the community involved will have received basic information about the objectives of the documentation project, how it can affect the community, the consequences of the project, etc. Free and prior informed consent implies that information is provided freely, that consent is given before the project begins, that sufficient time is allowed to obtain the views of the communities involved and to adapt the project to such views, and that there is an unambiguous contract or agreement between the parties (Henriksen [2009a]; Kuokkanen 2008). Such agreements will uphold the parties' best interests in order to avoid misunderstandings and conflicts.

The Principles for the Conduct of Research in the Arctic, drawn up by the Alaska Native Knowledge Network (2009), set out clearly what should be included in free and prior informed consent. The following points should be incorporated:

- funding for the documentation project, by which person or institution
- leader of the project and other people involved
- need for consultants, guides and interpreters from the local community
- documentation methods
- the language of the documentation work
- predictable positive and negative results of the documentation project
- the effects, both positive and negative, that participation may have on tradition bearers
- copies of the final product, descriptions of the data and other relevant material from the project for the benefit of tradition bearers and other community members
- what will happen to the end result and collected material when the project ends
- the researcher must respect the customs and values of the local culture and the local language

With regard to the documentation of *árbediehtu*, there should be free and prior informed consent or a similar agreement between the researcher and the *árbečeahpit* (the interested parties). "Traditional knowledge (...) should only be used with the prior informed consent of the owners of that traditional knowledge" (*Akwé: Kon*[1] 2004). Such agreements should be in writing, so that all parties involved know the preconditions for the project and what will be required not only of the *árbečeahpit* but also the researcher. An agreement can eliminate possible misunderstandings and conflicts between the parties concerned. The main intention behind free, prior informed consent and similar agreements is that the knowledge bearers and the local community agree to their *árbediehtu* being mapped, archived and used and that they understand what it entails to share the knowledge and what consequences it may have, both positive and negative, short-term and long-term (Henriksen [2009a]). Those who document *árbediehtu* must be sure that the tradition bearers have actually received the relevant information and are fully aware of any repercussions participation may have for them (Oskal & Turi & Sundset 2007). Free and prior informed consent is a form of protection for both *árbečeahpit* and researcher, so that neither of them will be used for purposes other than those agreed upon. Such consent can also regulate the use of the knowledge they share, so that the tradition bearer need not be afraid that the knowledge he or she is sharing will later appear in a completely different context from the intended project.

The meeting with *árbečeahpit*

The documentation of *árbediehtu* involves a meeting where one party shares his or her knowledge and the other party acquires new knowledge and/or the possibility of documenting such knowledge. It is a joint work process

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1   The Akwé: Kon guidelines are an important tool published by the Convention on Biological Diversity. They play a major role in the continuing work of the Secretariat of the Convention of Biological Diversity and are to be implemented by the countries which sign the Convention, in which the traditional knowledge of indigenous and local communities is protected and highly valued. Akwé: Kon is a set of guidelines developed in cooperation between the signatory countries, indigenous peoples and local communities, based on the premise that development may take place, but not at the expense of traditional indigenous lands and waters, sacred sites, etc. The use of these guidelines will ensure that cultural, social and environmental impacts can be presented to the indigenous peoples before any change or development takes place. The guidelines are a means to protect indigenous cultures from exploitation and instead contribute to improved living conditions for them.

between the researcher and the *árbečeahpit*. In order for the documentation process to achieve a positive outcome, both parties must be committed and willing to share. Basic requirements are two-way communication and respect between the individuals concerned (*Kahniakehaka Nation* 1995). Success in *árbediehtu* documentation requires reciprocity and a positive relationship between the researcher and the local community (Grenier 1998; Smith 2000). The respect for the other party also implies that the researcher considers when it is convenient for the *árbečeahppi* to receive him/her and share the traditional knowledge. *Árbečeahpit* may have family and other commitments, and therefore give short notice that they cannot attend a meeting. In the documentation of *árbediehtu* one must respect the local community and its activities as well as the family life of the *árbečeahpit* (*Inuit Tapiriit Kanatami and Nunavut Research Institute* 2007). The collector of knowledge should also show consideration for the *árbečeahppi*; sometimes he or she may turn up because a meeting has been agreed upon, but actually have his or her mind elsewhere, perhaps because of something that has happened in the family or community. In such a situation, the researcher should be able to put the *árbečeahppi* first and offer to postpone the meeting to a later date. *Árbečeahpit* should never feel compelled to meet the researcher (IIRR 1996).

In the documentation of *árbediehtu*, one meeting is not sufficient; a number of conversations/meetings are often a prerequisite for achieving successful documentation. In the first meetings, much of the time and conversation will involve the parties getting to know each other and building a trusting relationship. The data collected must then be understood and perhaps analysed; here it is important that the researcher's understanding of the *árbediehtu* corresponds to the perceptions of the activity held by the tradition bearer. The researcher has a responsibility for communicating the knowledge conveyed by the *árbečeahpit* in a well thought-out manner (Longley Cochran [2009]). It is also important that the holistic perspective of the activity is preserved in the final product.

Anonymity and confidentiality

In all traditional knowledge documentation, it is preferable that the tradition bearers agree to the use of their name in the final product. This strengthens the documentation project and its subsequent results in many ways. In many of the methods used in documentation work, it is a prerequisite that the *árbečeahpit* cannot demand to remain anonymous. The data collected

can be perceived as stronger and more reliable, both from the perspective of the indigenous people and other sections of society, because the separate groups know whose knowledge formed the basis for the data. From a Sami perspective it may be important to know that it actually was Sami who shared their knowledge and no one else. To take tin wire embroidery as an example, it is not only the Sami who have mastered the technique, and in the documentation of patterns, it is important for the Sami to know that a Sami designed the pattern, and also where the pattern comes from. For the Sami population, it is also important to be aware of who shared their knowledge, and the tradition bearer's name enables the Sami to determine directly from which area e.g. a pattern originated. A Sami from the same area as the tradition bearer can determine from the pattern to which family it belongs. This knowledge can be of great significance for those trying to regain their identity and their lost heritage; via non-anonymous tradition bearers it is possible to recreate e.g. a *gákti* (Sami costume) from the area they came from, perhaps with patterns, colouring of bands, etc. peculiar to the family. Who the tradition bearer is and which area or family he or she belongs to can be of much greater significance for the individual Sami or other indigenous person than for the researcher. There may be several different ways of using the collected data at a later stage, and how it is used depends on who the user is.

If the method used permits it, anonymity and confidential treatment of data should be offered (*Inuit Tapiriit Kanatami and Nunavut Research Institute* 2007; *Inter Tribal Health Authority* 2005; *Kahniakehaka Nation* 1995; *Principles for the Conduct of Research in the Arctic* 2008; Longley Cochran [2009]). In other cases, the researcher must discuss with the tradition bearers the possible implications of anonymity. Researchers should also be aware that a demand for anonymity might arise from the tradition bearers. Sami communities are often small, and the inhabitants know each other and to some extent also control one another. In such small communities it may be difficult to ensure full anonymity for an individual, and this should be explained to the tradition bearer. At the same time, the tradition bearer may wish to remain anonymous in the material. The requirement of anonymity and the possibility of meeting such a requirement are closely connected to the particular methods used in the documentation project. If the documentation is concerned with general subject matter, it is easier to promise anonymity. In the presentation of *árbečeahpit* it is possible to omit the age and place of residence (district affiliation), but the gender can be more difficult to leave out, as it may be relevant to the study. If the researcher considers it difficult to ensure anonymity, this should be communicated to the

tradition bearer, who can then determine whether he or she is still interested in taking part in the project.

Confidentiality is equally important. The researcher and the informant must agree on what may constitute confidential information in the joint project. The person who shares knowledge may not want parts of this knowledge to reach the public domain, e.g. private family matters, certain knowledge about individuals, other specific events, etc. If the knowledge collector is known to the chosen tradition bearers, they will often be much more forthcoming with information than they would be with a collector who was a complete stranger. It is thus a considerable challenge for the researcher to decide which information is too sensitive to be made public. This may be information that the tradition bearer provides in all confidence, which really has nothing to do with the documentation project (Gaup 2008; see also Nordin 2002). The researcher must then ensure that such information is not presented in the final material.

If knowledge is stored in a database in close connection to the documentation work with the tradition bearer, it must be made clear to those who possess the required knowledge that it will be difficult to edit and remove parts of the material at a later stage; they will thus be aware of this if they reveal personal and sensitive information. This must, however, be stipulated in the agreements between the researcher and the tradition bearer before the actual documentation work begins, as the latter will then have time to reflect on whether he or she is interested in joining the project. There is another aspect to be considered here, namely that if the data is to be transferred to the archives or databases that store and preserve *árbediehtu*, this must have been discussed with the *árbečeahpit* in advance, and must be stated in the agreements between the interested parties. There are various options for dealing with confidential material. One is simply to remove the confidential data on the grounds that it was the wish of the *árbečeahpit*. Another option might be that the researcher agrees with the *árbečeahpit* that the material should be marked as secret before it is released, and that the respondent can determine when the material will be made available, e.g. 10 or 20 years after his or her death, or in agreement with the person involved. Allowing relatives to participate in such decision-making after the person in question is no longer with us can be fraught with problems. The relatives may disagree on the extent to which the knowledge should be made available to others than themselves. All aspects of the availability of material to which *árbečeahpit* have contributed must be

determined together with the person concerned, and regulated by agreements.

Compensation for *árbečeahpit*

Some of the ethical guidelines which form the basis for this study mention the issue of financial compensation for tradition bearers. During one of the first seminars of the *árbediehtu* project, in Kautokeino in August 2008, attended by Sami tradition bearers, the question of compensation of *árbečeahpit* was discussed.

The ethical guidelines of other indigenous peoples suggest that a fair and adequate compensation should be paid to those who volunteer as knowledge bearers in a project (Inuit Tapiriit Kanatami and Nunavut Research Institute 2007; Kahniakehaka Nation 1995). It is important to emphasise that it is the time the *árbečeahpit* devote to the project through their participation which is compensated financially, and not the knowledge conveyed. Those involved in the project cannot assume that *árbečeahpit* are able to take part without financial compensation, because such participation may involve several meetings and each meeting may last several hours. *Árbečeahpit* offer their time, which they may in fact need for other activities. The time involved belongs to the researcher's working hours while the knowledge bearer is expected to give of his or her "free time". The relationship between tradition bearers and researchers should be based on equality in all respects (*Mi'kmaq Ethics Watch Principles and Guidelines for Researchers Conducting Research With and/or Among Mi'kmaq People* 2008; Kuokkanen 2008). One way to address the issue of financial compensation may be to offer *árbečeahpit* the equivalent of the lost income according to the relevant salary scales. Those who are planning to implement a project can at the financing stage apply for funds to cover the costs of the participation of the knowledge bearers based on the time they are expected to dedicate to the project. The compensation will therefore not be arbitrary but regulated.

In agreements between the parties, e.g. free and prior informed consent, the terms of compensation should be set out in order to avoid misunderstandings. Compensation or participation in the project can be recommended but must not be required. Compensation for *árbečeahpit* is a sensitive issue; the researcher may have to deal with it carefully and decide on each case separately, while at the same time giving all tradition bearers in the same project fair and equal treatment.

Acceptable practices in the local community

In traditional knowledge documentation, there is no given method which is more suitable than any other; indeed successful documentation work usually requires a combination of methods (Hansen & Van Fleet 2003; DCI 1991; Grenier 1998). Many of the methods used in connection with the documentation of traditional knowledge are derived from the methodology of the social sciences and give priority to qualitative rather than quantitative data collection.

> "(...) to describing traditional knowledge in a written form, the local community may want to include maps, photographs of preparation or plant involved in a process, drawings, audio and videotape for interviews. Group discussions, individual interviews, and firsthand experience are essential in capturing traditional knowledge as accurately as possible. In addition, it may be necessary to collect and preserve physical artifacts and specimens as a part of the traditional knowledge-documentation process." (Hansen & Van Fleet 2003, 35.)

There are many methods to choose from, and the researcher must decide which of them is/are most suitable for the implementation of the project (Grenier 1998; Hansen & Van Fleet 2003). The choice of method must also involve a certain degree of flexibility. A basic rule might be not to keep to only one method.

> "It is important to use a variety of methods and all possible means to capture this knowledge, as a single method alone cannot capture all aspects of traditional knowledge, and different methods work better for some types of traditional knowledge than others" (Hansen & Van Fleet 2003, 35).

Before a traditional knowledge project is begun, the choice of method should be well thought out and thoroughly examined, and one should also be aware that the method or methods may have to be modified or completely replaced after the commencement of the documentation process. The documentation work must clearly describe how all traditional knowledge and related material have been collected, how they are used and from which group they originate.

This information may be of importance at a later stage, e.g. if questions arise concerning the data collection.

It is vital that the chosen methods are acceptable to the local community (*Inter Tribal Health Authority* 2005; *Principles for the Conduct of Research in the Arctic* 2008). The people involved must not be humiliated in any way or take offense at any of the methods used in the documentation project. The methods should not be such that *árbečeahpit* feel upset or cheated long after the project has been completed.[2] The methods employed must treat people with respect before, during and after the project.

Gollegiella: language use

A great deal of traditional knowledge lies in the indigenous languages (Guttorm & Labba 2008; Ryd 2001). There are many words describing natural phenomena, handicraft terminology, etc. and various special expressions which cannot easily be translated into another language. It is by no means certain that all words, expressions, nuances, etc. can be translated satisfactorily into another language, so that some of them may become lost in translation. "There is a fear of loss in translation when writing down the information because some components of language cannot be translated into another" (Longley Cochran [2009]). If the documentation is conducted in a language other than the local one, the words and expressions of the local language should be recorded and used in the final product, with a translation of the meaning of the words given in brackets. In the procedure proposed here, words, expressions, etc. will be preserved even if the researcher does not know the language. If special words and expressions can be preserved intact as accurately as possible, they can be passed on to future generations.

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2   In the late 1910s and the 1920s, Herman Lundborg of the State Institute for Racial Biology in Uppsala carried out, recorded and photographed skull measurements of Sami people on the Swedish side of Samiland, which the descendants of the Sami concerned found insulting and degrading. There is also a book which presents images of these Sami with accompanying notes on their skull dimensions, etc.

Ideally, all documentation should be in the language spoken in the community, but this is not the reality.[3] If the circumstances allow, the local language should be used in meetings with the tradition bearers and in the documentation work (*Inuit Tapiriit Kanatami and Nunavut Research Institute* 2007; *Principles for the Conduct of Research in the Arctic* 2008; Longley Cochran [2009]; IIRR 1996). This recommendation should also apply to the Sami community, especially if the *árbečeahpit* speak the Sami language. It is often easier for Sami speakers to express themselves in the Sami language, both because this may be their everyday language and because the subject matter belongs to Sami culture or Sami society. It may be easier to express oneself in Sami as the words, memories and experiences connected to the activity at hand are more readily found in one's own language. It may seem unnatural and artificial to talk about *árbediehtu* in a different language than the everyday language.

In contact with the local community and its members, information about the project should be provided in the local language (*Inuit Tapiriit Kanatami and Nunavut Research Institute* 2007; ITC [no date]). This could be particularly important if the documentation cannot be conducted in the local language. The project manager can for example distribute written information in the local language as to what the project is about, its purpose and goals, and how individuals can get in touch with the project. If there are linguistic complications which may affect the quality of the documentation work, it can be advantageous to use interpreters and translators, so that such language problems will have minimal influence on the final result. It may also be important to use interpreters in other communication with the community to ensure that everyone receives the same information (*Principles for the Conduct of Research in the Arctic* 2008).

When a researcher or other person works with the collected data, the traditional names of people, animals, places and objects, together with other local expressions are to be used (*Assembly of Alaska Native Educators* 2000; Hansen & Van Fleet 2003; IIRR 1996; DCI 1991). If names are altered, translated or the names on a map are chosen, it may be difficult for others in the local community to benefit from the documented traditional knowledge. The local people have first-hand knowledge of the indigenous names, and

3   In some areas of *Sápmi*, Swedish, Norwegian, Finnish or Russian is the everyday language for many Sami as a result of the various countries' policies towards Sami in previous centuries. In these areas it may be more natural to carry out the documentation in the majority language, into which the *árbečeahpit* readily incorporate special Sami expressions. The choice of language for the documentation work can be determined in the course of the initial contacts with the local community.

these names can contain much information for those familiar with the language. A place name may provide a description of nature which can help people find their way in the countryside and know what to expect there. This kind of *árbediehtu* will disappear if the local words and phrases are not used. This should apply in the documentation of *árbediehtu*, for a person familiar with the Sami language can extract much information from a study of the material with its regular use of special Sami words and turns of phrase. In this way, documentation projects also serve to preserve languages.

Who owns *árbediehtu*?

The ownership of knowledge is a complex issue. An equally complex issue is whether one can own Sami traditional knowledge. *Árbediehtu* is owned both collectively and individually by the Sami population; the researcher must be well aware of this fact. Neither international nor Norwegian law can give adequate protection to *árbediehtu* as collectively owned knowledge (Henriksen [2009b]). Not all Sami possess the same *árbediehtu* and therefore the ownership rights must be determined on a case by case basis (Henriksen [2009b]). The context of the documentation work will thus give an indication of who has the right to the knowledge.

> "The resources and knowledge of indigenous and local communities can be collectively or individually owned. Those interacting with indigenous and local communities should seek to understand the balance of collective and individual rights and obligations. [The right of indigenous and local communities to protect, collectively or otherwise, their cultural and intellectual heritage should be respected.]" (UNEP/CBD/WG8J/6/4.)

After the documentation process, the researcher should not claim any ownership rights to the collected *árbediehtu*; it will continue to be owned by the Sami population. The only difference is that the researcher chose to record it, but that does not give him any authority to sell the knowledge or commercialise it for his own account. How the collected knowledge may be used is an issue to be addressed in agreements between the researcher and the community involved.

> "Ownership of Indigenous knowledge (intellectual and cultural property rights) gained by the research team, will need to be

> negotiated with the relevant community/individuals, (...). This refers to all aspects of written works, recordings, photographs, artworks, and music composition with commercial potential, to ensure ownership protection of all parties." (WINHEC 2009, 11.)

When traditional knowledge is collected and preserved in different sites from where it traditionally belongs, it is easier for more people to benefit from it and utilise it in different ways. The local communities and individuals involved must therefore be able to influence who has the right of access to the knowledge and especially how it can be used, without their indigenous culture being exploited. *Árbediehtu* belongs to *árbečeahpit,* local communities or in some cases the whole of Sami society, irrespective of whether it is still handed down in a traditional way or whether it is collected, recorded, and preserved at various institutions.

Storing and preserving documented *árbediehtu*

Documented traditional knowledge that has been recorded by a researcher will normally be stored or preserved elsewhere than with the tradition bearers and the community. Indigenous people often feel that they willingly share their knowledge but when the researcher goes home, it ends up in a place a long way away from them and they have little opportunity to benefit from the material which results from their knowledge. Researchers may find it difficult to promise that the material will be kept at a site near the indigenous people because of practicality, but this should be the ideal goal.

When knowledge is documented, we also face questions about how and where it should be stored and preserved, and who will have access to the material. These are important issues for indigenous peoples, because they no longer merely want to share their knowledge but also demand that it be made available to them. Traditional knowledge researchers should thus reflect on such aspects of their work and discuss them with the tradition bearers and the community involved, or at least they should be able to explain exactly what will happen to the knowledge when it has been documented. If the material is to be archived upon completion of the documentation project, the *árbečeahpit* should be made aware of this. When material is submitted to an archive, it is difficult to know who will access the material because archives are often available to the general public. The *árbečeahpit* have the right to receive such

information before the project commences as it may be an important factor in their decision to participate.

Árbečeahpit and other people from their community must also have free access to the databases, archives, etc. containing the relevant material, and this should preferably be stored in or near the local indigenous community, so that they can realistically consult the collected material (*Inuit Tapiriit Kanatami and Nunavut Research Institute* 2007; *Assembly of Alaska Native Educators* 2000; *Kahniakehaka Nation* 1995; *Principles for the Conduct of Research in the Arctic* 2008; ITC [no date]). The data often ends up at an institution in another part of the country and the indigenous community who have shared their knowledge thus find it difficult to gain access to it (*Inuit Tapiriit Kanatami and Nunavut Research Institute* 2007; Myrvold 2002, 45–55). In the agreements drawn up between the researcher and the tradition bearers/local community, it must be stipulated how the collected material will be returned to the people involved, e.g. how many copies of the final material each tradition bearer will receive. The parties concerned must also come to an agreement on how the original material will be preserved on completion of the documentation project. This is not something for the researcher to decide of his/her own accord, but the local community must decide how the material should be preserved.

In all storing and preservation of traditional knowledge occasioned by living people, the fundamental guiding principle should be the protection of the participants and their knowledge (*Inter Tribal Health Authority* 2005; Hansen & Van Fleet 2003). The people who volunteer to let others partake in their stores of knowledge must not run any risk of being misused or ridiculed in any way. The researcher has therefore a responsibility to review the material before he/she hands it over to e.g. an organisation in order to ensure that no *árbečeahppi* can appear in a negative light through his/her account or information. If there is information in the material that the researcher considers to be false, or if the tradition bearer felt unwell during some meetings, the person responsible for the material should consider carefully whether it should be released to a wider audience, as storing or preservation in e.g. a museum may imply. All of the above-mentioned points constitute information which can be regulated in an agreement between the knowledge collector and the *árbečeahpit*.

Árbediehtu – locality-specific

All *árbediehtu* is more or less locality-specific. *Árbediehtu* may be concerned with inner nature, i.e. psychological aspects which may be shared by much of the population, while e.g. knowledge of how best to move reindeer between different areas is linked to people within a specific geographic locality. On the other hand, knowledge of how to make *nuvtah* (winter shoes of reindeer skin) or *gákti* (Sami costume) may even be connected to just one family. It is therefore important that the collector of traditional knowledge in a certain area respects not only the local culture in general but also the variations within individual families with respect to customs, habits, practices, etc. (*Inuit Tapiriit Kanatami and Nunavut Research Institute* 2007; *Principles for the Conduct of Research in the Arctic* 2008). "Local knowledge from different locations or groups are often inappropriately combined or generalized to present a generic picture of local Inuit knowledge which is, in fact, distinct or unique" (Inuit Tapiriit Kanatami and Nunavut Research Institute 2007). If the researcher collects cultural elements from one area before he/she has already documented similar traditional knowledge in a nearby Sami area, there is a danger that the unique traditional knowledge of some communities will not be documented. For this reason, traditional knowledge from different geographical areas must never be mixed, as it may give a distorted picture of the *árbediehtu* in the areas concerned and at a later stage provide false information to those who make use of the knowledge (*Inuit Tapiriit Kanatami and Nunavut Research Institute* 2007).

If we begin to merge traditional knowledge from different areas, the picture of *árbediehtu* which emerges will be too general, leading to the possible disappearance of the unique traditional knowledge of each individual area. An awareness that every local community is unique will enable us to more easily demonstrate how dynamic and flexible society is, and that there are many local adaptations and solutions based on the various ecological niches to be found in *Sápmi* which have formed the livelihood of the Sami.

Giving credit to the *árbečeahpit*

In projects aiming at the documentation of traditional knowledge, it is vital that local people take part. The Sami, like the Inuit and many other indigenous peoples, have had negative experiences of not being acknowledged or compensated fairly in e.g. documentation projects; it has not been made clear that they were the knowledge contributors. However, the knowledge

contributed to a project by indigenous peoples is often a prerequisite for its implementation. "Inuit participants in research projects have not always received appropriate credit in research publications, reports etc. and/or have not been compensated fairly for their important contributions" (*Inuit Tapiriit Kanatami and Nunavut Research Institute* 2007). The negative feeling mentioned above also applies to the Sami population; they share their knowledge, experiences and memories, but receive nothing in return. They are often not acknowledged in the final product. Therefore, the people who shared their knowledge must also get credit for it (*Inuit Tapiriit Kanatami and Nunavut Research Institute* 2007; Longley Cochran [2009]). At the very least, they should be named and thanked in the credits of the project, e.g. in the preface to a book or in the scrolling text at the end of a film. It should be made clear that the participation of the *árbečeahpit* was a prerequisite for the implementation of the project and that it is thanks to them that it has been possible to document, preserve and transmit the knowledge.

If the collected material results in a book, the authorship should be shared with whoever contributed knowledge to the project (*Kahniakehaka Nation* 1995). This should also be stipulated in the agreements before the actual project starts, so that no one will feel overlooked or exploited after it has been completed. It will have been a joint effort by the researcher and the *árbečeahpit* to successfully record, photograph or film the traditional knowledge material. The entire product is based on the knowledge of *árbečeahpit*; the researcher has merely recorded the knowledge in a form that can be preserved and archived. In the documentation of *árbediehtu*, the researcher should reflect on such issues as: Whose knowledge will be published, his own knowledge or that which he has helped to preserve?[4] In most cases shared authorship is recommended.

Árbediehtu can also be used in other ways in the final product, e.g. in documentation of land use, where a number of *árbečeahpit* have shared their knowledge of how a specific area was cultivated and used according to the season. In this type of traditional knowledge, the central goal is not to preserve a creative process, but to document how a specific geographical area has been used, e.g. where various families cut their shoe hay, or where they picked cloudberries. In the documentation of this type of knowledge,

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4   One example where shared authorship should have been used is Yngve Ryd's book "Snow – by a Reindeer Herder". The entire book is based on John Rassa's *árbediehtu* of snow. Ryd himself writes that he and Rassa worked on the book for five winters, meeting about twice a week. It is clear that the entire book draws on Rassat's store of knowledge about snow, and that Ryd reproduces that knowledge (see Ryd 2001).

shared authorship will generally be less important as the final product will be based on the *árbediehtu* of many individuals. However, the names of those who shared their knowledge for the project should be mentioned.

How to deal with shared authorship is to some extent for the researcher to decide. It will also depend on the subject matter and the form of collection, e.g. whether one individual has shared his or her knowledge or a number of people have been involved in the project. It is not possible to give one clear guideline for all cases, since there are many external factors. The individual context must determine how the tradition bearers will be acknowledged and thanked. The questions outlined above should be considered carefully by the researcher before the final result is made available to the general public, if only because the researcher is the one who knows best to what extent the various participating *árbečeahpit* should be given credit.

Final products based on the knowledge of *árbečeahpit*

If traditional knowledge documentation is carried out in indigenous communities, the requirement is that the results should be returned to the communities involved and especially to the tradition bearers (*Inuit Tapiriit Kanatami and Nunavut Research Institute* 2007; *Principles for the Conduct of Research in the Arctic* 2008; Longley Cochran [2009]; DCI 1991). A collector of knowledge must give tradition bearers the opportunity to benefit from the final material, whether recorded in books, films, databases, etc. If the material is in a database, the tradition bearer should be enabled to access the database without difficulty. The local community of the tradition bearer should also be given the same opportunity since the dissemination and sharing of traditional knowledge is vital for it to survive. If the material is sent to schools, for example, teachers will be able to integrate traditional knowledge into their teaching, even if only at a theoretical level. Another way of giving back something to the community is for the researcher to return to the area after the project is over, and hold one or more lectures/film shows/slide shows, etc. based on the material collected there. How the project can give something back to the tradition bearers and their community must be adapted to the methods the community itself uses to pass on information and knowledge. The form of feedback to the local community should be stipulated in the agreements drawn up between the parties concerned. It must never be the case that the researcher returns to the community to teach the people about their own *árbediehtu*. The tradition bearers will continue to be the experts,

even though their knowledge has now been documented. The outcome of the collected material must be presented to those who participated in the project with the utmost respect and humility.

When the collected material has been structured, it must be returned to *árbečeahpit* or other knowledgeable local people, so that they can study it and confirm that the researcher has understood the traditional knowledge correctly and recorded it in an acceptable manner (*Assembly of Alaska Native Educators* 2000; *Kahniakehaka Nation* 1995; ITC [no date]). For the *árbečeahpit* it may be important to go through the material to which they contributed, in order to give them the opportunity to verify that they said what they intended to say, or to check whether they forgot to talk about or demonstrate any aspects of the traditional knowledge relevant to the goal of the project. The researcher also benefits from this approach of letting the experts in the field go through the material to ensure it is correct. In addition, sending copies of interviews, photographs, films, etc. is often appreciated by relatives of the tradition bearers, who can thus also benefit from the knowledge. When the tradition bearer has examined the material he or she contributed to, only to discover that the researcher interpreted the *árbediehtu* in a different way than what was intended, the researcher must take account of this information from the *árbečeahpit*. If the two parties cannot agree on some aspect of the *árbediehtu* collected, this should be reflected in the final report, but also in the raw data. The exact difference between the parties' points of view should also be indicated, preferably with comments by the *árbečeahpit* in brackets after the relevant place in the text (Oskal & Turi & Sundset 2007). This approach protects both *árbečeahpit* and researcher. The reader of both the raw data and the final product thus becomes aware that there has been disagreement on some details. In this way, *árbečeahpit* have no need to be afraid that their knowledge has not been reproduced correctly.

Final comment

In the above, I have presented a number of ethical guidelines which I consider could be useful starting points for guidelines for the documentation of *árbediehtu*. The guidelines I mention here are by no means definitive; I see this article as a basis for further discussion on how such guidelines should be devised. It may well be that more should be added in order to achieve as comprehensive guidelines as possible, or that other people may consider that some of the guidelines I have chosen here are not relevant to the Sami

community. Ethical guidelines are context-dependent. A basic document therefore fulfils its function as a guide to enable suitable guidelines for each individual project in *Sápmi* to be developed. The main objectives of the guidelines presented here are to protect *árbediehtu* in different perspectives and to protect tradition bearers from exploitation. This approach has been grounded in the Sami values. *Árbediehtu* is of great importance to the Sami identity, culture and way of life and it should therefore be documented according to the wishes of the Sami themselves.

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JAN ÅGE RISETH

Can Traditional Knowledge Play a Significant Role in Nature Management?

Reflections on Institutional Challenges for the Sami in Norway

Árbediehtu as Knowledge and Resource

All societies have a knowledge base which forms a foundation for the activities of everyday life. This is passed on from generation to generation, and individuals have access to it in their daily lives (Berger & Luckman 1980). In the Sami community, this knowledge is called árbediehtu, Sami traditional knowledge. It is part of what is known internationally as indigenous or traditional knowledge. Árbediehtu is an independent knowledge system deeply rooted in Sami culture and the Sami view of life. Fikret Berkes (2008) has studied analogous systems and calls them *knowledge-practice-belief-complexes*, based on the identification of coherent systems, see Figure 1.

We have adjusted the author's original figure (Berkes 2008, 18) in order to emphasise our focus on traditional knowledge and practices.

The figure has been designed for analytical purposes, i.e. to be used as a tool for understanding the basic relations between nature, knowledge, use and the relevant social context. The figure shows several internal levels: an intact nature and resource base; traditional knowledge about animals, plants, earth and landscape; traditional practices and management systems; social institutions with effective rules and customs/moral codes and a world
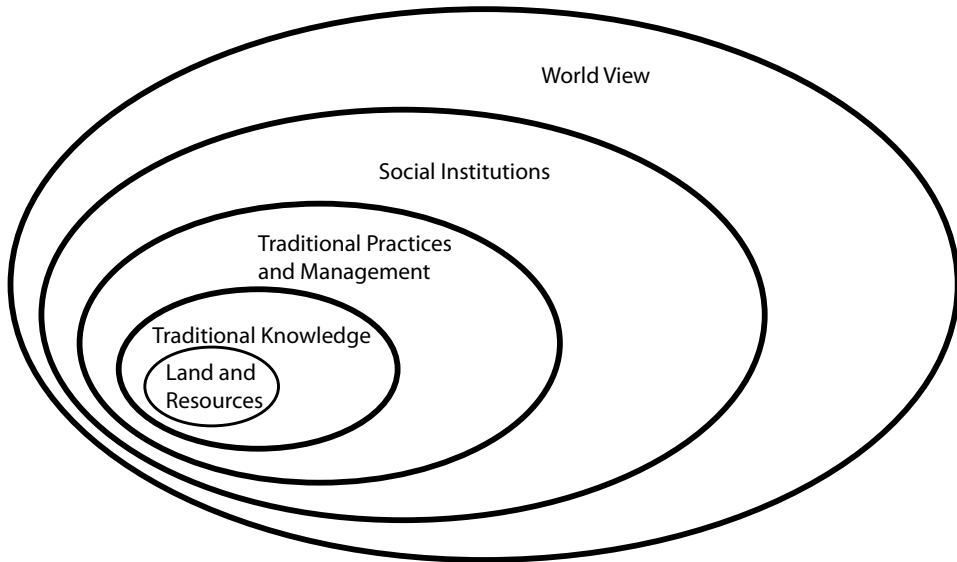
Figure 1. Levels of analysis for traditional knowledge and practice systems (Adapted from Berkes 2008, 18).

view including religion; ethics and belief systems, which forms a basis for interpreting the world we observe around us.

The *Árbediehtu* project focuses on the mapping, preservation and use of Sami traditional knowledge, i.e. the second and third levels in the figure. My aim in this presentation is to shed light on the significance of the fourth level, the social institutions, in interaction with the knowledge and its use and preservation. The conservation and use of Sami traditional knowledge imply a series of challenges. In this article we consider whether an institutional approach may contribute to a better understanding of the possibilities of meeting these challenges. The article aims to discuss which institutional conditions are, or may become, significant for the preservation and use of árbediehtu. The main focus will be on the use and management of nature, and the examples discussed are based on Sami conditions in Norway.

In order to discuss the interaction between knowledge and institutions, I would like to start by relating árbediehtu to epistemology.

Knowledge

Sami traditional knowledge is found locally with people who maintain a traditional Sami way of life (Vars 2007; Nordin 2008). To refer to the knowledge as traditional implies that its foundation goes back in time, and that it is passed on from generation to generation. Important fundamental aspects of this knowledge include surviving in nature, coping successfully with everyday activities, making a living, managing in life, etc. In the Sami context, it also includes more specific knowledge within limited spheres of activity, e.g. hunting, fishing, reindeer herding and *duodji* (Sami handicraft). Almost all of this knowledge is *practical knowledge*, i.e. knowledge about how to do something; "knowing how", as opposed to knowledge about what something is; "knowing that" (Ryle 1980). A distinctive characteristic of all practical knowledge is the fact that the form and content of the knowledge are inseparable from the bearers of that knowledge or the situations where it is taught and used. Nordtvedt and Grimen (2006) call this the *indexicality* of practical knowledge, i.e. that the knowledge has distinguishing marks showing where it comes from, who possesses it, and what it is used for. The design of the traditional Sami costume, for example, will tell most Sami people which area it comes from, the more initiated will be able to place it in specific families, and experts can often see exactly who the tailor was.

In Western history, practical knowledge has long been allocated to an epistemological shadow world, i.e. been under-communicated. This is the historical heritage from Plato and his concept of knowledge (*episteme*) as substantiated, true understanding. In the Western tradition, it is precisely *episteme* which has been the model for scientific knowledge[1]. By contrast, practical knowledge consists of skills based on familiarity with the world around us, and is therefore more difficult to articulate in relation to the Platonic concept. Plato's student Aristotle, however, introduced a distinction between *episteme* and two other forms of knowledge: *techne* and *phronesis*. While *episteme* is demonstrative knowledge about something eternal and unchangeable, *techne*[2] is knowledge about how to make things, and *phronesis* is knowledge about morally sound actions. In árbediehtu, everyday knowledge

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1   We thus typically call the theory of knowledge *epistemology*.

2   Techne is the origin of the term *technology*.

about arranging fishing nets, setting grouse snares and drying and smoking meat would be part of *techne*, whereas Sami life wisdom, including ethical and moral judgements, would come under *phronesis* (Jentoft 2006). These two concepts from antiquity embrace much of what we today call practical knowledge, but they were "re-discovered" relatively late in the last century (Nordtvedt & Grimen 2006) and have thus had limited influence on Western scientific thinking and practice.

However, the same authors (Nordtvedt & Grimen 2006) emphasise that practical and theoretical knowledge should be recognised as equally important forms of knowledge, since knowledge is not only expressed verbally, but also through action. They point out that there is much common ground between indexed (practical) knowledge and theoretical knowledge. Summing up, the authors state that practical knowledge is "learnable, criticisable, transmissible and articulable through action. And it may accumulate." (Nordtvedt & Grimen 2006, 190).

As practical knowledge is found in people, it is also personal knowledge. Knowledge may be seen as an interaction process between individual and culture. Personal knowledge is thus a mediator between human interests and an intersubjective way of thinking. It makes man a cultural being and bridges the conflict between tradition and reason. In using language, we participate in the knowledge and ideas woven into tradition, society and culture (Polanyi 1958; Rolf 1995). In accordance with this, the formation of knowledge is a process which is at the same time both social and deeply personal (Polanyi 1958). These two aspects of the nature of knowledge also have a more general manifestation in that knowledge is not only fundamental to all societies but is also a commodity which can be bought and sold in a market (Reichman & Franklin 1999).

Knowledge may also be understood from the perspective of common-pool resources or "commons" (see below), as knowledge is developed, used and maintained within both large and small variants of human communities.

Commons

Commons are resources that are common to large or small groups of people. In the well-known article "The Tragedy of the Commons" (Hardin 1968), the author uses the term to signify a free resource where no limits are imposed on

the users' exploitation of the resource. This use of the concept deviates both from the classical use and the use in the international research on commons which has evolved since the mid 1980s. Even though the concept may be used somewhat freely, the legal use of the concept is unambiguous in defining the right of commons as an exclusive collective right of ownership or use of a resource area (Jentoft 1998; NRC 2002). This right may belong to a limited group, such as a local rural community.

In the interior of Finnmark County, the *meahcci* (uncultivated outlying land) in Guovdageaidnu (Kautokeino) was typically a commons until an all-year road was built a generation ago. It was used exclusively by the *dálonat* (settled Sami) during the growing season and in cooperation with the reindeer herding Sami in the winter (Buljo 2008; Hågvar 2006; Riseth et al. 2010; Riseth & Solbakken 2010). Even though the local population has, over the last decades, been deprived of control through public measures, *meahcci* still shows clear signs of being a commons.

The growth and spread of the Internet has made it clear that just as with other commons, *knowledge commons* are also subject to social dilemmas, involving misuse and theft, exclusion and overpricing, and insufficient maintenance and quality assurance (Hess & Ostrom 2006).

Árbediehtu may also be understood as a commons. Such knowledge is a significant resource for those who master it, and it is exclusive in the sense that it is not accessible to all. At the same time, it presents a challenge as regards maintenance and transmission to future generations. It is also vulnerable to competition because of modernisation or marginalisation of the Sami way of life and there is furthermore a risk of cultural elements being misused by outsiders.

The Sami University College has compiled a report which evaluates how documented traditional knowledge should be managed (Joks 2009). The report discusses the relationship between individual and collective ownership of knowledge from an indigenous perspective and refers to a report written by the present chair of the UN Permanent Forum on Indigenous Issues, Victoria Tauli-Corpuz, who emphasises that collective ownership implies that knowledge belongs to a community, not an individual (2003). In accordance with this, the knowledge management report (Joks 2009) also stresses the importance of building up data bases and securing information systems as well as strengthening the role of the local community in the management

of knowledge. Tauli-Corpuz (2003) also emphasises that knowledge only has meaning within its own society, making it therefore difficult to move knowledge without it losing its original meaning. This last point is clearly connected to the above-mentioned indexicality of árbediehtu. This also gives relevance to a commons approach. In reality, it can often be difficult to distinguish between knowledge about a resource and the actual physical resource linked to such knowledge. Formal access to a resource may not guarantee successful use of the resource; a fishing license is in itself not sufficient to catch fish. In order to fish successfully, one normally needs knowledge of both the location of the fish and the use of the equipment. In many cases, practical knowledge will be the key that gives *de facto* access to the resource[3].

As previously mentioned, this article focuses mainly on institutions, but in addition to the social aspect of knowledge introduced thus far, we also need to consider the economic dimension, e.g. how far knowledge may be seen as a good.

Goods

Unlike standard economic theory which has divided goods into either private or public goods (Samuelson 1954), international research on commons resources has aimed at differentiating the perception of goods on the basis of certain general features, partly because of the importance of the management aspect. Table 1 presents an understanding of goods based on two dimensions; horizontal – whether the consumption is *rivalrous* or not, and vertical – whether it is easy or difficult to *exclude* others from consumption. If the consumption is rivalrous, it means for example that if you catch a certain fish, I cannot catch the same fish[4]. Whether it is easy to exclude others from a specific good will partly depend on whether the good is clearly defined.

The table shows four types of goods, where the two classical types, public and private goods, constitute extremes in having opposite properties in both dimensions. Club goods and common-pool resources are intermediate

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3   The example here is typical *techne*, whereas *phronesis* will be important in the management of the resource (Jentoft 2006).

4   At the same time, your catch this year will not necessarily limit my catch next year. In this case, it would be non-rivalrous consumption.

Table 1. A general classification of goods (adapted from Ostrom & Ostrom 1977)
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	RIVALROUS CONSUMPTION	
	Non-rivalrous	Rivalrous
Difficult	**Public goods** (e.g. weather forecasts, beautiful views, museum collections)	**Common-pool resources** (e.g. pastures, libraries, knowledge communities, teaching aids, counselling)
SIMPLICITY OF EXCLUSION		
Easy	**Club goods** (e.g. concerts, subscriptions, membership of a cultural association)	**Private goods** (e.g. reindeer, computers, books, personal knowledge of hunting techniques)

types. The common feature of public goods and common-pool resources is the difficulty of excluding potential consumers from them. For *public goods*, this is not a problem, as their consumption does not reduce them in any way. If you and I look at the same view or listen to the same radio programme, these goods are still accessible to other consumers. However, in the case of *common-pool resources,* e.g. the limited number of reindeer compatible with sustainable use of specific pasture land presents a challenge (independent of the difficulty in establishing the precise limit). There may similarly be a limit to how many apprentices a *duojár* (Sami master craftsman) has the capacity to teach, or how many doctoral students a professor can supervise. *Private goods* are distinguished by rivalrous consumption, but do not present a problem as one can easily exclude others from them. *Club goods* are easily excludable even though their consumption is non-rival.

It is important to note that the table only concerns the consumption of goods. For many goods with unproblematic consumption, their supply and maintenance may well present problems. This is what is called *the free rider*

problem. In the case of public goods, this problem is often solved in that the State provides the good, and that its supply and maintenance is financed by taxation. However, in the case of common-pool resources: Who is to take the responsibility for maintaining a reindeer corral? It should also be noted that similar but easily excludable goods (club goods) are easy to finance directly.

Specific goods cannot always easily be classified according to the table above, but the table does illustrate some common types of problems and challenges. It also shows that certain elements of árbediehtu can in principle come under each of the four types of goods. The collective ownership of indigenous peoples' knowledge emphasised by Tauli-Corpuz (2003) belongs to the categories of public goods and common-pool resources. It is important to note that for knowledge-related goods, there will often be a dynamic relationship between these two categories and the two individual categories, club goods and private goods, where the latter two will depend on the former two. However, it is often the relationship of individual goods to markets that creates challenges for árbediehtu.

Árbediehtu is put to the test in that it forms the foundation for the livelihood of the knowledge bearers. Because the knowledge is continually tested, it also has to be dynamic and adapt to changes in nature and society. Encounters with modern technology and Western society challenge traditional knowledge through e.g. markets offering simpler or more modern products and solutions. This can constitute a significant threat to árbediehtu, as the knowledge is tied to established practices that must be maintained in order to keep it intact.

The critical point will be how far traditional practices can be preserved parallel to new ones being introduced, as the Nenets are reported to be doing (Stammler 2008). Correspondingly, the reindeer herding Sami who still keep draft reindeer[5] and use them for racing, even if they use snowmobiles in their everyday lives, contribute to maintaining árbediehtu about taming reindeer and using them as draft animals. This shows how individuals, by developing their personal knowledge, contribute to the maintenance of a common resource. At the same time, the introduction and spread of the snowmobile in Sami reindeer husbandry (Pelto 1973; Nilsen & Mosli 1994; Paine 1994) is a good example of how innovations immediately perceived as beneficial may

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5   Intensively tamed reindeer traditionally kept for transport of persons and goods by hauling sleighs (in winter) or pack saddle (in summer).

contribute to a very rapid change[6] in traditional practices and consequently help to undermine a common knowledge resource.

Kalstad (1997) takes an extreme view of this process in stating that in modern Sami reindeer herding:

> "…knowledge about nature, animals and other people has lost some of its value… However, the technology ... has rendered the traditional knowledge dispensable" (Kalstad 1997, 140–141).

Production of the *lávvu* (traditional Sami tent) for sale may illustrate another type of problem created in the encounter with external markets. For many years the Sami company Venor in Guovdageaidnu (Kautokeino), basing its expertise on traditional knowledge, has been producing both traditional and modern *lávvu* tents and selling them commercially. The collective traditional knowledge here forms the basis for the market-oriented production of a commodity. Other companies, without any ties to the Sami community, have since started producing modern *lávvu* tents, based on the same collective Sami knowledge. Vars (2007) points out that:

> "…collective knowledge should still be collectively managed and owned, but there is a need to clarify how and by whom consent for the use of Sami culture in various contexts should be given. … how such knowledge and cultural expressions should be documented, managed, compensated, distributed and re-transferred." (Vars 2007, 161–162.)

Before moving on to a specific discussion of institutional aspects of Sami traditional knowledge, we shall consider in more detail the idea of institutions.

What are institutions?

Institutions may be described as frameworks and social conditions for actions. We are always influenced by standards or rules for what is acceptable, correct or sensible action in different situations. Institutions are, to put it rather simply, these standards of formal and informal rule systems that govern social

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6   The (probably) first snowmobile salesman came to Guovdageaidnu/Kautokieno in 1961 and left without any sale. Some of the first snowmobiles were bought in 1965. Four years later 95% of the reindeer herders had bought a snowmobile.

intercourse. Institutions may be explained as constant social structures that give meaning and stability to social life. Different social arenas are governed by different institutions. One definition that sums it up is:

> "… the conventions, norms and formally sanctioned rules of a society. They provide expectations, stability and meaning essential to human existence and coordination. Institutions regularize life, support values and produce and protect interests." (Vatn 2005, 83.)

Different aspects of institutions

In the traditions of different social sciences, e.g. economics, sociology and anthropology, institutions are defined in somewhat different ways, and the different sciences emphasise different aspects of institutions and their functions. The organisational sociologist Richard Scott (2001) has summed up different views and aspects in a common model. He describes institutions as consisting of three pillars: 1) the *regulative* pillar, 2) the *normative* pillar, and 3) the *cultural-cognitive* pillar. Specific institutions may be held up by one, two or all three of these pillars. Alternatively, we can consider the pillars as different layers of a structure that governs our actions.

In the regulative pillar, there are typically written *laws* and *rules* which are followed up with control of compliance and sanctioning of breaches. Speed limits on the roads are a typical example, where with the surveillance of automatic cameras, tickets are issued when we are photographed driving faster than the speed limit allows. The argument for such rules is expediency; in this case the intention is that the rules shall contribute to reducing the speed on the roads and in turn reduce the number of traffic accidents, injuries and deaths. It is also typical for such institutions that a third party, society's coercive apparatus, is behind the enforcement. This means that everybody knows that breaking such rules may result in punishment. Most of us adapt by complying with most of the laws and rules, if for no other reason than the desire to avoid punishment.

The normative pillar first and foremost embraces *values* and *norms*. Values are conceptions about preferred or desirable conditions, and indicate standards for actions and behaviour. Norms specify how things should be done and define legitimate means to reach aspired goals. Normative systems place limits on what is considered socially acceptable behaviour. In some Sami communities,

Laestadianism[7] has such a strong position that failure to attend congregations is likely to be perceived as a breach of socially acceptable behaviour. In other Sami communities, where there might be a similar percentage of Laestadians in the population, normally only confessors and seekers that attend meetings. Others are not expected to attend. In other words, the behavioural norms differ in this case between communities.

The cultural-cognitive pillar denotes shared conceptions about what constitutes the social world and also provides a framework for what is meaningful. This pillar comprises common ideas and a shared logic of action, e.g. through symbols and signs that give meaning to objects and actions. Compliance with this type of action pattern may often be due to the fact that one simply cannot imagine doing things in a different way from the usual one, i.e. that one's pattern of actions has become routine to the extent that it has become "the way we do things here". Another term used for such specific action patterns is *conventions*. Conventions are defined as rules for interaction that solve coordination problems and which we adapt to because we generally find it to be in our collective interest (Bromley 1989; Vatn 2005). Even though conventions are not regulated by a formal third party, there could be *social sanctions* tied to breaches of conventions.

In such cases, there will also be the question of norms connected to the compliance with conventions. In many Sami communities, for example, there is, or has been, an exact distribution norm as to which marshes the various families can use to pick cloudberries[8]. Such a pattern may be so firmly established that everybody is fully aware of it and nobody questions it. Then if newcomers arrive who do not know this and are not socially intelligent enough to ask, problems may arise. Maybe they are not only picking on other people's marshes, but also breaking another norm by picking unripe berries? Such deviants will soon get a reputation, stories may be told about them, and they may get a nasty nickname. These are social sanctions, maybe not very strong, but they often work; many adapt after having been warned. Research on such institutions also indicates that the strength of the sanctions should be in reasonable proportion to the offence (Ostrom 1990).

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7   Laestadianism is a Lutheran revival movement important in many Sami areas.

8   Here we will not discuss whether this is also a question of rights.

Institutions and legitimacy

Institutions need *legitimacy* to work, i.e. the rules that are assumed to govern our actions must, at least to some extent, be perceived as desirable and reasonable in order for us to comply with them. The closer the correspondence between society's institutions and our own conceptions, the better the institutions will work. As we have shown above, it is also clear that institutions borne by all three pillars will tend to be the most stable ones. Berger and Luckmann (1980) describe legitimising as the release of meaning of another (higher) order based on the fact that institutionalised activities at an early stage develop as repetitive patterns of actions, and that these gradually develop common conceptions among the participants through affiliation with broader cultural frames or norms.

Legitimacy may be connected to different authorities, and what is legitimate may be in dispute, especially in complex situations where support from one authority may undermine support from another, so that it becomes a question of whose support counts the most. Confirmed authorities may therefore maintain structures they consider suitable even if challenged by less powerful groups. The foundation for legitimacy varies between the three pillars. The regulative pillar is concerned with acting in accordance with a prevailing set of rules. In the normative pillar, a deeper, moral basis is emphasised in order to affirm legitimacy. Normative policy instruments tend to be internalised to a much greater extent than the corresponding regulative ones. Thus, the bases for legitimacy vary between the pillars, and they may be in conflict. What is recognised as legitimate will therefore vary according to which elements of the institutions have precedence over the others.

Formal rules that lack legitimacy and are not normally complied with or enforced gradually lose their significance. Even though duck hunting in springtime in Guovdageaidnu (Kautokeino) Municipality is formally only permitted on the Kautokeino River according to the Wildlife Act, and only as a trial arrangement, everybody knows that this type of hunting is conducted over a larger area. It is also important that such hunting goes back a long time, whereas the public attempts at regulation are recent. Institutional analysis has concentrated on studying *working rules* or *rules-in-use*, i.e. the rules that the resource users normally adapt to and comply with[9] (Sproule-Jones 1993).

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9   Regardless of whether the custom or practice is legalised by the authorities or not.

Which mechanisms maintain the institutions?

A distinctive feature of institutions is their durability. It is thus reasonable to ask what maintains them. Scott (2001) indicates that they are maintained by various types of carriers: 1) symbolic systems, 2) relational systems, 3) routines and 4) artifacts, and that these carriers cross the three pillars, so that the relationship may be described in a matrix format.

Symbolic systems may thus help to maintain laws and rules, values and expectations, patterns of action and conventions. One example could be how the system of symbols used in traffic signs works to stabilise traffic behaviour by indicating traffic rules and expectations for behaviour in traffic, and also how we generally react automatically by reducing speed when we see a sign symbolising lower speed.

Relational systems are based on patterns of expectations tied to patterns of social networks of positions, which in turn are connected to a pattern of social roles. Such systems both limit and empower the role players while simultaneously expanding and changing. Relational systems are, for instance, a significant element in large governance systems such as a state apparatus, which rests on all three pillars with the power of coercion, the control of norms as well as internalised patterns of action. A bureaucrat who does not have the sense to go through formal official channels may therefore easily get into trouble. On the other hand, the adaptable bureaucrat will often advance in his career more rapidly than a competent, but less flexible, professional.

Institutions may also be supported by structural activities in the form of habitual actions and *routines*. Many institutional analysts refer to routine activities as bearing elements in organisations, but the same may also apply to daily life. Two sisters who live apart but get together one day with their little children do not need to talk about what has to be done from when they start getting the children ready for bed until they can both sit down on their own and chat about old memories, everyday problems or whatever else they might be interested in. The basic structure of routines which they learned in their childhood home is intact even if they solve some problems in rather different ways from the previous generation.

Artifacts are elements of material culture, developed by human ingenuity for use for various tasks. The production of artifacts may be based both on formal rules and on normative standards, and may carry symbolic values.

Modern technology also includes artifacts such as computers, which have to fulfil formal demands for e.g. security, business standards of performance and capacity and less articulated demands for user-friendliness. Sami *duodji* is not regulated by laws, but is subject to very strong norms and values, regarding both production and use. Sami crafts have to unite esthetics and functionality and also follow traditional rules for the cut and design of specific details. The very existence and use of *duodji* also contribute to maintaining traditional customs tied to the use of the objects. Maybe the wearing of traditional Sami clothes also serves to encourage traditional Sami social life and social conventions in general?

Institutional levels and relevant knowledge

At the basic level, institutions comprise the rules we encounter in daily life, e.g. as users of a fishing lake. Whereas for most of the people in our community, the fishing lake is a *guollemeahcci*, a lake where we can catch fish for dinner, the same lake might for a few other families be their *guollebáiki*, a lake where they can catch their winter supply of fish (Schanche 2002). The specific rules followed by all users of this fishing lake are called *operational* rules (Kiser & Ostrom 1982), or *action rules*. But these are by no means the only factors to take into account; we also have to consider biophysical aspects and deeper institutional stipulations.

In studying the management of natural resources, we easily realise that rules are not the only contributing factor in deciding the possible actions of the resource users. How much fish one can catch in a lake naturally depends on how much fish there is, the amount of spawn, the condition of the lake bed, the equipment available, etc., i.e. a whole series of biophysical conditions. Institutional analysis presupposes that rules for harvesting are established on the basis of knowledge (traditional knowledge and/or research-based knowledge) about such conditions. One of the prerequisites for effective rules is precisely that the rules should be well adapted to the resource and its use (Ostrom 1990).

We presuppose a social process behind the establishment of operational rules. In principle, we imagine this to be a *collective decision-making arena*, but in reality the operational rules-in-use often originate from several sources; they may be based on formal decisions like laws, regulations and legal decisions, on informal decisions such as local customs and established traditional practices,

or direct decisions by the resource users concerning agreements on dealing with specific situations when they arise. The rules may also to a varying degree be followed up by monitoring and enforcement. Figure 2 suggests some combinations.
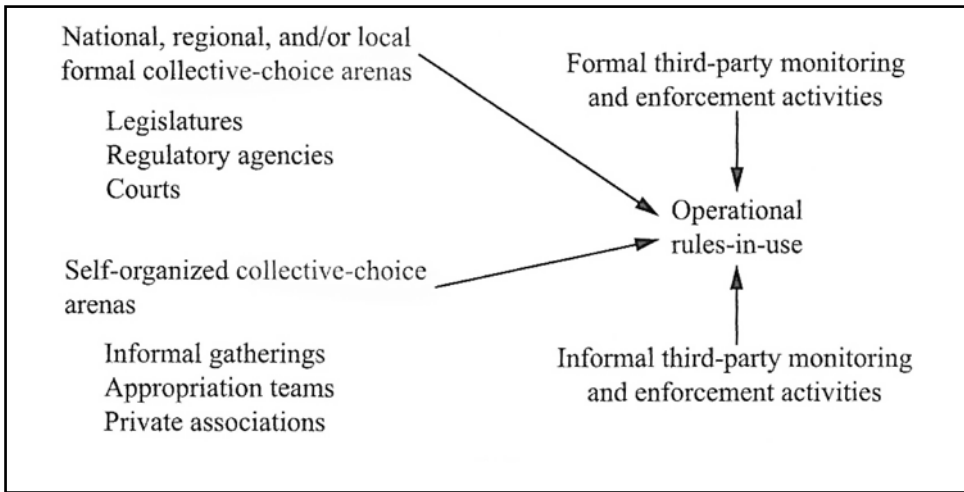
Figure 2. Collective-choice arenas and operational rules-in-use (Ostrom 2005, 62).

If everything takes place within the domain of the traditional Sami subsistence economy (Hågvar 2006), this collective decision level may consist of informal adaptations within a small local community (in Sami *gillevuoddu*) where the various families and extended families over time have adapted to each other's use, even though they may not have formally decided upon which areas may be used by whom and for what purpose. One may also have a formal organisation with an annual meeting and a board, with written resolutions about the use and distribution of resources. In this type of decision-making arena, traditional knowledge will be the basis for assessments and decisions. This does not prevent the use of other types of knowledge if necessary.

However, the collective decision level may alternatively be part of public proceedings, such as the establishment of a protected area pursuant to the Nature Diversity Act. In that case, the frame of reference would be abstract, impersonal and research-based textbook knowledge. Furthermore, in some such processes, local users and interested parties have experienced that there is no actual dialogue at all (Zachrisson 2008; 2010; Arnesen & Riseth 2008; 2009). This may be explained by the theories of *model power* (Bråten 1998)

and *cooptation* (Selznick 1948). The model power theory denotes power by virtue of models of reality in dialogues between different parties and also unequal distribution of what passes for relevant knowledge, who possesses this knowledge, what is deemed relevant, etc. Model power is exercised when one group's perspective comes to control or govern the dialogue without reference to the content of the knowledge as such. Faced with model power, local players may experience being disempowered, regardless of the argumentation they present and the knowledge base for such argumentation, since they do not fit into the model. Cooptation refers to those governing the process establishing connections to key players in whom the public has confidence, which thus contributes to lending legitimacy to the governing powers. This concept may apply when, for instance, local councils or expert bodies reduce the relevance of the local population's argumentation.

The next level in an institutional analysis is the so-called *constitutional* level, where rules apply for how decisions are to be made at collective level, in this case the decision making process concerning a protected area. The framework for such processes may have great importance for the outcome of knowledge encounters between traditional knowledge and textbook knowledge. For public decision-making processes, the constitutional level will normally be the national political level. In our example, this would include the Nature Diversity Act and the National Park Plan, and also the recommendations typically issued by the Ministry of the Environment and the Directorate for Nature Management in the form of guidelines, directives and practices (Arnesen & Riseth 2008; 2009).

The deepest[10] level in institutional analysis is the *meta-constitutional* level. In our context, the example would be international environmental and indigenous policies. The point of this level is that powerful guidelines can be issued regarding the kind of national politics a state should pursue[11]. There has been a rapid development in international indigenous politics and indigenous peoples' rights for the last two decades. The 1989 ILO Convention No.169[12] has been particularly important for the work of the Sami Rights Committee and the final version of the Finnmark Act from 2006, which were concretised in the Sami Parliament's "Guidelines on changes in use of outlying land"

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10 In practice. In theory, there are no limits to the amount of levels one may conceive.

11 For a more extensive discussion on this, see Riseth et al. 2010.

12 http://www.ilo.org/ilolex/english/index.htm

from 2007, which attaches considerable importance to a continuation of traditional Sami use. The UN Convention on Biological Diversity from 1993[13] has also been very important for the work on the new Nature Diversity Act, which replaced the earlier Nature Conservation Act as of June 1st 2009 (*White Paper* 52, 2008–2009). Following consultations, preservation of the natural foundation for Sami culture and experience-based knowledge has been included in the statutory objectives of the new Act (*White Paper* 52, 2008–2009; *The Sami Parliament* 2008); see more on this below.

Viewed as a whole, the *institutional* operational conditions for nature use and management are formed in a dynamic interaction between the biophysical possibilities and the guidelines issued at various institutional levels. We see that institutional development in recent years provides new openings for preservation of Sami traditional knowledge.

Sami use of nature and *árbediehtu*

The history of the Sami and the nation states is to a great extent a history of colonisation. This also applies to the history of knowledge. The title of Anton Hoëm's (2007) book "From the World of the Noaidi[14] to the World of the Scientist" gives us an indication of a series of paradigm shifts where the latitude for traditional knowledge has narrowed over time. However, the author points out that in educational research many have taken for granted that there has been coherence between the goal of Norwegianisation on the part of the authorities and the actual everyday school reality. Hoëm believes that there is little research that substantiates such conclusions. The same author gives a straightforward account of the main lines of progress in the social development in Várjjat (Varanger) and shows specifically how it was the post-war restoration and modernisation that first powerfully activated change processes away from basic Sami livelihood strategies and from a Sami barter economy to a modern monetary economy[15]. A main point for Hoëm (2007) is that as long as the school was the only arena for research-based, impersonal and context-free knowledge, the consequences for the knowledge base in the

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13   http://www.cbd.int/

14   Noaidi is a spiritual leader (shaman) in the Sami tradition.

15   However, relief work and development of communications during the interwar period (1918–1940) had started this process.

local Sami community were not serious, but he considers that 1945 was a turning point and that the dominant position of Sami traditional knowledge in the local community from that time onwards became gradually reduced.

There is much that indicates that a study of records for other Sami communities would reveal similar patterns. As regards the *dálonat* or settled Sami in Guovdageaidnu (Kautokeino), Johan Henrik Buljo (2008) dates the building of an all-year road in 1968 as a first turning point in a process that opened *meahcci* (the outlying land resources) to outsiders and where later management-related changes, e.g. from the land sales authority in Vadsø, have contributed to undermining the traditional Sami management system and thus the relevance of Sami traditional knowledge.

In her book on the use of outlying land in Tana, Elina Helander ([2001] 2004) argues that state legislation and management contribute to cultural change. Specifically, she refers to how various types of restrictions in the outlying areas, e.g. on motor traffic, building cabins, use of fishing nets etc., make it difficult to combine various traditional activities to make up a *birgejupmi* (livelihood). It is also implicit in Sami upbringing that one has to be flexible towards different possibilities and take account of social realities when moving about in the countryside. Many public decrees and administrative procedures clash with Sami thinking, e.g. that it may not be allowed to take the shortest route or that one may have to give a detailed account of what one has been doing on various trips. In addition to such accounts going against the grain of normal Sami forms of communication, many also consider such accounts to bring bad luck to harvesting[16]. Such restrictions may also make it more difficult to teach children cultural skills.

As also described by Buljo (2008), this author's respondents also allege that the extensive use by the general public of the Sami local areas constitutes a threat to traditional Sami industries. In her conclusion, she asks whether the Norwegian laws and their application "contribute strongly to crushing significant parts of the traditional Sami culture" (Helander [2001] 2004, 29).

We can sum up by concluding that the problems are created by a combination of competition for land and enforcement of public authority in areas traditionally managed by Sami communities without much interference by the authorities. Helander ([2001] 2004) has also, with the concept of semi-

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16   Cf. Nils Oskal (1995) on reindeer luck.

autonomous social field (Benda-Beckmann 1997) as her basis, analysed the traditional Sami activity *golgadeapmi* (drift-net salmon fishing) to see how the Norwegian legislation works. Even though Norwegian normative rules exist and there is an (apparently) efficient administration, she has concluded that these laws are pretty much invisible. That is to say, the local population has an established practice that continues more or less regardless of the legislation[17]. They thus have their own effective rules. "The local Sami are conscious of and reflect on the differences between the Sami sense of justice and the Norwegian legislation" (Helander [2001] 2004, 41). She emphasises that members of a local community first and foremost follow the rules and customs that apply there and know their obligations towards other members, and suggests:

> "In reality, there are probably two legal systems at work in large parts of North Norway, the common law legal system and the Norwegian state legislation. Depending on people's respective ethnic identities, their familiarity with local customs and levels of knowledge etc., they adapt to one or the other of the two legal systems..." (Helander [2001] 2004, 42.)

The points here referred to from Helander's work may be summed up in two statements:

- Two competing institutional systems are operational in Northern Norway: the traditional Sami system and the legislative system of the State.
- Sami culture is threatened by the fact that the legislative system is expanding into the semi-autonomous social fields of the Sami communities.

The actual situation as to the relationship between these two institutional systems obviously varies considerably with different activities and customs and with local geographic areas, but we can at least confirm that as long as there exists a traditional Sami institutional system, functioning mostly independently of the official system, it must necessarily be based on a working knowledge system in Sami society.

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17   The way Sami involved in reindeer herding react to attempts by the authorities to regulate the number of reindeer in Finnmark may also be seen in this perspective (Riseth & Vatn 2009; Riseth 2009).

A good example of the fact that local management and knowledge systems may hold a stronger position than many seem to think, is the so-called Svartskogen case. The population of Olmmáivággi (Manndalen) in Kåfjord has been using the 116 square kilometre outlying area of Svartskogen for logging and pasture as far back as anybody can remember, i.e. they have managed the area on the basis of traditional knowledge. The State has formally been the landowner for more than 100 years, but in 2001 the local community won the right of ownership to the area by a Supreme Court verdict, based on substantiated claims to immemorial usage (Eriksen 2008).

Elements for a situational analysis

In the introduction, we presented the problem: which institutional conditions are, or may become, significant for the use of árbediehtu in nature management. A status analysis of the position of árbediehtu would presuppose an extensive empirical survey, but we may still present a preliminary outline for assessment. With reference to Figure 1, the basics are:

- Traditional Sami ways of life are strongly tied to an intact natural resource base.
- *Árbediehtu* forms a significant part of the livelihood basis for Sami communities and activities.
- The use of the traditional knowledge in the form of specific practices and resource management systems is the basis for its preservation.
- Sustainable use of resources depends on well-functioning social institutions.
- A Sami world view provides a common basis for understanding the surrounding world.

Traditional knowledge is one of the basic elements in a "knowledge-practice-belief-complex" (cf. Berkes 2008, 18) and it would be difficult to imagine culturally alive communities lacking such knowledge. Without making a statement as to their relative importance, árbediehtu can be compared to the Sami language as a basic element in the Sami life-world. Preserving and maintaining such knowledge is, in other words, a key cultural-political issue.

Threats

We have already referred to Elina Helander's ([2001] 2004) statement that legislation destroys central elements of Sami culture. With Figure 1 as our starting point, we will extend this perspective to an assertion that local Sami knowledge and practice systems are threatened by several types of external influences over a broad front. This may be illustrated by a series of different processes, whose combined actions contribute to driving *a double splintering wedge* into such a system, see Figure 3.
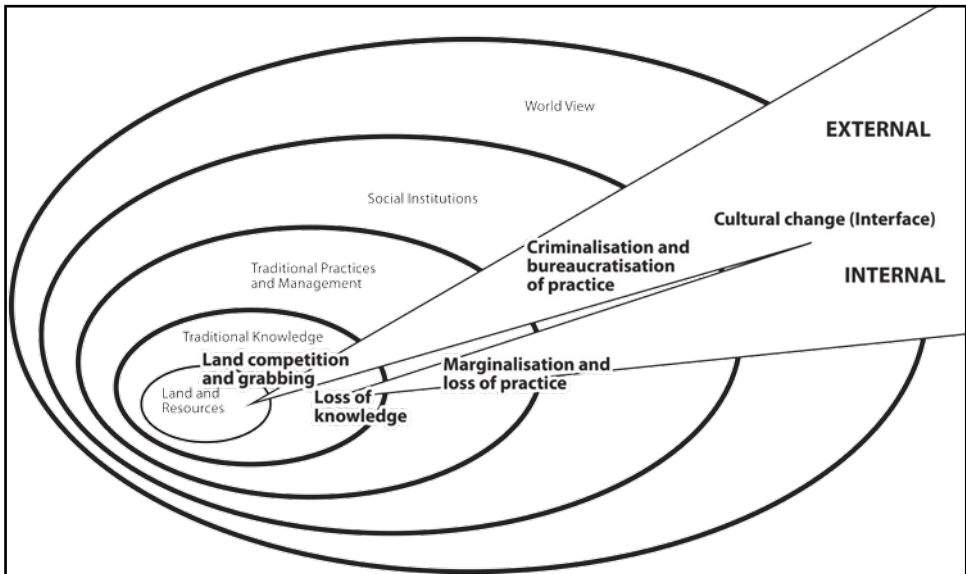
Figure 3. The double splintering wedge. The combined actions of several processes drive a double splintering wedge into a traditional knowledge and practice system.

The figure illustrates that traditional practices seem to be threatened by a series of influences, which include both external and internal sub-processes. The two wedges signify the external and internal influences. Since the levels in the system are contingent upon each other to a greater or lesser degree, the various threats will also be able to create a ripple effect in the whole system.

The external influences are:

- Both external economic actors and the general public contribute to loss of, and competition for, land and resources.
- Criminalisation or bureaucratisation of traditional practices through institutional expansionism from the nation state, which also undermines the local Sami communities' semi-autonomy.

The internal influences are:

- Loss of traditional knowledge.
- Socio-economic marginalisation and/or modernisation which render practices less relevant and less able to survive because of more limited possibilities for transmission.

All in all, different types of influences and the interaction of various factors lead to *cultural change* in the interface between different cultures (Nakata 2008). The challenge will be to steer the changes in a direction which promotes the preservation of traditional knowledge.

The first-mentioned trend, *loss of or competition for land*, both from external economic actors and the general public, is probably one of the strongest external threats to both reindeer husbandry (UNEP 2001) and other Sami primary industries. This trend and the other external trend, *criminalisation or bureaucratisation of traditional practices,* reinforce each other and must to some extent be seen as consequences of both the historical Norwegianisation policy and post-war social modernisation.

A good example of criminalisation and bureaucratisation of a traditional practice is the previously mentioned springtime duck hunting in the Sami district of Guovdageaidnu (Kautokeino). Traditionally, the settled Sami have hunted ducks in spring to obtain fresh meat when this was scarce after a long winter[18] (Hætta 2007). This practice challenges the standard logic of ecological harvesting, which stipulates that hunting shall take place in the autumn and it has therefore been forbidden by Norwegian legislation. At present, the traditional duck hunt is permitted as a trial arrangement, but

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18   Before freezers became common the access to other than salted, smoked or dried meat was limited in spring.

limited to the Kautokeino River only, whereas it still remains prohibited everywhere else in Kautokeino Municipality.

These trends have considerable power and dynamics and counteracting them with political and institutional measures is demanding, especially as it will take time before the majority population and the control systems of society are ready to change and fully recognise Sami practices and the physical space and freedom of resource management these require.

The internal trends, *loss of traditional knowledge and marginalisation/modernisation*, are closely linked. The most vulnerable point here is the transmission between generations. When a certain practice dies out with the older generation, the knowledge is often lost at the same time, since the next generation adopts a new practice. Such cases are described as *transmission failures* (Ostrom 1998). For árbediehtu to survive as living knowledge, the most important premise is that it is transmitted to younger generations through practices and that the practices are maintained.

At the same time, it is important to ensure that practices that cease to be in common use are documented and preserved, by the aid of modern media, museums, schools, tradition bearers, etc. This is no doubt an area where the *árbediehtu* project can play a key role both by enhancing the status of such practices, giving "emergency aid" and developing and ensuring permanent organisational solutions (Joks 2009, 57). The Norwegian Government's ambitions to expand such work in a cross-border perspective is promising as regards political support and financing (The Norwegian Cabinet 2009, 42).

These two developmental trends concern conditions within the Sami community and will be a challenge even if the external pressures are dealt with. The challenge is to achieve a development where the new and the old can be integrated in a balanced way from a Sami cultural perspective (Smith 1999; Kuokkanen 2007; Nakata 2008; Porsanger 2010).

New possibilities?

Changes in international political processes relating to both environmental and indigenous issues and the Sami policy of the Norwegian government open up for revitalisation and status upgrade for árbediehtu. These changes create new possibilities, but are limited both by loss of traditional knowledge

and insufficient political and cultural will to pursue this goal. The challenges here are two-sided; both between the Sami and the State/the majority population and internally within Sami society and local communities.

With regard to political authorities, the state apparatus and the majority population, the changes in the official Sami policy in recent decades have been extensive. However, much of this is so far only change at a superior or symbolic level. In areas where competition for resources and institutional expansionism constitute considerable threats, changing the situation for the better will require concerted efforts over a long time.

Elina Helander's ([2001] 2004) analysis and our extension of it in Figure 3 seem to be relevant for large parts of Sápmi (Samiland). I would suggest that the most important conclusion to be drawn from her argument is that it is a major challenge to (re-)create and preserve an institutional, and strictly speaking also physical, space for Sami practices. It is pertinent to note that the Norwegian Government's High North Strategy operates with Sami knowledge only as a supplement to textbook knowledge (*The Norwegian Cabinet* 2009).

It is positive that the knowledge thus gains both attention and status, but this is hardly sufficient for ensuring that árbediehtu remains living knowledge. Porsanger (2010) also mentions this and states that it has been pointed out by many other indigenous peoples. The whole perspective clearly needs to be turned around and the issue seen through the eyes of everyday local Sami reality, so that árbediehtu itself is the starting point. If we adopt indigenous expert Linda Tuhiwai Smith's line of thought about knowledge, we will be concerned with

> "…centering our concerns and world views and then coming to know and understand theory and research from our own perspectives and for our own purposes" (Smith 1999, 39).

This perspective points towards establishing árbediehtu as autonomous knowledge, but this also implies that the Sami must have a self-determination perspective on their own natural surroundings and their own local communities (Kuokkanen 2007; Sara 2004). We may then ask about the role institutions and institutional conditions will play for árbediehtu. Returning to the above presentation of institutions, what might strike us first when explaining what institutions are may be the fact that they are very durable

social structures. In relation to our problem, this has both a positive and a negative effect.

The positive effect is the aspect we referred to from Anton Hoëm's (2007) work, i.e. that the efforts at Norwegianisation have not made as much of a mark as we often think. Randi Nymo's theses (2003, 2011) on health and care systems in the Sami communities of Ofoten and Sør-Troms confirms this; the Sami in these communities have received new impulses and modernised their lifestyles while at the same time maintaining traditional Sami thinking and practice in many areas.

A 2009 survey in connection with proposed nature conservation areas in Guovdageaidnu (Kautokeino) (Riseth et al. 2010; Riseth & Solbakken 2010) also substantiates very extensive and versatile *meahcceávkkástallan* (use of outlying land). Because of its size and scope, this use must play an important role in *birgejupmi* (livelihood) for a large part of the population.

In other words, there are many indicators pointing to traditional Sami practices and knowledge being very much alive over large parts of Sápmi. If we tie this to Scott's presentation of aspects of institutions above, the cause is evidently the fact that the practices and knowledge are linked to the cultural-cognitive pillar and thereby also to the most deeply-rooted institutional structures possessed by mankind.

The negative effect is that in areas where the threatening trends relating to Figure 3 (competition for land and resources, institutional expansionism and socio-economic marginalisation/modernisation) have undermined traditional Sami practices and árbediehtu, formal institutional systems will be a considerable obstacle to re-establishment. Public bureaucracies have their own logic, where laws, regulations and management practices exercise a hegemony and presumably use both model power and cooptation (see above), maybe without reflecting on the fact that they may completely override the local population and their interests.

Institutional reforms may therefore pave the way for new possibilities for what kind of knowledge and what interests should have a hegemony, or at least be given considerable importance, e.g. in natural resource management. The nature management sector, however, has a strong natural science-oriented tradition and has not been very open to other types of knowledge such as traditional folk knowledge (Aasetre 1999). As previously mentioned,

knowledge monopolies and limited openness may lay a foundation for model power and co-opting, rather than real participation (Arnesen & Riseth 2008; 2009).

It often takes a long time to implement such reforms. Even though the Sami Parliament was established nine years after the appointment of the first Sami Rights Committee in 1980, another 16 years were to pass before Norway implemented reforms which could give Sami interests (apart from reindeer husbandry) greater influence on natural resource management than other relevant pressure groups.

The final passing and early stages of enforcement of the Finnmark Act constituted a turning point for nature management in Norwegian Sápmi, perhaps primarily because of the *right to consultation* that was established as a constitutional usage, and formalised through an agreement between the central authorities and the Sami Parliament in 2005. This led to the following:

- An agreement in 2007 between the Sami Parliament and the Ministry of the Environment on "Guidelines for protection plans in Sami areas pursuant to the Nature Conservation Act", giving Sami interests and organisations special rights at all stages of the planning process.
- In 2007 the Ministry of the Environment endorsed "The Sami Parliament's guidelines for assessment of Sami interests regarding changed use of meahcci/outlying land", which contains specific rules for the access of Sami interests to consultations and decision-making processes.
- In the Nature Diversity Act, in force from June 1st 2009, Section 8, Subsection 2 reads: "The authorities furthermore have to attach importance to knowledge that is based on the experiences of many generations through use of and interaction with nature, including such use on the part of the Sami, and which may contribute to sustainable use and protection of the natural diversity". (*White Paper* 52, 2008–2009.)

Here we see that the previously mentioned international processes (e.g. the Convention on Biological Diversity) have influenced the attitude to knowledge in laws and regulations (Riseth et al. 2010).

During the consultations on the Nature Diversity Act, the Sami Parliament worked at getting *traditional knowledge* incorporated as a concept in the Act. This concept is used actively in the Sami Parliament Guidelines mentioned above

and is recognised internationally as a dynamic concept of knowledge (Berkes 2008), but the Ministry still argues that "traditional" may be interpreted as static. Regardless of this difference of opinion, the wording of the Act is still unambiguous, and the knowledge monopoly of the natural sciences has been broken. The challenge now will be to ensure that this provision is complied with in practice.

The establishment of nature conservation areas in Norway has so far been one-sidedly based on a solely scientific concept of knowledge (Arnesen & Riseth 2008; 2009). In this context, it is interesting that the Ministry of the Environment has stopped/postponed on-going protection plans in Guovdageaidnu (Kautokeino) and Karasjok with reference to the Sami Parliament's opposition (NME 2010). This may perhaps open for attaching greater importance to árbediehtu in future management of the areas, should they become protected.

Within the reindeer herding sector, an analogous development can be seen. Since the implementation of the Reindeer Husbandry Act of 1978, the public reindeer herding administration has been very concerned about adapting the extent of the herding to the pasture resource base. In most of Finnmark, these efforts have not been very successful (Riseth 2009a; Riseth & Vatn 2009). In an evaluation from Sami University College (Joks et al. 2006), particular importance was attached to the fact that local experts had not been involved in the work of the administration; this would have given relevance to the knowledge of the herders and enable this knowledge to be included in the basis for the proposed decisions. The reindeer herding authorities seemed to attempt to respond to this criticism, as they then produced guidelines (NMAF 2008) where the criteria for assessment of pasture utilization were not wholly scientific but also based on experience-based knowledge (Riseth 2009b).

In reality, I believe it is difficult to create a larger space for *árbediehtu* in practical nature management without changing the management systems from centralised hierarchical structures towards *co-management systems* (Borrini-Feyerabend et al. 2007), where the resource users participate on a more equal footing with formally educated bureaucrats, and possibly also have the responsibility for nature management returned to them. How to achieve this in the best possible way is one of the big issues in the international debate on nature management (Carlsson & Berkes 2005; Armitage et al. 2007); one lesson seems to be that it is important to let processes between different players continue for some time to find out how to cooperate as constructively

as possible, followed by the design of a management model based on the experiences gained in the processes. In Scandinavia, we have not come very far in this field, and participation by local communities seems to have had only a marginal effect on practical nature management (Sandström et al. 2008).

A large part of the problem so far seems to be that there does not appear to be any understanding of co-management processes in the central nature management machinery in Norway. This can be illustrated by the fact that the Norwegian Directorate for Nature Management (NDNM, *Direktoratet for naturforvaltning*), after having summed up relatively unsuccessful attempts at decentralised management of protected areas, rather than asking what is required to make decentralised management work better, advises that the Ministry of the Environment allocates the responsibility for nature management for the relevant areas to the county environmental department and to newly-established national park administrators or government departments[19] (NDNM 2008).

Seen in this perspective, it is interesting that the Finnmark Act paves the way for some new formal possibilities, e.g. § 24 concedes a "special right to local use", i.e. a kind of tenancy arrangement for up to 10 years. This offers precisely the opportunity for trial and error, learning from both good and bad experiences, without any important consequences other than that the parties involved learn what works and what does not. Likewise, it is an excellent idea to have a trial arrangement for the spring duck hunt on the Kautokeino River. Although the trial arrangement is insufficient, it does prevent this habitual activity based on árbediehtu from being unambiguously branded as environmental crime, and at the same time it gives Norwegian environmental management authorities time to reflect. Another example is the trial arrangement for small game hunting in Tossåsen Sami community in Jämtland County in Sweden. The arrangement is basically that the local reindeer herders control the whole hunt and may direct the hunters to where they do not disturb the reindeer herding. In other words, the management is based on árbediehtu. I believe that such examples which reveal árbediehtu as a sound foundation for long-term, intelligent resource management are of great importance in involving this body of knowledge more strongly in future nature management.

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19   The ministry followed the advice, but stipulated that a regional/local protection board be established.

The formal recognition of traditional knowledge in the reindeer herding sector is typically also tied to reforming of the legislation in that the Reindeer Husbandry Act of 2007 (*NOU Official Norwegian Report* 2001:35) assigns the traditional Sami *siida*[20] a significant role in reindeer husbandry management, whereas it was considered non-existent in the Reindeer Husbandry Act of 1978. Furthermore, I also believe it is important that there are active pressure groups that ensure the preservation of traditions, through training and positive examples, and also serve as spokespeople addressing both the general public and the authorities. I also attach importance to the fact that Sami interests, organs and organisations are on the offensive and make use of the formal opportunities available, even though they may not be ideal.

Summary and Conclusion

We introduced this presentation by looking at some basic features of both árbediehtu and institutions. We proceeded to outline some features of Sami use of nature and árbediehtu, and presented some elements for a situational analysis. In this context, we emphasise that this body of knowledge is fundamental to culturally alive Sami communities and that it depends on continued transmission of the practices involved. At the same time as threats from loss of and competition for land and resources, institutional expansionism and socio-economic marginalisation/modernisation are all too real, changes in policy towards indigenous peoples internationally and towards the Sami in Norway open up for new opportunities for árbediehtu to play a more important role in nature management.

To sum up, árbediehtu is beginning to be recognised, both within the nature management sector and the reindeer husbandry sector, but there is every reason to question whether this process will be rapid enough for it to be of essential practical significance. Parallel to the recognition process there is, as we have mentioned, a continual loss of knowledge through both modernisation and social marginalisation.

Even though it is now established by law that the authorities should attach importance to Sami traditional knowledge, it is difficult to imagine that árbediehtu will attain prominence in nature resource management unless valid

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20   In the context of reindeer herding, the term *siida* means a group of people jointly herding reindeer usually belonging to several households and persons.

co-management solutions replace centralistic management models. There are various partly contradictory factors and both how these work in relation to each other as well as the future prospects for preserving árbediehtu should be the subject of further research on selected areas of knowledge, preferably based on distinct Sami communities with strong tradition bearers and an appropriate cultural environment.

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BJØRG PETTERSEN

Mind the digital gap:
Questions and possible solutions
for design of databases and information
systems for Sami traditional knowledge

Introduction

The background for this article is the need to record, preserve and disseminate traditional Sami knowledge, *árbediehtu*, by using information systems. It is partly based on a report compiled at the request of the Sami Parliament in 2008, "*Rapport om grunnlag for forvaltning av dokumentert tradisjonell kunnskap*" (Report on the basis for management of documented traditional knowledge) (Joks 2009; Pettersen 2009), particularly Chapter 7 "*Et informasjonssystem for dokumentasjon og forvaltning av árbediehtu*" (An information system for the documentation and management of *árbediehtu*).

Several workshops have been organised within the *árbediehtu* project since the report was published, and several sub-projects mapping traditional knowledge are in progress. The sub-projects at the partner institutions are all different, but face similar challenges in relation to the information collected: How should the material be used and disseminated? What should be stored, for whom, and how should the material be organised so that users can easily retrieve knowledge on a particular topic? How to safeguard against misuse of data and simultaneously convey the knowledge in the best possible way?

Knowledge management through information systems such as registers, databases, portals and websites has become part of our daily lives. An *information system* is defined as a system for capturing, transmitting, storing,

retrieving, manipulating, and displaying information (*Wikipedia* 2010a). Such a system may be manual, but the term is mainly used with reference to systems based on information and communication technology (ICT). It may refer to collections of text on the Internet, databases with structures for collection and analysis, or Geographic Information Systems (GIS) containing maps with associated data. The term *information system* also includes the people who operate or use the system.

Traditional knowledge is an ambiguous term. Åsa Nordin (2009) distinguishes between three terms often used synonymously: traditional knowledge, indigenous knowledge and situated knowledge. *Traditional knowledge* covers practical knowledge, customs and beliefs which help people survive in the conditions of their local environments (*Wikipedia* 2011). *Indigenous knowledge* is knowledge used actively among indigenous people, or related to shared knowledge still existing through oral tradition. Such knowledge is dynamic, belongs to a group, and is linked to the use of an area. Sami traditional knowledge, *árbediehtu*, is defined as belonging to this category (*Wikipedia* 2011b).

Situated knowledge very much resembles indigenous knowledge, but the focus is on knowledge connected to location and time (Peet 1998). Firstly, the knowledge is connected to geography and history, and secondly, the geographical and historical conditions largely determine how the knowledge is produced. Situated knowledge refers to a process, where e.g. social and material conditions, tools and geographical factors affect the production of knowledge. A common feature of all three concepts is the fact that they include norms and values relating to the use of the knowledge.

In this article I consider some problems and theories related to the storage and management of traditional knowledge using digital tools, and the constraints embedded in the technology in relation to what knowledge is and how to organise it. I then proceed to describe and discuss three different solutions. The three systems are designed from different standpoints and for different purposes, but they are all intended to preserve and impart traditional knowledge. Some basic conditions for establishing a system are discussed based on the examples: *ontologies,* which deal with descriptions of concepts within a particular field or domain and how these concepts relate to each other, and *metadata,* which describe the content of an information system (data about data). Finally, some specific suggestions for system development

and technical requirements for information systems for traditional knowledge are presented, based on experiences from indigenous knowledge projects.

Technological constraints and design of knowledge bases

When we wish to register traditional indigenous knowledge, which may be situated knowledge or tacit knowledge, by the use of databases, textual or audiovisual media, we are faced with a number of dilemmas (Agrawal 2002; Pettersen 2009). Some are ethical or cultural and independent of technology. Others are a mixture of constraints embedded in the technology, such as loss of control over knowledge and its use, or the feeling of losing the natural context as traditional knowledge is stored and structured in databases and registers.

The technological-scientific knowledge domain is an area where knowledge is defined as being universal, objective and rational. Most people involved in research or other work on indigenous knowledge know that it is a political area, where social, economic and cultural forces predominate and where folk knowledge is often in a subordinate position to academic knowledge (Chambers & Gillespie 2000; Haraway 2008). Deep ecological knowledge, acquired and tested through generations, is not taken seriously, and may be ridiculed or dismissed as superstition and belief. Such knowledge is therefore not taken into account in the process when practical policy is hammered out (Harding 1995; Nergård 2006). In general, there are often deep cultural divisions between social institutions, expert elites and other groups of the population regarding situated knowledge about traditional use of nature and the land (Krange 2007). This is also mirrored in the way knowledge databases have been designed, with respect to both selection and approach. For example, official national maps have often excluded many Sami place names, and Sami monuments and sites have not always been classified as cultural heritage worthy of protection (Rautio Helander 2008; Barlindhaug & Pettersen 2011).

Certain kinds of traditional knowledge are relatively unproblematic to classify and manage in an information system. This applies to the more tangible and verifiable knowledge, such as hunting methods, knowledge of the use of plants and ecological knowledge. What is considered to be "good" or "useful"

general knowledge often seems to determine how the knowledge is managed and organised in registers and databases (Agrawal 2002; van der Velden 2010).

Knowledge axes and technologies

Sami traditional knowledge, just like other situated and traditional knowledge, is a response to the practical challenges encountered in everyday life. It is based on work practices and is often carried out in particular physical and social contexts which make these practices possible, such as reindeer herding, farming, fishing and hunting. It is knowledge that lives on through oral tradition, is transmitted through stories and interaction and can be indirect or oblique. Representations of parts of this knowledge are often presented as cultural codes through art and pictures, and in databases, texts and research. But usually this knowledge is embedded in people's daily lives and activities. It is something you do, not something you have. The knowledge must be transferred to the younger generation by including them in its practice and enabling them to be present in places and situations where it is used (*in situ*). It is naturally always a question of performing and acquiring something that is useful and valuable.

To describe and store information about the content of traditional knowledge and work processes in an information system, a database or an archive is to lift the knowledge out of its context (*ex situ*). Therefore it is important to keep track of what happens in this process and which knowledge axis we move along when we work with the design of information systems for traditional knowledge (see Figure 1).

Baumard uses the term *mètis* for the type of practical and intuitive knowledge we are dealing with here, describing it as a "sustainable model for knowledge and observation, which applies to all levels of society, from the fisherman and hunter to the philosopher and politician" (Baumard 1994). *Mètis* is a form of practical intelligence, a complex, indirect and unarticulated knowledge (*tacit knowledge*) affecting how we deal with ambiguous events and situations. When general knowledge (*episteme*) cannot be applied to new and complex situations, when recognised and conscious knowledge and know-how (*technè*) cannot be used, and when practical knowledge and social practices (*phronesis*) do not provide a solution in an uncertain situation, one draws upon the fourth dimension of knowledge, which is difficult to describe in words. One uses a mixture of knowledge of smart solutions and what one feels is right,
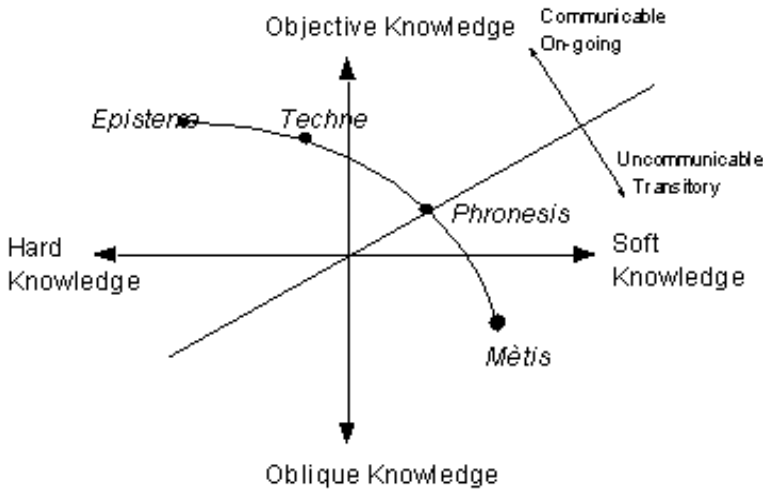
Figure 1. Knowledge axes and the four types of knowledge; mètis, phronesis, techne and episteme (Baumard 1994).

leading to decisive steps, which will vary according to the situation. This often happens intuitively, where one works from one's own assumptions and various practical experiences connected to such a situation; this is *mètis*. This knowledge is specialised, indirect and can be embedded in local experiences and everyday rules, e.g. how reindeer herders interpret the weather and natural environment during the moving of the herd, or how to predict a good year for grouse or cloudberries. It is a matter of how signals are interpreted and handled in a particular situation. The knowledge the fisherman has about tides, currents and underwater reefs determines how he navigates and docks, and where he fishes. When one is raised in a tradition, like that of the fisherman or reindeer herder, one acquires this knowledge, and it works both individually and collectively. Such tacit knowledge is also acquired and used daily in modern organisations (Baumard 1999).

Can we use digital tools to describe "just something we do"?

How can we describe knowledge that is so difficult to grasp; unpredictable, complex, physical and experience-based? Can we find a contact zone in a technological design where this kind of traditional, contextual and situated knowledge can be managed without being reduced to general *ex situ*

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knowledge? In her article *Design for the contact zone*, van der Velden (2010) uses concepts from feminist and critical theory to shed light on these questions. Her first point is that all science has intrinsic values. One distinguishes between belief and knowledge. Western science and technology place great emphasis on objectivity and seek knowledge that is general and universal. Her second point is that one must include other knowledge and use what Haraway (1995) calls a partial perspective. This implies viewing knowledge as situated and linked to location, situation and social and historical context. All knowledge is situated, even scientific knowledge.

What Haraway (1995) calls the God-trick is when the researcher or system developer refuses to place him- or herself in relation to what is being researched or developed. What we might call God's eye, represented by an objective view from nowhere, has a focus which is too general and universal, which does not work for capturing the content of traditional Sami knowledge (Jernsletten 2005). Technologies have built-in conditions for objective knowledge and for how knowledge should be structured. There is an inherent cognitive injustice in technology, and this bias is further enhanced by uncritical use of a technology containing constraints, traditions and values that do not recognise knowledge that differs from the scientific or Western "objective" version of knowledge. Global and universal knowledge is defined as a science, while knowledge connected to location and situation is defined as superstition and belief. This perspective on values can, when used indiscriminately, lead to a removal in the design process of knowledge that cannot be verified or made scientific. Such "strong objectivity" can therefore be an obstacle to recognising other types of knowledge (Harding 1995; Agrawal 2002).

Nevertheless, we must still try to create a contact zone, a space for different "knowledges" to meet; traditional knowledge and the technological-scientific knowledge of the information system. Therefore, it is useful for us to realise that we view knowledge from a certain standpoint. We may take a position and be biased, also when we wish to use databases and software. The goal is to achieve greater cognitive justice in the design of knowledge systems (van der Velden 2010).

The methods one uses in the design of information systems are related to what one wishes to achieve with the knowledge that is being collected, stored and organised. Internationally there are many examples of information systems for traditional knowledge (Scott 2004). Although the content of the systems and databases often fails to fully cover what we here refer to as

traditional Sami knowledge (*árbediehtu*), it may still be useful to look at the solutions. As we have seen, there is some variation in what is considered traditional knowledge and in how the term is used (Agrawal 2002; Joks 2009). The solutions also vary considerably in terms of content, how the knowledge is collected, stored and managed and in how much detail it is described in the information systems.

A presentation of three indigenous knowledge databases

In order to illustrate some relevant issues, we will now examine three different designs for databases and information libraries: a simple text-based database for Internet searches, a comprehensive national register of traditional knowledge in medicine and a multimedia collection with in-depth knowledge of experiences, traditions and cultural practices. These examples are operative as of May 2010, and are found, with Internet addresses, in the reference list (*UNESCO & The Netherlands Organization for International Cooperation in Higher Education* 2002; IKRMNA 2006; TKDL 2009).

Register of best practices on indigenous knowledge, UNESCO

The first example of a database is a UNESCO project, and describes traditional knowledge and various indigenous practices in a broad sense (*UNESCO & The Netherlands Organization for International Cooperation in Higher Education* 2002). The focus is on usefulness, and a considerable part of the empirical knowledge of the project has been verified by modern scientific methods. The aim is to show that sound use of traditional knowledge will help to develop cost-effective and sustainable development strategies, provide income and promote poverty alleviation. The material is classified by country; each case is unique and is intended to present the best practice within the traditional industries of an area. The purpose of the database and website is to encourage researchers and policy makers to incorporate indigenous knowledge in various development-related projects. To demonstrate the content and structure of the database, we look at two examples: one from Mexico and the other one from Canada.

The selected project from Mexico describes the cooperation between female shepherds of the Tzotzil people and researchers in genetics. The shepherds

are familiar with the selection criteria, based on traditional knowledge transmitted through generations, regarding the animals with the most suitable wool for the manufacturing of textiles. This traditional knowledge formed the basis of empirical testing and genetic research which used scientific methods to establish a higher quality of wool production. The project not only led to a verification of the knowledge, but also practical benefit from the results. The methods were developed and adopted locally in order to achieve greater profitability in the operation and an enhanced quality of the wool products (UNESCO 2005a).

The second example of best practice is taken from Eastern Canada and concerns the mapping of traditional ecological knowledge, where 30 small communities participated in a locally managed study. The knowledge holders were the Inuit and Cree people living on islands and in areas around Hudson and James Bay. The objective was to influence public policy and decision-making processes in relation to ecology in the Hudson Bay bio-region. Traditional knowledge was collected at public meetings, such as the conditions of rivers, currents, ice, weather, animals, health, and the traditional management of and impacts on coastal and marine environments. This information was localised by using GIS tools, and recordings and transcripts were made. Researchers and locals discussed the impact of pollution on the environment and reports and mappings were made of the environmental impact in the region.

The project was a success and won a UN award. The accuracy and importance of the knowledge was thus recognised. It provided an opportunity for people to express themselves on the basis of traditional ecological knowledge. The main goal was to record knowledge in order to integrate traditional ecological knowledge into the management of the areas. The results are available in a book, *Voices from the Bay* (McDonald et al. 1997) as well as searchable text on the Internet (UNESCO 2005b).

The purpose of the information system is to disseminate and apply the knowledge. This is achieved by demonstrating examples with high utility value and thus promoting respect for and use of indigenous tradition, culture and knowledge. The technology and storage method in this system is simple and based on open Internet standards, i.e. HTML (*Hyper Text Markup Language*), which defines the appearance of the text and XML (*Extensible Markup*

Language) which describes the data and the structure of the database[1]. The descriptions are adapted for a particular audience and are focused on a small number of good projects. Navigating the database is easy: one selects the search criteria from a list or an index, where one can choose region, country and theme. If one clicks on *identity*, for example, a kindergarten project from Canada will appear, while clicking on *Canada* will bring up all the projects from this location. Such a descriptive list is called metadata, meaning "data about data" or data about the content. Information which has already been collected is categorised and used here. All the projects are structured fairly similarly with regard to content, the importance of the traditional knowledge and the results achieved. This facilitates using the material and finding relevant examples.

The Traditional Digital Library (TKDL)

The second and largest database among these examples is from India. The ownership and rights of use of traditional, local and national knowledge are under strong pressure from commercial forces, especially from the multinational pharmaceutical industry. Indian authorities, in collaboration with the World Intellectual Property Organization (WIPO), have built a knowledge database to prevent patents from being filed for plants and crops that are widely used, both as herbal medicine and for other purposes. *The Traditional Digital Library* (TKDL 2009) contains over 4,500 Indian medicinal plants and is searchable online.

Those seeking patents within herbal medicine can check whether their "invention" is non-patentable, meaning it is already in use and thus *prior art* (*Wikipedia* 2009)[2]. In this way India prevents a flood of patent applications from so-called bio-pirates for traditional Indian products like *basmati* rice and *quinoa*. The library and database are maintained by a large group of doctors practising traditional Indian medicine such as *Ayurveda*, *Unani* and *Siddha*, thus continuing thousand-year-old traditions. They transcribe handwritten and printed historical documents from different languages, and assure the quality of the information. The doctors are employed by the Indian Ministry

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1   http://office.microsoft.com/nb-no/excel/HA100340221044.aspx

2   *Prior art:* in most systems of patent law constitutes all information that has been made available to the public in any form before a given date that might be relevant to a patent's claims of originality.

Illustration 1. The TKDL website.

of Health under *The Department of Indian Systems of Medicine and Homeopathy.* A unique system of classification has been developed over time, *Traditional Knowledge Resource Classification* (TKRC), which is structured on five levels in line with international patent legislation. The database is aimed at global use, and can be searched in English, German, Spanish, French and Japanese. The technology is adapted to the Internet, but the amount of data requires a powerful database for storage and retrieval. The government and international organisations have assisted with resources. This is a large ongoing project with a central national database for the conservation and protection of important resources. The project legitimises the right to make use of nature and deep-rooted traditional knowledge.

The Indigenous Knowledge Management System (TAMI)

The third and last example of an information system is taken from Australia, and is directed towards a general preservation of culture and traditions: memories, stories and other cultural expressions (IKRMNA 2005; Verran & Christie et al. 2007). The explicit goal of transferring traditional values and knowledge to young people is viewed as a great challenge. How can one manage traditional knowledge for the use of future generations in today's information society, where the distance between young and old is increasing, and the traditional meeting places for learning, previously maintained though lifestyle and work, are gradually disappearing? The concern is that knowledge,

Illustration 2. From the TAMI website

culture and beliefs will die out with the older generation. This implies both challenges and opportunities.

The TAMI database (*Text, Audio, Movies and Images*) has thus been developed for general knowledge management through multiple projects evolving into the current software system. Photos, video, audio and text are entered and to some extent organised. The structure is simple and relatively flat, and one moves around in the application by using buttons and lists. Metadata is used to describe what information is being stored and in which folders, but the terms one uses to describe the content can be defined at any time. Unlike the previous examples there is no predefined list of keywords. The concept formation and categorisation can be done by the owners of the information system. Here one constructs one's own ontology, and defines the content of the concepts oneself. The term "ontology" has a Greek origin and means something along the lines of "the way things actually are" (Christie 2005; van der Velden 2008). This method of building one's own list of concepts can lead to a certain amount of chaos, but it is still a constructive and productive chaos:

> "Methods we adopt in IKRMNA are informed by our experience with Yolngu educators at Yirrkala School in the 1990s. These methods – open and emergent, flexible and varied, are informed by our understanding of Yolngu metaphors. We know from experience that although this looks messy and disordered the approaches we learned from Yolngu elders and teachers at Yirrkala are generative and productive." See the *native rat methodology* (IKRMNA 2003–2006).
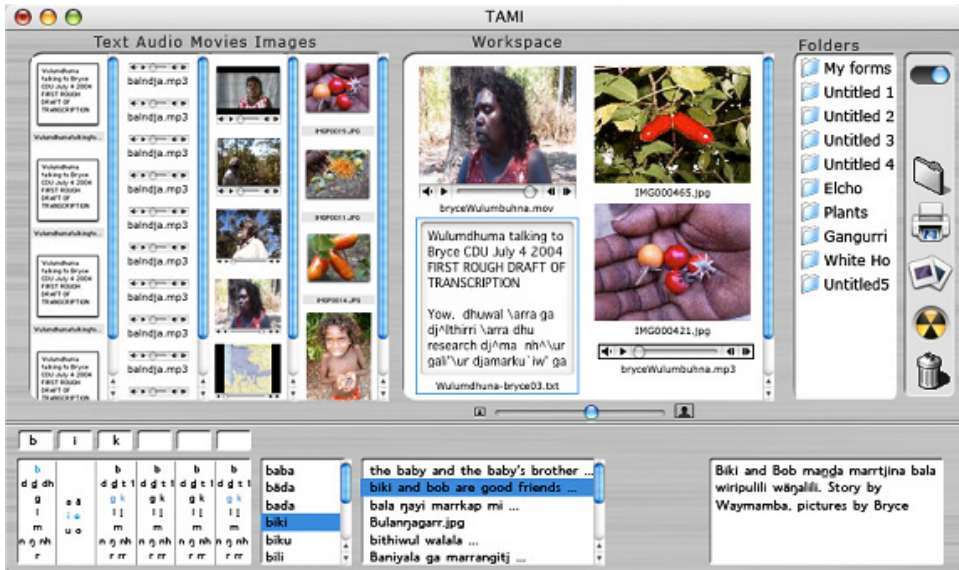
Figure 2. TAMI is designed to allow the users to enter and organise data.

The entering of data is intended to be cumulative and dynamic. Those who own the knowledge construct and shape the information using their own words, in accordance with their background experience. Language is emphasised, and the structures and design of the database provide for the greatest possible freedom. Traditions, ideas and cosmologies are to be reflected in the information system. This do-it-yourself approach applies to definitions as well as concepts, design, publishing and the use of information. The functionality of the application is designed to facilitate the organisation of data. All data is entered in one interface, and the person adding the data stores it as he or she finds appropriate. In order for others to be able to use the database, a description of folder content is added. In this way a logical structure is constructed using metadata, describing "what this is".

In the TAMI system, objects (text, images, video and film) may be loaded and searched without metadata (Christie 2008a). The user adds the metadata as required, as an aid to text-based searches. A glossary of the words used to describe the content of the folders is being stored. This list contains the words both in English and the local language or dialect and is always visible on the screen. The glossary works by allowing somewhat imprecise (fuzzy) searches. Drop-down menus and key fields with   lists work by making search entries of the letter a find all the words with an a-, while ba will find all ba-words. The list thus serves as phonological assistance (Haraway 1995; Christie 2005).

The purpose is to preserve traditional knowledge in a broad sense, pass it on and have the pleasure and benefit of using one's own language and one's own terms and defining what the base should contain. Local language is used, in some cases translated into English. One thus builds one's own ontology, i.e., concepts that can be used in relation to what is being described in the database. In this way terms and concepts describing knowledge are being developed and used in line with one's own life-world (Haraway 1998; Christie 2005).

Some issues and dilemmas concerning systems for storing traditional knowledge

Comparing the three information systems, we find considerable differences. The first example, the UNESCO database, is perhaps the most scientific. Here, the traditional knowledge is often "washed" with scientific methods using verification and generalisation, as in the example of genetic science and wool production in Mexico. The knowledge is separated from the context in which it was originally intended to exist. Knowledge relevant for development is emphasised, while beliefs and rituals, which are also part of the knowledge system (*mètis*), are not represented. Agrawal (2002) calls this "scientifisation", and the process consists of fragmentation (*particularisation*), validation, abstraction and generalisation of knowledge.

Most examples from the UNESCO best practice database appear to be joint projects with non-governmental organisations (NGOs), and it also seems that the potential for generalisation and usefulness was crucial for the project to be initiated. The inclusion of traditional knowledge is limited, and does not give rise to alternative views on development (Agrawal 2002). Such a classification

might suggest that *in itself* such knowledge has no intrinsic value. Challenging alternatives for development are excluded, while alternatives with confirmed usefulness are worth preserving and protecting. It is a positive demonstration of how traditional knowledge can complement scientific data. But one may ask who benefits from this?

Placing traditional knowledge in a database is not in itself an act of generalisation, but the purpose behind this and the forums in which it is referenced and used will ultimately determine whether the knowledge becomes generalised (made into general, common knowledge). UNESCO is probably aware of this dilemma, since a note on the website (*additional remarks and information*) emphasises that indigenous traditional knowledge is an ongoing process that cannot simply be transferred to other contexts.

A digital mapping of geographic areas was carried out in the example of best practice from Eastern Canada. This method of mapping indigenous traditional land use is called participatory GIS (PGIS) (Chapin & Lamb et al. 2005). Canadian First Nation communities have since the 1970s used *Traditional Land Use and Occupancy Studies* (TLUOS, TLUOM[3]) to gather knowledge of how local communities have previously used, and still use, the land (Pettersen 2009). Whether GIS and traditional knowledge is a good mix is controversial (Dunn & Atkins et al. 1997; Abbot & Chambers et al. 1998). Cartography has a colonial history, where "*naming is claiming*", and where the mapping and naming of places and landscapes was used as a tool for colonisation. Land was conquered by "dividing" and classifying the wilderness, the empty landscape, *terra nullus*, which the cartographer filled with meaning (Olwig 2002). If one approaches the role of designing spatial databases, whether for traditional knowledge, situated knowledge or *árbediehtu*, without reflecting on the unique nature of the knowledge, one is in danger of approaching it in a way which Haraway (1995) calls "*the view from nowhere*" (Harding 1995). We do not take into account our own point of view, the language we use and the choices we make.

It is easy to go wrong when general and universal categories and definitions are taken for granted and used to represent reality (Setten 2003; Christie 2004). This is particularly evident in relation to thinking about physical landscapes. The Anglo-American landscape tradition, with a dichotomy of nature/culture, has been an implicit way of thinking about the landscape:

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3   TLUOM: traditional land use and occupancy mapping.

nature as female and irrational, culture as male and rational. The way in which the landscape was depicted in art was often, from the ruler's perspective, seen from above (Rose 1996; Olwig 2002; Pettersen 2008). The development of the Norwegian nation and the representation of the national landscape also rest on this tradition, where the romantic rural landscape represented what was normal, i.e. Norwegian, while the wilderness, with "Lapps" or "Finns", represented the unknown, "the other". By ignoring Sami place names, and Norwegianising areas over time, cartography used the "colonial tradition" to establish the concept of a common national Norwegian landscape (Rautio Helander 2008). An alternative, non-descriptive approach to the landscape is to use terms and concepts to refer to territories or areas as a material manifestation of organisation and traditional management (Olwig 1996). Landscapes are connected to cultivation, and can thus be understood through people's traditional activities in the area. The traditional experiences of indigenous people are spatial as they are traditionally linked to a site, land, sea, landscapes, animals and plants. The land can be owned and used collectively, without government. Stories, history and language are related to location and lifestyle. Oral narratives, norms and morals are connected. The landscape and place names hold knowledge of, and testify to, the lives and work of previous generations, who have left parts of themselves there, as an ongoing process. The tradition is inscribed into the area; it is the unspoken part of the practice (what one does) and is always present. Etymologically the traditions are the core of the landscape and its primary purpose as territory. The area or landscape is the physical manifestation of both present-day use and all the associated regimes of traditional use (Olwig 2002; Setten 2003; Jernsletten 2004; Pettersen 2006; Kwan 2007; Pettersen 2008).

Different practices are employed in the mapping of landscapes, with corresponding method books, most of them from Canada and Southeast Asia. Alaska and Canada have developed a set of methodologies and terms which are relatively thorough and consistent Canada puts the greatest emphasis on political and ethical aspects and describes sound methods for collecting information, but says little or nothing about the use of technologies and GIS systems. The manuals from Southeast Asia avoid discussions of politics and ethics and focus instead on the technical aspects, such as how to build up the map base and how to use GPS in the field (Momberg & Atok et al. 1996; Tobias 2000; Flavelle 2002).

Our starting point should be a conscious awareness that a database is a collection of information (in the form of e.g. text, lists, photos, maps, film

and sound) that does not *in itself* contain knowledge (Christie 2004). The collection of information can function as a tool for transferring knowledge, but learning is much more than the transfer of knowledge from one mind to another; it is a process that occurs in a context and in interaction with others. This is especially important to understand in relation to a tool with such strong pictorial and visual impact as GIS. The danger in creating a consultation system as general as the Canadian example is that central and local authorities cease to consult the traditional knowledge bearers. A generalised truth arises from what originally was dynamic and adapted to situated knowledge. *"Indigenous knowledge"* is once and for all defined.

Masking the differences in landscape is an old power tool used in taking control of territories. Cultural values govern how we use and interpret the landscape. To interpret and understand a landscape requires an understanding in relation to the users' cultural values and experiences (Winchester & King 2003). We must therefore localise and customise our information design to traditional knowledge and not transfer general solutions (Suchman 2000).

The second example – the Indian database TKDL – is interdisciplinary, and was created out of necessity to protect traditional folk medicine and the use of traditional plants and healing methods against what India describes as bio-piracy. TKDL is a collective project between the *Council of Scientific and Industrial Research* (CSIR), the Ministry of Science and Technology, and the Department of AYUSH in the Ministry of Health and Family Welfare. An interdisciplinary team from traditional medicine (Ayurveda, Unani, Siddha and Yoga) and experts on patent design (examiners), together with IT experts and scientific and technical personnel are involved in the design of TKDL. The working group goes under the name of WIPO – Traditional Knowledge Task Force (Tripathi 2003).

India boasts many formal institutions for traditional knowledge in the fields of medicine, agriculture and linguistics, including 300 colleges for Ayurveda, Unani and Siddha (*Government of India* 2009). The knowledge base is huge, as SK Tripathi (2003) says: "Indian traditional knowledge is an ocean, vast and diverse". However, it has been pointed out that registration of this knowledge can be a double-edged sword. Registration works positively since it leads to traditional methods being protected from patenting, and it leads to cooperation with other countries and organisations such as WIPO for classification and protection. At the same time it can have negative consequences as it is easier to locate knowledge and exploit it in other ways,

without the local knowledge keepers benefiting from the commercialisation. Such registration alone is not *per se* a protection; it will only work with legislation and other measures to safeguard local interests. For effective implementation of conservation and protection it must be possible to deal with violations. One is always left with the problem of spreading, misuse and others acquiring the situated knowledge and using it. It has therefore been agreed that a *sui generis*[4] system must be created, leading to the protection of not only the knowledge produced in technical laboratories, but also that produced in the laboratory of life (Hampton 1995; Tripathi 2003; *Wikipedia* 2010b).

As in the case of the UNESCO database, there is a risk of the situated knowledge in TKDL being generalised, and of the oral, dynamic transmission between generations being replaced by the recorded knowledge. This can be avoided by an additional initiative at state level, where local biodiversity registers are being created. Documentation, registration and copyright patent systems are required at all levels, but it is also necessary to develop and support a *sui generis* system, where situated knowledge is protected in a separate regime.

The Australian application TAMI stands out from the others with its simple design and tailored functions. This way of building a system is nevertheless similar to many existing systems for cataloguing of photos, multimedia and text. *Apple iLife* for Mac and *iView media pro* for Microsoft have some of the same functionality as TAMI. Such solutions have also been used by others in similar projects, but TAMI differs from these in its categorisation of data by enriching the content by the use of metadata. One also builds one's own terminology, and has great freedom to build up and define the content of the concepts. The goal of constructing such ontology is to expand what one can have knowledge of, what one can know something about and what these concepts include. Epistemology and ontology are about values, belief and reality. The philosophy behind the database is that knowledge and traditions are dynamic and belong to a space. What knowledge and truth are depends on

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4   The term *sui generis* has been used in the context of Canadian Aboriginal law to describe the nature of Aboriginal title. *Sui generis* is also used in Aboriginal education to describe the work of Aboriginal people to define and create contemporary Aboriginal education as a "thing of its own kind". The motto "Sui Generis" has been adopted by the Akitsiraq Law School both in honour of the defining characteristic of aboriginal title in Canadian Law, and in acknowledgment of the unique form, admissions and curriculum of this one-of-a-kind professional legal education (*Wikipedia* 2010b).

one's perspective. Knowledge is situated, and this should be reflected in the systems used for collection, storage and distribution of traditional knowledge.

The TAMI system contains roles, it relates to a place and it is known who the contributors are and from which perspective the knowledge is produced. The process of defining terms is ongoing and the system has been developed in several rounds. While this is very demanding in terms of resources, it provides a freedom and a content that is completely different from the other bases. The great flexibility that the system offers can also lead to difficulties if one wishes to share knowledge outside the group familiar with the terminology and context.

Common understandings and ontologies

We have critically considered the idea of different types of knowledge and the theories that point out that all types of knowledge have intrinsic value, and that all knowledge is local and situated (Turnbull 1997). When working with information systems for traditional knowledge we must bravely describe what cannot be described, identify and develop specific words and terms, and define the content of what we are to describe, store and pass on. This is part of what is known as ontologies: To attribute a phenomenon as belonging or not belonging to a category determines how we can think about it. (Haraway 1995; van der Velden 2010).

Ontologies are concerned with what we can say about the world, and with the creation of a common consensus of the content of concepts, what reality actually looks like. But it is impossible to reach one single common understanding of what the world actually looks like, and we thus have a need for multiple ontologies. Therefore we often describe a selection of objects, concepts and other "things" that exist in a particular field of interest and the relationship between them.

Ontology is related to epistemology, which is concerned with the view of what can be in the world, and what can be described. Epistemology is the study of knowledge and how it occurs, what we can have knowledge of (validity and scope) and how one thinks about a knowledge domain. The design of databases and information systems is a representation of knowledge based on how we imagine people to acquire understanding and knowledge of the outside world. How a common understanding is constructed, and

how concepts and stored material are documented, is a question of common documented understandings, i.e. ontologies. By browsing through ontologies, one can share knowledge and integrate information using data derived from ontologies. The classification may have a flat structure, as we saw in the TAMI database, which almost resembled a dictionary, but can also be constructed as a hierarchy (Sieber & Christopher Wellen [no date]). If we want to describe traditional Sami inland fishing, what then constitutes a lake? *Top-level ontologies* which describe very general concepts and relations to topology, such as lakes, sea or mountains, are located on this level (Smith 1995). *Domain ontology* refers to the vocabulary in relation to location, such as southern Sami or coastal Sami areas. *Task ontologies* describe a task or activity such as fishing or hunting in water. *Application ontologies* denote concepts which depend on particular domains or tasks, and are usually a specialisation of these. They represent user needs, such as how to look after fishing lakes, or how to fish with a traditional method.

As we can see, there are many ways to create ontologies, e.g. in the TAMI database one gradually builds one's own by adding information. This is probably because the common ontologies, those used for searching the Internet, are too general and heterogeneous for the knowledge belonging to the traditional domain. Global and national information design is used in most areas, and the major search engines, like Google and Yahoo, are exponents of this universalised way of designing ontologies.

Metadata, a tool to describe content

If one only publishes on websites, it is absolutely essential for the generation of knowledge and learning that one takes account of contexts and describes structures. Metadata (data describing data) should be developed for the material when collecting *árbediehtu* or other traditional knowledge. The Internet has changed the way we communicate, and developments in social media like Facebook and blogs allow for an increasingly easier sharing of data. Tools for the description of content are a great help in systematising documents, databases, maps and multimedia right from the start. How detailed the documentation should be is a question of judgement, but metadata is particularly important in systems where searches or analysis of the material are important objectives. Systematisation is also necessary to ensure reuse and sharing of the registered information. There are many ready-made solutions based on free software and open source code. One of these is XML

Metadata Editor/Generator Application (XMEG), which can be downloaded from the web (DSTC [no date]). One example of good organising is *kulturnett. no Den statlige portalen til kultur i Norge på nett* (the Norwegian government portal to cultural information), which is designed as a map of topics. The list of topics is presented on the home page to assist users (Kulturnett 2010). Both content and context can be defined for all web solutions. *The OWL Web Ontology Language* can be used to describe classifications, relationships and the connections between these in web documents and applications (W3C HTML Working Group 2008). Tools are also available to organise information and define semantic metadata.
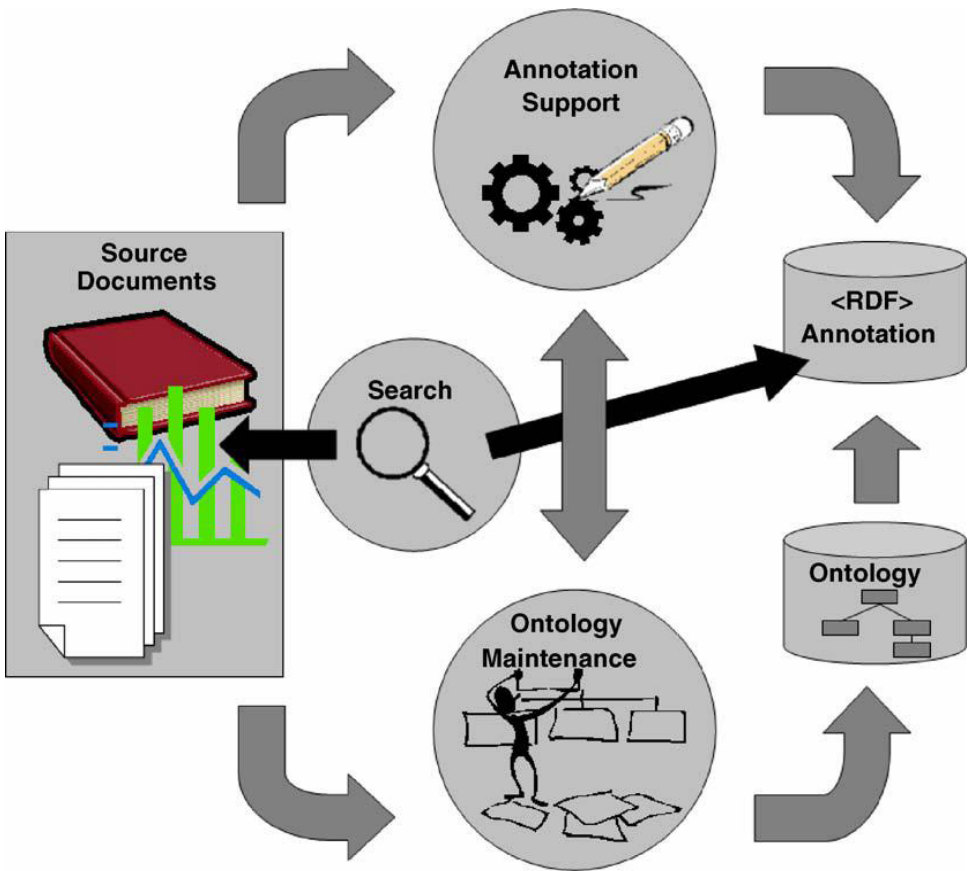
Figure 3. Annotation in document-based knowledge systems (Uren 2005).

Metadata can also be used to organise information, to search and to carry out detailed navigation and to facilitate knowledge acquisition. Metadata can add

more intelligence and content to both documents and texts, by maintaining order and structure and recording the content of the document or text (Uren & Simiano et al. 2005). How much is documented is determined on the basis of what is required. As shown in Figure 3, this is a continuous process, where the document system or database is constantly enriched and maintained with new concepts, as the amount of information increases. A good illustration of such an enriched storing system is *Mangfoldige minner*, which is run by volunteers all over Norway. Stories of immigrants' encounters with Norway and folklore from immigrant settings are collected (*Norsk Folkeminnelag & Norsk Lokalhistorisk institutt* et al. [no date]).

Standards are important in order to succeed with information sharing, e.g. *Hypertext Markup Language*, HTML and *eXtended* HTML. XHTML is the recommended primary format for publishing documents on websites. If this is not possible, one can use PDF. One should also strive to follow a universal design for how to present material online and follow, if practically possible, the guidelines for good accessibility for all types of users, as defined in e.g. the Norge.no quality standards for sites (FAD 2009).

Software options for organising digital resources

It is obviously an impossible task to create a single solution consisting of a universal database for all traditional Sami knowledge. But it is possible to use many different technologies, which can provide good technical and functional solutions (Pettersen 2009). None of the examples referred to in this article are immediately applicable to the Sami situation in all respects. But it may be useful to look at good alternative technologies and ways of organising data, if one intends to promote forms of knowledge which represent an alternative to the norm. The aim should be to make the information system reflect the nature of the knowledge (see Figure 1).

On the y axis (vertical), Figure 4 shows software for general versus specific use, and the x axis (horizontal) holds complex versus simple data and metadata structures. Most of today's proprietary standard systems are situated in the top left intersection. In the lower area to the right, we find systems like TAMI, the Ara Irititja Project (2007) and other specially designed, user-friendly information systems for managing indigenous data. Everything is interconnected: the methods developed for the documentation, preservation and storage of *árbediehtu* should match the choice of technology. The good,

general applicability

MOST
PRORPRIETORY
SOFTWARE

complex
data and
metadata
stuctures.

simple
data and
metadata
structures

INDIGENOUS USER-
FRIENDLY DATA
MANAGEMENT
SYSTEMS

specific applicability
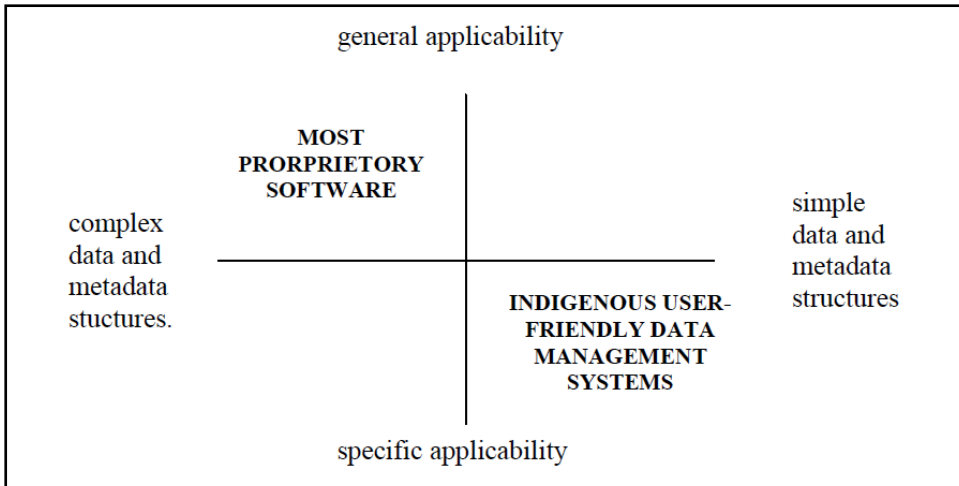
Figure 4. Software options, axes of applicability and complexity (Christie 2008b).

important story should preferably be transmitted to younger generations and live on through use, and not be reduced and buried as a model in a database. Another challenge is to have a terminology to search for and preserve knowledge. There must therefore be a certain degree of categorisation, but the objectives of each particular case will determine e.g. how and when to categorise. Christie (2003) found it necessary to use specially developed databases (TAMI) because the most commonly used systems today are too complex and general. In other cases it may be sufficient to adapt standard software and use it in new ways (*appropriation*).

KISS: keep it simple, stupid

How should one begin the work of constructing an information system that supports preservation and protection, and simultaneously promote communication and learning about Sami traditional knowledge? Method, ethics and culture should be reflected in information systems for traditional knowledge, and it is important to maintain a focus on context, processes and practices, where, when and how knowledge keepers perform their knowledge, a *knower-centred* approach. A purely knowledge-centric approach, with the focus simply on the usefulness, can lead to "museumisation" of local knowledge (Joks 2009). Unlike in Scandinavia, poverty is a relevant factor for the knowledge keepers of some indigenous groups, and this is reflected

in some of the systems we have analysed. Such differences in indigenous realities can lead to straightforward solutions and be a useful wake-up call to create novel designs.

We have seen that information systems can hold values and assumptions relating to the question of what knowledge is, i.e. the nature of knowledge and how it is produced. The goal of designing a separate system is to achieve an effective integrated transfer of Sami knowledge traditions between generations. To promote this goal, the design process should make it possible to find a space for the two knowledge systems to meet, the technological-scientific and the undefined, often fluid and procedural traditional knowledge. Mary Louise Pratt (1999) calls this the contact zone, the "social space" where cultures meet. Such contact zones are socio-technical areas where different ontologies, knowledges and experiences collide and mix. The goal is to create spaces where the different knowledge traditions can meet in a cognitively just manner.

Before the database or the website has been designed, and begun its life as a physical reality, one must look for this undefined social space (van der Velden 2010). As we begin modelling the system design from a Sami standpoint, it can be useful to establish a perspective that information systems are never completed once and for all. One must expect to make several cycles of design and develop the opportunities seen in each cycle together with the knowledge holders and users. Some recommendations for system development, which I have adapted to Sami traditional knowledge where appropriate, are listed below. Good advice for system development is taken from van der Velden (2005; 2010) and Verran (1993) and technical requirements are taken from Dyson & Legget (2006, 81).

Indigenous database system requirements

A. Good advice for the development of systems:
- Start simply, with a limited dataset, load the data and create metadata.
- Always have in mind who will use the system and which knowledge keepers will contribute.
- Focus on the retrieval, transfer and use of information (digital objects) from the database to design the logic, data structure and search engine.
- Create a minimal structure for the metadata to begin with, to support the loading of data and metadata about knowledge contexts and practices.

- Take a critical stance. Regard the database/system and its development as a political and cultural investment, a process in need of continuous discussion.

B. Technical requirements for the system
- The design should be appropriate for Sami culture; supporting oral and pictorial communication is particularly important.
- It should contain the languages appropriate to any given Sami context.
- It must be enabled for data registration in the field, including data from simple mobile phones if necessary.
- It should be robust enough to withstand arctic conditions, i.e. snow, rain, wind and low temperatures.
- It should protect Sami knowledge protocols, and secure and control who has access to information, e.g. who is allowed to see sacred sites or other sensitive content.
- The system should comply with copyright and intellectual property law.
- It should be easy to use and navigate, also for people with disabilities and the elderly.
- It should be reasonably priced and cost-effective.
- It should allow for different types of knowledge in various local adaptations.
- There should be control of the content, design, development and maintenance at local level.

Conclusion

Traditional knowledge is not quite like any other knowledge. It is often oral, invisible and difficult to grasp. The information expressed in text, pictures and films within a digital system is just the tip of the iceberg of the actual knowledge possessed by the knowledge keepers and local communities. We must also try to find ways to convey the unpredictability of the knowledge. The design process should begin in a basic way with the aim to work interactively, go several rounds and establish an open perspective on one's own knowledge. How can the system become even more goal-orientated? The knowledge that is stored and managed must be firmly rooted in the experiences of the knowledge keepers and provide an experience of its true context and environment. When designing digital systems, one should also have specific thoughts about who might wish to use the traditional knowledge today.

Until now the work with *árbediehtu* has been organised as a project, with a reference group of resource persons. Cooperation on requirements specifications between the partners is especially important, and others directly involved should also be included from the start. In order to build up a common knowledge base, one should to a certain degree structure the data and create a common ontology and concept formation. It is also important to structure data sufficiently to enable exchange across projects. At the same time the complexity and diversity of the material should be retained. National and international networking provides the opportunity to reap from others' experiences in similar projects and to create connections between different systems. Open source code and local ownership allow for reuse and development of others' applications. Who owns the knowledge, and where it comes from, should be communicated in the information system in both content and design.

Traditional knowledge is characterised by its ability to adapt to place, situation and social community. The emergence of multimedia technology and new social media has enabled people to collaborate and share information in completely new ways. We want systems that create good cycles. What is brought out and used from *giisá*, the treasure chest of traditional knowledge, lives on. Learning is a multifaceted process, whether it is done in the mountains or at sea, via a desktop or an iPhone.

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ERIK NORBERG & BIRGITTA FOSSUM

Traditional Knowledge and Cultural Landscape

Introduction

In the early 1980s, the South Sami people themselves started to document their knowledge of their heritage, lifestyles, traditions and language. Almost 30 years later, in 2008, funds were at last allocated to a project called "*Saemieh Saepmesne – I det samiska rummet*" (Saemieh Saepmesne – In the Sami space) in order to continue this work. (*Saemieh Saepmesne* 2010). "*Saemieh Saepmesne*" is a joint Swedish and Norwegian Interreg project which attempts to cover the South Sami areas on both sides of the Swedish and Norwegian border, the partners being Saemien Sijte in Snåsa, Gaaltije in Östersund and Västerbotten Museum in Umeå[1].

The object of this work is to throw light on the South Sami cultural landscape and the presence of human life within it. Language, place names, archives and cultural remains are important sources of knowledge about traditional uses of the landscape. Significantly, the project has been able to create networks between local South Sami associations and institutions on both sides of the Swedish- Norwegian border, and research institutions.

Specifically, the work involves providing interested Sami people from local communities with the tools they need to document and research different aspects of South Sami history and culture. These tools are provided through

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[1]   The project receives financial support from, among others, the Sami Parliaments in Norway and Sweden, the EU, Interreg, several counties, Ájtte Swedish Mountain and Sami Museum, Ministry of Labour and Social Inclusion and the Norwegian Council for Cultural Affairs.

1/2011

courses in archival studies, interviews – conversations, mapping and place-name studies and survey courses in Sami cultural remains. The work is carried out in close cooperation with Sami villages, reindeer districts and Sami associations. The results from the work of *Saemieh Saepmesne* are put into a shared database. The data forms the basis for information sharing both within and outside the Sami community. Results of the project are communicated regularly through seminars, presentations and in written form on the website (*Saemieh Saepmesne* 2010).

When Sámi University College received funds from the Sami Parliament and the Norwegian Ministry of Labour and Social Inclusion to implement a pilot project to develop a methodology for documenting, preserving, protecting and storing *aerpiemaahtoe* (traditional knowledge), the Saemien Sijte took the opportunity to participate with the *Saemieh Saepmesne* project. This has given us the chance to participate in discussions particularly on methodology and ethical rules. It has also been important to us to have the opportunity to show that physical remains, as much as other kinds of records, are part of traditional knowledge, and that in our part of Sápmi they are very much a part of people's consciousness. Knowledge of these is transmitted both by oral tradition and by the identification and documentation of sites by earlier generations. Within the South Sami area, there is an emerging awareness of how important documentation is since it can have significant implications for future rights disputes. During the project a kind of manual of Sami cultural remains, prepared by Ewa Ljungdahl at Gaaltije, has been published. The manual "*Om vi inte syns så finns vi inte – Vägledning och dokumentation av det samiska kulturarvet*" (If we're not seen, we don't exist – Guidance and documentation of Sami Cultural Heritage) is intended as a help and inspiration to local registrars and custodians of Sami tradition and culture (Ljungdahl 2009). The title of the booklet shows how great the need is to document the Sami presence in the area through oral tradition, written sources and physical cultural remains. These last are an important archive of Sami history, since much of Sami history currently in use is written by people outside the Sami community.

Historical background of the project

In Norway, Sami cultural remains that are more than 100 years old have been protected since 1978. At the same time ethnic mobilization and increased awareness have developed within Sami culture, with a focus on

language and rights issues. With the Alta case, hydroelectric expansion in Finnmark was one of the more important developments.[2] The Alta case in the late 1970s and early 1980s showed that the Sami areas were vulnerable to extensive exploitation (Fjellheim 1987, 6). Norwegian authorities with overall responsibility for cultural heritage sites in the country had little knowledge of South Sami remains at that time and the knowledge of authorities outside the Sami Parliament can still be said to be limited.

In the early 1980s two major projects to exploit the South Sami area were planned, namely a regulation plan for Luru/Grana/Sanddøla and a firing range in Fosen. After South Sami demands for an investigation into the consequences of these developments, the developer agreed to bear the cost of investigating their future impact on the affected areas (Fjellheim 1987, 6).

The events of the late 1970s and early 1980s also led to a greater awareness of Sami issues in archaeology and history (Schanche & Olsen 1984; Bergstøl 2009, 75). In the 1980s there was a significant shift in western, and therefore in Scandinavian, archaeology from positivism and eco-functionalism towards structuralism, with the focus on reading the material culture as text, and interpreting its symbolic content (Schanche 2000, 79). Archaeology's earlier ethnocentric history was noted and criticised in parallel with the general movement towards Sami political mobilization. Archaeologists, particularly at the University of Tromsø, began to approach Sami history in a new way. This was sometimes met with resistance among colleagues who felt that it was not possible to attribute any ethnicity to archaeological materials (see Bergstøl 2009). In Tromsø, this kind of criticism was countered with the argument that it was impossible to construct a value-neutral history with regard to Norwegian and Sami identity because research is not conducted in a vacuum, but is rather influenced by political currents in society (Gjessing 1973; Olsen 1984; Bergstøl 2009).

In the early 1980s, Saemien Sijte[3] encouraged activities that would strengthen South Sami self-esteem and unity between Sami people (Fjellheim 1987, 6). From 1980 onwards, the recording of cultural remains was a theme in all

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2   The Sami protests against the expansion were a major success in Norwegian society and became widely known around the world.

3   Saemien Sijte is an independent organisation founded in 1964 in order to establish a museum and a gathering place for the South Sami in Norway. The museum and cultural centre that exists today was completed in 1980 (Fjellheim 1987, 5).

Saemien Sijte's annual reports, the idea being to access knowledge held by the custodians of tradition, usually older Sami, of Sami places no longer in use. The first survey course was held in 1981 with a total of 23 participants, from Hattfjelldal in the north to Elgå in the south (Fjellheim 1987, 6). In the summer of 1982, a pilot project was held in Røyrviks municipality after the Ministry of the Environment provided funding for a three-week pilot project registering Sami cultural remains. There was a sort of pre-registration week during which one person (Jonar Tomasson) toured Røyrvik and talked to various custodians of tradition who were thought to be knowledgeable about Sami cultural remains. Field visits to the reported locations were then carried out over two weeks. That same year, registrations of cultural remains were conducted as part of a Sami initiative in Engerdal (Fjellheim 1987, 7).

Funds for a larger inventory project throughout the South Sami area were finally granted in 1984 by the Norwegian partner. The area was divided between ten historic and currently active Sami groups. Within these groups, registrars with access to the local community were sought, the thought being that a person from within the society, as opposed to one from outside, would have both the geographical knowledge and the support of the population. Also, these people usually know about past and present Sami settlements in the area, as well as about how the area has been cultivated and managed for reindeer. A local registrar is more likely to create a local network of informants (Fjellheim 1987, 8–9). Fjellheim (1987, 9) argues that the registration process builds up an understanding of the inhabitants' own cultural background which then further strengthens this affinity. The work also creates a wider interest in other cultural activities. To summarise, the registration of cultural remains in the 1980s aimed to:

- Strengthen South Sami culture and sense of identity.
- Increase knowledge of their culture and history.
- Create local cultural activities.
- Create source material for South Sami culture and history.
- Document landscape use.
- Increase knowledge of Sami culture in the landscape.
- Provide a basis for planning and heritage protection.

The purpose of these registrations was to preserve historical sites and sources, while also helping to strengthen South Sami cultural awareness and historical roots. Lack of knowledge has meant that general inventories of cultural

remains conducted previously in Norway have not managed to any great extent to capture the remnants of Sami culture (Mjaatvedt 1987, 11).

In methodological terms, we relied heavily on the existence of tradition-bearers who could describe what kinds of remains were in the landscape, where they were and what they knew about them. The actual field methodology was followed by researchers interviewing local tradition-bearers and collecting data on cultural heritage and its contexts – for example, about who was the user/owner of any given site. Tradition-bearers in the 1980s were mainly elderly Sami who had been active in the area, either through herding or other work. The places they mentioned were located, when possible with the help of the tradition-bearer. They were marked on the map and the coordinates were set. They were then described and photographed, while both the terrain and the area closest to the remains were also described. The registration schedule used was provided by the Secretariat for Registration of Heritage Sites in Norway (SEFRAK, *Sekretariatet for registrering av faste kulturminner i Norge*)[4]. Inventory areas were made to coincide with reindeer grazing districts so as to enable researchers to monitor more effectively the annual cycle of reindeer herding through the spring, summer, autumn and winter migrations (Mjaatvedt 1987, 13). The project sought also to use Sami terminology for various remains, and to develop a dictionary to describe the remains both in South Sami and Norwegian (Mjaatvedt 1987, 14).

According to Mjaatvedt (1987, 11), South Sami history on the Norwegian side of the border, even in modern times, was at that time an essentially oral history passed down from generation to generation. There was a limited reference literature; knowledge had to be built in parallel with the heritage inventories. Since the 1880s, historical research into the South Sami maintained that the South Sami were an immigrant group arriving in the area that had been deserted as a result of the Black Death in the 1350s. For areas south of Snåsa, the Sami were considered to have arrived as late as in the 1600s. During both the 1980s and the 2000s, the late immigration theory was brought up again by historians from the University of Trondheim. The Sami's own history, however, says that they have always existed in these areas (Mjaatvedt 1987, 11–12).

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4   http://www.riksantikvaren.no/?module=Articles;action=Article.publicShow;ID=2959

Cultural heritage and context

Greater value should be placed on the contextual study of cultural heritage. Cultural heritage is related to other cultural expressions such as language, the Sami way of life, food traditions, folklore, costumes and all the traditions relating to their habits and practices. Together they form a system that helps set the frame of reference for Sami culture (Fjellheim 1987, 9). According to this view, Sami cultural heritage forms an important part of a historical whole in which changes in land use and ways of survival become apparent as they happened across time, and as such form a history of social change.

Abandoned Sami remains of more than 100 years old are defined as heritage sites – and this creates favourable conditions for those with knowledge of them. Many of the registered cultural remains are part of what is traditionally and locally known. Local people often know who used a given site, in what way, and why. Of course there are even older Sami remains about which there is no information, but even here general traditional knowledge can provide good interpretative tools when similar remains are described. While many archaeologists in other parts of Scandinavia derive interpretative analogies from anthropological studies in other parts of the world, we often base our interpretative tools on traditional knowledge. Where it was important to show that the South Sami had been in the area, the older tradition-bearers were also of great importance in identifying "known" human settlements.

As an archaeologist however, one is not wholly dependent on tradition-bearers for finding Sami cultural remains. They often appear during regular inventory research as well. Older remains are often recorded, even though there is no known tradition and the current land use of the site offers no clue as to its former use. In these cases, traditional knowledge can provide important information about the use of space and movement in the landscape as a whole. The greatest danger with this, as we will discuss later, is that one can miss remains that do not follow the pattern we have learned to recognize and to associate with reindeer herding.

Not surprisingly, Sami people name cultural remains with one or more Sami words to define what they are or were. A dictionary of South Sami terminology for cultural remains was started in the 1980s and has expanded during the course of the project. It has been reviewed locally by a South Sami language consultant. The glossary is not finished, and since the South Sami language is rich and varied, the glossary will probably continue to change and develop for

quite some time. There are often several different words for the same type of cultural remains, and our aim is to highlight this as far as we can.

The project's documentary approach is very like that of the 1980s project. Both then and now, issues were discussed: inventory technique, interview technique – now called conversation technique – collection of traditional knowledge, etc. (Mjaatvedt 1987, 12–13). In conclusion, it appears that the project which started in the Norwegian part of the South Sami area in the 1980s now has a sort of sequel in which many of the questions from that time arise again and where the goal is similar. The main difference to the 1980s' project is that the current project deals with the whole of the South Sami area on both sides of the border between Norway and Sweden, and one of our aims is to identify the whole of the South Sami area of distribution. The technology we use to show and highlight the Sami region and to disseminate information is now better and more suited to the task than it was 20–30 years ago, while we also benefit from the Internet and the accompanying social media to inform, receive information and make contacts.

Landscape, heritage and identity

The documentation of Sami cultural heritage is important because it throws light on Sami history and prehistory. It shows a Sami presence in the area where perhaps it had previously been doubtful or unknown. As well as revealing economic, social and religious aspects of Sami life, it can provide evidence of Sami use of the landscape. In the South Sami area, this work is still important in the fight to preserve traditional livelihoods in traditional areas. In the wake of certain lawsuits (e.g. the Nordmaling case), there is a risk of the South Sami people losing reindeer grazing rights. In some areas they have already lost these rights. They have been unable to refer to rights from time immemorial, and have instead had to rely on the good will of private landowners. An example is Trollheimen, where there has been a longstanding conflict of interest between private landowners wishing to exploit the area and the reindeer herding Sami people there. Much of this conflict lies in the difficulty of getting the Sami prehistory recognized, and because of an inability to respect and acknowledge the value of the Sami presence in the area.

Several factors come into play in deciding whether cultural remains should be defined as Sami or not. One can generally say that they can be defined

as Sami if there is a living or recorded tradition of similar cultural remains, or if local Sami knowledge links them to a Sami cultural context. Ancient remains can also be counted as Sami if research results can demonstrate a Sami history or prehistory (*Sami Parliament in Norway* 2005). In addition to this, there are cultural remains that are related to Sami prehistory because they are tangible expressions of the processes that led to the establishment of well-known Sami cultural expressions. This means that even older remains may be seen in a Sami context. Thus, they become part of the Sami cultural landscape and they need to be treated as such (ibid; Jørgensen & Olsen 1988; Olsen 1984; Hansen & Olsen 2004).

Sami cultural heritage management involves not only the physical traces of human activity but also places with traditions associated with events, beliefs, myths and place names. Many people have grown up with these myths, stories and performances passed on through traditions tied to the landscape. Affiliation to the landscape involves more than just being attached to the place where you are or live. It is part of the wholeness of life. The landscape has been owned by and inherited from the ancestors; it is part of the cosmological scheme involving animals, humans, plants, ancestors, gods and demons (Østmo 2004, 18; Fossum 2006, 34f). A rock, when seen from outside its cultural context, can be considered as a beautiful formation in nature, while for those aware of the Sami community it may have a completely different meaning. The rock may be part of a holy place which has gained great importance across the centuries through the rituals, traditions and beliefs associated with it.

Cultural remains and sites on their own say something about the Sami understanding of landscape and nature as well as indicating the importance of the landscape to economic, social and religious conditions. The diversity of cultural remains shows long-term Sami use of Sápmi. The Sami cultural landscape has a great time-depth and is charactherized to a high degree of continuity. This is evident not only in the use of the landscape over generations, but also in the stories and traditions about Sami ancestors who have shaped the cultural landscape across the centuries, reinforcing the links between the people and their territory (Norwegian Sami Parliament's definition of Sami cultural remains, *Sami Parliament in Norway* 2005).

The protection of the Sami cultural landscape and remains must therefore help to strengthen and preserve Sami identity and its relationship of the Sami to their ancestral land. It also plays an important part in informing future

generations of their cultural identity by showing their historical roots in the landscape. This is why Sami heritage and cultural environments are important in a contemporary context; besides providing historical knowledge as to how we have related to the environment, they also show how we can and should continue to relate to it (*Sami Parliament in Norway* 2005).

At the end of the 1980s, the cultural landscape was accepted as a "subject" to be studied. Landscapes around the world were ecosystems which to varying degrees were influenced by humans – through cultivation, buildings, cities and monuments, and by more subtle changes in vegetation caused by the grazing and fencing of animals – for example reindeer (Mulk & Bayliss-Smith 1999).

Traditional Sami industries, both reindeer herding and the activities of past hunting communities, have caused minor changes to the landscape. These are not always visible to the untrained eye and often require specific training to enable them to be identified. Sami culture does not always leave physical traces of itself. Sites may also have a strong secular and sacred significance in myths and traditions, and are as such an intangible heritage. Whether it's a place you pass through or a place only visible on the horizon, it is equally important as a part of the Sami landscape as the place where the *gåetie* (the Sami dwelling) stands.

How the landscape is used depends on the user's understanding and knowledge of it, the extent to which he or she belongs to it. Sami culture and way of life have always been closely tied to the use of the landscape. The Sami cultural landscape is, in effect, the Sami understanding of the land, which in turn is reflected in the activities carried out in it (*Sami Parliament in Norway* 2005).

In animist religions a key belief is that the landscape has soul. This makes nature and the landscape not just a passive backdrop but an active spiritual element in human life (Wiker 2004, 115; Fossum 2006, 34; Porsanger 2003). Man and nature are in a continuous process of interaction. Meaning is not written into the landscape, but is rather the consequence of that interaction (Bradley 2000; Jones 2006, 212; Fossum 2006, 34). The landscape exists in a dialectic relation between social action and geographical space, where social and cultural environments combined with experience create a cognitive map that determines movement patterns and behaviour in the landscape (Østmo 2004, 185; Fossum 2006, 34f). The landscape is changing, and change is

in itself an inherent result of our experience (Ingold 2000, 201). Its forms are clues to meaning rather than carriers of meaning (Ingold 2000; Jones 2006). Knowledge of and membership in an area are shaped by both practical experience and the transmission of knowledge between generations (see *Sami Parliament in Norway* 2005).

 Landscape is part of social space; it is where structures become significant. Structures in social space are expressed by occupied space acting as a representation of social space (Bourdieu 1996, 150; Østmo 2004, 185f). Children are socialized in to society and learn social rules by moving around the home (Hodder 2004). Consciousness itself is largely shaped by the surrounding material reality and a particularly strong influence on the individual occurs during childhood and adolescence (Engels [1882] 1938, 37). Social space is a constructed, abstract representation in the same way a map gives an overview of the social world, and the material, concrete and symbolic can be expressed in the occupied room or landscape (Bourdieu 1993, 297). In Sami pre-Christian religion, the *gåetie's* spatial design symbolizes society's social structures. Social and religious aspects of pre-Christian society were given specific expressions, and came to play an important role in how the ensuing generations became socialized into the Sami conceptual world. In this way, the *gåetie* functioned as a microcosm in which the various components and structures in the *gåetie* symbolized the cosmological order (Rydving 1995, 100ff; Hansen & Olsen 2004, 97ff; Fossum 2006, 35). In the traditional *gåetie*, the centre is the core symbol of the sun and its life-giving rays. From the main entrance, two rows of stones or logs run towards the fireplace, with similar lines to the rear of the *gåetie*. The area between the fireplace and the back door was perceived as holy and was taboo for women. Hunting prey was brought in through the rear holy door, while milk and products from animal husbandry were brought in through the main door. In addition to the horizontal division of the *gåetie*, you can see the line between the smoke vent, the fire and the earth as a reflection of the vertical dimension of the cosmos. It was the image of the world pole that went between the different dimensions and which had its heavenly end point in the polar star (Hansen & Olsen 2004, 97ff; Fossum 2006, 175f).

The Scandinavian mountains are often described as Europe's last wilderness, something that could imply that the area is essentially untouched by humans. These are the same mountains and landscapes that are part of the Sami cultural landscape where the Sami have been working through the millennia (Ljungdahl 2007, 28ff). It will have major consequences for Sami life and

culture if the traces of Sami presence are assumed to be part of the wilderness and not acknowledged as traces of a human culture. It may mean that the area becomes more accessible to further exploitation, which in turn could impose restrictions on reindeer herding and other Sami industries.

Today it is accepted in academic circles that the Sami have a long history and prehistory. The term Sami immigration is no longer referred to, but the question usually asked is: when did the Sami, Norse, Finnish and other ethnic identities arose on the Scandinavian Peninsula? What were the underlying causes, how did the phenomenon develop in different areas and how is it possible to detect its signs? In spite of the fact that today there is a broad consensus among archaeologists that the South Sami have been living in the area for a very long time and that they are descendants of the prehistoric people who lived here and inheritors of their culture, opinions surface occasionally which challenge this. In 2005, the collective publication ”*Trøndelags historie*” (The history of Trøndelag) (Bull et al. 2005b) came out, in which Ida Bull and Audun Dybdahl support the immigration theory even today (Bull 2005, 265; Dybdahl 2005, 159). This theory was put forward by Yngvar Nielsen in 1889 and, put briefly, argues that the Sami people immigrated to the area in the 1500s and 1600s. In 1889, he based his arguments for this on what he considered to be an absence of tombs and sacrificial sites and Sami place-names in the Røros area. In part 1 of the publication (Bull et al. 2005a) a different view is put forward by archaeologists who show that the Sami population existed in the central parts of Norway during the Iron Age (Aronsson & Ljungdahl 2008).

As a result of information contained in Trøndelag's history, the Saemien Sijte foundation, together with the Nidaros diocese and the committee for South Sami churches (*Nidaros bispedømme, utvalg for sørsamisk kirkeliv*), organised two seminars during 2006 and 2007 in order to spread new knowledge about the South Sami settlement history (Lyngman 2007).

Recent surveys and archaeological investigations have also shown Sami settlements as far south as Valdres in Oppland county during the Iron and Medieval Ages. Under the direction of the Science Museum in Oslo, a Sami site was investigated which, on evidence about its use, can be dated back to the 900s (Skalleberg, orally).

The importance of meetings and participation

Dialogue as a method and our shortcomings

The point of dialogue as a method in the "*Saemieh Saepmesne*" project is to increase our knowledge of the South Sami community, and amongst its members as well. It requires us as project organisers to listen to and ask questions about needs and interests. In theory it works so that when a need is identified, we create the conditions for something to be done about it. For example, people may want to know the research world's historiography of South Sami society for a given time. We can then arrange for lectures to be given, or we can obtain the relevant literature on that area. Or people may ask what methods are available for tracking and documenting the past, for example, which archives are available online and where, in which records can we find data concerning the Sami, and the search methods for those archives. It could also involve how to look for cultural remains in the landscape or tips on how to conduct talks with tradition-bearers. Courses in archaeological survey techniques have been the most popular to date. This type of course has now been held five times in the area in the local Sami communities.

In theory it seems obvious that any activity arising out of the community itself should be supported and developed. In practice though all projects of this nature have inherent problems and contradictions. Projects often follow a set plan that is a prerequisite for grant funding. This sets certain limits which constrain the project's scope and flexibility. It can for example be difficult to satisfy needs which arise locally and which are perceived as important if they haven't already been presented in the funded project plan. Operations in the field do not happen by themselves. They must be continuously monitored and directed by the project management so as to ensure that desired objectives are achieved. This is not and should not be a one-way communication; many requests are received by those who work with "*Saemieh Saepmesne*", full or part time. However, there are differences between different areas.

The funds for this project came after an application process. Only when it was finished could dialogue with local communities begin. We believe the project "*Samieh Sapmesne*" has such a project history, at least on the Norwegian side. Dialogue with the local communities started mainly after the project had begun. Once it had started, project staff went around introducing themselves and informing the local community about the project so as to create interest

and credibility. This practice may have problems for several reasons: it can become difficult for the project to put down local roots; it risks being perceived as something imposed from the outside, while the idea of co-determining its design and goals may be seen as of minor significance. At worst, local communities that have not been engaged in dialogue before projects are started could come to see them as irrelevant. This is a shortcoming we are aware of, and it is a lesson to be learnt when any new application is processed.

Another important issue is that, in many cases, the staff hired for the project cannot themselves take part in designing the application. This problem is almost insurmountable. Posts have to be publicly advertised before anyone can be employed, and there can be no guarantee at the application stage that funding will be available. Personnel are therefore sometimes recruited entirely after the event so that the very people hired to implement the project can have no hand in its design.

In its defence, however, it should be said that those working on the project are very excited about it and have met with a good response and rewarding exchanges with local communities. The group that designed the project idea had the benefit of people with a special insight into South Sami society, for example, Ingvar Åhren. Åhren, a former project manager and operations manager from Gaaltije in Östersund, is South Sami and has a large network on both the Norwegian and Swedish sides. The local Sami community have long felt the need for a documentation project. We have heard a lot of people saying something like, "This should already have begun, and should have started 10–20 years ago." The project application was therefore designed in an atmosphere of goodwill, after the local need for it had been identified.

Some examples from an ongoing dialogue

In connection with a course in conversation technology that the project provided, many interesting reflections were made by participants. Among other things, these dealt with alternatives to the way conversations are usually planned and organised. One often reads that as an organizer, you should if possible avoid conversing with more than one person at a time on the grounds that it may be difficult afterwards to discern who said what. Personal or sensitive information may be inhibited by several participants. The practicalities of giving everyone space to be heard can also become difficult. Some of the participants on the course objected to this and pointed

out that there are also advantages to meeting several people at once. For example, bearers of tradition with common experiences can discuss and help each other to remember different events and stories. They are inspired by meeting each other and talking about old times and their memory can be helped by the energy of the meeting. This type of experience is not usually described in books about conversation and interview techniques (Crafoord 2005; Häger 2007). The problem of distinguishing who said what during conversations between two or three people at once is real. However the gain in terms of knowledge may be greater and identifying who says what can be solved if one uses a video camera as well as a voice recorder. Perhaps today's documentation practices are too fixated on the individual, often putting great responsibility on one person to remember and inform. It should surely be possible occasionally to vary documentation methodology, moving between one and several custodians of tradition, so as to get a more complete picture. Sami traditional local knowledge is collective and may have a different alignment to the one suggested in the interview books.

Another issue raised by participants in the course on conversation technology was what to do if the person you're talking to submits incorrect information? Many of those interested in the ancient uses of South Sami areas are experienced and aware tradition-bearers of that culture. This was an issue that we had to take on board and we tried to solve it as described below, in an account that was then included in the guidance on conversation techniques (Norberg 2010, 3):

> "That memory is affected by time is well known, and dates and locations can be wrong. Some of this one can check, return to and complete, but we cannot require that everything anyone says should be completely correct. You are very much given the tradition-bearer's view of various events and developments. The story may then be added to by different parts of second- or third-party information. Several stories about the same event may differ significantly on certain points; what we hear is one individual's experience of it."

Other questions raised concerns as to whether the South Sami community cultural remains should be published or not. Should they be in the public record? There are different opinions and views sometimes change over the course of time. Albert Jåma, a 60-year-old Sami engaged in reindeer herding within Åarjel Njaarke sijte, Vestre Namdalen is one of those who reflected on this issue. Albert said that he had changed his mind over whether or not the

existence and whereabouts of cultural sites should be disclosed. At first he thought they should be kept secret, but now he thinks they should be public knowledge. When asked why, he replied something like this:

> "In the 1980s, I was involved in working with and documenting cultural heritage, and believed in concealing the remains. Part of the resistance to the publication of cultural remains was based on a feeling that we had already been robbed of so much. Rights to land and water, being questioned as native people, and constantly studied by people outside who then wrote their version of Sami history, religion and origin. Should we lose our cultural remains now too? I think I shared this feeling with many Sami in these parts." (Albert Jåma 09/05/2009.)

Later, Albert said he continued to work on surveys and records of all kinds of cultural remains in the area, not only the Sami:

> "I saw that some remains had already been damaged; I have seen others be destroyed despite the fact that they are protected by law. You cannot save every one, but when cultural remains are publicly documented and then subsequently destroyed, for whatever reason, this becomes a historical document showing that these were Sami remains. Despite the fact that they've been lost and destroyed. The remains were perhaps not investigated archaeologically, but they are on the map of places where we Sami operated. Everyone can see it and have to recognise the written documentation. This conserves the data maybe for all time. If the remains are kept secret, then the information that could be used to fight any possible exploitation is lost. We Sami may know it was there, but it is not a clear and recognized historical document in the same way as it would be if it had been officially registered." (Albert Jåma 09/05/2009.)

This conversation led us to think and even understand some of the resistance to publication. It is possible to make the cultural heritage the group's own by keeping it secret and there is probably some value and point in doing that. In the end it becomes each individual's opinion as to what is best for the future, and this opinion can change. If the remains are known, they receive legal protection and become part of history but there is still no guarantee that they will not be destroyed. They retain, even if they are destroyed, a preserved value as a recognized historical document of South Sami activities in an area and that's what it takes to be recognized by the majority society.

We have learned a lot and many new ideas have come out of our time working in the South Sami area of Norway. The lessons and experiences have given us new knowledge and have in a way brought life and meaning into our own lives.

Ethics

In the 1980s, critical questions were raised around the world regarding how indigenous peoples' graves have been treated in connection with archaeological investigations. A forum for these issues, the World Archaeological Congress (WAC), was founded where ethical principles were debated. The conference in 1989 that went under the title "Archaeological Ethics and the Treatment of the Dead" was devoted to ethical issues and led to the 1990 adoption of ethical principles for members and obligations towards indigenous peoples (Olsen 1997, 260ff; Schanche 2000, 79; *First Code of Ethics* 1990).

That same year, i.e. 1990, Norway ratified the ILO Convention 169: "Convention Concerning indigenous and tribal peoples in independent countries". The Convention replaced the previous Convention on Rights of Indigenous Peoples ILO-107, adopted in 1957. The first convention was not ratified by Norway, but together with Mexico, Norway was among the first countries to sign the ILO-169 (Bergstøl 2009, 75). Sweden still has not ratified the convention on the grounds that Sweden does not consider itself able to meet the requirements of the Convention relating to Sami land rights.

In Norway, the Sami Parliament was established in 1989 and in 1994 it became a separate administrative body for Sami cultural heritage (Holand 2005; Bergstøl 2009, 75). Responsibility for cultural heritage sites in Norway and Sweden is structured similarly, but with a significant difference in terms of who is responsible for the Sami cultural heritage. Both in Norway and Sweden, the Directorate of Cultural Heritage has overall management responsibility, but regional responsibility is delegated to the counties' respective county boards. The main difference is that in Norway, responsibility for managing the Sami cultural heritage is delegated to the Sami Parliament's division for rights, way of life and environment. In Sweden, responsibility for management of Sami cultural heritage lies in the same place as other cultural heritage sites, namely the county boards. There are pros and cons for both systems; that is not something we will examine here. What can be said is that there is a

positive message in the administration being under the Sami Parliament and, in the spirit of self-determination, subject to Sami control.

In recent years, the Sami population in Sweden has made increasingly clear demands for cultural self-determination and control over cultural heritage issues. An important part of these demands has been to restore and re-bury bone material taken from Sápmi for archaeological studies, and skeletons and skulls collected for biological and medical research. The demand for repatriation and the right to bury their dead is about respect and recognition of the abuse the Sami community has suffered at the hands of the majority. Since the 1970s, these demands have been made around the world, and in the USA and Australia it is now impossible to pursue archaeology without being aware of these issues. In the United States the requirements and the debate led to Congress in 1990 adopting repatriation legislation into U.S. federal law, namely the "Native American Graves Protection and Repatriation Act (NAGPRA)" (Ojala 2009, 236ff).

In Scandinavia, there have been a few re-burials of human remains in the Sami area. The first was the re-burial of the skulls of Mons Somby and Aslak Hætta, each executed by beheading for their part in the Kautokeino uprising in 1852. The skulls had been taken to the Anatomical Institute at the University of Oslo for research purposes. In 1997, after many years of struggle by their descendants, the skulls were taken back to Sápmi and buried next to the Kåfjord church outside Alta (Olofsson 2001; *Sami Parliament in Sweden* 2007). In addition, there have been re-burials in Finland (Lehtola 2005) and one in Sweden (Heinerud 2004). In 2002, the skeletal remains of *Soejvengelle*[5] were buried in the original grave in *Aatoeklibpie* (in Swedish Atoklinten) in a collaboration between the Västerbotten Museum and *Vadtjen Saemieh Sijte*. The grave was investigated in 1950 by Ernst Manker, and the skeletal remains were then moved to the Nordic Museum in Stockholm. The material was kept there until 1973 when it was transferred to the National Historical Museums, also in Stockholm. In connection with the investigation, Manker promised in a letter to Nils Axelsson in Ström (Tärna parish) that the bones would be returned and re-buried in their original location. However, it took over 20 years before the demands by *Vadtjen Saemieh Sijte* led to *Soejvengelle* being re-buried (Heinerud 2004; Fossum 2006; Ojala 2009, 255). This is so far the only re-burial of Sami skeletal remians that has taken place in Sweden. Today at least nine institutions in Sweden have Sami skeletal material in their

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5   Also *Suoivengella* (in South Sami) the 'shadow man'.

collections from an unknown number of individuals (Edbom 2005, 31). At the same time there is a tradition of re-burying remains that is starting to emerge for different reasons, for example from abandoned cemeteries (Ojala 2009, 255). In Finland during the 1990s, it became known that there were skulls at the University of Helsinki which were from Inari, Utsjoki and Muonio and which had been collected during the 1800s and 1900s. After debate and demands from the Sami population, 95 skulls were brought back to Sápmi and re-buried on an ancient Sami burial site in Enareträsk (Lehtola 2005, 84; Harlin 2008, 196; Ojala 2009, 268).

These may be the only examples of the repatriation of skeletons so far in the Nordic countries but these are far from the only examples of the collection of skeletal material, holy stones, and so on. These collections were assembled mainly during the late 1800s and to some extent into the 1900s. Ernst Manker, ethnologist and former director of the Nordic Museum, can be cited as an example of a collector. During the 1940s and 1950s he travelled around Sápmi gathering information, knowledge and materials that he brought to the Nordic Museum in Stockholm. Manker published major works full of information about Sami culture and their archaeological remains. One of his great works "*Lapparnas heliga ställen*"(The Lapps' holy places) (Manker 1957) provides much information on places of sacrifice in Sápmi with both pictures and descriptions of places of sacrifice. By reading Manker, among others, people can quite easily find the major important places of sacrifice, something which could have repercussions far into the future. The sites could at worst be damaged by looting but they may also be used by various New Age movements.

Memories of the rampage in Sápmi by previous researchers still live on, and the experience has bred some scepticism about cooperating with archaeologists and scientists. Those who currently document Sami prehistory have a completely different ethical framework in their approach and working methods. One important change is their view of Sami prehistory and history. Earlier students of Sami society did not start from the position that the Sami actually had a history. Now this prehistory is recognized and studied (Olsen 2000). The right of the Sami themselves to define what kind of training is needed for this study, is also recognised. In addition, more and more researchers come from the Sami communities, and much of the work is being done by Sami researchers or Sami institutions.

Saemien Sijte – South Sami Museum and Cultural Center is a Sami institution. We shall work according to our own codes of conduct consistent with museum standards. We shall follow best practice as set out in museum and research ethics guidelines, as well as in the main guidelines laid down by the Sami Parliament. Yet our work and our ethical guidelines remain locally grounded in the South Sami society.

It is therefore important that institutions and projects working with an indigenous cultural heritage are aware and work within the ethical guidelines and conventions drafted by the UN and the ICOM (*International Council of Museums*). At the same time each country also has ethical guidelines (*National Committees for Research Ethics in Norway* 2010) and we have the *Archaeological Code of Ethics* mentioned above (*First Code of Ethics* 1990). Without going into them in detail, we want to mention the UN Framework Convention on Biological Diversity, the UN Declaration on the Rights of Indigenous Peoples, the ILO Convention 169 and the draft UN guidelines for the protection of indigenous heritage (*Principles and guidelines for protection of the heritage of indigenous peoples*) (*Convention on Biological Diversity* 1992; *Declaration* 2007; *ILO Convention* 2003; *Draft Principles* 2000; see also *Ethics in Sámi and Indigenous Research* 2008). Field work carried out shall be in accordance with academic standards and relevant national and international laws and agreements in the field (United Nations conventions, ICOM's rules, Archaeological Code of Ethics). Field work will respect the views of local communities. It is also important that we know where our ethical boundaries lie. What are the limits of my professional practice? Do I agree to work on investigations in relation, for example, to future exploitation? Thinking about different issues before they occur can be a great help.

The documentation of prehistoric and cultural remains is based on our working methods, and always involves at least two types of "products". First, the physical ancient remains in the Sami region which may be in danger of being physically destroyed; second, the oral and/or written information about the sites and the area as a whole, which draws on traditional knowledge.[6]

The project will document Sami ancient and cultural sites and characterise them where possible. This is done primarily by recording cultural remains in the database developed for the project and to the Sami Parliament. Access

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6   For ethics in the documentation of Sami traditional knowledge, see Åsa Nordin Jonsson's contribution in this article collection.

to the database is given to those who participate in the project, meaning the South Sami population. The presence of registered sites is shown on a map, and eventually the number of points on it will grow as more and more places are identified. It is possible to protect sensitive sites in the database, such as graves and sacrificial sites, so that they do not appear on the map, i.e. they can be excluded from being published. The Sami Parliament also has a requirement that all Sami ancient and cultural remains that are registered shall be included in the FMIS (*Fornminnes Informations System*, which is Information System for Cultural Heritage, http://www.fmis.raa.se) and in Askeladden (Database for cultural heritage, http://askeladden.ra.no/sok), which is the public database for ancient remains in Sweden and Norway.

In theory, all ancient remains are protected by law if they meet the requirements for protection. But in practice, it is only when they are registered that the authorities can ensure that the remains are not destroyed – for example, by road construction. Our demand has been that sensitive remains such as graves and sacrificial sites shall not be publicised so that they can be protected from destruction by curious people, plunderers and so on. In the two public databases available today, there are two levels of access. First, there are the public search tools, available to anyone on the Internet; and secondly, there are some that are only accessible by login and password. To get the login and password, the user has to belong to a relevant authority or research institution. Today, fragile remains are protected from disclosure in the sense that they are only accessible to those with a login, i.e. the Directorate of Cultural Heritage, the county administration and boards, the Sami Parliament and the universities.

As a result of the methods we use we also receive a relatively large number of oral narratives. Conversations with tradition-bearers take place with free and informed consent. They are fully aware of what the information will be used for, and agreements about the use of the material are made before the conversation begins. Where conversations with tradition-bearers are either recorded on tape or filmed on video, these talks are stored on a server and are available to the tradition-bearers if they wish to have a digital copy. The material is also available to participating institutions and staff in the project. An agreement or a contract should also state clearly what restrictions the tradition-bearers have concerning the use of the material and the extent to which other researchers may or may not have access.

As a responsible institution, the project owners and cooperating institutions are required to ensure that the material is not abused and that the material may not under any circumstances be given or sold to organizations, businesses or put to other commercial use. We and the project workers are also responsible for protecting confidential information which becomes available to the project during the work; this may in practice mean that we cannot include sensitive information e.g. the location of sacred places.

Cultural heritage and identity – then, now and later

Using archaeological remains and stories to create national history is not unusual, and certain events are often part of the national myth (Olsen 1997, 271ff). Traditionally, archaeologists and historians in the Nordic countries have had little interest in Sami history, probably because it does not play an active role in the national myth. For the periods where we have been able to distinguish between Sami and Nordic prehistory, it has usually been the latter that has been studied.

The research view from the 1600s until about 1870 saw the Sami as the indigenous people of Scandinavia. Subsequently the Sami population was gradually marginalised by the Germanic peoples (Hansen & Olsen 2004, 17) and during the 1860s the majority society's policy and scientific views became more hostile to the Sami. Views on the earlier concept of 'the noble savage' changed throughout the western world. In the 1870s, a theory of a late Sami migration from the east was launched. In 1891, Ingvar Nielsen claimed he had proved that the Sami south of Trøndelag and Hedmark had only come to these areas during the previous 200 years and that consequently they could not be an indigenous people in the central parts of Norway (Hansen & Olsen 2004, 23–24).

In the period from 1910 to 1960 historians and archaeologists rarely studied Sami history. Most felt that the Sami were a relatively recent immigrated people and they were subsequently seen as representing an ethnographic field of study (Hansen & Olsen 2004, 26). As recently as the 1970s the story of Northern Scandinavia was the history of Swedes and Norwegians alone (Olsen 2000, 29; Fossum 2006, 17). In archaeology, their own (Norwegian, Swedish or Finnish) national history was important while ethnographic studies were regarded as the study of the other, the primitive, and the alien.

As mentioned earlier, there are still some historians who hold views rooted in this academic tradition.

There is also another group of researchers who, more indirectly, subscribe to the theory that Sami history is short. Lennart Lundmark (1998, 2008) is a historian who is often critical of society's significant and damaging impact, particularly in the Swedish part of Sápmi. His books often give a brief description of the sources that exist concerning the Sami. These are all written archival sources (they are considered the most objective by Lundmark) where the Sami appear in different contexts. In his prefaces, he often argues that the Sami people disappear in the obscurity of history during the 1000s when the written material runs out, but is it really so? We would argue the opposite. We believe that in rejecting the source value of archaeological materials, Lundmark (and certain other researchers of Sami history and religion) also denies the South Sami people the right to a long history. This approach contributes to a picture of a static Sami society, unchanged by time, where any pre-historic traces that do not fit the written source material, become invisible . By recognizing the source value of archaeological materials and using them in conjunction with other source material, you can give a better picture of Sami community, social life, beliefs and regional variations, and with a much greater time depth than the fragmented historical material can ever give (Fossum 2006, 17). Historians of religion such as Louise Bäckman (2000, 17), Håkan Rydving and Rolf Kristoffersen (1993, 198) have been cautious in referring to the archaeological results of their research. One can just about acknowledge that early institutional practices did not accept a adjacent historical discipline, as archaeology is to history, but it is a cause for concern that the situation is unchanged today in the 2000s.

Sami cultural remains are one, perhaps the foremost, of the sources available today for the writing of early Sami history from within the Sami community. Remains of many settlements from different periods are still there in the land where the Sami lived and worked, but that is rarely mentioned in the written material. On this view, archaeology plays an important part in the writing of Sami history and is almost the only source, apart from a few Roman and Greek sources, for material on the Sami in the period before the 1000s and the Middle Ages. The archaeological survey of Sami remains from the Late Iron Age and early Middle Ages in southern Norway has also reinforced the few historical sources available, such as the reference to Harald Hårfager and Finnekonge Svåse, who had a *gåetie* near the royal estate in Dovre (Sturluson 1995, 72–73). Archaeology has been a great help in understanding how society

was re-organised as a consequence of the domestication of reindeer and when that happened. Sven-Donald Hedman's (2003) research in the Arvidsjaur/ Arjeplog area clearly shows that the domestication of reindeer caused the settlements to be moved away from lakes, rivers and good hunting grounds to dry heaths in more moor-like areas. Pasture together with an adaptation to the needs of the reindeer were the main factors in the new settlement pattern, along with access to water and firewood, and this is reflected in the change in the area during the Late Iron Age in the 600–700s.

So far, archaeological investigations in the South Sami area have been few, but they have been useful for contemporary society. However, this has not prevented archaeologists from believing that, for interpreting prehistoric societies, what is documented is representative of the whole. Evert Baudou (1992, 110–111) argues for example that it is possible to see an ethnic border from northern Ångermanland diagonally across to northern Jämtland on the basis of the presence of asbestos ceramics and moulds for ananino bronze during the millennium BC. Although this type of pottery and this type of mould exist north of the border there have been fewer finds south of it. Baudou believes that the border remained visible during the Iron Age and into the historic period and to some extent still remains. According to him the border separated areas inhabited by the Sami (the North) and by the Nordic agrarian population (the area south of the border). Later he refers to the fact that south of the "border" the place names are Nordic and north of it they are more Sami (Baudou 1992, 112). In our opinion, this reasoning is extremely simplified because no critique of the archaeological source record is offered, for example about what may have shaped this distribution. Furthermore Baudou disregards abundant material on both sides of the "border" from the same period, for example bifacial arrowheads of quartz and quartzite (in use from about 2000 BC until the beginning of our era, perhaps to as far as the 400 AD). Another set of remains which Baudou (1992) does not mention is the lake graves on both sides of that border and other "transnational" remains, for example catch pits and cooking pits. Last but not least, it seems Baudou forgets who printed all the public maps since they were first made, with a monopoly on the naming of places.

There have been two major archaeological excavations of burial grounds in Härjedalen: Vivallen in Funäsdalen dated to the 900–1000 AD and Krankmårtenshögen by Storsjön, dating from the period 200 BC to 200 AD. Here Baudou (1992, 153) only deals with Vivallen which he accepts as a Sami pre-Christian burial ground, without discussing it in relation to his

significantly more northern border. Baudou, however, does make the reflection that no burial ground like it had been discovered in the "undoubtedly Sami area in northern part of Norrland." He also notes that burial practices can vary across a widespread geographical group (Baudou 1992, 153). Therefore Baudou has identified a group that seems to be distributed far south of the border on the basis of un-problematised archaeological finds.

Like all historical sources, archaeological remains and research are open to multiple interpretations. The published results can then be used by society in various ways: in school, in study groups or in local history societies. Sometimes, and this happens especially in the South Sami area, they figure in legal disputes over land and water between landowners and Sami. The results of archaeological research have been instrumental in several trials, as evidence for South Sami cultural continuity in current South Sami areas over the last two millennia. Without these research results the immigration theory would almost certainly still be asserted by a larger number of academics and law practitioners than it is today. The phrase: "if we're not seen, we don't exist" or perhaps even more explicitly "if we're not seen on your terms in written documents, we don't exist" is, in this context, made very clear.

Reflections and conclusions

The theoretical conditions for this project have been good. In practical terms, we have seen growing interest and involvement from the local Sami communities as the project has progressed. Interest in history and prehistory is great and this should strengthen personal identity and bring added value to local communities in many ways and on different levels.

Initially, the practical implementation of the project was out of step with today's theoretical starting points. By that we mean that the project could have been better anchored in the affected communities before the application for funds was made. The fact that it wasn't may have meant that the project was initially perceived as an imposition on the community from outside, the result of something formulated elsewhere, and that the locals lacked influence. In our project and in all others that we will do, we are going to be more attentive to this in the future, especially now that we hope to work further, with an extension into 2012. The issues to be addressed then, whether they concern research or pure documentation, will be rooted from the start in the local communities.

Registration of cultural remains and the collection of traditional knowledge are very important in the South Sami area, as in all the Sami areas. Sami cultural environments are created by activity in the area. Working with people who themselves have lived in a similar way to the people who actually made cultural marks on the land gives a further dimension to the understanding of tradition. As mentioned, we should not focus only on remains from historical times and from later reindeer-herding communities but try to follow the history of the area in a continuous line back in time.

In South Sami society, especially in the southern parts, it is very important to register the older remains in order to problematize and question the various migration theories. In these areas, the issues for the affected communities are mostly to do with land rights. The burden of proof is still on the Sami community to show that they existed there before the 1880s. This inevitably means searching the land with limited means and resources for traces that will then be scientifically analysed and interpreted. Will there be areas in Norway where the Norwegian population may have to do the same in order to be allowed to continue with their livelihoods? There are a lot of sites that had no Norwegian farms before the 1800s in Norway.

What we can see from archaeological research on prehistoric Sami communities is that settlement patterns changed radically when the society went from being a hunting and fishing society to a reindeer-herding community. There are other factors that determine the location of settlements. When the Sami mainly lived by hunting, trapping, fishing and gathering it was the availability of resources which largely decided where they settled. When they started reindeer herding it was the availability of grazing which determined the choice. On the Norwegian side there has been no comprehensive research into the earlier periods, which means that we do not have as good an overview of how the settlement pattern changed during the transition to reindeer herding. If registrations reflect only the use of the landscape for reindeer herding practices, we will lose remains from earlier periods as well as research opportunities for discovering when these transitions were made locally.

What we have seen at our courses is that local tradition-bearers become extraordinarily skilled in finding old remains after they have learnt how to recognise them in the terrain today. Their appetite for new knowledge combined with their own knowledge of the area, myths and places, and

their ability to move in harmony with the landscape means that they quickly develop an insight into where and how to find older remains.

Something that is perhaps unique to this project is that it makes use of traditional knowledge to give South Sami society some visibility in the world beyond. Open meetings and seminars, and the marking of South Sami cultural remains on the same map on both sides of the border between Sweden and Norway have all helped to make this happen. Our hope for this project is that by these means we will help to give South Sami society a strong sense of itself, while also strengthening its position in the nation states of Sweden and Norway.

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JELENA PORSANGER

The Problematisation of the Dichotomy of Modernity and Tradition in Indigenous and Sami contexts

Scholars, social workers, museum staff, indigenous leaders and individual members of indigenous communities, who are working in the field of indigenous traditional knowledge, always meet the inevitable question: "How do you determine what is traditional and what is modern in your indigenous culture?" This question is most often posed by those outside indigenous communities, but nowadays there are also internal discussions on this issue within such communities, among indigenous academics and some experts working in the field of documentation of traditional knowledge. This problem issue has become more and more obvious for me after many years of work as a Sami researcher in different academic institutions, and as a project manager for the Árbediehtu Project on documentation and protection of Sami traditional knowledge (see *Árbediehtu Pilot Project* 2010) from 2008 until today.

I believe that the question above is based on a dichotomy of modernity and tradition. In this article I intend to problematise this dichotomy. I do not consider the established division into binary oppositions as problematic, but I share the view of many indigenous scholars who argue that the division of tradition and modernity into binary oppositions is hostile to indigenous epistemologies. The focus of this article is on indigenous and Sami understanding of tradition and traditional knowledge, which is based on the Sami theory of knowledge, perception of the world and value system. This understanding can be revealed through investigation of Sami concepts, as

well as through analysis of certain scholarly works by Sami researchers. This article is an invitation to a broader scholarly discussion about the introduction and use of Sami concepts in research as an alternative to basing theorising and analysis on the established epistemologies. In my opinion, the question of "how tradition and modernity can be separated from each other" is a "mission impossible" question, which originates from non-indigenous epistemologies and focuses attention on issues foreign to an indigenous ontology and value system.

Problematisation as a powerful research paradigm

Problematisation of an issue is undoubtedly a salient feature of research paradigms, almost regardless of research topic. Problematisation has been closely connected to so-called Western philosophical thought, which is quite strongly rooted in ancient Greek philosophy and the Cartesian understanding of the theory of knowledge. Indigenous scholars, in the early process of decolonising research approaches and methodologies[1], noticed that in research on indigenous issues, problematisation of the indigenous seemed to be a Western obsession (Smith L. 1999, 91). The "indigenous problem" has been "a recurrent theme in all aspects of imperial and colonial attempts to deal with indigenous peoples" (Smith L. 1999, 90). The core of discussions about the indigenous as "the Other" on different levels, e.g. research, journalism, missionary and traveller accounts, literature etc., is simply and briefly expressed by Linda Tuhiwai Smith as follows: "The --- (*insert name of indigenous group*) problem" (Smith L. 1999, 90). Historically, the problematisation of the indigenous has been connected to the colonisation of indigenous peoples, their territories and resources (see also Dunbar (2008)).

I quote Linda Tuhiwai Smith extensively here because this Maori scholar has had an unquestionable influence on indigenous research worldwide, as well

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1   According to the mainstream of indigenous theorising, indigenous peoples' interests, knowledge and experiences must be put at the centre of methodologies and of the construction of knowledge about indigenous peoples (Rigney 1999, 119; about indigenous methodologies in general, see Porsanger 2004; 2007, 13–107; Smith L. T. 1999; 2005; Smith G. 2003; Kuokkanen 2007; 2009, 121–144; *Handbook* 2008). Most indigenous scholars emphasise the importance of the competence of indigenous researchers, prioritise indigenous knowledge as a source, and draw attention to the benefit of indigenous research to the indigenous peoples studied themselves.

as on my own research views and priorities[2]. In my opinion, *problematisation as a research paradigm* seems to be a powerful tool for indigenous research in a methodological sense. In considering the application of this paradigm to indigenous research, one may argue that such research should break new ground and not merely follow the established research paradigms. I agree that the development of indigenous theorising can give academic circles a breath of fresh air and help indigenous peoples to achieve intellectual independence (Porsanger 2010, 438). However, I also firmly believe that indigenous research can draw on all previous research and theorising (Porsanger 2007, 18).

As a matter of fact, problematisation seems to be a logical part of the Western research paradigm. Generally speaking, Western research operates with the concept of "problem" as a synonym to "question", both in social and natural sciences. For example, in presentations of research issues such as "the problem of truth in philosophy" or "the problem of validity in social science" or "the problem of the use of marine resources" etc. one can easily identify *the research problem.* Thus, problematisation seems to be deeply rooted in Western theories of knowledge (epistemologies) and approaches to knowledge, especially in relation to yet unknown opinions or a variety of points of view.

In research on indigenous issues, the problematisation paradigm has been quite productive – considered from the point of view of the mainstream Western academy. This paradigm has articulated unequal power relations and is based on values belonging to non-indigenous value systems. The result of the use of this research paradigm is that "many researchers, even those with the best of intentions, frame their research in ways that assume that the locus of a particular research problem lies with the indigenous individual or community rather than with other social or structural issues" (Smith L. 1999, 92). Indeed, the problematisation of indigenous peoples has focused attention on indigenous individuals and communities as a source of the "problem" rather than on other circumstances and power relations around indigenous issues. Furthermore, such problematisation has moved researchers' attention away from the views, values, and often also from the real needs of indigenous peoples, i.e. from indigenous philosophies, epistemologies, ontologies and value systems.

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2   In my doctoral dissertation (Porsanger 2007) I proposed a Sami research methodology and applied it to the evaluation of source materials for the study of indigenous Sami religion, and proposed a Sami term *eamioskkoldat* for "indigenous religion".

Based on our realisation that problematisation has great potential as a research tool, we can apply it to indigenous research. Problematising the paradigm of the dichotomy of tradition and modernity can give legitimate voice and space to indigenous theories of knowledge. By doing so, we are questioning the whole "solid" ground underlying the above issue of "How to differentiate between tradition and modernity".

Knowledge building

As I have expressed elsewhere (Porsanger 2010), indigenous research has passed through a period of emancipation and rigorous criticism of non-indigenous ways of theorising, with a clear focus on the argumentation for, and defence of, the distinctive characteristics of indigenous knowledge. Today, when indigenous research has gained in strength, there is, in my opinion, a need for the production of new knowledge based on novel approaches and concepts that derive from our own cultures, and for theorising on the basis of these concepts (ibid.). Such research will be capable of competing with traditional academic research; indeed, it will enrich our academic knowledge. Furthermore, as emphasised by Sami scholar Vigdis Stordahl (2008, 262), knowledge building is an important part of the process of nation building.

Indigenous research can be expected to produce new knowledge which our communities require and need for development processes conducted on their own terms. For example, in the Árbediehtu Project, the project workers have found that local Sami communities are gratified that their traditional knowledge is taken seriously both as knowledge and as a source of reliable information, which can and should contribute to local development on the terms of local people. Many times the local participants in the project meetings were overcome by emotion; it seemed that people have waited a long time to experience recognition of their traditional skills and knowledge.

Both indigenous and non-indigenous scholars can contribute to knowledge building. In my opinion, the most exciting and challenging experience we indigenous scholars have had from about the year 2000 until today is to live and be actively involved in the "methodologically contested present". This term is proposed by Norman K. Denzin and Yvonna S. Lincoln in their introduction to the *Handbook of Critical and Indigenous Methodologies* (*Handbook* 2008, 4), where they apply this term to the historical period from 2000 to 2008 in qualitative research in North America. This historical phase of the

methodologically contested present is full of excellent contributions by many brilliant scholars challenging the established research paradigm (see for example *Handbook* 2008).

The suggestion, application and use of novel methodological solutions, as well as knowledge production on this methodological basis, are part of what Denzin and Lincoln call "the future" – a current historical moment in qualitative research. In their view, this moment is happening now, it "confronts with the methodological backlash associated with the evidence-based social movement" and "is concerned with moral discourse, with the development of sacred textualities" (*Handbook* 2008, 4). Denzin and Lincoln point out that this future historical moment "asks that the social sciences and the humanities become sites for critical conversations about democracy, race, gender, class, nation-states, globalization, freedom, and community" (ibid.). In my opinion, an addition must be made to Denzin and Lincoln's optimistic account of the future research challenges: the established research paradigm of natural sciences is also being increasingly questioned in the indigenous context, especially in connection with traditional knowledge.

Much has happened in research since 2008, when Denzin and Lincoln described the moment of the "current future". I believe that in many parts of the indigenous world, we indigenous scholars still find ourselves in the very moment of the methodologically contested present, which North American qualitative research seems to have already passed, according to Denzin and Lincoln.

At present, many of us are actively involved in the shaping of "the future". The next chapter of my article provides an insight into some achievements of Sami research which form part of knowledge building and have disputed the established methodologies. In my view, the period of the methodologically contested present in Sami research started almost about 35 years ago with the groundbreaking contribution by the Sami philosopher Alf Isak Keskitalo. In 1974, at the Seventh Meeting of Nordic Ethnographers at Tromsø Museum in Norway, Keskitalo gave a remarkable presentation about research as an inter-ethnic relation. He addressed the then prevailing asymmetry in research between the Sami and the Nordic societies. This article, originally published in Norwegian, was twenty years later also published in English (Keskitalo (1976) 1994) in the research series *Diedut*, the well-known publication channel for Sami research outcomes from the Nordic Sami Institute, where Alf Isak Keskitalo was the first head of the department of language and culture

research.[3] In my opinion, it is no coincidence that the establishment of the Nordic Sami Institute in 1973 and Keskitalo's presentation in Tromsø in 1974 are closely related in time. These events mark the beginning of the empowerment of Sami research. Keskitalo's contribution has influenced subsequent generations of Sami scholars, especially after its publication in English, which made his article widely available to international Sami research circles. Keskitalo argued for a paradigm shift and the use of a Sami theory of knowledge (see also Stordahl 2008, 256–257). Starting from the mid-1990s, and not coincidentally from the Keskitalo's publication in English in 1994, Sami researchers became increasingly more active in contesting the established research paradigm.

Emancipation, empowerment, criticism of Western theorising and methods, and use of indigenous epistemologies have been strongly emphasised in indigenous research during the last decades. The whole field of research on indigenous traditional knowledge seems to be an exciting intellectual landscape, full of challenges and possibilities to bring indigenous understandings to scholarly investigations. The questioning of the dichotomy of tradition and modernity also seems to be part of this exciting journey. Sami epistemology provides the opportunity to move away from this dichotomy, and start argumentation from the standpoint of the Sami theory of knowledge. Sami research is full of noteworthy examples of the struggle to find a legitimate place between the playgrounds of different epistemologies.

Modernity and tradition in Sami research

Many Sami scholars have expressed their views on modernity in indigenous, and specifically Sami, contexts. The question of "How traditional Sami society and traditional ways of life relate to modernity" has been touched upon in many publications by Sami scholars. This article is simply a tentative review of some of the Sami researchers' opinions on tradition and modernity. There are many more remarkable scholarly contributions which could have been analysed here, but limited space obliged me to make a selection for this article. Some of the scholarly works quoted are from the mid-1990s, while others are

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3   Nowadays the research series Dieđut is published by Sámi allaskuvla / Sámi University College (www.samiskhs.no/index.php?c=143&kat=DIE%26%23272%3BUT). The Nordic Sami Institute became affiliated to Sámi University College in 2005.

quite recent. The review does not follow any particular chronological order, but is thematically structured.

I agree with the view of some Sami scholars who argue that presentation of modernity and tradition as binary oppositions diverts our attention from indigenous understandings of tradition, and forces discussions to take place in the arena of epistemologies alien to indigenous ways of thinking. One Sami researcher, Rauna Kuokkanen (2009, 168), rightly argues that taking for granted "a dichotomy of tradition and modernity" makes indigenous peoples' epistemologies invisible. Kuokkanen suggests giving a voice to indigenous ways, traditions and methods (in Sami she uses terms *vierut ja vuogit,* which can be translated as 'ways; customs; methods'). These ways and methods cannot be adjusted to a linear perception of argumentation, neither to divisions into "pre-modern versus modern" or "traditional versus modern" (Kuokkanen 2009, 168–169). In Kuokkanen's opinion, division into these binary oppositions has resulted in an understanding that indigenous culture belongs to the pre-modern period and that culture therefore cannot be connected to modernity (ibid, with references to Elisabeth Povinelli and Colleen O'Neill[4]).

The question of the use of dichotomies in Sami research was touched upon already in the 1990s. When discussing the role of women in traditional Sami society and in modern times, the Sami scholar Vuokko Hirvonen (1996) argues for the need for change in research paradigms and perspectives. She encourages Sami scholars to do research on their own culture. Inspired by feminist critics, Hirvonen suggests that instead of using only dichotomies, scholars can combine personal, cultural, subjective and objective factors into the knowledge process, which will enable them to understand what they are seeing and how they are seeing (Hirvonen 1996, 9–10). Hirvonen's suggestion to question the use of dichotomies has a direct connection to epistemology, which deals with the nature and basis of knowledge, and also with ways of knowing, especially with reference to the limits and the validity of knowledge.

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4   Elisabeth A. Povinelli, an American anthropologist, is a scholar in studies of women and gender, law and culture; she has studied how liberal systems of law and value meet local Australian indigenous worlds (see Elisabeth A. Povinelli (1994) *Labor's Lot: The Power, History and Culture of Aboriginal Action.* Chicago: The University of Chicago Press; and (2002) *The Cunning of Recognition: Indigenous Alterities and the Making of Australian Multiculturalism*). The historian Colleen M. O'Neill has written about American Indian culture, history and economic development (see Colleen M. O'Neill (2005) *Working the Navajo Way: Labor and Culture in the Twentieth Century*; and (2004) *Native Pathways: American Indian Culture And Economic Development In The Twentieth Century*).

The idea of achieving a better understanding of "what researchers are seeing" by the use of their indigenous epistemologies has an ontological character, because ontology deals with assumptions about the nature and relations of being, i.e. of reality. Thus, Hirvonen draws attention to the necessity of the use of Sami epistemology and ontology in research, and considers the division into dichotomies as a non-productive approach to Sami research. It is worth mentioning that both Hirvonen and Kuokkanen disapprove of the use of dichotomies in connection with "traditional versus modern", seemingly because the opposition of tradition and modernity is alien to the Sami context.

In the 1990s and early 2000s many Sami researchers were strongly influenced by the ideas of the British sociologist Anthony Giddens, who differentiated between traditional (pre-modern) culture and post-traditional (modern) culture (Giddens 1991). Among Giddens' characteristics of modernity we find the following: a modern focus on specialised expertise rather than a holistic traditional way of doing things, and also the disembedding from time and space in the modern era (ibid).

Johan Klemet Kalstad and Arvid Viken (1996) rely upon Giddens' theorising in their considerations of how traditional knowledge is challenged by modernity in the case of Sami tourism. The writers seem to have accepted the theoretical, linear placement of tradition and modernity. In their view, Sami institutions play an important role in the process of "reinventing Sami traditions and re-embedding Sami institutions and cultural expressions". At the same time these Sami institutions are "monuments of transformation from tradition to modernity" (Kalstad & Viken 1996, 35). Despite the fact that Kalstad and Viken proclaim a need to "find compromises […] between tradition and modernity […]" (1996, 41), they do not seem to be quite comfortable with the insertion of tradition and modernity into a linear development process. They state that there is no definite boundary between tradition and modernity, and that in the case of Sami tourism, for example, tradition tends to be increasingly modern (1996, 35). Thus they implicitly mean that a differentiation of tradition and modernity as oppositions is not entirely possible in the case of Sami tradition. However, this remains in the background of Kalstad and Viken's theoretical considerations, which are very much based on the established way of thinking in the 1990's.

Kristine Nystad (2003) in her study of the career choices of Sami boys in Guovdageaidnu/Kautokeino, also based her theoretical considerations on Giddens' ideas and the theorising of other European and Norwegian

sociologists. Nystad operates with the concept of the "meeting" of tradition and modernity in her analysis of possible reasons for the rejection of some Sami boys of the possibility of formal education in favour of remaining in the traditional Sami way of life. When operating with the theoretical concept of "tradition and modernity as oppositions" – borrowed from Giddens and other sociologists – Nystad asks the following question: "Can traditional and modern be united? Should we rather look at tradition as not being in opposition to modernity?" These questions show that the researcher is breaking free from an established linear perception of tradition and modernity. The questions have seemingly arisen from the empirical data (interviews with Sami youth and their families). Nystad seems to recognise that her empirical data do not fit into the established theoretical frame, in which tradition and modernity are opposed to each other both in time and content. This opposition belongs to the linear perception of "development"[5] processes. Nystad makes a brilliant discovery in her empirical material: making a choice between a "traditional" and a "modern" career and way of life is actually a question about the Sami value system. Reindeer herding with its traditional knowledge is considered as much more valuable than other jobs and formal education. This is not a choice of abandoning tradition and moving "forward" on the linear time scale towards the "modern" way of life. This is not an option to choose between two opposite alternatives, tradition and modernity, but rather a preference for continuity in the traditional Sami way of living within contemporary society.

Nystad does not conduct any deeper theoretical analysis of this discovery, but she makes the Sami value system visible in her scholarly analysis, and her research has thus a direct connection to the most recent achievements in the field of indigenous methodologies. In indigenous methodological thinking, there is one important dimension over and above epistemology and ontology, i.e. that indigenous scholars have been insisting on the inclusion of their respective axiologies (value systems) in research. Value systems deal with the nature, types and criteria of values and value judgments, as well as with ethics (Porsanger 2007, 25). Considerations of axiological assumptions in the Sami

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5   The Western understanding of the concept of development has been recently questioned in indigenous contexts; see for example contributions to the International Expert Group Meeting on Indigenous Peoples' Development with Culture and Identity organised by the UN Permanent Forum on Indigenous Issues in New York in January 2010, published by Tebtebba Foundation, see *Towards an Alternative Development Paradigm* 2010; see also Porsanger 2010; Kuokkanen 2009, 160–163.

context, with respect to tradition and modernity, might give new insights into the Sami understanding of tradition.

"What is modern and what is traditional" does not seem to be an essential question for Sami scholars, who build their considerations on Sami epistemological ground with respect to the Sami value system. This makes them recognise and pay respect to Sami tradition as being an inevitable part of present-day life in Sami communities. Thus, Klemetti Näkkäläjärvi, in his early scholarly works on Sami reindeer herding, expresses the functional value of Sami tradition as follows: "The earmark system of the Sami can be compared with the functioning model of any social system of modern Western society" (Näkkäläjärvi 1996, 93). When making this comparison, Näkkäläjärvi argues that the traditional earmark system is very sophisticated, and this tradition cannot be subordinated to modern social systems in time. In my view, Näkkäläjärvi implies that the hypothetical difference between traditional and modern might make no sense if traditional knowledge is taken seriously and if it is recognised as a knowledge system which is as valuable and as valid as Western "scientific" knowledge. This is an epistemological question, articulated by Näkkäläjärvi (1996, 81) in his notable statement that it is not at all self-evident that indigenous scholars "should use the conceptions of majorities when creating theories".

A scholar of literature, Harald Gaski (1997), in his discussion of Sami culture in present-day Norway, during the "new era", seems to be forced to operate with the concepts of tradition and modernity. However, he is convinced of the impossibility of an opposition between tradition and modernity in the Sami context. Furthermore, Gaski emphasises that the present-day Sami relationship with the environment is strongly traditional from the point of view of Sami ontology and the Sami value system. This is not a question of being "old fashioned", because this understanding would place his argumentation within a linear conception of tradition and development. Gaski expresses Sami epistemological assumptions as follows:

> "Even though the Sami probably are one of the most modernized indigenous peoples in the world, their role as communicators between an ever more estranged "Western" conception of Nature and the indigenous peoples' preferred holistic view expressing the statement that all creatures are fundamentally dependant on each other, is important and steadily growing." (Gaski 1997, 24.)

The use of some concepts, e.g. "Nature", in Gaski's writing might appear problematic. However, in my opinion, his message is about Sami tradition which does not fit into the established ideology of modernity, and the fact that tradition cannot be placed as a "forerunner" of modernity that presupposes a linear placement in time and space. As for the use of the established terms and concepts in writings of many Sami scholars, I believe that one has to consider the fact that indigenous Sami research is quite young. The development of Sami research terminology and analytical tools on the basis of Sami epistemology has so far had quite a short history. In the 21st century, the development of Sami research based on rich Sami epistemology has become a very popular research topic. Many Sami scholars have recently produced new and exciting research results in this field, and the present volume on Sami traditional knowledge is an example of this process.

Rauna Kuokkanen (2009) in her recent work on indigenous knowledge, philosophy and research, makes an extensive evaluation of the Western history of thought since the Greek philosophers and the Age of Enlightenment, which in her opinion has shaped the opposition of modernity and tradition. Kuokkanen discusses colonialism and post-colonial theories, Cartesian and positivistic epistemologies, the concept of development etc. She notes that the traditional and modern are interconnected, and that the dichotomy of these concepts has been a powerful tool to marginalise and suppress indigenous peoples and to place them outside "modern" society (Kuokkanen 2009, 165–166). Nevertheless, Kuokkanen criticises some Sami scholars, who in her opinion have not been critical and analytical enough, and have referred to the Sami as "the modern indigenous peoples, who have left their tradition to history" (ibid.). Without going into a detailed analysis of the Sami scholarly works on the subject, Kuokkanen (2009, 167) further asserts that "many Sami researchers" have adopted the modernity–tradition dichotomy as their analytical tool without any evaluation of the validity of such a dichotomy. I agree with Kuokkanen on the idea that Sami research has accepted many established theoretical concepts, especially in the period prior to the 2000s. But I radically disagree with her overall statement about Sami research in general, which has left "tradition to history". As a matter of fact, this statement exemplifies a linear perception of tradition and modernity, which Kuokkanen is actually criticising.

My brief tentative review of some Sami scholarly works is intended to show that all the Sami researchers mentioned and quoted (A. I. Keskitalo, V. Hirvonen, R. Kuokkanen, K. Näkkäläjärvi, J. K. Kalstad, H. Gaski,

K. Nystad) are struggling with a kind of intellectual dissatisfaction caused by the use of the established Western theoretical concepts of modernity and tradition, which do not fit the Sami context. I believe the time is coming when Sami research will make Sami epistemology more visible, operative and efficient. Indigenous Sami knowledge can and should be given priority as a source. Sami concepts can be used as analytical tools, and they might give inspiration to modern theoretical thinking about "tradition".

Indigenous concepts and theorising

In the history of thought, many concepts which have their origin in indigenous traditions are nowadays widely accepted and employed in various academic disciplines. For instance, in the study of religion, one can mention the concepts of *shaman* (from the Evenki language, one of the Tungusic languages of Siberia), or *mana* and *taboo*[6] (from *mana* and *tapu* in Polynesian traditions).

In the framework of the implementation of Article 8(j) of the UN Convention on Biological Diversity[7], two Mohawk terms have been adopted internationally in connection with traditional knowledge: *akwé: kon* and *tkarihwaié:ri. Akwé: kon* means 'everything in creation', and it expresses a holistic comprehension of the world. The term has been chosen as a name for the voluntary guidelines for the conduct of cultural, environmental and social impact assessment regarding developments proposed to take place on, or which are likely to impact on, sacred sites and on lands and waters traditionally occupied or used by indigenous and local communities (*Akwé: Kon Guidelines* 2004). *Tkarihwaié:ri* means 'the proper way', and is used as a name for the voluntary code of ethical conduct for the work with traditional knowledge, to ensure respect for the cultural and intellectual heritage of indigenous and local communities (*The Tkarihwaié:ri Code of Ethical Conduct* 2010).

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6   In the dictionary sense, mana is 'the power of the elemental forces of nature embodied in an object or person', and taboo is generally understood as 'banned on grounds of morality or taste', but the original meaning is 'forbidden to profane use or contact because of what are held to be dangerous supernatural powers'.

7   For the text of the UN Convention on Biological Diversity, see: www.cbd.int, and especially for Article 8(j), see: www.cbd.int/traditional.

Many indigenous concepts were "discovered" by outside scholars studying indigenous spiritual and religious traditions. These concepts have been recognised as precise and meaningful concepts that describe the foci of the studied phenomenon, and are nowadays part of both research and everyday language.

The notion of "discovery" related to research on indigenous peoples and their traditions has been a much discussed issue among indigenous scholars around the world, especially during the last decade (Smith L. 1999; 2006; Smith G. 2003; Kuokkanen 2009, 150-151, for more references, see also Porsanger 2004). The notion of "discovery" has its roots in the way of thinking about indigenous peoples as "the Other" as different, exciting, unknown (to use some positive connotations related to otherness; it is worth mentioning that a list of references to the negative connotations, e.g. superiority, logical/illogical, primitive state of mind etc. might be very long).[8] Academic "discoveries" made on the basis of indigenous epistemologies, as e.g. in the case of the term *shaman*, are often inventive and even profound, but after a while indigenous concepts begin to be filled with a content consistent with the Western epistemologies and conceptual understandings. Most of the academic "discoveries" about indigenous traditions are made on the basis of Western epistemologies. These "discoveries" may be met with scepticism by the indigenous peoples themselves. It has been pointed out that what academic circles may consider as a "discovery" might not meet the standards of legitimate knowledge or pass the verification tests set up by the indigenous people studied (see Berkes 2008, 15).

Understanding a particular indigenous tradition by the use of concepts which derive from the very same tradition and language is a sound starting point for indigenous theorisation, as has been argued by many Sami scholars (Keskitalo (1976) 1994; Näkkäläjärvi 1996 and 2008; Guttorm 2006; Balto & Østmo 2009; Hirvonen 1996 and 2009; Porsanger 2007 and 2010; Sara 2003 and 2010 [in print]). This kind of theorisation is concerned with indigenous understandings, meanings, connotations and connections. Many indigenous scholars found inspiration in their indigenous ways of thinking, when

8   See also a report "Preliminary study of the impact on indigenous peoples of the international legal construct known as the Doctrine of Discovery", submitted for the 9th session of the UN Permanent Forum on Indigenous Issues by Special Rapporteur Tonya Gonnella Frichner (see Frichner 2010). This stidy illustrates the extent to which the Doctrine of Discovery has served as the foundation of the violation of indigenous peoples' human rights, particularly in the case of the United States' law system.

attempting to use indigenous concepts as analytical tools (as for example in Kaupapa Maori research). This might open for possibilities to break free from dichotomies. One can select words from the level of the object language, which in semantics and logic is the ordinary language used to talk about things in the world. This contrasts with meta-language, an artificial language used by linguists and others to analyse or describe the sentences or elements of the object language itself (Porsanger 2007, 4–5).

In order to develop indigenous theorisation, there is a need for special research methods that may be (and usually are) innovative for the "traditional" academy. One has to rely on ways of analysing which are appropriate and meaningful in a particular indigenous context. For example, the Yupiaq scholar Oscar Kawagley illustrates an indigenous Yupiaq research approach with the help of the Yupiaq concept *tangruarluku* 'to see with the mind's eye'. This concept stems from Yupiaq epistemology and, in Kawagley's words, it "transcends that which we can perceive with our endosomatic sense makers and illustrates how a Native perspective may provide a way of bringing the so-called mythical subjective world and the objective scientific world together" (Kawagley 1995, 144–145). R. Kuokkanen (2009, 213) argues that indigenous concepts "seek to emphasize the possibility of conducting research according to perspectives and values stemming from indigenous communities – research that reflects and thus reinforces indigenous culture more than just at the level of the research topic". Thus, Kuokkanen links epistemological and ontological questions and value systems.

Tradition and traditional knowledge in an indigenous context

How can indigenous concepts of tradition and traditional knowledge help us to break new ground in theorisation and distance ourselves from the dichotomy of tradition and modernity? Indigenous knowledge provides us with concepts and meanings. I adhere to the view of many indigenous scholars in the field of traditional knowledge that there is an urgent need to research indigenous concepts of such knowledge. This might give us a more detailed understanding of the indigenous concept of tradition.

Attempts to define tradition have been made by scholars in various disciplines throughout the centuries. In the third millennium, inspired (and in many cases forced) by indigenous research and theorising, many scholars share the

view that traditional "refers to cultural continuity transmitted in the form of social attitudes, beliefs, principles, and conventions of behavior and practice derived from historical experience" (Berkes 2008, 3). Even though such a definition includes the concept of continuity, it is related to the linear concept of history ("historical experience") and does not seem to introduce innovative elements. Innovation is always part of indigenous understandings of tradition and is the characteristic feature of tradition in the sense of *a process* (see e.g. Sara 2003, 124–125; Smith L. 2005, 101; Guttorm 2007; see also Guttorm [2011 in print] regarding innovations and tradition). Coming from Latin, the concept of tradition in general Western understanding, in the dictionary sense, means the action of handing over (transferring). It also implies that the handing down of information, beliefs, and customs is conducted by word of mouth or by example, from one generation to another, without written instruction. Thus, tradition is generally understood as a body of customs, beliefs, stories, and sayings associated with a people, thing, or place. This concept of tradition has also some implicit characteristics: (a) an inherited, established, or customary pattern of thought, action, or behaviour, and (b) cultural continuity in social attitudes, customs, and institutions.

Even though these very important connotations are connected to our theoretical knowledge about the meaning of the concept of tradition, one can suggest that the meanings and connotations mentioned here make most sense if they are opposed to modernity. Once again, this dichotomy is shaping the very basis for our theoretical understanding of tradition.

According to my knowledge, indigenous concepts of tradition do not seem to be related to any kind of "opposition" to something that is "non-traditional". Rather, tradition is understood as a many-faceted entity which is in a constant process of change[9] and which stems from indigenous concepts of time, space and knowledge. For example, a specific Maori conception of time is based on the idea that "the past is never behind but is considered as always being in front of the present" (Henare 2001, 218), and this concept is articulated in Maori language structure, narratives and traditional knowledge[10]. Furthermore, the traditional Sami conception of time seems to be cyclical and in a constant

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9   Cf. religion: It has long been accepted by scholars of religion that religions are in a state of constant change; they are not systems, but rather processes (see *Indigenous Religions* 2000, 1).

10   For the impact of this conception on Maori research, especially on indigenous Maori religion, see Porsanger (2007, 38).

movement without end, at least according to some explanations of the star constellations (see Sergejeva [Porsanger] 1999; 2000).

In the indigenous context, it has been demonstrated that *traditional* means cumulative and open to change (Berkes 2008; *Indigenous Environmental Knowledge* 2000), and that the concept represents generations of experiences, careful observations and trial-and-error experiments (Grenier 1998, 1). Traditional knowledge tends to be understood as both the process and the information. Basing his argument on extensive knowledge of indigenous concepts of tradition, Fikret Berkes (2008, 8) reasons that the concept of *traditional [ecological] knowledge* refers to both "ways of knowing (knowing, the process), as well as to information (knowledge as the thing known)". This distinction is important for analytical reasons; it is also useful for a proper understanding of the concept of traditional knowledge. It is also worth mentioning that in the history of the concept of traditional knowledge scholars have been challenged by the apparent opposition between *tradition* and *change*. This apparent opposition as well as the notion of *indigenousness* (seen as being particular to a specific geographic area) has led many scholars to apply the term *indigenous* instead of *traditional* knowledge. One of the main reasons for this has been an attempt to avoid the whole debate about tradition (Berkes 2008, 4, referring to D. M. Warren, L. I. Slikkerveer and D. Brokensha 1995; see also Grenier 1998; Joks 2009).

Some Sami concepts

A comprehensive Sami concept for tradition/custom is *árbevierru* (in this case the North Sami term), which contains two interrelated parts: *vierru* 'mode, custom' and *árbi* 'heritage, inheritance'. These two parts have a reciprocal relationship. In the Sami mind-set, neither part of a dual entity is "first" or "second". A dual entity can be visualised as a sphere divided into two interconnected parts. This interconnectedness, in my view, may be the reason for the apparent difficulty of attempts to fit this kind of spherical perception of a dual entity into a linear understanding, which implies that there is a beginning and an end. Such linear, non-holistic, understanding might also explain the difficulty of the above mentioned Sami scholars in accepting the dichotomy of tradition and modernity.

In the concept of *árbevierru,* "mode/customs" and "heritage/inheritance" are interconnected in a reciprocal way. *Vierru* has a variety of meanings and

connotations[11]: norms and values, customary patterns of thought, action or behaviour, value judgments (criteria of good/bad, right/wrong, beautiful/ugly, useful/useless etc.) and ethical issues (understanding of acceptable/unacceptable). *Árbi* expresses at least the following ideas: the transmission of cultural heritage from one generation to the other, the succession of generations, the connection between past, present and future, and continuity.

In my opinion, the use of the Sami concept *árbevierru* instead of "tradition" can better express the indissoluble ties in tradition between the past, the present and the future. *Árbevierru* indicates the continuity of the ways people do certain things and adhere to certain values (*vierru*), which are strengthened and validated by *árbi* (heritage; inheritance). Customs, innovations, wisdom, knowledge, values, heritage and continuity are inseparable from each other in this way of understanding tradition.

Many indigenous scholars have emphasised that the continuity and strength of traditional knowledge lies in its tendency to adjust itself to changing conditions and requirements (Battiste & Henderson 2005, 38–41), to seek a balance between "pure" knowledge and sustainable innovations (Smith L. 2005, 101), to import and innovate but to be successive (Sara 2003, 124–125, 128), to improve and to change (in Sami, *rievdadallat*, see Guttorm 2007; see also Guttorm [2011]) and finally, to learn and to adapt (Kawagley 1993; Cajete 2000). When indigenous scholars make efforts to bring forward such essential issues, the whole discussion on tradition moves coherently away from the dichotomy of tradition and modernity, and focuses on the indigenous conceptual world. Used as analytical tools, indigenous concepts are deeply and inevitably connected to particular indigenous epistemologies, ontologies and value systems.

In the same manner as *árbevierru*, the North Sami concept of *árbediehtu* for 'traditional knowledge' also contains two interrelated parts, namely *diehtu* 'knowledge' and *árbi* 'heritage/inheritance '. As far as I am aware, the term *árbediehtu* for traditional knowledge was first used in writing by Harald Gaski in 2003 (Gaski 2003, 33), in the plural *árbediedut*, with reference to Sami wisdom transferred from one generation to the other by word of mouth. Nowadays *árbediehtu* with reference to traditional knowledge seems to be frequently used in Norway, Sweden and Finland, where North Sami is spoken. The most

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11   For more about the concept of *árbevierru,* and specifically of *vierru*, see a contribution by Gunvor Guttorm in this volume.

recent example is a book by an authoritative Sami knowledge holder, Lemet-Sárá (Sara H. Hætta), an elder from Guovdageaidnu/Kautokeino. Lemet-Sárá has written about the traditional knowledge, experiences and contemporary history of the Sami who settled down permanently on their farmlands (this group is called *dálon* in North Sami) in the Guovdageaidnu area (see Hætta 2010).

The concept of *árbediehtu* clarifies knowledge as both the information and the process and emphasises different ways to gain, achieve or acquire knowledge, binding the past, the present and the future together. These two parts of the concept of *árbediehtu* are interrelated and make a whole. *Diehtu* has a variety of meanings, and this concept is closely connected to another Sami concept for "knowing", i.e. *dovdat* 'to know personally; to feel'[12]. Some meanings of the concept of *diehtu* can be briefly presented as follows:

- the sum of what is known (knowledge and information)**:** the body of information, and principles acquired through generations and by practice,
- the fact or condition of knowing something or somebody with familiarity gained through experience or association (cf. *dovdat*),
- the fact or condition of knowing something or somebody, which is gained not necessarily by personal experience, e.g. in the sentence "*Mun dieđán gii son lea, muhto mun in dovdda su*" (North Sami), different levels of knowing are expressed,
- the fact or condition of being aware of something (cf. *gámus dovdat* about intuitive knowledge),
- the range of one's information or understanding.

Diehtu in the concept of Sami traditional knowledge (*árbediehtu*) stems from and is connected to the practice and pragmatics of living in the Far North with its characteristic resources, which are only slowly renewable. *Árbediehtu* is the collective wisdom, practical skills and theoretical competence evolved and acquired by Sami people through centuries in order to subsist economically, socially and spiritually.[13] Man is seen as an inevitable part of the environment.

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12 For theorising about the Sami concepts of *diehtit* 'to know' and *dovdat* 'to know personally; to feel', in their connection to the Sami concepts of *gaskavuohta* 'relationship' and *oktavuohta* 'relation', see Porsanger (2007, 35–38).

13 The knowledge and skills needed to subsist economically, socially and spiritually are directly related to the profound Sami concept of *birgejupmi*, which is connected to well-being and sustainable livelihood.

Theoretical competence is a substantial part of *árbediehtu*. The whole way of life of the Sami has always required a high degree of flexibility, which can be expressed by the Sami saying "*Jahki ii leat jagi gáibmi*" ("One year is not another year's brother"), meaning that one always has to be prepared for changes because the weather and availability of resources vary from year to year. Thus, theoretical knowledge is the necessary basis for the search for solutions even in unusual or unexpected circumstances.[14]

The concepts of *árbevierru* and *árbediehtu* can provide possibilities for precise and meaningful explanations. Used as analytical tools, these concepts reveal the interconnectedness of economic, social, spiritual, theoretical, analytical, continuous and innovative elements.

Definitions and diversity

In theoretical discussions, scholars (indigenous and non-indigenous alike) are eager to define "traditional", "local", "indigenous", "traditional ecological" knowledge, etc. I believe that a search for an exhaustive definition[15] of tradition or traditional knowledge moves the focus of indigenous discussions away from the main issue. It is also worth mentioning that the action of definition is not equal to the action of explanation: to define something does not necessary mean to explain the issue. A parallel can be drawn to the words of a Hawaiian researcher, Renee Pualani Louis, in her noteworthy article about indigenous methodologies. She states that the search for a simple answer to the question "What exactly are indigenous methodologies?" only feeds scholarly beliefs of essentialism and emphasises the "messenger" instead of the "message" (Paulani Louis 2006, 132).

The understanding and recognition of the extreme diversity of indigenous traditions is often indicated as being more important than the process of classification (Battiste & Henderson 2005, 37). The Inuit, for example, use

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14   Here the Sami concepts of *heivehallat* 'to adjust [frequently, continually]' and *čoavdit* 'to solve' can be mentioned. Traditional Sami pedagogy relies quite significantly on this philosophy of being prepared for challenges and changes, to be able to adapt oneself, to find solutions by oneself on the basis of acquired and possessed knowledge (for more about Sami pedagogy, see Balto 1997a; 2008; Joks 2007; Aikio 2000).

15   For theoretical discussions on the need for definition in religious studies, see for ex. Porsanger (2007, 6–8); *Redefining Nature* 1996; *The Pragmatics of Defining Religion* 1999.

their own term *Qaujimajatuqangit* for Inuit traditional knowledge (cf. Arnakak 2002; see also *The Inuit Qaujisarvingat* 2010). However, the Inuit Tapiriit Kanatami and Nunavut Research Institute emphasise in their *Guide for Researchers* who intend to work with Inuit communities that the term *Inuit Qaujimajatuqangit* is not quite appropriate, because of its various meanings depending on the community and context (ITK & NRI 2007, 5).

Many indigenous peoples suggest their indigenous concepts of traditional knowledge to be quite comprehensive for an understanding of such knowledge. For example, the Mi'kmaq concepts *telinuisimk*, *telilnuo'lti'k* and *tlinuita'sim* are proposed as desirable and suitable terms, because they encompass connections to various indigenous manifestations as part of a particular ecological order (Battiste & Henderson 2005, 35).

According to Louise Grenier (1998, 1), indigenous knowledge "refers to the unique, traditional, local knowledge existing within and developed around the specific conditions of women and men indigenous to a particular geographic area". In Marie Battiste's view, indigenous traditional knowledge represents

> "[…]a complex and dynamic capacity of knowing, a knowledge that results from knowing one's ecological environment, the skills and knowledge derived from that place, knowledge of the animals and plants and their patterns within that space, and the vital skills and talents necessary to survive and sustain themselves within that environment." (Battiste 2008, 499.)

Marie Battiste (2008, 499) underlines the fact that traditional knowledge maintains appropriate relationships with all things and people involved in it, and is based on vigorous observation. Participation in traditional activities, stories and daily dialogues are ways to transmit knowledge, which is preserved in language structures (ibid.). Similarly, our elder and Sami language professor, Juho Niillas (Nils Jernsletten) affirms that traditional knowledge "is transmitted through observing, learning skills, and systematising this in linguistic expressions, terms, and professional jargon" (Jernsletten 1997, 89). These linguistic expressions contain valuable information, perhaps well known locally, for those who use the language and the concepts on a daily basis. But for the academic world these Sami linguistic expressions have

considerable theoretical value. They may provide research tools, which enable us to gain access to the arena of Sami epistemology.[16]

Surprised by modernity?

The tradition-modernity dichotomy has a tendency to leave indigenous peoples outside the contemporary world, which is considered to be "modern" as opposed to the "traditional" world of the indigenous. This dichotomy tends to make continuity and indigenous epistemologies invisible, and as a consequence, the rich conceptual world of indigenous peoples has no use in research as an analytical tool.

In discussions about modernity and indigenous peoples, it is quite often emphasised that globalisation is a challenge for indigenous peoples, that new technologies have an impact on them, that the traditional areas of habitation and traditional ways of living of such peoples are becoming restricted, that Western education has affected them, etc. In these discussions, "non-traditional" is often directly related to "modern", and the question of modernisation frequently appears in debates on indigenous issues. One can quite often hear that a great challenge for indigenous peoples is "to face modernity". According to this view, which is apparently based on the binary opposition between *traditional* and *modern*, indigenous peoples seem to be stuck in the past, and have in a way been suddenly surprised by modernity, which has come from the outside world. This view is indeed just a continuation of the perception of indigenous peoples as "the Other".

How is "modernity" perceived in the Sami context by the Sami themselves? The limited space of the present article does not allow for a broad discussion of this topic. Modernity is indeed a Western invention, a construction, as a philosophy and ideology. There is no Sami term for it, just as there are no Sami terms that correspond to the Western concepts of "culture", "religion", "nature" etc. In some Sami scholarly works modernity is often used to mean something "contemporary", as rightly pointed out by Kuokkanen (2009, 167). In her opinion (ibid), this does not refer to modernity as a philosophy or ideology, the main characteristics of which are as follows: rational and scientific thinking, secularisation, materialism, individualism and man's

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16   As for example with the Sami snow terminology (see Jernsletten 1997; Magga 2006; Eira & Magga & Eira 2010; Riseth, Jan Åge et al. 2010).

control over "nature". In Kuokkanen's opinion, the use of the concept of modernity as a synonym of contemporaneity is connected to the social changes that happened in Samiland after the Second World War and especially from the 1960s onwards (ibid).

Indeed, the use of the term "modern" as equivalent to "contemporary" can be easily found in many recent Sami scholarly works, where "modern" appears to describe contemporary time, views, customs, understandings etc. This is especially the case in works written in the Sami language (see e.g. Balto & Østmo 2009; Keskitalo 2009; Lauhamaa 2009; Seurujärvi-Kari 2010). This does not need to be considered as a reference to any theory. Rather, this might be a question of language use, because in Sami one can use expressions like *ođđa áigi* or *dálá áigi* or *dáláš áigi* 'new time; contemporary time' and *modearna áigi* 'modern time' as synonyms. The Sami academic world probably needs a debate on the use of such terms. In my opinion, there are also other questions to be addressed: Should we operate with dichotomies like tradition–modernity in our scholarly analysis? Is it a deliberate choice? Should we not rather focus our attention on indigenous understandings which are meaningful for us?

The binary opposition of tradition and modernity hinders scholars from entering the rich conceptual indigenous world, which can offer fresh and exciting solutions. Indigenous theorisation is still struggling to get the recognition it deserves, but indigenous research findings have revealed that traditional knowledge provides ideas and solutions quite independent of the conception of modernity as philosophy and ideology. Indigenous concepts should not be used merely as exotic additions to the established research paradigm. In my opinion, attempts to adjust indigenous concepts to the linear "world of dichotomies", which is based on a perception of oppositions, are not beneficial for the further development of indigenous theorisation.[17] Instead, the academic world might discover and/or create new analytical tools on the basis of already existing concepts found in indigenous theories of knowledge.

In Sami research, Sami philosophy and epistemology can open new perspectives and provide new methodological solutions, which can be very modern and applicable and relevant to academic research. In this statement, I deliberately use the word "modern", more in the dictionary sense, which

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17   On the Sami understanding of "opposition" in the process of comparison, see Porsanger 2007, 46-47.

implies involving the latest techniques, methods, concepts, information, approaches, etc.

The Sami concepts of *árbevierru* and *árbediehtu* have a great potential which should be tapped in order to develop Sami academic thinking and Sami research methodologies. Designed on the basis of the rich Sami theory of knowledge, ontology and value system, Sami research methodologies will be innovative, primarily because of the use of new methods, new concepts, and new approaches, which have their roots in the Sami knowledge system.

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Contributors

Birgitta Fossum

Doctoral degree (dr.philos.) in archaeology from the University of Umeå (Sweden).

She was born in 1969 in Bærum near Oslo, grew up in Northern Norway and lived in Umeå for two decades. At present she is the head of Saemien Sijte (South Sami Museum and Cultural Centre) in Snåsa, Norway. She has worked at the University of Umeå, Västerbotten Museum and carried out projects on behalf of the Silver Museum in Arjeplog and the County Administrative Board of Norrbotten (Länsstyrelsen i Norrbotten) among others. She has been working with archaeological documentation, investigations and excavations in Northern Fennoscandia. She has also conducted research and analyses of empirical archaeological material.

Birgitta participated in the project as the head of the partner institution, Saemien Sijte, but until February 2010 she was the Project Manager for "Saemieh Saepmesne – I det samiska rummet/In the Sami space".

Research issues: Sami culture and history, especially archaeology, Sami

Birgitta Fossum.
Photo: Peter Steggo.

rituals, archaeological findings from the Iron Age in Northern Fennoscandia such as ritual remains, graves, sacrificial sites, silver hoards, dwellings and labyrinths, rituals as tools for the establishment and preservation of social and ethnic identities, oppositions to and bonds with other cultures or communities.

Special areas of interest: connection of archaeological findings and ritual remains to Sami identities, linkage between cultural landscape, cultural heritage and South Sami identity.

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Bjørg Elsa Pettersen

M Sc degree in Human Geography and Geographic Information Systems from the University of Leicester, UK.

She was born in 1958 and grew up in Tjeldsund and Harstad in Northern Norway. She is working as a senior advisor specialising in human geography and geographic information systems (GIS) at the Research and Development Section of Statsbygg (Norway).

Bjørg's role in the project was as an advisor on knowledge and information technologies and methods, through her own private company BeArctic. Her special fields of interest in the project were to find ways of using information systems to record, store and convey knowledge and to promote the use and transfer of traditional Sami knowledge.

Research issues: information design, information systems, databases, development, contact zone, partial perspectives, strong objectivity, metadata, ontology, knowledge keepers, cognitive and digital justice, traditional knowledge, indigenous knowledge, situated knowledge.

Bjørg Elsa Pettersen.
Photo: Tim Valio.

Special areas of interest: the use of geographic information systems (GIS) as a tool for communication and digital democracy in decision making processes; the usability of interactive 3D geo-visualisation for public participation in spatial planning.

Erik Norberg

PhD degree in archaeology from the University of Umeå (Sweden).

He was born in 1968 and grew up in Lunde, Ångermanland (Sweden). He is currently working in Snåsa (Norway) as the Project Manager of the inter-regional project "Saemieh Saepmesne – I det samiska rummet/ In the Sami Space" on the documentation of South Sami cultural heritage and landscape. The project is a cooperative effort between Saemien Sijte in Snåsa, Gaaltije South Sami Cultural Centre in Östersund (Sweden) and Västerbotten Museum (Sweden). Erik has been working in the fields of history, archaeology and museology. He has participated in many archaeological research projects in Northern Sweden and North West Russia, and has published a number of archaeological and historical research papers and articles.

In the project he participated as the Project Manager of "Saemieh Saepmesne", representing the partner institution, Saemien Sijte.

Erik Norberg.
Photo: Tim Valio.

Research areas: archaeology of Northern Fennoscandia, especially hunter and gatherer societies, and archaeology of the South Sami area. Areas of special interest: social organisation and social space within societies.

Gunvor Guttorm

Doctoral degree (dr.art.) in the history of arts from the University of Tromsø (Norway).

She is a Sami, born in 1958 in Kárášjohka/Karasjok, where she also grew up, and has lived in Johkamohkki (Jokkmokk, Sweden) since 1993. She has been working professionally in producing *duodji*, Sami arts and crafts. Her *duodji* products have been displayed in exhibitions both across Sápmi and internationally. She has been employed at Sámi allaskuvla/ Sámi University College since the College was established in 1989, and is now a professor in *duodji* there. She has published textbooks on *duodji* for further education and college courses, and for professional education in *duodji*. She has also published research and popular science articles about Sami handicrafts.

Gunvor's role in the project was as advisor and supervisor in the development of methods for documentation and dissemination of traditional knowledge. She was also a member of a research team at Sámi allaskuvla supporting the project.

Gunvor Guttorm.
Photo: Ánte Siri.

Research issues: tradition as an ongoing process, production of *duodji*, tradition and innovations, aesthetics and practical use of *duodji*. Special areas of interest: contemporary production of traditional Sami *duodji*.

Jan Åge Riseth

Doctoral degree (dr.scient.) in Natural Resource Economics from the Agricultural University of Norway.

He was born in 1953 and raised in Snåsa (Nord-Trøndelag). He has lived for one decade in Alta (Finnmark) and two decades in Narvik (Nordland) in Norway. He is presently working as a senior research scientist at the Northern Research Institute (NORUT, Tromsø, Norway). He has published numerous research reports and popular articles, and a number of peer-reviewed articles and book chapters. He is responsible for five books, and has delivered many conference papers. Most of his research publications are interdisciplinary and cover the fields of reindeer herd management, nature resource management and protected areas, traditional ecological knowledge, and climate change.

Jan Åge was involved in the project as an expert in natural management and institutional relations.

Research issues: reindeer management, economics, nature management and protection, sustainable resource use, modernisation, climate change, traditional knowledge.
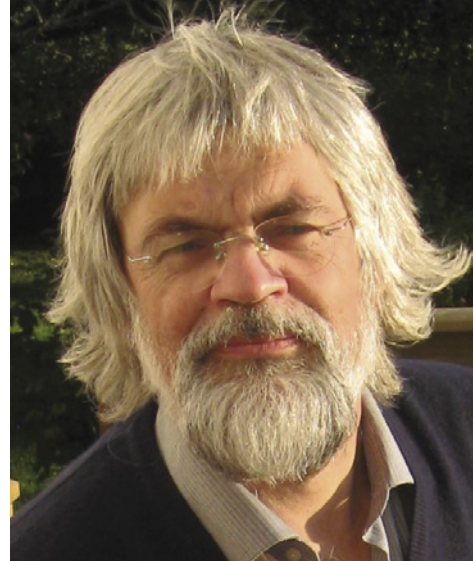
Jan Åge Riseth.
Photo: Randi Nymo.

Special areas of interest: adaptation possibilities for reindeer management and traditional land use, climate change issues, indigenous peoples and use of protected areas.

Jelena Porsanger

Doctoral degree (dr.art.) in the history of religion and Sami research from the University of Tromsø (Norway), Licentiate in philosophy degree from the University of Helsinki (Finland).

She is a Skolt Sami, born in 1967 and grew up in the Murmansk region of Russia. At present she is an Associate Professor at Sámi allaskuvla/Sámi University College. She has also studied and worked at the universities of Tartu (Estonia), Helsinki (Finland) and Tromsø (Norway). She was director of the Nordic Sami Institute (Guovdageaidnu/Kautokeino, Norway) and research director for Sámi allaskuvla until 2009. She has published many popular articles, research papers and peer-reviewed articles about Eastern Sami traditions, religion and history, indigenous methodologies and religious history. She has delivered many papers at international conferences, also in the capacity of an expert in knowledge and capacity building for the UN Permanent Forum on Indigenous Issues. For many years she has been the chief editor of *"Sámi dieđalaš áigečála"*, a research periodical in the Sami language published in collaboration between Sámi allaskuvla and the Centre for Sami studies at the University of Tromsø.

Jelena Porsanger.
Photo: Tim Valio.

Jelena was the Project Manager. As the director of research for the Nordic Sami Institute and Sámi allaskuvla she initiated this pilot project and actively participated in its implementation.

Research issues: indigenous methodologies, indigenous religion, Sami oral tradition and terminology, sources for the study of religion of the Eastern Sami, source criticism.

Special areas of interest: decolonisation of research methodologies, traditional knowledge, research ethics, empowerment of Sami communities, development and application of indigenous approaches to research.

John Bernhard Henriksen

Law degree (cand.jur.) from the University of Tromsø (Norway), and M Sc degree in international political processes from the University of Bristol (UK).

He is a Sami from Guovdageaidnu/Kautokeino, born in 1962, who now works as an independent consultant in the field of human rights and policy processes through the private enterprise JBH Consultants Ltd in Hong Kong. He also works as special advisor for Gáldu, a Resource Centre for the Rights of Indigenous Peoples (Guovdageaidnu, Norway). He is a member of the UN Expert Mechanism on the Rights of Indigenous Peoples (EMRIP).

In the project, he participated through the project's partner institution Gáldu, as an expert in international human rights law. Special areas of interest: indigenous peoples' rights, indigenous political collaboration, Sami parliamentary cooperation, international and common law.

John Bernhard Henriksen.
Photo: Trine Guttorm Anti.

Åsa Nordin Jonsson

Doctoral degree (dr.philos.) from the University of Umeå (Sweden).

She is a Sami from Jiellevárre/Gällivarre (Sweden), born in 1974 in Uppsala and grew up in Tärnaby (Sweden). She is currently working as research advisor at Árran Lule Sami Centre in Divtasvuodna/ Tysfjord (Norway). Her doctoral dissertation from 2002 was in Sami Studies. She has subsequently worked in research and teaching related to Sami society, both at the University of Umeå and Sámi allaskuvla. She has worked at Vaartoe, the Centre for Sami Research at the University of Umeå as a researcher and lecturer in Sami society and culture.

Åsa's contribution to the project was as an advisor and supervisor in theoretical aspects of traditional knowledge, especially ethics.

Research issues: Sami history especially in Sweden, historical relations between the Sami and the majority population, reindeer husbandry as a means of livelihood, economy of reindeer herding, research ethics, traditional Sami concepts.

Åsa Nordin Jonsson.
Photo: Anna-Marja Kaddik.

Special areas of interest: to demystify stereotypes and generalisations about Sami culture and history.

Čoahkkáigeasut

GUNVOR GUTTORM

Árbediehtu doaban ja geavadis

Maŋemus 30 jagis lea ollu fuomášupmi biddjon álgoálbmogiid máht-tui, ja makkár mearkkašupmi lea álgoálbmogiid beroštumiin ja vásá-husain dán fáttá áddejupmái. Álgoálbmogiin galgá leat riekti čalmmus-tahttit, geavahit ja viidáset ovdánahttit iežaset árbedieđuid. Dat lea iešmearrideami oassi ahte oainnusindahkat ja ruovttoluotta fievrredit máhtu. Sámi allaskuvlla Árbediehtu-prošeavtta sáhttá oaidnit dakkár doaibman. Doaba *árbediehtu* lea válljejuvvon prošeavtta oktasaš doaban árbevirolaš sámi čehppodahkii *(diehtu)* ja gálggaide/daguide *(máhttu)*.

Mo sámi perspektiivvas sáhttá áddet ja dulkot árbedieđu? Artihkkalis dárkilit čilgejuvvojit muhtun doahpagat mat gullet árbedihtui ja mat sáhttet leat relevánttat go mii digaštallat árbedieđuid. Artihkal lea jurddašuvvon bovdejupmin digaštallamii mo oaidnit iešguđetge beliid árbedieđus ja oažžut oidnosii sámi áddejumi árbedieđu doahpagis. Artihkalčálli láhkona dán fáttá konseapttaid bokte, mat gávdnojit beaivválaš gielas geavatlaččat ja maid sáhttá áddet *árbediehtun*. Čálli digaštallá sihke mot sámi dutkit ja eai-sámi dutkit leat geavahan sámegielat doahpagiid mat válddahallet, čilgejit ja čiekŋudit árbedieđuid áddejumi sámi konteavsttas. Dáid suokkardallamiid čálli lea dulkon árbediehtu-doahpaga iešguđetge beliid ektui.

Čálli ákkastallá ahte metodalaš lahkoneami ovddideapmái lea dehálaš vuhtii váldit daid áddejumiid mat olbmuid gaskkas gávdnojit ja sámi doahpagiid mat válddahallet iešguđet máhtuid sámi konteavsttas ja mat leat gaskkustuvvon buolvvas bulvii. Dán vuođul sáhttá ráhkadit áddehahtti ja heivvolaš analyhtalaš metoda man bokte oažžu ovdan álgoálbmotperspektiivva dan digaš-tallamii, miilea cieggan oarjemáilmmi áddejumi olis dan ektui, mii árbediehtu lea doaban ja mot dat áddejuvvo geavatlaččat.

JOHN BERNHARD HENRIKSEN

Árbediehtu: Muhtun riekteárvvoštallamat

Artihkal váldá ovdan muhtun guovddáš riektegažaldagaid mat gullet sámi árbevirolaš máhttui ja dihtui (*árbediehtu*). Čálli váldá vuođđun relevánta mearrádusaid ON biologalaš máŋggabealatvuođa konvenšuvnnas (*Convention on Biological Diversity* 1992), mii lea bajitdási riektereferánsarámman Árbediehtu-prošektii. Artihkalis dárkilit suokkardallá doahpagiid *álgoálbmogiid máhttu, innovašuvnnat ja dábit (geavadat)* ja makkár geatnegasvuođaid konvenšuvdna ásaha stáhtii árvvusatnit, bisuhit ja viidáset doalvut sámi máhtu, innovašuvnnaid ja dábiid. Álgoálbmogiid geahččanguovllus, leat stáhta riektevuođuštuvvon geatnegasvuođat čadnon našunála lágaide ja leat ráddjejuvvon gustot dušše fal nu guhkás go lea vejolaš ja ulbmilaš našunála lágaid olis.

Konvenšuvdna ii ráddje geatnegasvuođaid mat konvenšuvdnabealálaččain leat eará álbmotrievtti reaidduid geažil. Stáhta ollislaš geatnegasvuođat sámiid ektui berrejit mearriduvvot maiddái eará gaskariikkalaš šiehtadusaid ja reaidduid vuođul. Maiddái dálá álbmotriekti dohkkeha ahte álgoálbmogiin leaiešmearridanriekti, ja ahte stáhta olmmošvuoigatvuođaid norpmaid ektui lea geatnegahtton ráđđádallat álgoálbmogiiguin áššiin mat gullet sidjiide. Muhtun dilálašvuođain lea stáhta geatnegahtton viežžat sis dihtomielalaš ja ovdagihtii šihttojuvvon mieđiheami ovdal go sáhttet mearridit dahje bidjat johtui doaimmaid mat sáhttet álgoálbmogiidda čuohcat. Čálli ákkastallá ahte sámi árbediehus ja árbevirolaš luonddugeavaheamis ja birgejumis maiddái lea riektesuddjen álbmotrievtti mearrádusaid bokte mat ásahit suddjema álgoálbmogiid kultuvrii, nugo ON konvenšuvnna artihkal 27 siviila ja politihkalaš vuoigatvuođaid birra.

Siskkáldas riekteprinsihpaid mielde – Norgga vuođđolága ja olmmoš-vuoigatvuođalága mielde – berre stáhta láhčit dilálašvuođa dasa ahte sámi kultuvrra sáhttá bisuhit ja doalvut viidáset ođđa buolvvaide. Dát geatnegasvuohta gusto árbediehu ektui daningo sámi árbediehut leat sámi kultuvrra oassin. Stáhtas lea riektegeatnegasvuohta, álbmot-rievtti, vuođđolága ja olmmošvuoigatvuođalága geažil, addit sámiide duohta vejolašvuođaid sihkkarastit ja ovddidit iežaset kultuvrra, ee. árbediehuid.

Norgga sierra lágat liikká eai ásat makkárge beaktilis riektesuddjema árbedihtui, ja dat hui unnán láhčet dilálašvuođaid árbevirolaš máhtuid ja dieđuid bisuheapmái, geavaheapmái ja viidáset fievrrideapmái. Luonddu-

valljivuođaláhka (*Naturmangfoldsloven*) eanasmuddui ii daja maidege sámiid vuoigatvuođaid ja beroštumiid birra kultuvrra, eatnamiid ja resurssaid ektui. Seamma váttisvuohta gusto maiddái eará Norgga lágaide mat leat dehálaččat árbedieđu geavaheami ja bisuheami eavttuide, nugo mohtorjohtolatláhka mii gusto meahcce- ja čázádagaid vánddardeapmái, guolástuslágat, láhka luossabivddu ja siseatnanguollebivddu birra, fuođđoláhka jna.

ÅSA NORDIN JONSSON

Ehtalaš neavvagat árbedieđuid dokumenterenbarggu váste

Dán artihkkalis ovdanbuktá čálli muhtun ehtalaš neavvagiid ja rávvagiid maid berre vuhtii váldit árbedieđu, sámi árbevirolaš máhtu, duođaštus- ja dokumentašuvnna barggus. Ehtalaš neavvagiid ásaheapmi ja geava-heapmi dokumentašuvnna barggus láhčá dili dasa ahte atnit árvvus ja gudnevuollegašvuođain gieđahallat sámiid, sin dieđuid ja máhtuid. Ollu árbečeahpit leat guhkit áigge vásihan, ja vásihit ain ahte dutkit/ čohkkejeaddjit geaiguin árbečeahpit deaivvadit iešguđetge prošeavttaid bokte, dávjá buorrin geavahit sin dieđuid. Dán dilálašvuođa lea vejolaš rievdadit go sihke álgoálbmotservodagat ja dutkit/čohkkejeaddjit ožžot eanet máhtu ehtalaš rámmaid birra, ja go duođaštus-/čohkkenprošeavttat čađahuvvojit ehtalaš njuolggadusaid mielde. Dát dattetge gáibida ahte goappeš áššebealálaččat čájehit lotnolas áddejumi, árvvusatnima ja dáhtu duođaštus-/čohkkenprošeavttain geavahit etihkkanjuolggadusaid.

Álgoálbmogiid – dán oktavuođas sápmelaččaid – iežaset árvvut ja vuoruheamit galget leat vuolggasadjin árbedieđuid duođaštus-/čohkkenprošektii. Dan vuođđoipmárdusa dohkkeheapmi sáhttá ásahit oadjebas birrasa sámi árbedieđuid dokumenteremii ja duođašteapmái. Dán proseassas bohtet árbečeahpit ja árbedieđu vuoiggalaš oamasteaddjit adnot árvvus ja gudnejahttot áššebealálažžan. Dát lea dehálaš bargovugiid válljemii ja mearrádussii mo ovdanbuktit loahpalaš bohtosiid, beroškeahttá das ahte vállje go ovdanbuktima leat databásan, filbman, girjin vai eará gaskkustanvuohkin.

Árbedieđuid čohkkema etihkka berre leat huksejuvvon álgoálbmoga árbečehpiid dárbbuid ja relevánsa ala. Seammás dat galgá leat dehálaš árbedieđuid čohkkejeddjiide maid. Danin berre ehtalaš njuolggadusaid

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geavahit juo dokumenterema álgomuttus ja plánenproseassas, ja iešalddis prošeavtta čađaheamis, loahppamuttus ja go ovdanbuktá bohtosiid. Ehtalaš njuolggadusat addet gudnevuollegaš rámmaid árbedieđuid suddjemii ja árbečehpiid árvvus atnimii.

JAN ÅGE RISETH

Sáhttá go árbedieđus leat dehálaš doaibma luondduhálddašeamis?

Reflekšuvnnat ásahuslaš hástalusaid birra Norgga sámiide

Árbediehtu lea guovddáš elemeanta álgoálbmogiid kultuvrrain ja lea vuođđu sin guhkesáiggi resursahálddašeapmái. Ođđaáigásaš riikkain lea dattetge árbedieđus vuollegis stáhtusa, ja stáhtalaš luondduhálddašeamis lea luonddudieđa mii dominere.

Čálli guorahallá makkár ásahuslaš gaskavuođat leat – dahje mat sáhttet – dehálaččat árbedieđu seailluheapmái ja geavaheapmái. Luonddu hálddašeapmi ja geavaheapmi lea guovd-dážis. Ovdamearkkat leat Norgga sámiid birgenlági vuođul. Dutkamis geavahuvvojit kvalitatiivalaš metodat, nugo dokumeantaanaliissa ja áicamat oassálastima vuođul. Čálalaš materiálat leat raporttat ja dieđalaš artihkkalat luondduhálddašeami, seailluheami ja boazodoalu birra.

Árbevirolaš sámi eallinvuohki ja sámi árbedieđu ovdáneapmi lea nannosit laktašuvvon luondduresurssaid geavaheapmái. Árbedieđuid seailluheapmi gáibida ahte diehtu ávkkástallo geavatlaččat ja luondduresurssaid hálddašeami vuogádagaid siskkobealde. Ceavzilis resursageavaheapmi gáibida buresdoaibmi sosiála ásahusaid.

Árbedieđu ja dan seailluheami uhkidit muhtin áitagat, muhto dálá sosiála ásahusat addet ollu vejolašvuođaid seailluhit árbedieđuid. Olgguldas ekonomalaš aktevrrat ja muhtin álbmotoainnut hehttejit sámi ealáhusaid geavaheamis eatnamiid ja resurssaid. Sámi ealáhusaid vejolašvuođat geavahit luondduresurssaid árbevirolaš, ceavzilis lági mielde leat sakka gáržžiduvvon ja ain gáržžiduvvojit.

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Eiseválddiid njuolggadusat vearredahkun dahket ja byrokratiserejit árbevirolaš bargovuogiid ja billistit sámi servodaga oasse-iešstivrejumi. Go massá vejolašvuođaid ávkkástallat luondduresurssain árbevirolaš vuogiid mielde, ja go moderniseren lassána ja go sámi báikegottit marginalisere-juvvojit sosio-ekonoma-laččat, de boađusin sáhttá leat árbedieđuid massin. Seammás maid árbevirolaš máhtu ja dieđuid sirdin hehttejuvvo.

Rievdadusat gaskariikkalaš ja sisriikkalaš politihkas sáhttet váikkuhit árbedieđu ealáskahttimii ja viidáset ovddideapmái. Árbedieđuid árvu lea juo dohkkehuvvon, muhto ceavzilis resursahálddašeamis lea dárbu bajidit árbedieđu stáhtusa. Ceavzilis luondduhálddašeapmi orru dárbbašeamen oktasaš hálddašanvuogiid ođastusaid, mat bajidit árbedieđu diehtogáldun seammá dássái ja seammá árvosažžan go luonddudieđa ge ja ii ge dušše lassin luoddudiehtagii.

BJØRG PETTERSEN

Fuomáš digitála guossalanrokkiid ja čovdosiid go duddjot informašuvdna-vuogádagaid sámi árbedieđuid várás

Árbediehtu-prošeavtta ulbmil lea ovddiditvugiid duođaštit, vurket, bisuhit ja suodjalit sámi árbedieđuid. Lea hástalus vurket árbedieđu digitála arkiivvaide ja informašuvdnavuogádagaide, daningo árbevirolaš máhtto-vuogádagat leat rievdadalli ja konteavstta ja dilálašvuođa duohken. Ollu cuiggodeaddjit ákkastallet ahte databásaide lea mihtilmas objeaktan dahkat (*objectify*) ja generaliseret. Dát erenoamášvuohta boahtá čuohcat vurkejuvvon árbedieđuide ja ahte dušše váldá vuhtii dan mii adno "albma" diehtun, mii mearkkaša objetiiva diehtu. Databásain diehtu biddjo dábálaččat guovddážii. Dás deattuhuvvo dieđu ávkalašvuohta, mii fas mielddisbuktá juogusteami (*classification*), biđgema ja generaliserema. Boađusin sáhttá leat ahte konteaksta, muitalusat, kultuvra, norpmat ja oahppanvuogit olgguštuvvojit.

Čálli ovdanbuktá ja digaštallá golbma informašuvdnavuogádaga álgoálbmot árbedieđuid váste mat leat geavahusas: Mo dat doibmet árbedieđuid ektui? Digaštallan dahkko vásáhusaid, dutkamiid ja ovddidanbargguid vuođul, mat gávdnojit álgoálbmot databásaid ja digitála arkiivvaid olis. Lea dárbu ovddidit

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ontologiija mii lea heivehuvvon álgoálbmot dieđuid mihtilmasvuođaide, vai olaha eambbo demokráhtalaš digitála vurkema. Dábálaččat adnojuvvon ontologiijat leat menddo oppalaččat. Ontologiija ovddideamis lea dehálaš válddahallat doahpagiid álgoálbmogiid iežaset gielaid vuođul, iežaset sániiguin. Dieđuid vurkema várás lea maiddái dárbu duddjot metadata, mii lea diehtu dieđuid birra.

Árbedieđuid várás duddjojuvvon informašuvdnavuogádat berrejit doaibmat ehtalaš njuolggadusaid mielde, ja leat stabiila ja álki geavahit, leat heivehuvvon birrasii ja báikkálaččat hálddašuvvon. Dat mielddisbuktá mearrádusaid dahkama sisdoalu, hámi, ovdáneami ja sisabeassama hárrái. Gielalaččat galget informašuvdnavuogádat dustet ja doarjut buot relevánta sámi gielaid.

Heivvolaš informašuvdnavuogádaga ráhkadeami árbedihtui ferte oaidnit kultuvrralaš investeremin, proseassan mii digaštallo čađat gaskka. Multimediateknologiija ovdáneapmi ja ođđa sosiála mediat addet vejolašvuođaid gulahallamii ja álkidahttet olaheami njálmmálaš ja visuálalaš kultuvrii, juoga mii lea oassi ja árvvus adno árbevirolaš sámi diehto- ja oahppanvugiin.

ERIK NORBERG & BIRGITTA FOSSUM

Árbediehtu ja kulturduovdagat

Artihkal lea ”*Samieh Saepmesne – I det samiska rummet*/Sámi lanjas”-prošeavtta birra mii čađahuvvo oarjelsámi guovllus. Prošeavtta ulbmilin lea čoaggit dieđuid ja čalmmustahttit oarjelsámi kultureanadagaid ja olbmo saji doppe. Prošeakta nanne kulturmuittuid registrerema metodaovddideami, mas árbedieđuid geavaheamis lea dehálaš rolla.

”Saemie Saepmesne” prošeavtta vuođul artihkkala čálli-guovttos digaštallaba arbedieđu čohkkema iešguđetlágan beliid. Deaddu biddjo dieđuid čoaggimii sámi kulturduovdagiid birra, eanaš arkeologalaš materiála hámis, fysalaš báikkiin, ovdamearkka dihte orrunsajiin dahje eará dieđuid čoaggin oinnolaš ja vuoiŋŋalaš sámi kulturárbbi birra. Diehtočoaggin galgá geavahuvvot oarjelsámi servvodaga čalmmustahttimii ja nannemii. Dokumentašuvdna galgá čájehit sámiid saji guovlluin, gos váldoservvodat eahpida ahte sámit historjjálaččat leamaš, muhto gosa sámi servvodat čuoččuha iežas gullat.

Artihkkala čálli-guovttos digaštallaba muhtin čuolmmaid mat gullet diehtočoaggima prošeavttaide sihke oppalaččat ja maiddái konkrehta prošeavtta ovdamearkkas oarjelsámi guovllus. Čállit čilgeba earret eará man dehálaš lea gulahallat báikegottiiguin ovdal go prošeakta álggahuvvo ja makkár váttisvuođat sáhttet ihtit jos gulahallan álggahuvvo maŋŋegihtii. Ollislaččat maid fuomášuvvo dutkiid gáržžes oaidnu "iežaset" gáldodieđuid birra ja dutkanbirrasiid vuostemiella geavahit lagas dutkansurggiid bohtosiid ja diehtosurggiid rasttildeaddji bargovugiid.

Kulturmuittuid registreren ja árbedieđuid čoaggin lea hui dehálaš oarjelsámi guovllus. Kulturmuittut ja kultuvrralaš birrasat (kultureanadagat) čájehit sámi ipmárdusa eanandagaid ja luonddu birra, ja eanandagaid mearkkašumi ekonomalaš, sosiálalaš ja vuoiŋŋalaš dilálašvuođaide. Sámi kultureatnamiid ja kulturmuittuid suddjen galgá leat veahkkin nannet ja seailluhit sámi identitehta ja oktavuođaid máttuid eatnamiidda. Dáinna lágiin dat maid lea mielde gaskkusteamen boahttevaš buolvvaide dieđuid sin historjjálaš ruohttasiid birra, maid eanandagat sisttisdollet.

JELENA PORSANGER

Modernitehta ja árbevieruid guoktejuogu (dikotomiija) problematiseren álgoálbmot ja sámi konteavsttas

Sii geat barget álgoálbmogiid árbedieđuid duođaštemiin ožžot dávjá jearaldaga meroštallat, mii lea árbevirolaš ja mii lea ođđaáigásaš vásedin álgoálbmoga kultuvrras. Dán gažaldaga jerret dávjjimusat sii, geat eai gula álgoálbmogiidda, muhto dála áigge dát gažaldat digaštallo maiddái álgoálbmogiid báikegottiin, álgoálbmogiid akademiijas ja áššedovdiid gaskkas, geat barget árbediehtu-dokumenteremiin. Dán artihkkalis guoktejuohku (dikotomiija) gaskkal modernitehta ja árbevieruid digaštallo. Vuolggasadji lea álgoálbmot dutkanmetodologiija teoretiseren. Čálli lea movttiiduvvon álgoálbmotdutkama bohtosiin miehtá máilmmi ja son ákkastallá ahte gažaldat "sirrehusas gaskkal árbevieruid ja modernitehta" vuolgá diehtoteoriijain mat eai gulaálgoálbmogiidda. Árbevieruid ja modernitehta guoktejuohku deattuha gažaldagaid mat leat apmasat álgoálbmogiid ontologiijii ja árvovuogádahkii.

Problematiseren lea oassin ásahuvvon dutkanparadigmas. Dat lea nannosit vuođđuduvvon oarjemáilmmi diehtoteoriijaid ala (epistemologiija) ja dieđuid lahkonanvugiide, earenoamážit dan ektui mii lea amas dahje man ektui gávdnojit iešguđetge oaivilat. Ráđđejeaddji dutkamii álgoálbmotášiid birra lea cieggan paradigma, mas problematiseren deattuha eahpedásálaš fápmooktavuođaid. Problematiserenparadigma bokte áššečuolbma sajuštuvvo álgoálbmogii, sihke ovttaskasolbmuide ja birrasiidda. Dát paradigma sirdá dutkiid fuomášumi eret álgoálbmogiid oainnuin, árvvuin ja oalle dávjá maiddái, sin duohta dárbbuin.

Álgoálbmotdutkamis sáhttá problematiserema geavahit nanu dutkanreaidun. Álgoálbmogiid diehtoteoriijat birra sáhttet boahtit oidnosii ja oažžut legitimitehta, jus problematisere guoktejuogu gaskkal árbevieruid ja modernitehta. Dán sáhttá ovdamearkka dihte dahkat go sámi doahpagiiguin čájeha ja duođaštuhttá mot sámit áddejit árbevieruid ja árbedieđuid. ddDát jurdda ii leat ođas sámi akademihkkariidda. Dat boahtá ovdan geahčastagas man artihkalčálli dahká muhtun sámi dieđalaš bargguid birra, mat leat ilbman 1990-logu rájes. Dát oanehis guorahallan čájeha ahte ollu sámi dutkit leat rahčan juogalágan intellektuála duhtameahttunvuođain daningo leat geavahan oarjemáilmmi teorehtalaš doahpagiid modernitehta ja árbevieruid birra mat eai heive sámi kontekstii.

Sámi doahpagiid – árbevierru ja árbediehtu – geavaheapmi analiisareaidun addá sámi árbedihtui ovdamuni diehtogáldun. Sámi doahpagastin sáhttá addit dievasmahttit ja ođasmahttit ásahuvvon teorehtalaš jurddašeami "árbevieru" birra ja sáhttá ovddidit sámi fágalaš jurddašeami ja sámi dutkanvugiid. Dát artihkal lea bovdejupmi stuorát dieđalaš digaštallamii dan birra ahte váldit atnui ja geavahišgoahtit dutkamis sámi doahpagiid, dan sadjái go geavahit ásahuvvon epistemologiijaid vuođđun teoretiseremii ja analiissaide.

Tjoahkkájgæso

GUNVOR GUTTORM

Árbbediehto moallánahka ja dan adno

Maŋemus 30 jagijt le læhkám edna tjalmostibme álggoálmmugij diedojda, ja majt da merkahi álggoálmmugij ratjástallama ja åtsådallama dán tiemá dádjadusá gáktuj. Álggoálmmugijn galggi liehket rievtesvuoda åvddånbuvtátjit ja ádnuj váldátjit ja åvddånahtátjit ietjasa árbbedábálasj diedojt. Diedoj åvddånbuktem ja máhtsadibme le oasse iesjmierredimeprosessas. Sáme allaskåvlå prosjækta sáme árbbedábálasj diedoj birra máhttá gehtjaduvvat dákkár prosjæktan. Prosjækta le válljim *árbbediehto* (árbbedábálasj diehto) moallánagáv, dagu aktisasj moallánahkan árbbedábálasj sáme diedojda(diehto) ja máhtudagájda (máhtto).

Gåktu máhttá sáme vuojnos dádjadit ja dålkkut árbbediedov? Artihkkalin ásaduvvi muhtem moallánagá ma li árbbediehtuj tjanádum ja máhtti liehket sajenis gå dát dágástaláduvvá. Artihkal le dágástallamálggon tjáledum åvddånbuvtátjit árbbediedo bielijt ja rabátjit sáme dádjadusáv árbbedábálasj diedoj birra. Dáv tiemáv lahkanittjat, le artihkaltjálle gæhttjam makkár árggabæjválasj giela ja praksijsa vuojnos le árbbedábálasj diehton. Tjálle le dágástallam gåktu sáme dutke ja dutke gudi ælla sáme, li ádnuj válldám sámegielak termajt ma gåvvidi, tjielggiji ja tjiegŋodi árbbedábálasj diedoj dádjadusáv sáme kontevstan, ja dájt dålkkum moallánagá duon dán aspekta gáktuj.

Tjálle argumenteri válldet adnuj dav dádjadusáv mij le ulmutjij lunna, ja dav åtsådallamav mij le sáme moallánagáj gáktuj ma gulluji duov dáv diedov gåvvidittjat sáme kontevstan, mij jut le buolvas buolvvaj gaskostaládum li ájnnasin moallánagá vuogij lahkanime åvddånahttemij. Dán vuodon, máhttá ávkálasj anályjtalasj vuohke åvddånahteduvvat oattjotjit álggoálmmuk vuojnov ásaduvvam alleværáldá dádjadusá gáktuj mij árbbedábálasj diehto le moallánahkan ja gåktu dát praksijsan dádjaduvvá.

JOHN BERNHARD HENRIKSEN

Muhtem riektálasj árvustallama

Artihkkalin tjáleduvvá muhtem guovdásj riektálasj tjuolma sáme árbbedábálasj diedojda tjanádum. Tjállen le ANa Biologalasj moattegerdakvuoda konvensjåvnå mærrádusá vuodon, (Convention on Biological Diversity 1992), mij le badjásasj riektálasj ålgoldisævtoj referánssan Árbbedábálasj diehto pilotprosæktaj. Artihkkalin åvddånbåhti sisano álggoálmmukdiehto, innovásjåvnå ja práksijssa buojkuldagájda, ja makkár vælggogisvuodajt konvensjåvnnå vuodot stáhtajda mij gullu roaddodit, bisodit ja åvddånahttet sáme diedojt, innovásjåvnåjt ja práksijsav. Gå gehtja álggoálmmugij vuojnos, le stáhtaj riektálasj vælggogisvuoda evtulattjajt tjanádum stáhtaj najonálalasj lágajda ja ráddjiduvvam dåjmatjit nav guhkás gå dát le máhttelis ja ávkálasj.

Konvensjåvnnå ij ráddjidahte vælggogisvuodajt ma li konvensjåvnå bællálattjajn ietjá álmmukriektálasj instrumentaj gáktuj. Stáhta vælggogisvuoda tjoahkkáj sámij hárráj vierttiji mierreduvvat aj ietjá rijkajgasskasasj sjiehtadusáj ja instrumentaj gáktuj. Dálásj álmmukrievtesvuohta aj annsidahttá álggoálmmugijn li rievtesvuoda iesjmierredibmáj, ja jut stáhtajn ulmusjrievtesvuodaj njuolgadusáj milta li vælggogisá álggoálmmugij konsulterit ásjijn má sijájda guoskadalli. Muhtem bálijn le stáhtta vælggogis viedtjat sijáj fiddja ja diehton juogedum åvddågehtaj guorrasimev åvddåla doajmma mij máhttá sijajda guoskadallat mierreduvvá jali álgeduvvá. Tjálle argumenteri jut sáme árbbedábálasj diedojn ja árbbedábálasj adnemin luondos le aj riektálasj suodjalibme álmmukrievtesvuoda mærrádusáj baktu ma vuododi álggoálmmugij kultuvrajt, dáj gaskan artihkkal 27 ANa konvensjåvnån sivijla ja politihkalasj rievtesvuodaj birra.

Sisŋeldis riektálasj vælggogisvuodaj milta – vuodolága ja ulmusjrievtes-vuodalága milta – viertti stáhtta láhtjet dilev nav vaj sáme kultuvrra máhttá bissot ja boahtte buolvajda vatteduvvat. Dát vælggogisvuohta doajmmá aj árbbedábálasjdiedoj gáktuj, danen gå árbbedábálasj diedo le sáme kultuvras oassen. Álmmukriektá, vuodolága ja ulmusjriektálága milta le stáhtan rievtesvuodajvælggo vaddet sámijda oalle máhttelisvuodajt ietjasa kultuvrav nannitjit ja åvddånahtátjit, dán vuodon aj árbbedábálasj diedojt.

Sierraláhkaásadimen Vuonan ij huoman vatte dåbmaris riektálasj suodjalimev árbbedábálasj diedojda, ja ij la ga vuojga dæddo biejaduvvam dákkár diedojt bisodittjat,anátjit ja joarkátjit. Luonndovaljesvuohtalágan ij mige sierra

nammaduvá sámij rievtesvuodaj ja berustimij birra luondo, ednama ja luonndoluohkkoj gáktuj. Sæmmi gassjelisvuohta li aj ietjá vuona láhkaásadimij gáktuj, ma li ájnnasa árbbedábálasj diedojt anátjit ja bisodittjat, dán vuolen aj motåvrråjåhtudahka miehtsijn ja tjáhtjádagájn, guoláduslåhkaásadimen, luossaguollim ja jávrreguollimlágan, návdde- ja låddimlágan j.n.á.

ÅSA NORDIN JONSSON

Etalasj njuolgadusá árbbediehto duodastahttemij, sáme árbbedábálasj diedoj hárráj

Dán artihkkal åvddånbuvteduvvi muhtem etalasj njuolgadusá má lulu beras aneduvvat árbbediehto duodastahttemij, sáme árbbedábálasj diedoj hárráj. Etalasj njuolgadusáj sajájduhttem ja adno duodastahttemprosjevtajda vaddi vieledusáv ja vuollegasjvuodav gå sáme ja sijá diedo giehtadaláduvvi. Moaddásijn gejn li diedo li guhkes ájgev åtsådallam, ja ájn åtsådalli, jut sijáj diedo tjævdot aneduvvi dutkijs/tjoaggijs majt iejvviji duon dán dutkamprosjevtajn. Ienep diedo etalasj algoldis ævtoj birra álggoálmmuksebrudagájn ja dutkijn/tjoaggijn, ja duodastahttemprosjevtaj tjadádimijn etalasj njuolgadusáj milta, vaddá máhttelisvuodajt dáv dilev ietjájdduhttet. Dát gájbbet jut goappátjijn bielijn le aktisasj dádjadus, vieledus ja sidot njuolgadusájt anátjit duodastahttemprosjevtajn.

Álggoálmmugua – dán aktijvuosan sámijn – le sierra árvo ja vuorrodime, ja dá galggi liehket vuodon duohtastahttemprosjevtajn. Gå dát ánssiduvvá de sjaddá jasska birás sáme árbbediedojt duohtastahtet. Dán prosessan li sáme árbbediehto guodde ja duolla árbbediehto æjgáda bielle majt vieledit hæhttu. Dá li ájnnasin gå barggovuogijt vállji ja gå ja jus låhpalasj båhtusijt mierreduvvi åvddånbuvteduvvat, vájku gåktu vállji åvddånbuktemvuogev mij máhttá liehket diehtotjoahkke, filmma, girjje j.n.á.

Álles etihkka duodastahttemijn viertti tsieggiduvvat álggoálmmuga dárboj ja árbbediehto æjgádij guoskavasj diles, ja hæhttu sæmmi båttå liehket ájnnasin árbbediehto tjoaggáj. Etalasj njuolgadusá vierttiji danen juo álgos ja plánimprosessan aneduvvat, ja aj prosjekta tjadádimen, låhpan ja båhtusij åvddånbuktemin. Etalasj njuolgadusá bukti vieledahttem álgoldis ævtojt mij árbbediehto æjgádijt ja árbbediedov suodjiji.

JAN ÅGE RISETH

Máhttá gus árbbedábálasj diehtuj liehket ájnas sadje luonndoháldadusán?

Ájádusá institusjåvnålasj hásstalusáj birra sámijda Vuonan

Árbbedábálasj diehto le guovdátjin álggoálmmugij kultuvrajn ja le vuodon sijáj guhkesájggásasj luonndoluohkkoj háldadibmáj. Ådåájggásasj rijkajn ij la árbbedábálasj diedojn vuojga stáhtus, ja luonndodiedalasjvuodajn le mierrediddje sadje stáhtaj luonndoluohkkoj háldadimen.

Dán tjállusin guoradaláduvvá makkár institusjåvnålasj dilijn li- jali máhttá liehket- sáme árbbedábálasj diedojt bisodit ja adnuj válldet. Luondo adnem ja háldadibme le tjalmostahtedum. Vuodon buojkulvisájda le Vuona sámij iellemvuodo. Dutkama vuodon le kvalihtátijvalasj vuoge duola dagu dokumentaj anályjssa ja oasseválldij váksjoma. Tjálalasj materiála li rapporta ja diedalasj artihkkala luonndoháldadime, bisodime ja ællosujto birra.

Árbbedábálasj sáme viessom ja sáme árbbedábálasj diedoj ávddånibme li nannusit luonndoluohkkoj adnemij tjánádum. Diedoj bisodibme gájbbet árbbedábálasj diedojt praksijsan ja luonndoluohkkoj háldadime vuogádusájn. Guottedahtte ressursaj adnem gájbbet buorre doajmme sosiála institusjåvnåjt.

Árbbedábálasj diehto ja dan bisodibme le duon dán ájto vuolen, valla udnásj sosiála institusjåvnå vaddi muhtem máhttelisvuodajt árbbedábálasj diedojt bisodittjat. Ålgoldis økonomalasj aktøra ja almulasjvuohta vuosstálassti sáme æládusáj ednam ja ressursaj adnemav, dát binnet ja le binnedime máhttelisvuodajt luonndoluohkkoj adnet dábálasj guottedahtte vuogij milta. Stáhta njuolgadusá kriminaliseriji ja byråkratiseriji árbbedábálasj praksijsav ja hæboduhttá dav autonomijav mij sáme sebrudagán muhtem mærráj le. Luonndoluohkkoj árbbedábálasj vuogij milta ávkástime máhttelisvuodaj massem, ådåájggásasj ja sosio-økonomalasj hæbodibme sámij lahkasebrudagájn máhttá dahkat nav vaj diedo ja praksijsa e åhpaduvá boahtte buolvajda.

Rijkajgasskasasj ja nasjonálalasj politihka rievddadusá máhtti doajmmat vuodon árbbedábálasj diedoj ælládahttemij ja ávddånahttemij. Árbbedábálasj diehto le juo ánssiduvvam, valla dárbbo le stáhtusav aledit árbbedábálasj diehtuj guottedahtte luonndoluohkkoj háldimen. Guottedahtte luonndoluohkkoj háldime ávddånibme le vuojnunagá tjanádum duodaj

jådedimvuogijda ma máhtti dahkat árbbedábálasj diedojt gálldon sæmmi dásen gå luonndodiedalasjvuodav, ja ij dåssju duoddegálldon.

BJØRG PETTERSEN

Gáhttiju då digitála mettulasjvuodajs: Gatjálvisá ja máhttelis tjoavddusa sáme árbbediehto diehtojuohkemvuogádusáj dagádijn ja sáme árbbedábálasj diedoj diehtotjoahkkijda.

Árbbediehto-prosjevtan le ulmme vuogijt åvddånahttet sáme árbbediedojt duodastittjat, bisodittjat ja suodjalittjat. Árbbediehto ja dan iehpetjielgas ja aktijvuodaj tjanádum karáktera árbbedábálasj diehtovuogádusájn li gássjelisá digitála vuorkájn ja diehtojuohkemvuogádusájn vuorkkit. Moadda lájttális ulmutja tjuottjodi jut diehtotjoahkkijt tjovvu objektiverim ja generáliserim karákterra mij diedojt ietjájduhttá dåssju dasi mij gehtjaduvvá "oalle" jali objektijvalasj diehton. Tjalmostibme le diehtuj ja le álu ávkálasj árvvo diehti, juoga mij buktá klassifiserimav, sierragiehtadallamav ja generáliserimav, ja aktijvuodav, histåvråv, kultuvrav ja åhpadimvuogev guodá.

Gålmmå sierra álggoálmmuk diehtojuohkemvuogádusá ma li juo ásaduvvam åvddånbuvteduvvi ja dágástaláduvvi artihkkalin: Gåktu då doajmmi árbbedábálasj diedoj gáktuj? Mij dágástallap dáv åtsådallamij, dutkamij ja åvddånahttema gáktuj álggoálmmuk diehtotjoahkkij ja digitála vuorkáj hárráj. Ontologijav åvddånahttet mij hiehpá álggoálmmukdiedoj karákterraj le dárbulasj jåvsådim diehti ienep demokráhtalasj digitála vuorkkimav. Ontologija ma dábálattjat li anon li ilá åbbålattja, ja le aj dárbbo álggoálmmuk bágojt ja gielav tjielggit. Gå galggá diedojt duodastahttet de le dárbbo dahkat metadáhtáv, dáhtáv dáhtá birra.

Jus galggá buorre designav oadtjot árbbediedoj birra vierttiji diehtojuohkem-vuogádusá doajmmat etalasj njuolgadusáj milta, ja liehket stuovvása ja álkke. Adnet, hiebadum birrasijda ja bájkálattjat háldadum. Dát aj gullu sisano, designa, åvddånahttema gáktuj ja guhti galggá dájt bessat adnet. Diehtojuohkemvuogádus aj hæhttu doarjjot divna guoskadaládum sámegielajt.

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Dågålasj diehtojuohkemvuogádusá åvddånahttem árbbedábálasj diedojda hæhttu gehtjaduvvat dagu prosæssan ja kultuvralasj investerim mav le dárbbo agev dágástallat. Diehtojuohkemteknologija åvddånahttemmáhttelisvuohta ja oabllom máhttá liehket buorren gå dát sjaddá viehkken ienep aktisasjbargguj ja vaddá álkkep bessat adnet njálmálasj ja visuálalasj kultuvrav, mij jut le árvvon sáme árbbedábálasj diedojn ja oahppamvuogen.

ERIK NORBERG & BIRGITTA FOSSUM

Árbediehto ja kulturduobddága

Artihkal le "Saemieh Saepmesne- I det samiska rummet" prosjevta birra, mij le jådon oarjjelsáme guovlon. Prosjevta ulmme le duodastahttet ja åvddånbuktet oarjjelsáme kultuvrraduobddágav ja ulmutjij årromav dåppe. Prosjækta buktá kulturmujttoregistrerima ja árbbedábálasj diedoj adnema dutkamvuogijda åvddånahttemav.

Artihkkala tjálle duov dáv oasev árbbedábálasj diedoj tjoaggemav tjuolmastibá álgujn prosjevtas "Saemieh Saepmesne". Dæddon le tjoagget diedojt sáme kultuvrrabirrusijs, ienemusát arkeologalasj materiálajs, fysihkalasj sajijs luondon duola dagu årromsajijs ja ietjá materiálalasj ja ij materiálalasj sáme kulturárbes. Duodastahttem gálggá aneduvvat åvddånbuvtátjit ja nannitjit oarjjelsáme sebrudagáv ja aj vuosedittjat sáme årromav guovlojn gånnå dat iehpeduvvá ieneplåhkosebrudagás ja mij sámijs tjuottjoduvvá.

Artihkkala tjálle åvddånbukteba oasev dás gatjálvistjuolmas mij gávnnu dákkár duodastahttemprosjevtan, gájkkásasj dásen, valla aj sierra dákkár prosjevta gáktuj oarjjelsáme guovlon. Tjálle dágástallaba ierit ietján man ájnnasin le bájkálasj sebrudagáj guládallat åvddåla dákkár prosjækta álgaduvvá ja makkár gássjelisvuoda máhtti ihtet jus guládallam maŋŋela álgaduvvá. Ålleslåhkáj gehtjadum dágástaláduvvá aj dat gártjes vuojnno mij gávnnu dutkijn "ietjasij" gálldomáteriálaj hárráj, ja dan vuosstemiellaj anátjit iehtjádij dutkambåhtusijt muodugasj dutkamdábijs, ja aj fágajgasskasattjat dutkama hárráj.

Kulturmujttoregistrerim ja árbbedábálasj diedoj tjoaggem le ållu ájnnas oarjjelsáme guovlon. Kulturmujto ja kultuvrrabirrusa ietja vuosedi sáme dádjadusáv luondos ja duobddágis, ja man ájnnasin duobddága lidjin

økonomalasj, sosiálalasj ja åskulasj vidjurij gáktuj. Sáme kultuvrraduobddágij ja kulturmujtoj suodjalibme galggá liehket maŋen sáme iesjdåbdov ja aktijvuodav ájttegij luonnduj nannitjit ja bisodittjat. Dán baktu de galggá aj liehket oassen joarkátjit ja åvddånahtátjit luondo histåvrålasj ruohtsajt boahtte buolvajda.

JELENA PORSANGER

Modernitehtta ja árbbedábe gatjálvissan álggoálmmugij ja sámij aktijvuodan

Ulmutja gudi barggi álggoálmmugij árbbedábálasj diedoj gatjádaláduvvi álu tjielggitjit mij árbbedáhpe ja modernitehtta le muhtem álggoálmmuga kultuvran. Álu boahtá dát gatjálvissan álggoálmmuga ålggolis. Valla dálásj ájge de dát gatjálvis dágástaláduvvá álggoálmmugij gaskan ja bájkálasj sebrudagájn, álggoálmmugij akademijajn ja fáhkaulmutjij gaskan gudi álggoálmmugij árbbedábálasj diedojt duodastahtti. Dán artihkkalin le modernitehta ja árbbedábij vuosstebiele gatjálvissan. Arvusmahtedum álggoálmmugij metodologijajs ja álggoálmmukdutkamijs væráldav birra, tjuottjot tjálle jut ássje "sieradibme árbbedábij ja modernitehta gaskav" boahtá diehtoteorijajs ma e guoska álggoálmmukássjijda, ja daj tjalmostibme le ássje ma li abmasa álggoálmmugij ontologijaj ja árvojda.

Dutkamtjuolmaj gássjelisvuodajt tjoavddet le oasse doajmme dutkamparadigmas. Dat le nannusit vuododuvvam alleværálda diehtoteorijajda ja diehtolahkanimijda, ållagasj dasi mij le amás ja gen ga lágásj miejnigijda. Álggoálmmuga ássjij mierrediddje dutkamij sissŋelin ja dutkamij birra li moattelágásj fábmudakbiele boahtám åvddån dutkamtjuolmaj ássjij paradigmajn. Læhkám la dábálasj tjadnat juokkirik dutkamtjuolmav ájnegis ulmutjij álggoálmmugis ja bájkálasj sebrudahkaj. Dát paradigma le sirddám dutke vuojnojt ierit álggoálmmugij vuojnojs, árvojs – ja álu aj – ierit duohta dárbojs.

Dutkamtjuolmaj gássjelisvuoda máhtti aneduvvat nanos dutkamvædtsagin álggoálmmukdutkamijn. Álggoálmmugij ietjasij dutkamteorija máhtti vaddet ávkev ja dåhkkiduvvam sajev gå gassjelisvuodaj tjuolmajt tjoavddá árbbedábe ja modernitehta vuosstebielijt. Dát máhttá dagáduvvat, buojkulvissan, gå vuoseduvvá sáme dádjadusáv árbbedábijs ja árbbedábálasj diedojs sáme

moallánakdádjadusáj baktu. Dát ájádus ij la ådås sáme akademihkkárijda, gåk artihkkalin åvddånboahtá tentatijva analyjsajs muhtem sáme diedalasj bargojs gitta 1900-lågojs. Dát oanegis tjadádibme vuoset moadda sáme dutke li vájvástuvvam juokkirik lágásj intellektuála duhtamahtesvuodaj mij boahtá dassta gå li doajmme alleværálda teorijaj moallánagájt adnám modernitehta ja árbbedábij dutkamijn ma e hieba sáme aktijvuodajda.

Sáme *árbbedáhpe* ("tradisjon") ja *árbbedábálasj diehto* moallánagáj adno analyjssavædtsagin vaddá sierranjuolggudagáv gáldoj gáktuj. Dát máhttá vaddet arvusmahttemav doajmme teorehtalasj ájádallamijda "árbbedábe" birra ja máhttá åvddånahttet sáme fágalasj ájádallamijt ja sáme dutkamvuogijt. Dát artihkal le dagu gåhttjom stuoráp diedalasj dagástallamijda sáme moallánagájt dutkamijn adnegoahtet, gå adnet doajmme diehtoteorijajt vuodon teoretiserimijn ja analyjsajn.

Åanadassh

GUNVOR GUTTORM

Aerpiemaahtoe baakojne jïh åtnosne

Dej minngemes 30 jaepiej dle stoerre fokuse orreme aalkoealmetji daajrose, jïh maam ulmide aalkoealmetji skraerjie jïh dååjrehtimmie utnieh guktie daam aamhtesem buejkehte. Aalkoealmetjh edtjieh reaktoem utnedh dovne vååjnehtidh jïh åtnose vaeltedh, jïh vijrebe evtiedidh sijjen aerpievuekien daajroeh. Vååjnehtimmie, jïh daajroem bååstede sertedh leah akte bielie dehtie jïjtjeraarehkeprosesseste. Maahta Saemien jilleskuvlen prosjektem, saemien aerpievuekien daajroen bïjre, goh dagkeres prosjektem vuejnedh. Prosjekte dam dïejvesem *aerpiemaahtoe* (noerhtesaemien: *árbediehtu)* veeljeme goh akte tjåenghkies dïejvese, dovne aerpievuekien saemien daajrojde jïh maahtojde.

Guktie maahta aerpiemaahtoem guarkedh jïh toelhkestidh aktede saemien vuajnoste? Tjaalegisnie naan dïejvesh evtiesuvvieh mah leah *aerpiemaahtose* ektiedamme, jïh mah maehtieh sjyøhtehke årrodh gosse daam aamhtesem digkiedibie. Ussjedamme tjaalegem goh akte digkiedimmiesoejkesje, juktie ovmessie vuajnoeh aerpiemaahtoste vuartasjidh, jïh guktie maahta saemien mielen mietie dam dïejvesem aerpievuekien daajroem guarkedh. Juktie dam aamhtesem geatskanidh, dle tjaalegen tjaelije aarkebiejjien gïelesne jïh rïektesisnie darjomh vuartasjamme mah maehtieh *aerpievuekien daajrojne* vååjnedh. Tjaelije lea digkiedamme guktie dovne saemien jïh daaroen dotkijh leah saemiengïelen teermh åtnose vaalteme mah buerkiestieh, boejhkestieh jïh lïhkebe tjïelkestieh dam goerkesem aerpievuekien daajroste aktene saemien ektiedimmesne, jïh dam toelhkestamme ovmessie vuajnoej muhteste dehtie dïejvesistie.

Tjaelije digkede guktie åtnoe dehtie goerkesistie mij lea almetji luvnie, jïh dååjrehtimmie saemien dïejvesigujmie, mah ovmessieh daajroeh aktene saemien ektiedimmesne buerkiestieh, jïh mah leah boelveste boelvese leereme, leah vihkeles gosse edtja aktem metodihkeles geatskanimmiem evtiedidh. Daennie vååroemisnie, maahta aktem tjïelke analytihkeles vuekiem evtiedidh juktie aktem aalkoealmetjeperspektijvem åvtese buektedh, dennie

digkiedimmesne dejstie tseegkeme jillege goerkesijstie mij aerpievuekien daajroe goh dïejvese lea, jïh guktie dam rïektesisnie gåajhtsede.

Tjoevtenjebaakoeh: *Aerpievuekie, aerpiemaahtoe, maehtedh, daejredh, vuekie, daepie,* aalkoealmetji daajroe, vihtiestimmie, vaarjelimmie.

JOHN BERNHARD HENRIKSEN

Aerpiemaahtoe: Såemies rïekteles gïehtjelimmieh

Tjaalege såemies voernges rïekteles dåeriesmoerh digkede, mah leah saemien aerpievuekien daajrose (aerpiemaahtoe) ektiedamme. Tjaelije vååromem vaalta sjyøhtehke moeneminie, EN'n konvensjovnesne biologeles gellielaaketjen bïjre (*Convention on Biological Diversity* 1992), mij lea dïhte bijjemes rïekteles vuajnoemierie dan Aerpiemaahtoe-aalkoeprojektese. Tjaalege sisvegen bïjre dejstie dïejvesijstie *aalkoalmetji maahtoe, innovasjovnh jïh haarjanimmie* lïhkebe tjïelkeste*,* jïh mah diedth konvensjovne staatese vadta, juktie krøøhkedh, vaarjelidh jïh vijriebasse jåarhkedh saemien daajroem, innovasjovnh jïh haarjanimmem. Aalkoealmetji vuajnoen mietie, dle staaten rïekteles diedte jearohks dejstie nasjovnale laakijste, jïh dah ajve faamoem utnieh dan gåhkese gåarede jïh lea maereles.

Konvensjovne ij dejtie diedtide geerelh mejtie konvensjovneguejmieh vååroemisnie utnieh jeatjah almetjerïekteles dirregijstie. Staaten tjåenghkies diedth saemiej åvteste byøroe aaj tjoevkesisnie vihtiestidh dejstie jeatjah gaskenasjovnele latjkojste jïh dirregijstie. Aaj åålmegereakta daan biejjien jååhkesje aalkoalmetjh reaktoem utnieh jïjtje moenedh, jïh staate, almetjereakta-njoelkedassi mietie, diedtem åtna aalkoealmetjigujmie råårestalledh dejnie aamhtesinie mah dejtie doehtedieh. Akti veajkoej dle staate diedtem åtna dej frijje jïh bievneldh åvtelhluhpiedimmiem skååffedh aarebi rååjvarimmieh nænnoste, jallh dejgujmie nearhka, mah maehtieh aalkoalmetjidie doehtedidh.

Tjaelije buerkeste saemien aerpievuekien daajroe *(aerpiemaahtoe)* jïh aerpievuekien åtnoe eatnamistie *(bearkadimmie)* aaj aktem rïekteles vaarjelimmiem utnieh åålmegerïekteles moenemi tjïrrh, mah aalkoealmetji kultuvrese vaarjelimmiem vadta, daan nuelesne 27. artihkele, EN'i konvensjovnesne sivijle jïh politihkeles reaktaj bïjre.

Sisnjelds rïekteles diedti mietie – jïh maadthlaaken jïh almetjereaktalaaki mietie – staate byøroe sjïehteladtedh juktie dïhte saemien kultuvre maehtieh tjåadtjodh jïh orre boelvide deellesovvedh. Daate diedte lea *aerpiemaahtoen* bïjre, juktie saemien aerpievuekien daajroe lea akte bielie saemien kultuvreste. Åålmegereaktan, maadthlaaken jïh almetjereaktalaaken mietie, staate aktem rïekteles diedtem åtna saemide rïektes nuepieh vedtedh sijjen kultuvrem gorredidh jïh evtiedidh, daan nuelesne aerpiemaahtoe. Læjhkan dah sjïere laakh Nøørjesne eah naan maereles vaarjelimmiem aerpiemaahtose tseegkh, jïh nåake sjïehteledtieh dagkeres daajroem vaarjelidh, nåhtadidh jïh vijriebasse sertedh. Dïhte laake eatnemegellielaaketjen bïjre lea åajvahkommes sjeavods saemiej reaktaj jïh iedtji bïjre, gosse lea kultuvren, eatnemen jïh vïerhtiej bïjre.

Dïhte seamma dåeriesmoere aaj vååjnesasse båata gosse lea jeatjah nøørjen laaki bïjre, mah stoerre ulmiem utnieh guktie edtja aerpiemaahtoem nåhtadidh jïh gorredidh, daan nuelesne laake motovrefealadimmien bïjre miehtjine jïh tjaetsine, gaajhkh gøølemelaakh, laake loesegøølemen jïh jaevriegøølemen bïjre, vijrelaake jv.

ÅSA NORDIN JONSSON

Etihken bihkedassh juktie aerpiemaahtoem saemien aerpievuekien daajroem) vihtiestidh

Daate tjaalege såemies bihkedassh åehpiedahta mejtie byøroe nåhtadidh gosse aerpiemaahtoem vihtesteminie, saemien aerpievuekien daajroe. Gosse etihken bihkedassh tseegkie jïh nåhtede dejtie vihtestimmieprosjektide, dellie saemide jïh dej daajroem hijvenlaakan krøøhkeste. Jïjnjh aajhterh daajroste leah guhkiem dååjrehtamme jïh annje dååjrehtieh, dotkijh/tjøønghkijh, mejtie gaavnedieh ovmessie studijeprosjektine, sijjem jïh sijjen daajroem nuhtieh. Stuerebe daajroe etihken mieriej bïjre dovne aalkoealmetjesiebriedahkine jïh dotkiji/tjøønghkiji luvnie, jïh tjïrrehtimmie vihtestimmieprosjektijste etihken bihkedassi mietie, viehkiehtieh dam tsiehkiem jarkelidh. Dïhte kreava læjhkan gåabpegh paarhth sinsitniem goerkesem, krøøhkemem jïh væljoem vuesiehtieh dejtie bihkedasside vihtestimmieprosjektine nåhtadidh.

Aalkoealmetji – daesnie saemiej – jïjtsh aarvoeh jïh bijjemes veeljemh edtjieh vååromine årrodh dejtie vihtestimmieprosjektide. Jis dam

jååhkesje, dellie dïhte maahta aktem jearsoes byjresem sjugniedidh juktie saemien aerpiemaahtoem vihtiestidh. Daennie prosessesne dah guedtijh saemien aerpievuekijste, jïh rïektes aerpiemaahtoen aajhterh sïjhtieh seammavyørtegs guejmieh årrodh. Daate lea vihkeles gosse barkoevuekieh veeljie, jïh gosse edjta sjæjsjalidh guktie edtja dejtie gaervies illedahkide åehpiedehtedh, saaht magkeres åehpiedehtemevuekie mij veeljesåvva, goh daatabaase, filme, gærja jnv.

Abpe etihke vihtestimmien bïjre byøroe sjïehtelovvedh dejtie daerpiesvoetide jïh man ulmie dïhte åtna aalkoealmetji daajroeaajhteridie, jïh tjuara seamma aejkien vihkeles årrodh disse mij aerpievuekien daajroem tjøønghkie. Byøroe dejtie etihken bïhkedasside joe aalkoelisnie jïh soejkesjimmesne nåhtadidh, jïh aaj gosse prosjektine giehteleminie, galhkuvisnie jïh gosse illedahkide åehpiedahta. Etihken bihkedassh nænnoes mierieh vedtieh juktie aerpiemaahtoem jïh daajroeaajhteridie vaarjelidh.

JAN ÅGE RISETH

Aerpievuekien daajroe maahta vihkeles ulmiem utnedh eatnemereeremisnie?

Åssjaldahkh institusjovnelle haestemi bïjre saemide Nøørjesne

Aerpievuekien daajroe lea akte vihkeles biehkie aalkoealmetji kultuvrine, jïh lea dïhte våarome dej guhkies reeremasse vierhtijste. Dej-baaletje laantine aerpievuekien daajroe læjhkan aktem vuelege staausem åtna, jïh eatnemedaejremevoete aktem raarehke sijjiem åtna staateles vierhtiereeremisnie.

Daate tjaalege haasta mah institusjovnelle tsiehkieh mah utnieh – jallh maehtieh utnedh – ulmiem juktie *aerpiemaahtoem,* aerpievuekien saemien daarjoe, vaarjelidh jïh nåhtadidh Fokusem åtna åtnose jïh reeremasse eatnamistie. Dah vuesiehtimmieh våaromem utnieh jieledevåaroemisnie dejtie saemide Nøørjesne. Dotkeme våaromem åtna dejnie kvalitatijve vuekine, goh tjaatsegegiehtjedimmie jïh almetji vuartjasjimmieh. Dah tjaalegh lea reektehtsh jïh vitenskapeles tjaalegh eatnemereeremen, vaarjelimmien jïh båatsoen bïjre.

Aerpievuekien saemien jieledevoete jïh evtiedimmie saemien aeerpie-vuekien daajroste, leah nænnoeslaakan ektiedamme dan åtnose eatnemevierhtijste. Daajroevaarjelimmie kreava *aerpiemaahtoem* riektesisnie nåhtede, jïh vierhtiereeremen øørnegi sisnjeli. Monnehke vierhtieåtnoe sosijale institusjovnh kreava, mah hijvenlaakan barkeminie.

Aerpiemaahtoe jïh dan vaarjelimmie jijnjh aajhtoeh utnieh, bene daan beajjetje sosijale institusjovnh jijnjh nuepieh vedtieh dam aerpievuekien daajroem tjåadtjodh. Byjngetje ekonomeles aktøørh jïh åålmege eah seamedh saemien jielemh eatnemem jïh vierhtide nåhtadieh, jïh dïhte nuepide vaeniedamme jïh annje vaenede eatnemevierhtide aerpievuekien mietie jïh monnehke-laakan nåhtadidh. Staateles nænnoestimmieh dejtie dejpeladtje voetide kriminaliserieh jïh geervebe darjoeh, jïh slahtjete dej saemien siebriedahki bieleldh jïjtjeraarehkevoetem. Maahta nåakebe sertemem sjïdtedh maahtoste jïh haarjanimmijste gosse nuepieh teehpie eatnemevierhtide aerpievuekien mietie nåhtadidh, jïh orrestehteme jïh sosijo-ekonomeles marginaliseringe saemien voenges siebriedahkine.

Jarkelimmie gaskenasjovnale jïh nasjovnale politihkesne maahta goh våarome årrodh juktie aerpiemaahtoem jealajehtedh jïh vijriebasse evtiedidh. Aerpiemaahtoe lea joe jååhkesjamme, bene lea daerpies staatusem dan aerpievuekien maahtose lutnjedh, monnehke vierhtiereeremen sisnjelen. Jis dïhte monnehke eatnemereereme edtja åvtese juhtedh, dellie tjuara riektes jarkelimmieh stuvremisnie utnedh, mah maehtieh *aerpiemaahtoem* akten daajroegaaltijasse darjodh, seammalaakan goh eatnemedaejremevoete, jïh ij ajve akte lissiegaaltije.

BJØRG PETTERSEN

Geehtedidie digitale klïeksijste: Gyhtjelassh jïh vaestiedassh guktie maahta bïevnesesystemh jïh daatabaash darjodh saemien aerpievuekien daajrose (aerpiemaahtoe)

Aerpiemaahtoe-prosjekten ulmie lea vuekiem evtiedidh juktie vihtiestidh, vøørhkedh, gorredidh jïh vaarjelidh saemien aerpievuekien daajroem. Aerpiemaahtoe jïh dïhte galkije jïh gaavnoes vuekie dejtie aerpievuekien

daajroesystemidie leah geerve vøørhkedh digitale våarhkojne jïh bïevnesesysteminie. Gellie laejhtijh jiehtieh daatabaasi veanhtadihks objektijve jïh sïejhme vuekie sïjhtieh bïevnesidie jarkelidh, juktie dan sisnie ajve sjædta dïhte mij "tjïelke" jallh objektijve daajroe. Fokuse lea daajrose, jïh lea daamtaj ajve ussjedamme dan aarvose mij nåhtoem åtna, jïh destie sjædta øørnedimmie dåehkine, sjïere gietedimmie jïh sïejhme njoelkedassh, jïh ektiedimmiem, vaajesidie, kultuvrem jïh learoevuekiem gåhkele.

Daennie tjaalegisnie åehpiedahta jïh digkede golme ovmessie bïevnesesystemh aalkoealmetjedaajrose mah joe gååvnesieh: Guktie dah juhtieh aerpievuekien daajroen muhteste? Mijjieh dam tjoevkesisnie digkiedibie dejstie dååjrehtimmijste, dotkemistie jïh evtiedimmeste aalkoealmetji daatabaasi jïh digitale våarhkoej sisnjeli. Evtiedimmie aktede ontologijeste mij lea aalkoealmetjedaajroen vuekide sjïehtedamme lea daerpies jis edtja aktem buerebe digitale vøørhkemem buektiehtidh. Dah ontologijh mejtie iemielaakan nåhtede lea fer sïejhme, jïh aaj daerpies dïejvesh buerkiestidh aalkoealmetji baakojne jïh gïelesne. Juktie bïevnesidie vihtiestidh lea vihkeles metadata sjugniedidh, daata daatan bïjre.

Juktie aktem hijven haamoem buektiehtidh aerpiemaahtose, dellie bïevnesesysteme byøroeh dej etihken bihkedassi mietie årrodh, jïh aaj nænnoes jïh aelhkie årrodh nåhtadidh, byjresasse sjïehtedamme jïh voenges reeremem utnedh. Daan sisnie dah sjæsjalimmieh sisvegen, haamoen, evtiedimmien jïh dåårrehtimmien bïjre. Bïevnesesysteme tjuara gaajhkh sjyøhtehke saemien gïelh dåarjedidh.

Tjuara dam evtiedimmiem aktede sjïehteles bïevnesesystemeste aerpievuekien daajrose vuejnedh goh akte prosesse jïh akte kultuvrelle skåårveme, mij aktem ihkuve digkiedimmiem daarpesje. Evtiedimmienuepieh jïh geerjehtimmie bïevneseteknologijeste maehtieh akte aevhkie årrodh ihke dïhte vielie laavenjostose skreejrie, jïh aelhkebe sjædta njaalmeldh jïh visuelle kultuvrem skååffedh, mah stoerre aarvoem utnieh saemien aerpievuekien daajrosne jïh learoevuekesne.

ERIK NORBERG & BIRGITTA FOSSUM

Aerpirmaahtoe jïh kultuvredajvh

Tjaalege lea prosjekten bïjre,"Saemieh Saepmesne – I det samiska rummet" mij åarjelsaemien dajvesne juhtieminie. Prosjekten ulmie lea dam åarjelsaemien kultuvredajvem jïh almetji baeliem vihtiestidh jïh vååjnehtidh desnie. Prosjekte viehkehte vuekieh evtiedidh guktie edtja kultuvremojhtesh vïhtesjadtedh, jïh dam aerpievuekien maahtoem nåhtadidh.

Tjaalegen tjaelijh digkiedieh guktie naakedem dehtie aerpievuekien daajroste tjøønghkeme, jïh våaromem vaeltieh dennie prosjektesne "Saemieh Saepmesne". Åajvahkommes daajroem tjøønghkeme saemien kultuvrebyjresi bïjre, jeanatjommes arkeologeles gaavnoeh, goh vihties sijjieh eatnamisnie, vuesiehtimmien gaavhtan årromesijjieh jïh jeatjah gaavnoeh jïh imaterijelle saemien kultuvreaerpie. Edtja vihtienassem nåhtadidh juktie vååjnehtidh jïh nænnoestidh dam åarjelsaemien siebriedahkem, juktie vuesiehtidh saemieh daejnie dajvine orreme gusnie jienebelåhkoen siebriedahke jeajka saemieh orreme, bene saemieh dam tjåadtjoehtieh.

Tjaalegen tjaelijh aaj såemies dejstie dåeriesmoerijste digkiedieh mah leah dagkarinie vihtiestimmieprosjektine sïejhmelaakan, bene aaj daejnie prosjektine sjïerelaakan åarjelsaemien dajvesne. Tjaelijh digkiedieh gaskem jeatjah man vihkeles lea dejnie voenges siebriedahkine gaskesadtedh aarebi aktine prosjektine nearhka, jïh mah dåeriesmoerh mah maehtieh sjïdtedh jis aalka gaskesadtedh mænngan prosjekte aalkeme. Sïejhmelaakan aaj digkiedieh dam traegkies vuajnoem mij leah såemies dotkiji luvnie dan "jïjtse" gaaltijematerijalen bïjre, jïh aaj digkiedieh dam ov-væljoem mij gååvnese jeatjah dotkemeilledahkh nåhtadidh jeatjah lïhke dotkemesuerkijste, jïh aaj dåeresthvitenskapeles barkedh.

Kultuvremojhtesh vïhtesjadtedh jïh aerpievuekien daajroem tjøønghkedh leah joekoen vihkeles dennie åarjelsaemien dajvesne. Kultuvremojhtesh jïh kultuvrebyjresh aktem saemien goerkesem eatnamistie vuesiehtieh, jïh man vihkeles eatneme lea ekonomijen, sosijale jïh religijøse tsiehkiej gaavhtan. Gosse dam saemien kultuvreeatnemem jïh kultuvremojhtesidie vaarjele, dïhte edtja meatan årrodh dam saemien identitetem jïh dah ektiedimmieh maadtoej eatnamasse nænnoestidh jïh gorredidh. Dan tjïrrh edtja aaj akte biehkie årrodh dejtie histovrijen roehtside vijriebasse jåarhkedh, mah leah eatnamisnie orreme, dejtie båetije boelvide.

JELENA PORSANGER

Digkiedimmie vuestievoeteste daajbaaletje vuekien jïh aerpie-vuekien gaskem aalkoealmetji jïh saemiej kontekstesne

Dah mah vihtiestimmine barkeminie aalkoealmetji aerpievuekien daajroste, daamtaj gihtjelgieh nænnoestidh mij lea aerpievuekie jïh mij lea daajbaaletje vuekie akten vihties aalkoealmetjen kultuvresne. Daamtajommes gyhtjelasse båata aalkoealmetjen ålkoebieleste. Daan biejjien badth aalkoealmetjh jïh voenges siebriedahkh daam gyhtjelassem digkiedieh, jïh aaj aalkoealmetji akademijesne jïh eksperti gaskemsh mah vihtiestimmine aerpievuekien daajroste barkeminie. Daennie tjaalegisnie vuestievoetem digkedeminie daajbaaletje vuekien jïh aerpievuekien gaskem. Skraejrine dejstie aalkoealmetji metodologijijstie jïh illedahkh aalkoealmetjedotkemistie abpe veartenisne, tjaelije jeahta dïhte gyhtjelasse bïjre "juekemem aerpievuekien jïh daajbaaletje vuekien gaskem" båata daajroeteorijijste mah eah leah aalkoealmetjidie sjïehtesjamme, jïh voerkelimmiem beaja dejtie gyhtjelasside mah leah ammes aalkoealmetji ontologijese jïh aarvoeøørnegasse.

Dåeriesmoerh digkiedidh lea akte bielie dehtie tseegkeme dotkemeparadigmeste. Dïhte tjarki gårredamme jillege teorijidie daajroen bïjre (daajroeteorijh) jïh gahtanimmieh daajrose, joekoen disse mij lea ovnohkens jïh dejtie joekehts veanhtojde. Dan raarehke dotkemen sisnjelen aalkoealmetje-aamhtesinie jïh aalkoealmetje-aamhtesi bïjre, dle dïhte digkiedimmieparadigme joekehts faamoetsiehkieh buakteme. Sïejhme orreme aktem vihties dotkemedåeriesmoerem ektiedidh aalkoealmetji aktegsalmetjidie jïh voenges siebriedahkide. Daate paradigme lea dotkiji voerkelimmiem dubpiedamme vuajnojste, aarvojste- jïh naa daamtaj aaj – aalkoe-almetji sjyøhtehke daerpiesvoetijste.

Dåeriesmoerh digkiedidh maahta aalkoealmetjedotkemisnie nåhtadidh goh akte fååmijes dotkemedïrrege. Aalkoealmetji daajroeteorijh maehtieh aktem gïelem jïh aktem rïektes sijjiem åadtjodh gosse dåeriesmoeride digkede dan vuestievoeten bïjre, aerpievuekien jïh daajbaaletje vuekien gaskem. Dam maahta darjodh, vuesiehtimmien gaavhtan, gosse saemien goerkesimmiem vuesehte aerpievuekeste jïh aerpievuekien daajroste gosse saemien dïejvesh nåhtede. Daate åssjaldahke ij leah orre dejtie saemien akademihkeridie,

maam vuesiehtamme dennie tjaalegisnie aktene tentatijve gïehtjedimmesne såemies saemien vitenskapeles barkojste, mah leah dorjesovveme mænngan 1990-låhkoem. Daate åenehks vuartasjimmie vuesehte jïjnjh saemien dotkijh leah aktine såarhts intelektuelle plåanterdimmine tjabreme, dannasinie tseegkeme jillege teoretihkeles dïejvesh nåhtadamme daajbaaletje jïh aerpievuekiej bïjre mah eah aktene saemien ektiedimmesne sjïehth.

Dejtie saemien dïejvesidie *aerpievuekie* jïh *aerpiemaahtoe* nåhtadidh goh gïehtjedimmiedïrregh, saemien aerpievuekien daajroe aktem aevhkiem åådtje goh gaaltije. Daate maahta skraejriem vedtedh dan tseegkeme teoretihkeles ussjedallemasse "aerpievuekien" bïjre jïh maahta saemien faageles ussjedallemem jïh saemien dotkemevuekieh evtiedidh. Daate tjaalege akte bøøredimmie akten stuerebe vitenskapeles digkiedæmman juktie sjïehteladtedh jïh nåhtadidh saemien dïejvesh dotkemisnie, sijjeste dejtie tseegkeme daajroeteorijide nåhtadidh goh våarome teorijese jïh gïehtjedæmman.