◩ ON THE LINGUISTIC PREHISTORY
OF HOKKAIDŌ

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It has been known for some time that Ainu and Nivx were in contact, but with the exception of several words (see, e.g. Austerlitz 1976), the contact discussed was that between Nivx and Ainu of Sakhalin (Austerlitz 1991). In this article I will try to demonstrate that there was an even earlier contact between speakers of Nivx and speakers of Ainu that was quite profound, and that it took place on Hokkaidō, involving therefore not only Sakhalin Ainu, but also Hokkaidō Ainu.

Давно известно, что айнские и нивхские языки имели взаимные контакты, однако, за исключением нескольких отдельных слов (см., например, Austerlitz 1976), изучены только контакты между нивхским и языком сахалинских айнов (Austerlitz 1991). Данная статья имеет целью показать, что был и более древний языковой контакт между нивхами и айнами, и что этот контакт имел место на Хоккайдо и охватывал айнские говоры не только Сахалина, но и Хоккайдо.

1. INTRODUCTION

Both Ainu and Nivx represent portmanteau language families, each of them including two primary branches. A rough classification of the Ainu and Nivx languages is presented below with some additional comments. All Ainu languages (Fig. 1) are extinct nowadays. The Hokkaidō-Kuril branch is known much better
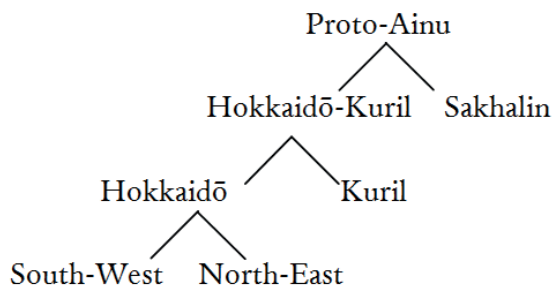

Figure 1 Classification of the Ainu languages
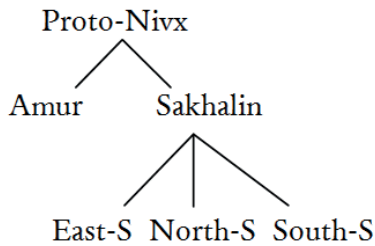
Figure 2 Classification of the Nivx languages

than the Sakhalin branch, but the poorest known is the Kuril node that is known much worse than Sakhalin: there are no texts recorded in Kuril Ainu, and all we have at our disposal are word-lists and phrases, recorded from the eighteenth to the early twentieth century. [1]

Like Ainu, Nivx (Panfilov 1962–1965; Kreinovich 1972; 1979) also represents a portmanteau language family, including two primary branches (Fig. 2). Nivx languages vary between moribund and severely endangered. Amur Nivx and Sakhalin Nivx are possibly a misnomer, because there are Amur-type dialects of Nivx spoken on the West shore of Sakhalin that were recorded by Shiraishi and Lok (2009 and others). Possibly we should replace them by the terms Eastern Nivx for Sakhalin Nivx and Western Nivx for Amur Nivx.

2. LEXICAL DOUBLETS IN AINU

There are a number of lexical discrepancies between Hokkaidō and Sakhalin Ainu that involve doublets, many of them from the basic vocabulary. It is interesting, however, that among them there are many that are difficult or even impossible to explain by any outside influence, let alone by influence from Nivx:

Hok. *etóp (-i) 'head hair' (Ya. *etóp* (-*i*), Ho. So. *otóp* (-*i*)) vs. Sakh. *ruusit > ruusis (-cihi) 'id.'

Hok. *pá-sirma (head-dust), *rú-sirma 'dandruff' vs. Sakh. *keyturu* (-*hu* ~ -*hi*) 'id.'

Hok. *kép-ne (> [*e*]*képne*) 'to be bald' vs. Sakh. *risara* 'id.'

Hok. *nóype* (-*he*) 'brain' vs. Sakh. *keyorop > keyoroh (-pihi) 'id.'[2]

Hok. *núykar*, Sakh. *nuykara* 'to comb' vs. Sakh. *ranke* 'id.'

Hok. *kipútur (> Ya. *kiputúr* (-*u*), Ho. Obi. *kipútur* (-*u*), Sa. *kipúturu*, Bi. *keputur*, Asa. Nay. *kipútur*) 'forehead' vs. Sakh. *kistom.* 'id.'

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1 This article is based on my paper presented at the International conference on the prehistory of Hokkaidō at the Research Institute for Global Environment on 24 February 2013.
2 Both Hok. *nóype* and Sakh. *keyorop have internal etymologies, see more on these two words below.

Hok. *tokóm (> *tokónpone* (*-he*), *tokóm*) 'ankle bone' vs. Sakh. *akuh-poni* (*-hi*) 'id.'

Hok. *ure* (*-he*) 'foot' vs. Sakh. *kema* 'id.'

Hok. *kumí* (*-hi*) 'mold, mildew' vs. Sakh. *sirus* (*-ihi*) 'id.'

Hok. *uhúy* 'to burn' vs. Sakh. *hukuy* 'id.'

Hok. *hótku* 'to stoop' vs. Sakh. *herari* 'id.'

Hok. *h'opun- (> sing. (*h*)*opún-i*, plur. (*h*)*opun-pa*) 'to rise, to get up' vs. Sakh. *payki* 'id.'

Hok. *hótke* 'to lie down' vs. Sakh. *am* 'id.'

Hok. *omáp* 'to love, to fondle' vs. Sakh. *raanuh* (*-k*) 'id.'

Hok. *o-sur- (sing. *o-sur-a*, plur. *o-sur-pa*) 'to throw away' vs. Sakh. *ketu* 'to throw away a lot'

Hok. *-pi(t)- (> *e-w-ópit-te*, *u-kó-pit-e*, *e-u-ko-pi-te*) 'to tie it' vs. Sakh. *muye* 'id.'

Hok. *okére* 'to come to an end' vs. Sakh. *hemaka* 'id.'

Hok. *e-ram-an (*e-ram-an*, *e-ramu-an*) 'to know, to understand' vs. Sakh. *wante* 'id.'

Hok. *ráy-kur* 'corpse' (dead-person) vs. Sakh. *kespe* 'id.'

Hok. *ekási*, *ekás* (*-i*) 'grandfather' vs. Sakh. *henke* (*-he*) 'id.'

Hok. *mát-ak* (*-i*) 'younger sister' (woman-younger brother) vs. Sakh. *heekopo* (*-ho*) 'id.'

Hok. *usís* (*-i*) 'hoof' vs. Sakh. *ronkay* 'id.'

Hok. *kamúy* 'bear' vs. Sakh. *iso, metoh* (*-kihi*) 'id.'

Hok. *páskur* 'crow' vs. Sakh. *etuhka* 'id.'

Hok. *kapíw* 'seagull' vs. Sakh. *kuhpoh* (*-pihi*) 'id.'

Hok. *sarórun* ~ *saróruy* 'crane' vs. Sakh. *nuhka* 'id.'

Hok. *yúpe* 'shark' vs. Sakh. *otah* (*-pihi*) 'id.'

Hok. *kí* 'head louse' vs. Sakh. *rasi* 'id.'

Hok. *mokórir* 'roll-shell' vs. Sakh. *nincin* (*-ihi*) 'id.'

Hok. *ni tumám* (*-a*) 'tree trunk' vs. Sakh. *suh* (*-pihi*) 'trunk, stem'

Hok. *nésko* 'walnut tree' vs. Sakh. *nom-ni* 'id.'

Hok. *asnap 'oar' (> *assap, asnap*) vs. Sakh. *honiwe, itanpa* 'id.'

Hok. *tús* (*-i*) 'rope' vs. Sakh. *kayta* 'id.'

Hok. *kumá* '[bamboo] pole' vs. Sakh. *sawa* 'id.'[3]

Hok. *mósma* 'besides' vs. Sakh. *ahkari* 'id.'

Hok. *nisátta ~ isatta* 'tomorrow' vs. Sakh. *sinma ~ siima* 'id.'

Hok. *epítta ~ opítta* 'all' vs. Sakh. *okore, emuyke* 'id.'

Hok. *pón* 'to be small' vs. Sakh. *haciko, nuyke* 'id.'

Hok. *ruwé ~ ruyé* 'to be thick' vs. Sakh. *serus* 'id.'

Hok. *epés* 'length' vs. Sakh. *hotari* 'id.'

Hok. *nupúr* 'to be dark' vs. Sakh. *upotoh* (*-k*) 'id.'

Sometimes there is a common word in Hokkaidō and Sakhalin, but there is also a doublet found either in Hokkaidō or Sakhalin:

Hok. *kemá* (*-ha*), Sakh. *kema* (*-ha*) 'foot, leg' vs. Hok. **tiki(r)* > Ya. Ho. Obi. Bi. Asa. *cikír* (*-i*), Sō. *ciki* 'id.'

Hok. *kirór* (*-o*), Sakh. *kiroro* (*-ho*) 'strength' vs. Hok. *túm* (*-ú*) 'id.'

Hok. **tinki* (> *cínki* (*-hi*)) 'skirt', Sakh. *imiicinki* (*-hi*) vs. Sakh. *seri* 'id.'

Hok. *pás*, Sakh. *pas* 'cinders, charcoal' vs. Sakh. *anci* < **anti* 'id.'

Hok. *óp* (*-i*) 'spear', Sakh. *oh* (*-pihi*) 'id.' vs. Sakh. *yoomah* (*-pihi*) 'id.'

Hok. *súm* (*-i*), Sakh. *sum* (*-ihi*) 'oil' vs. Sō. *ke* & Sakh. *kee* 'id.'

Hok. *pá*, Sakh. *paa* 'to find' vs. Sakh. *ekaari* 'id.'

Hok. **h²e-tuk-* (sing. *he-túk-u,* plur. *he-túk-pa,* unspecified *túk, e-túk*), Sakh. *tuh* (*-k*) 'to grow' vs. Sakh. *sikah* (*-k*) 'to grow, to bear fruit'

Finally, there is a smaller group that reflects relatively recent contacts between Ainu and Nivx after the Ainu migration to Sakhalin (no earlier than 13–15th centuries):

Hok. *sá* 'elder sister' vs. Sakh. *nanna* < NS *nanq,* NA *nanak* 'id.'

Hok. *húci* 'grandmother' vs. Sakh. **aCti* > *ahci* (*-hi*) 'id.' < NA *ətik* < **əCtik* 'id.'

Hok. *yúkram* (*-i, -u*) 'lungs' vs. Sakh. **hapap* (> *hapah, -puhu*) < Nivx *hawaf* 'id.' < **hapaphV*

Hok. *níste* 'to be strong' vs. Sakh. *manka* < Nivx *maŋg-* 'id.'

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3 The Sakhalin word might have been borrowed from EMdJ *sawo* 'bamboo pole for pushing a boat'.

In this group Sakhalin Ainu words are all clear loanwords from Nivx. But there is also another group of Ainu-Nivx parallels that present evidence for much earlier and more profound contact.

3. AINU-NIVX PARALLELS

Let me start by discussing Ainu and Nivx comparative morphology that presents some typological and areal oddities.

Both Ainu and Nivx are OV languages that are not genetically related. Ainu has many more prefixal positions than suffixal. Nivx, on the other hand, has predominantly suffixal morphology. The only apparent (not speculative) exceptions are reciprocal prefix *u-, indirect object-holder applicative *e-, indefinite direct object-holder *i-, and direct object-holder *-i, the latter two reconstructed on the basis of the following facts:

(1) All Nivx consonant-initial transitive verbs without overt objects start with fricatives, while all corresponding intransitives start with stops (Iushmanov 1972: 324; Jacobson 1958: 372–374; Burykin 1987: 187), for example:

khedr- 'to rustle' ~ *xedr-* 'to rub'

co- 'to be bent' ~ *zo-* 'to bend'

chevcevo- 'to be wet' ~ *sevcevo-* 'to make wet'

(2) All Nivx vowel-initial and *h*-initial transitive verbs without overt direct objects start with *j-* [j], while the same verbs with overt direct objects start with vowels, for example:

jopu- 'to gather' ~ *ces opu-* 'to gather branches'

jar- 'to feed' ~ *oɣla ar-* 'to feed a child'

jup- 'to tie' ~ *hontq hup-* 'to tie a bag'

(3) All Nivx consonant-initial verbs without overt indirect objects start with *e-*, while the same verbs with overt indirect objects start with consonants, for example:

ezmu- 'to love' ~ *oɣla chmo-* 'to love a child'

ezro- 'to climb' ~ *tiɣr chro-* 'to climb a tree'

ev- 'to hold at one's side' ~ *tux po-* 'to hold an axe at one's side'

The Nivx prefixes *u-, *i-, and *e- bear a striking resemblance to Ainu, with the main difference that in Ainu *e-* is not dropped with overt indirect object unless the latter is explicitly marked as an indirect object:

> *nukar* 'to look at' ~ *u-nukar* 'to look at each other'
>
> *ku-i-ku* 'I drink (it) ~ *wakka ku-ku* 'I drink water'
>
> *marek cep k-e-otke* ~ *marek ani cep k-otke* 'I spear fish with marek'

There are also other morphological parallels between Ainu and Nivx:

> Ainu *-p* ~ *-pe*, nominalizer 'thing', cf. PN *-p[h]V > NA and NS *-f*. Examples:
>> Ainu *e* 'to eat' ~ Ainu *ci'ep* 'fish' < *ci-e-p* 'the thing we (excl.) eat'
>> Ainu *kar* 'to make' ~ *a-kar-pe* 'the thing we (incl.) make'
>> Nivx *phət-* 'to split' ~ Nivx *phət-f* 'crack'
>> Nivx *khər-* 'to use fish net' ~ *khər-f* 'a place to put a fishnet'

> Ainu *-n*, classifier for 1 to 5 humans, cf. Nivx *-n*, classifier for 1 or 2 humans. Examples:
>> Ainu *sine-n* '1 person', *tu-n* '2 persons', *re-n* '3 persons'
>> Nivx *ñi-n* ~ *ñe-n* '1 person', *me-n* '2 persons'

There are also older Ainu-Nivx lexical parallels that are found not only in Sakhalin Ainu, but in Hokkaidō as well, so they can be traced to Proto-Ainu, although there are just a few of them. Interestingly enough these words, like the morphological parallels presented above, are found not only in Sakhalin Nivx, but also in Amur Nivx, for example:

> PA *pate 'only', cf. Nivx *park* < PN *pave 'id.'
>
> PA *too 'lake', cf. Nivx *tu* 'id.'
>
> PA *sintoko 'container, barrel', cf. PN *sintukV 'barrel' (NA *sidux*, NES *sindux*)
>
> PHSW *tiku- 'tree', cf. PN *cikV-tV 'id.' (NA and NS *ciɣr*)
>
> Hok. *kom > Sa. Obi. Asa. Sō. *kóm-ni*, Bi. *kom-ni*, Nay. *sí-kom-ni* 'oak', cf. PN *kVməy 'id.' (NA and NS *kməy*)

Let me now turn to the directionality of this earlier contact. The morphological parallels, especially verbal prefixes seem to be borrowed from Ainu into Nivx. It is more difficult to establish the directionality of lexical loans: probably in both directions, but mostly from Ainu to Nivx. The complexity of issues involved can be illustrated by the following example:

PA *yup- 'to tighten, to tie strongly' (*yupu* 'to tighten', *yupke* 'to be tight') was probably borrowed from Nivx *jup-* 'to tie' < PN *j-hup- (Vovin 1993: 160), but not before the Ainu direct object place-holder *i- was added to PN *hup- (Dougherty, forthcoming).

4. THE AINU-NIVX CONTACT

Where could this contact take place? There are several options that I will discuss below:

(1) Northern or Central Honshū. Highly unlikely, as there is no second independent piece of evidence for the presence of the Nivx languages on Honshū.

(2) The Lower Amur region. Also unlikely, as there is no solid evidence for the Ainu linguistic presence in this region except for Santan vocabularies that seem to indicate just a trade language.

(3) Sakhalin. Not very likely either, because it does not explain how Ainu elements ended up in the Amur region, and Nivx elements in the South of Hokkaidō.

(4) Hokkaidō, and may be even more specifically North-Eastern Hokkaidō along the shore of Okhotsk Sea.

(4a) The extralinguistic argument for North-Eastern Hokkaidō location is self-evident. Before being taken over by Satsumon culture, this area was inhabited by the bearers of Okhotsk culture, who were sea mammal hunters par excellence. And so are the Nivx.

(4b) I also believe that there is a strong linguistic argument in favor of a Hokkaidō location.

(4b-1) It is traditionally assumed that the Nivx languages crossed over from the Lower Amur region to Sakhalin, as it is believed that they migrated from the North to the Lower Amur region. This is consistent with the opinion that Okhotsk culture spread from the lower Amur region to Sakhalin, Hokkaidō, and Kurils (Janhunen 1996: 174–175), as well as with several ethnographical facts, such as, for example the fact that all surrounding peoples use a Nivx-type dog sledge.

(4b-2) However, this is inconsistent with the distribution of the Nivx languages in the region: much greater linguistic diversity is found on Sakhalin than on the Lower Amur, and this strongly suggests that there was also a migration in the opposite direction.

(4b-3) The model I am going to propose here is as follows:

In spite of the fact that the initial spread of Okhotsk culture was from the Lower Amur region to Sakhalin, Hokkaidō, and the Kurils, the present distribution of the Nivx languages as well as the penetration of Ainu linguistic elements into

the Amur Nivx can only be explained by the reverse migration caused by the encroaching of Satsumon culture upon Okhotsk culture in Hokkaidō.

So, the next logical question is: when did the contact take place? As there are no reliable linguistic tools for dating, we can only rely on extralinguistic factors. Since Satsumon culture did not appear on Hokkaidō before the seventh century AD, and Okhotsk culture did not disappear there before the thirteenth century AD, the contact must have occurred within this time frame.

5. TOWARDS DEEPER TIME LEVELS

The final question is whether it is possible to recover even more remote linguistic prehistory of Hokkaidō? The answer is probably yes, but one has to keep in mind the following:

(1) It is possible only with much less certainty.

(2) It might remain unclear whether the data reflect the linguistic prehistory of Hokkaidō or Honshū.

(3) There are also some other significant problems in the way, which I will discuss below.

For the last purpose, I will return now to the doublets in the Ainu lexicon and the problems they represent. There are a number of regional doublets in the Ainu lexicon the analysis of which may represent a reasonable approach to uncover external influences, but there are several problems in the way.

(1) First, there are a number of quasi-doublets, for example:

> Hok., Sakh. *sapá* vs. Hok. *paké ~ páke* 'head'. Both are based on PA *pa 'head' attested in compounds and placenames.

(2) Also, many doublets in the Ainu lexicon are the result of secondary formations that make them useless for comparative purposes, for example:

> Hok. *nóype* (-*he*) 'brain' vs. Sakh. *keyorop > keyoroh* (-*pihi*). Hok. *nóype* (-*he*) 'brain' is a clear compound consisting of the nominalizer -*pe* and probably a verb *noy-* 'to twist, to wind'. Sakh. *keyorop is clearly from *key* 'head' + *oro* 'inside' + -*p* 'thing'.

> HSW *akpe* and HNE *supop* 'animal trap'. HWS *ak-pe* is certainly 'shooting thing', and HNE *supop* is 'box'. Thus, these words refer to two different types of traps.

(3) On the other hand, there are some doublets or even triplets that are attested throughout the Ainu languages:

PA *sík (-í) > Hok. *sík* (-*í*), Sakh. *sis* (-*kihi*) 'eye' vs. PA *nuu (only in compounds, e.g. Hok. *nú-pe*, Sakh. *nuu-pe* 'tear' (lit. 'eye-water')).

PA *ték (-é) > Hok. *ték* (-*é* ~ -*éhe*), Sakh. *teh* (-*kihi*) 'hand, arm' vs. PA *aske- (only in compounds, e.g. Hok. & Kur. *áske-pet* 'finger', Sakh. *mon-peh* 'id.', cf. Hok. Ya. *ték-pet*, 'id.'

(4) Finally, there are some interesting lexical doublets that show the opposition of North-East Hokkaidō (especially the Sōya dialect) and Sakhalin vs. South-West Hokkaidō:

SWH *etór* (-*u* ~ -*i*) 'nasal matter' vs. Sō. *esúm* & Sakhalin *esum* (-*ihi*) 'id.'

SWH *h²oyup- (sing. (*h*)*oyúp-u*, plur. (*h*)*oyúp-pa*) 'to run' vs. Bi. & Sakh. *cas* < *tyas 'id.'

SWH *térke* 'to jump' vs. Asa. Nay. *e-túk* 'to jump (of fish from water)', Sakh. *tuh-se* ~ *tuhse-tuhse* 'to jump'

SWH *hekátu an* 'to be born' vs. Bi. *sik'o*, Asa. Nay. Sō *síko*, Sakh. *sikah* (-*k*) 'id.'

Hok. *anún* (also in Sō.) 'outsider' vs. Sō. *oya-kur* Sakh. *oya aynu* 'id.'

Hok. *h²otuy- (also in Sō.) (sing. (*h*)*otúye*, plur. (*h*)*otúypa*) 'to yell, to shout' vs. Sō. *kayo*, Sakh. *kayoo* 'id.'

Hok. *ama* 'to take off' vs. Sō. & Sakh. *asinke* 'id.'

Hok. (Ya. Nay.) *máka* ~ *maká* 'to open' vs. Nay. *cákke*, Sō. *cakké*, Sakh. *cahke* < *tyak-ke 'id.'

Hok. (incl. Sōya) *apé* 'fire' vs. Sōya *únci* & Sakh. *unci* (-*hi*) < *unti 'id.'

Hok. (except Nay. and Sō) *si-púya* ~ *su-púya* 'smoke' vs. Nay. Sō. *pá*, Sakh. *paa* 'id.'

Hok. *etay- (sing. *etáye*, plur. *etay-pa*) 'to pull' vs. Sō. *ehékem* & Sakh. *ehekem* 'id.'

Hok. *o-ur- (sing. *o-'úr-i*, plur. *o-'úr-pa*) 'to dig' vs. Nay. *poyé*, Sakh. *poye* 'id.'

Hok. *sinót* 'to play' vs. Sō. *hecire* 'bear dance' Sakh. *hecire* 'to play'

Hok. *siyúk* 'male bear' vs. Sō. *pínne kamúy*, Sakh. *piineh*, *piine iso* 'id.'

Hok. *nónno* 'flower' vs. Bi. *epuyke*, Asa., Nay. *epúy*, Sakh. *epuy* 'id.'

Hok. *nocíw* 'star' vs. Sō. *ketá*, Sakh. *keta*, KT *ketta* 'id.'

ABBREVIATIONS

Asa.	Asahikawa Ainu		Ho.	Horobetsu Ainu
Bi.	Bihoro Ainu		Hok.	Hokkaidō Ainu
EMdJ	Early Modern Japanese		HSW	SW Hokkaidō Ainu

HNE	NE Hokkaidō Ainu	Obi.	Obihiro Ainu
Kus.	Kushiro Ainu	PA	Proto-Ainu
Kur.	Kuril Ainu	PHSW	Proto-SW Hokkaidō Ainu
Na.	Nairo Ainu	PN	Proto-Nivx
NA	Amur Nivx	Sa.	Saru Ainu
Nay.	Nayoro Ainu	Sakh.	Sakhalin Ainu
NES	Eastern Sakhalin Nivx	Sō.	Sōya Ainu
NS	Sakhalin Nivx	Ya.	Yakumo Ainu

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