The systems of the deictic day names in the Samoyed languages

There are languages in which the expressions meaning 'yesterday' and 'tomorrow' and the lexemes meaning 'the day before yesterday' and 'the day after tomorrow' are identical, respectively. It seems that the number of these languages is not too large. Among the Uralic languages only one belongs to this group: the Nganasan language. In this paper I refer to the typological background of this phenomenon only briefly (in detail see Szeverényi 2010), and focus on the diachronic/areal relations and considerations that relate to one of Juha Janhunen's etymologies in his Samoyedic etymological dictionary. Janhunen's dictionary is still a cornerstone in diachronic research in Samoyedology, and this research explores the possibilities of reconstructing a lexeme meaning 'yesterday, tomorrow' for the Proto-Samoyed.

Deictic day names: YESTERDAY, TODAY, TOMORROW, etc.

Words like *yesterday, today, tomorrow*, etc. belong to the group of temporal adverbials. From a cognitive point of view, in the narrow sense, they are called positional temporal adverbials (Klein 1994), or temporal frame adverbials (e.g. Fillmore 1975, Smith 1981). In lexicology the simplest way is to use the term *deictic day name* (DDN) (Tent 1998), thus we can exclude adverbials that are positional or frame, but do not denote a DDN. Smith categorizes the temporal frame adverbials the following way:

```
deictic e.g. last week, yesterday, now, tomorrow, next year, etc. clock-calendar e.g. at midnight, etc. dependent e.g. previously, before, later, etc.
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Klein has a similar definition for the positional temporal adverbials: "...(they) give a maximal frame for a specific time span, whose boundaries and precise position are left implicit..." (Klein 1994: 153). The deictic day names have specific semantics in which they "denote an interval of time during which an event or interval occurs" (Bennet & Partee 1978).

In the literature of DDNs, it appears that only efforts which analyze "English-type" asymmetric systems exist (as far as I know with the exception of Fillmore 1967 and Tent 1998). Hence we have only limited information on the development of the "Nganasan-type" systems. The main reason for this is that cross-linguistically the dual symmetric system is a very rare phenomenon. The number of languages with full dual symmetry (like Nganasan) is very small. The best-known such language is Hindi. Analyzing Hindi data, Lemieux arrived at the conclusion that "Natural languages encode (at least) two different temporal relation systems: absolute (simultaneous and proximate) and directional (anterior – simultaneous – posterior). Proximity specifies the distance of the interval from the anchoring time. The distance is measured on a now – not now scale" (Lemieux 2009).

Janhunen's etymology

Janhunen reconstructed one DDN for the Proto-Samoyed as one of the two derivatives of the base meaning 'yesterday':

```
*te- 'gestern' (SW153) ('yesterday')
der. *tälå(-) ~ *tel3 (sk) 'gestern; morgen' ('yesterday; tomorrow')
der. korr. *täptå- (ssm) ~ *teptå- (nsm) 'folgender, morgen' ('following, tomorrow')
```

The distribution of the members of the etymology (based on SW):

	*te- 'gestern'	* <i>tälå</i> (-) ~ * <i>tel</i> \ (sk) 'gestern; morgen'	* <i>täptå</i> - (ssm) ~ * <i>teptå</i> - (nsm) 'folgender, morgen'
Tundra Nenets	+	_	+
Forest Nenets	+	_	+
Forest Enets	+	_	+
Nganasan	_	+	-
Selkup	+	+	+
Mator	?	_	_
Kamas	_	+	-

Even at first sight, the picture seems slightly confusing. On the one hand, there is a big difference between the representations of the etymologies. On the other hand, due to vocalism of the first syllable of the derivatives, there are phonological problems with the etymons.

In the next sections, I am not going to study forms of particular day names, but rather analyze the system of the DDNs itself in the Samoyed languages searching for relations and contexts. The key language is Nganasan, since among Samoyed languages it is only Nganasan which has lexemes meaning 'yesterday' and 'tomorrow'. This will be supplemented with data taken from a number of Arctic languages.

The Nganasan system

```
taluə takənu, taluə taanini —2¹
talu —1
əməd'ali N
talu +1
taluə takənu, taluə taanini +2
(talu 'yesterday; tomorrow', takənu, taanini 'behind, over, (postposition)'
```

It can be seen that the system is clearly symmetric not only on the level of (-1/+1) but also on the level of (-2/+2). Tent names such systems *dual symmetric systems*. If the factors influencing the dual symmetric system of Nganasan can be identified, reconstruction of the DDNs and their system can be started.

As the examples below demonstrate, the meaning of *talu* ('yesterday' or 'tomorrow') is determined by the tense suffix on the finite verb. If the verb has a future tense suffix, *talu* refers to the following day. If the verb has a past tense suffix, *talu* refers to the previous day.

- (1) ńüə-mə d'ügu-<u>suə</u> talu child-px.sg1 disappear-pst.sg3 **yesterday** 'My child disappeared yesterday.' (Gusev 2008: ES-03_paris 246)
- (2) təni?ia mi talu suə-?śitə-mi təni?ia. so we(2) tomorrow travel-FUT-1DU.s so 'We are going to go away tomorrow.'
 (Gusev 2008: K-03_brothers 523)

(In Nganasan there is no deictic inflectional present tense. Besides the past and future tense, there is aorist. The value of aorist is determined by the aspect (imperfective or perfective) of the verb.)

In my former paper I arrived at the conclusion (Szeverényi 2010) which Fillmore and Tent also suggest (Tent 1998: 127) but neither illustrates nor proves. It seems there is a relation between dual symmetric systems and inflectional future tense. Cross-linguistically it can be claimed that in languages with at least a partial dual symmetric DDN system, inflectional future tense presumably exists.

In my corpus there is no sentence or expression where the predicate is in aorist tense and the temporal adverbial of the sentence is *talu*. *Talu* occurs in a sentence only when the verbal predicate is in past or future tense. However, is the future tense really needed or are two different deictic tenses "enough"?

^{1.} N = 'now; present diurnal span'; deictic items consecutively preceding N are indicated by a minus symbol, and those consecutively following N with a plus symbol (Tent 1998: 113).

If we look at Hungarian or Finnish data, we can see that two different deictic tenses (present and past in this case) can be enough to determine the meaning of a positional temporal adverbial:

Hungarian

```
Vasárnap mozi-ba megy-ek. (= not today)
Sunday cinema-ILL go-PRS.SG1
'I am going to go to cinema on (next) Sunday.'
```

```
Vasárnap mozi-ba men-te-m.
Sunday cinema-ILL go-PST-SG1
'I went to the cinema (last) Sunday.'
```

In Hungarian the distinction of past and non-past is sufficient to determine which Sunday (the last or the next) is referred to:

```
day name + verb in present tense > it can only refer to the future (or it means regular action) day name + verb in past tense > it can only refer to the past
```

In Nganasan there is no deictic present tense, the agrist is not the oppositional deictic tense of the past tense. Thus the deictic future tense is needed to determine the meaning of *talu*:

```
talu + verb in future tense > it refers only to future talu + verb in past tense > it refers only to past
```

In the case of Nganasan and the other Samoyed languages, we have many pieces of information about the calendar and time, but mostly about seasons and months (e.g. Golovnev 1995, Sobanski 1995, and Tiškov & Češko 2005). In Nganasan lexemes, such concepts as second, minute, hour, and days of the week are missing (except for the Russian loans and concepts, e.g. 'week' is expressed by *ńedele* (< Rus. *неделя*) or *sajbi d'ali* 'seven days'). Relatively few PTAs are used in Nganasan which strengthens the absolute temporal relation.

Typology of deictic day names

As I mentioned, the "Nganasan-type" symmetric system is a very rare phenomenon. This is claimed by Tent (1998) who analyzed data from 157 languages. I found limited typological works on DDNs² possibly due to missing relevant data and good informants (because in many cases it does not prove enough to use materials from dictionaries and narratives, i.e. mostly folklore texts,).

Tent (1998) mentions factors that can cause problems in categorization which include: morphology (e.g. transparency, synchrony vs. diachrony), recursion (reduplication, e.g. German *vor-vorgestern* 'two days before yesterday', Hungarian *holnapután után* 'two days after tomorrow' type periphrastic or polymorphemic structures), frequency of certain lexemes (especially beyond (–3/+3)), and the problem of regional differences.

Tent categorized the languages by four parameters:

- o morphological symmetry/asymmetry: symmetric/asymmetric morphological structure of day names.
- o numerical symmetry/asymmetry: how many day names exist on both sides of N.
- o lexico-semantic symmetry/asymmetry: what type and class of modifiers are used by the languages (e.g. use of temporal and/or locative modifiers).
- o dual symmetry/asymmetry: it means lexical symmetry. Full dual symmetry exists where the oppositional terms are the same (-1 = +1, -2 = +2, etc.). Partial dual symmetry has two subtypes. "In the first, the language employs identical (or near identical) set of specialized lexemes on both side of N; but to the lexemes on one side adverbial/time particles or prepositions/postpositions are appended to distinguish between -N and +N. (...) In the second, only some of opposing day names share identical lexical items" (Tent 1998: 127).

I distinguish a third subtype that I call proximative lexico-semantic symmetry where the bases of -2 and +2 are different, but the modifiers are the same. In these cases the modifiers usually mean 'behind, over'. From the point of view of the Nganasan language, the dual symmetry has a specific role. In Tent's data, the Nganasan-type full dual symmetry is not common at all. In his corpus he found only three such languages (Hindi, Komba, and Capanahua).

This can be confirmed also by the fact that Haspelmath does not mention any literature concerning deictic day names and considers typological study on this topic necessary (e.g. whether the following universal is applicable: if a language has an expression for last year, it also has for 'yesterday', etc.) Haspelmath 1997: 7.

Diachronic observation: the systems of the Samoyed languages

I analyzed the data of the Samoyed languages using written sources.

Tundra Nenets

(based on Tereščenko 1965 and 1989, Lehtisalo 1956)

```
ťej ťaχakuna/ťej ťaχakuj jaľaχana -2
ťej jaľa'/ťeńana -1
ťuku jaľa' N
χuńana/ťebta'' +1
χuńij ťaγakuna / χuńij ťaγana +2
```

Forest Nenets

(Barmič & Vello 2002)

```
      čejn čena
      -2

      čěn
      -1

      čuki ďaljan
      N

      čeptan
      +1

      čeptin čena
      +2
```

```
(t'uku; čuki 'this', jal'a', d'al'an 'day', čena '3a' 'after, over, behind', t'ayakuj 'being far; более ранний, прежний' ')
```

Nenets has a proximative lexico-semantic symmetry with total morphological symmetry: the bases are partly of Samoyedic origin, in Tundra Nenets, words $\chi u \hat{n} a a a \chi u \hat{n} i j$ seems to be internal innovations.

Forest Enets

(based on Sorokina & Bolina 2001, Mikola 1995, Sorokina & Bolina 2005)

```
čej tahon -2
čej ďeri/čeńuńu -1
ěki ďeri N
četa +1
četěj tahon +2
```

The system of Forest Enets DDNs is similar to Nenets. It uses the same lexemes and modifiers in a similar way. Only the base is different on the level of $(\pm 1/\pm 2)$.

The three northern Samoyed languages share the same characteristics: -2/+2 terms are expressed with a PS or PNS-origin (< Proto-Uralic) postposition meaning 'over, behind'. This indicates the existence of an absolute temporal relation system and directional relation system.

Selkup

```
(Jirikov 1989, Alatalo 2004: 39, 1152, 1320, 2217, Bykonya 2005, Erdélyi 1969)
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Compared with the northern Samoyed languages, the Selkup language has much more dialects and it is very difficult to get relevant data for most of them due to missing relevant sources of many Selkup dialects according to DDNs. In Jirikov's dictionary (1989) we found an asymmetric system, but another Taz dialect source suggests a lexico-semantic symmetry (Erdélyi 1969). In Tym dialects I found traces of partial or possibly even dual symmetry (Alatalo 2004):

```
Taz Tym

ukoj čeli -2 āmə-ćēlə

t'al čeli -1

(tap) čeli N

t'ali +1

t'ali ömičeli +2 āmə-ćēlə
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Kamas

```
(Donner 1944: 26b, 55ab, 68a, 70a)
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Donner's material demonstrates that partial dual symmetry existed in Kamas as well (-2 = +2):

```
      p'wrwd'ān
      -2

      t'āld'en
      -1

      kar³λd'εn
      +1

      p'wrwd'ān
      +2
```

Mator

```
(Helimski 1997: 336, 356, 319, 389, 579, 585, 587, 644, 1072, 1074, 1096)
```

Mator uses the same modifiers on both side of N.

```
idi kajən, iri kajən —2
tüdi, tüdən, tünā —1
kūman +1
hubtə kajən, chubtehai +2
(modifiers: idi 'jener' ('that'), chubte 'folgend' ('following'))
```

Consequently, we find the following types of the DDN systems in the Samoyed languages:

dual symmetry: Nganasan and some Selkup dialects (?) partial dual symmetry: Kamas and some Selkup dialects

proximative lexico-semantic symmetry: Tundra and Forest Nenets, Enets, Mator,

some Selkup dialects

No kind of asymmetry can be detected.

Proto-Samoyedic: Tense and Aspect

The reconstruction of the Proto-Samoyedic tense and aspect system seems well accepted by the scholars: aorist (neutral) is reconstructed (*- η a) where the temporal relation of the verbal predicate is determined by the lexical aspect of the verb. Besides the aorist, a *-sa suffix of past tense is reconstructed (Mikola 2004: 115–116, Janhunen 1998: 471–472):

Proto-Samoyed TA-system	Tense	Aspect
refer to past	-så	aorist (completed action)
refer to present	_	aorist (ongoing action)
refer to future	_	_

A clear deictic opposition (present–past, past–future or present–future) cannot be detected in PS, since no suffix of present or future tense can be reconstructed for PS. It is not possible to oppose the *-så*-past tense with another deictic tense. Since the reconstruction of PS tense system is reliable, a full dual symmetry day name system could not have existed in PS, namely lexemes meaning both 'yesterday' and 'tomorrow' at the same time. I suppose, at best the proximative lexico-semantic symmetry can be reconstructed for PS. We find in some daughter languages partial dual symmetry that presupposes a proximative lexico-semantic symmetry.

The existence of inflectional future tense in Samoyed languages is a rather controversial issue. It seems that almost all S languages have "developed" a suffixal future tense to some extent. Selkup and Nganasan clearly have inflectional markers for future tense, Klumpp mentioned that inflectional future tense was present in Kamas as well (Klumpp 2002: 99–100). In Tundra Nenets the suffixal marker of future tense is derivational and not inflectional (Salminen 1993–2008).

Deictic day names in Arctic languages³

As compared to Tent's corpus, the partial dual symmetry is much more common in the Arctic area:

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partial dual symmetry (-2 = +2):
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Chukchee, Itelmen (Volodin & Haloymova 1989: 12, 17, 43), some Even dialects (Cincius & Rišes 1952, Robbek & Robbek 2005)

proximative lexico-semantic symmetry:

Yeniseian (Werner 2002), Central Alaska Yup'ik (Jacobson 1984: 54, 62, 397, 412), Yukaghir (Kurilov 2001: 21, 121, 538), some Even and Evenki dialects (Myreeva 2004: 635, 636, 709, 710, Nedjalkov 1997).

dual and lexico-semantic asymmetry:

Khanty (DEWO), Mansi (Munkácsi & Kálmán 1986: 97, 114, 127, 312, 645), Nivkh (Saveleva & Taksami 1970: 216, 268, 280, 464), Koryak (Žukova 1967: 66, 122, 129, 388, 406)

Let us see some examples:

Partial dual symmetry

Itelmen

- −2 qolank
- −1 ačińčik
- +1 azosk
- +2 qolank

Yukaghir

- -2 awjā jielgidaBa
- -1 awjā
- +1 eguojie
- +2 (eguojie) jielgidaBa

(cf. eguo- 'to get up, to rise', awjāBar 'evening', jielginde 'far, distant')

^{3.} I am not able to introduce all the related data from these languages. In this paper, I cite only a number of typical cases.

Proximative lexico-semantic symmetry

Kuskokwim, Yukon and Bristol Bay dialects of Central Yup'ik

- -3 amatiigni
- −2 yaaliagni
- –1 akwaugaq
- +1 unuaqu-
- +2 yaaliaku
- +3 amatiiku

The modifiers are the same on both sides of N, cf. *amani* means 'over there (obscured demonstrative adverb)', *yaani* 'over there (restricted demonstrative adverb)'. The basis is *unuk* 'night, last night'.

Evenki

Lexeme -2 is the derivate of -1, lexeme +2 is the derivate of +1. The modifiers of +2 and -2 are identical.

- –2 tɨnive čāgūdū
- −1 tinive
- +1 timātne, timii, timana
- +2 timātne čāgūdū

(cf. čāgidā 'not very far; far; behind; side or expanse or area that is farther on')

Asymmetry

Mansi (N dialect)

- moläl [molal] '1. egykor, minap; 2. tegnapelőtt'('1. once, the other day'; 2. the day before yesterday')
- -1 mol-χåtėl 'tegnap' ('yesterday')
- +1 χolit ~ χolitän [χolit(an)] 'masnap, holnap, reggel' ('the next day, tomorrow, morning')
- +2 χūrmit χåtėl 'holnapután, harmadnapra' ('the day after tomorrow, the third day') tīl-χ. 'holnapután' ('the day after tomorrow')

(*mol* 'previous, former', $\chi \bar{u}rmit$ '3'; $t\bar{t}l$ 'from now on; now; after this; because of this; from this')

Apart from Ob-Ugric languages we find asymmetry in Koryak and in Nivkh:

Koryak

- -2 jɨmajtg'ɨl'o
- -1 ajgive
- +1 mit'iv'
- +2 ŋankakenak

(cf. jɨmajtɨŋ 'after, over, behind', e.g. 'over the mountain' ŋejnɨk jɨmajtɨŋ)

Nivkh

- −2 nimrink
- −1 njmr
- +1 pit
- +2 posq

(ink '(PO)' 'before, earlier (PO)', other lexemes seem to be monolexemic.)

We can set up the following symmetry hierarchy. The dual symmetry presupposes lexico-semantic symmetry and the lexico-semantic symmetry presupposes morphological symmetry.

hierarchy	\rightarrow	\rightarrow		\rightarrow
language	morphological symmetry	lexico- semantic symmetry	proximative lexico-seman- tic symmetry	dual symmetry
Nganasan	+	+	+	+
Nenets	+	+	+	_
Enets	(+)	(+)	(+)	_
Selkup (Taz)	(+)	(+)	+	_
Tym Selkup	+	+	+	(+)
Mator	+	+	+	_
Kamas	+	+	+	(+)
Khanty	_	_	_	_
Mansi	_	_	_	_
Yukaghir	+	+	+	-
Evenki	+	+	+	(+)
Even	+	+	+	(+)
Chukchee	+	+	+	(+)
Koryak	_	_	_	-
Itelmen	+	+	+	(+)
Ket	_	_	_	_
Pumpokol	+	+	+	-
Nivkh	_	_	_	-
Yup'ik (C-A.)	+	+	+	-

Conclusion

Between related languages or dialects of a certain language, we can detect differences regarding the type of DDN systems (e.g. Chukchee and Koryak or Selkup dialects). It seems that DDN systems are dynamic and the changes go hand in hand with changes in other kinds of systems with respect to the grammar. In this case it is the tense-aspect system. As Tent pointed out, day names "for the diurnal spans –1 N and +1 are mostly monomorphemic, whereas day names for diurnal spans –2/+2 and beyond are mostly polymorphemic" (Tent 1998: 117–118). In spite of the heterogeneity of the DNN systems, we can establish some areal and genetic characteristics. For example, in the European languages the directional and asymmetric systems are frequent, while in Siberia the proximative, symmetric systems are more common. If we compare our results with Tent's data, the difference is more significant:

	Tent's data	Arctic
Morphological Symmetry	88%	78%
Dual Symmetry	12 (8%)	7 (39%)

Genetic borders can be established as well: all Ob-Ugric (even Ugric) languages have directional asymmetric systems, while partial dual symmetry is characteristic of Samoyedic.

Abbreviations

der. derivative

DDN deictic day name

DU dual

FUT future tense
ILL illative
korr. correlative
past past tense

PNS Northern Samoyedic Proto-language

PS Proto-Samoyed

PTA positional temporal adverbial

PST past tense

px possessive suffix

sg singular

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