

## **On the typological characteristics of Ainu language in connection with its possible genetic relationship.**

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### **1. Introduction**

Many who have written something on genetic relationship of Ainu (Tamura Suzuko, James Patrie, Murayama Sitirō, John Batchelor and others) spoke mostly about lexical similarities and just stated that this was like this that like that etc. They have never written anything neither about method nor about criteria they used, they didn't provide any system of criteria using which one can say that such and such languages are relative.

Relative languages may have very little look-alike lexical items though they are relative due to regular morphological and phonological similarities for example Armenian and other Indo-European. In other hand languages which are not relative and which are absolutely different can have quite amount of look-alike lexical items which appeared due to borrow, such languages are for example: Chinese and Japanese or English and Japanese.

Because of it if one is going to detect genetic relationship between any two languages one can not rely on lexical similarities only and has first to turn to their structure i.e. to their morphology, phonology and lexis to find systematic/regular similarities. Are these languages relative or not can be concluded only after such procedure is done. Lexis and phonology change much faster than morphology so morphology is the main item of this text.

### **2. Morphology**

I have to define certain morphological parameters more precisely because of wide spread such classification as well known “isolating – agglutinative – inflected – polysynthetic” which is incorrect and a bit ridiculous: it is the same as to say: “length is measured in meters, feet, ri and, for example, pounds”.

I am going to base on the scheme offered by Edward Sapir [Sapir 1934: 110] and modified by Joseph Greenberg [Greenberg 2004: 140].

Basic scheme is the following:

#### **classification of morphemes binding technique**

according to Sapir modes of morphemes binding are:

isolation,

agglutination,

fusion

Sapir introduced term “fusion” and used it instead of “inflexion”, to use “fusion” is much more precise than “inflexion” because it characterizes the very process which takes place in so called “inflected languages”;

classification of meaning (lexical as well as grammatical<sup>1</sup>) expression modes:

- analytism
- composition
- reduplication
- affixation
- incorporation
- polysynthetism
- inner inflexion
- supplement
- accent
- intonation
- tone

You can see that isolation, agglutination, fusion from one hand and polysynthetism from another belong to different classifications.

But I would like to modify this scheme a bit more.

## **2.1. Isolation**

According to Vadim M. Solntsev isolation is not a mode of morphemes binding like Sapir thought, but is a syntactic attribute. If language is named isolating it means just that syntactic relations (such as tense, aspect, voice etc.) aren't expressed inside of words. In an isolating language syntactic relations between words are expressed by word order and by special connective words. [Solntsev 1995: 9]

Inside of isolation can exist any technique of morphemes binding (agglutination or fusion) and any mode of expression grammatical/lexical meaning. Though, of course, isolating languages have poor morphology and there are some languages practically without morphology like Vietnamese for example.

Thus, estimation degree of isolation is a separated characteristics parallel to classification of morphemes binding technique and classification of modes of expression grammatical/lexical meaning.

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<sup>1</sup> I am not going to escape lexical meaning like many linguists do speaking about typology. If I avoid consideration of lexical meaning expression the description would be incomplete and an important part of structure would be missed.

Solntsev tells that all languages can be subdivided into two classes: isolating and non-isolating. But I don't think that it isn't quite correct approach, because of existing of many transitional types, and so I following Greenberg prefer to speak about "degree of isolation".

To estimate isolation degree I offer the following simple test: we take a text of one hundred words and count how many so called "inner syntactic morphemes" exist in it. Tense or aspect expressed by "inner morpheme", gender, cases, conjugations, personal marker etc. – all are elements of non-isolation. Then we should divide number of morphemes to the number of words. Using this test I received the following result:

Maori	0.11
English	0.21
Japanese	0.28
Ainu	0.30
Russian	1.86

The less is coefficient the more isolating language is.

Though the estimation is quite rough yet (the larger would be text the more exact would be coefficient estimation) it provides a useful scale. Due to the scale conclusion about isolation degree of any language will not be speculative.

Unfortunately I don't know such a "typical isolating" languages as Chinese or Vietnamese so I can not estimate their coefficient but I suppose that it would be a bit less than that of Maori.

And the scheme has been modified:

1. estimation of isolation degree
2. classification of morphemes binding technique
  - agglutination
  - fusion
3. classification of grammatical/lexical meaning expression modes
  - analytism
  - composition
  - reduplication
  - affixation
  - incorporation
  - polysynthetism
  - inner inflexion
  - supplement
  - accent
  - intonation

tone

## 2.2. Linear model of word-form

I am going to modify this scheme a bit more. Here I am going to turn to the question of linear model of word-form. It is very important in connexion with the classification of grammatical/lexical meaning expression modes.

Tamura Suzuko writes, that morphological structure of Ainu resembles that of the Inuit languages [Tamura 2000: 4]. But as I know Inuit and Ainu are absolutely different, especially in their structure.

Ainu has so called linear word-form model of American type, which is:

$(m)+(r)+R+(M)$

R, r – root morphemes, M, m – affixes

the same linear word-form model have North American Indian languages and Chukchi.

While Inuit demonstrates so called linear word-form model of Altaic which is:

$R+(M)$

R – means root, and (M) – affixes. Most of Eurasian languages such as Japanese, Korean, Finno-Ugrian, Mongolian, Turkic have linear word-form model of Altai type. (Volodin 1996, 2001)

Sometimes by the way it modifies slightly and becomes:

$(r)+R+(m)$

such are for example Japanese and Finno-Ugrian.

## 2.3. Avoiding term “polysynthetism”

What does above said mean in connexion with “resemblance between Inuit and Ainu”. It means that such a resemblance is a fake.

If Ainu has linear model of word-form of American type it means that in Ainu are permitted prefixation which is prohibited in Inuit. Composition and incorporation are permitted in Ainu but both are prohibited in Inuit. Inuit can express grammatical meaning by so called polysynthetic technique only. According to definition polysynthetism is expression of grammatical/lexical meaning by quite long line of affixes. Joseph Greenberg says that we can estimate the coefficient of polysynthetism and even offers certain criteria for it (Greenberg 1960)

But the information kept in term “polysyntheticism” is expressed if it is said about a language that reduplication, composition and incorporation are prohibited in it and that its main modes of expression of grammatical/lexical meaning is affixation. Because of it I offer to avoid using term “polysyntheticism”. I am going to escape using this term not only because of it’s plentiful but also because of unpleasant muddle about terms “incorporation” and “polysyntheticism” which grew up due to total misconception.

Term “polysyntheticism” was introduced by Edward Sapir to use it in description of North American Indian languages. I think that he used it instead of term “incorporation” because I have never met term “incorporation” in his book. But later, when term “incorporation” was invented muddle with these terms began. Authors of Russian Great Linguistic Encyclopaedia for example state that polysyntheticism is synonym of incorporation.

Joseph Greenberg also contributes to this muddle: he first speaks that incorporation is used in polysynthetic languages but later he speaks about Inuit as one of typical polysynthetic [Greenberg 2004: 140] though as it has been discussed above incorporation and even composition are prohibited in Inuit.

Alexander Vovin – professor of East Asian Languages from the University of Hawaii at Manoa once wrote me that Ainu is certainly a polysynthetic like Inuit but not incorporative like Chukchi. Such a statement seemed to me rather strange because I often met incorporative complex looking through Ainu texts.

Some distinguished these terms, some considered them to be synonyms and it generated muddle. I think that it’s also a sufficient argument to avoid using term “polysyntheticism”.

## 2.4. Incorporation

According to Professor Alexander P. Volodin incorporation is a particular case of composition: composition is word/stem adding expressing lexical meaning only and incorporation is word/stem adding expressing syntactic meaning besides lexical. Incorporation can exist in (m)+(r)+R+(M) languages only, see 2.2.

Needless to say that incorporation is always build in word or a compound into a verb and noun to noun composition can not be considered as incorporation because it express derivative meaning only. Incorporation is much more accidental than composition. Incorporative complexes are seldom included into dictionaries. But here it’s a bad criterion because in the case of Ainu incorporative complex and whole sentences are often included into dictionaries also. Though incorporation can be distinguished from composition in the following way: incorporation is composition that changes the valence of verb. Let’s look at an example:

*Okikurumi kor kuca cise ot-ta sap=as hine si-hum-nu-yar=as* [Nevskii 1972: 50]

"Having descended to the hunter cabin of Okikurumi we made our noise to be heard (to him)".

Let’s look at *si-him-nu-yar=as* the stem here is:

*si-him-nu-yar*

oneself-noise-hear-INDEF.CAUS.

It's an intransitive verb that requires the only actant – the subject. If we extract compound “si-hum” we receive:

*nu-yar*

hear-INDEF.CAUS.

It's a transitive verb that requires two actants: the subject and what is made to be heard.

Now we can alert the whole phrase in such a way:

*Okikurumi kor kuca cise ot-ta sap=as hine ci=humi-hi ci=nu-yar.*

Thus we have seen that built-in compound *si-hum* changed the valence of verb *nu-yar* – made it intransitive.

## 2.5. Morphological conclusion

So, as a result I receive the following scheme which can be used in description of any language:

1. Estimation of isolation degree  
count coefficient of isolation
2. Classification of morphemes binding technique  
morphemes binding technique are:  
agglutination  
fusion
3. Classification of linear model of word-form  
linear models of word form are:  
American type: (m)+(r)+R+(M)  
Altaic type: R + (m) / (r)+R+(m)
4. Classification of modes of grammatical/lexical meaning expression  
analytism  
composition  
reduplication  
affixation  
incorporation  
inner inflexion  
supplement

accent

intonation

tone

All points of this scheme are of equal importance. If you are going to detect resemblance and relationship you should find certain resemblance for each of four points of the scheme. But even one point is enough to demonstrate that resemblance is accidental like for example in the case of Ainu and Inuit. Moreover it seems to be helpful to add word order test (what kind of word order is used mostly in each of compared languages: VSO, VOS, SVO, OVS, SOV, OSV) and verbal paradigm test (comparison standard verbal paradigm of each of compared language)

## **2.6. Ainu morphological characteristics**

### 1. Estimation of isolation degree

as I have counted isolation coefficient of Ainu is 0.3

### 2. Classification of morphemes binding technique

Ainu uses the only technique of morphemes binding – agglutination.

### 3. Classification of linear model of word-form

Ainu has linear model word form of American type (m)+(r)+R+(M)

### 4. Classification of modes of grammatical/lexical meaning expression

analytism

composition

reduplication

affixation

incorporation

supplement

intonation

accent

## **3. Lexis and phonology**

### **3.1. On lexical similarities**

Here I would like just to plan some milestones of further consideration. Though morphology is the main item of comparison, to find certain material resemblance is also matter of the same importance. After structural resemblance has been caught lexis becomes the main item of consideration.

First should be compared about 10 – 15 the most simple words of two languages, such as: land, sea, sky, wind, sun, moon, water, house, boat, man, woman, dog and so on, then, for example, numerals and terms of kinship. After such procedure is done Swadesh list may be taken. Lexis referring to more elaborated spheres might have been changed due to interference (for example though in English many lexical items are of French origin it belongs to Germanic languages not to Roman; Japanese and Korean are of the same Altaic root, though in Japanese exist many lexical items of Austronesian origin)

Moreover it's important to note that lexical items of compared languages need not correlate directly and uncomplicatedly. Often to disclose lexical correspondence may be useful to turn to earlier state of one or even both of compared languages. Or turn to a third language which is or was the relative of these both. Especially when compared languages are “distant relatives”.

But much more important matter than simple words, numerals, kinship terms and Swadesh list correlation is to detect material resemblance of connective words, of auxiliaries and personal markers.

### **3.2. Phonology**

Practically the same recommendations are useful in the field of phonology. Phonology also can be changed greatly, for example, under the influence of interference of substratum languages (e.g.: Proto-Japanese might have had the same phonological system as other Altaic languages i.e. it was a bit more consonantal but under influence of Austronesian languages it got its modern phonological system)

Though phonological systems of two relative languages can change as well as lexis they must not differ much. For example, Itelmen language was traditionally considered as a relative of such languages as Chukchi and Koryak. Linguists singled these languages out in so called Chukchi-Kamchatkan language family. But, recently it has appeared that Itelmen doesn't belong to such family because of existence of many structural and lexical distinctions between it and other languages of “the family”. And one of the items which breached this system was quite big initial consonant clusters of Itelmen which were not typical for Chukchi or Koryak languages.

There should be certain regular correspondence between phonological systems of two of compared languages or between earlier states of the same languages or between compared languages and a third mediator language.

As I have told above phonology and lexis is matter of my further studies.

### **4. Conclusion**

Different languages may have certain structural similarities for example language of so called isolating type are spread in South-Eastern Asia and in Africa though they of course are not relatives. But if some languages are suspected to be relative they must have regular structural, lexical and phonological similarities.



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