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INTEGRATED LINGUISTIC ANALYSIS APPLIED TO IDENTIFY THE LANGUAGES AFFINITY

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Abstract

The article continues the series of publications on the prospects for the integration relating to comparative historical, system-centric and anthropocentric paradigms at the present stage of the development of philological sciences. The necessity for identifying this integration is due to the fact of the systemic nature of linguistic phenomena, as well as their inextricable unity with the phenomena of human psyche. Russian researchers from the laboratory of philology and cultural studies of the Complex Research Institute of the Russian Academy of Sciences and the Nakh Studies Center of Chechen State Pedagogical University are developing a methodology for integrated linguistic analysis, which combines comparative-historical, comparative-typological approaches and the methods of semantic semiology. The method of integral linguistic analysis is possible to use for these purposes, in particular, in for identification of the languages affinity degree. This article presents the results of the first and second stages of the study aimed at identifying the language affinity between the Nakh-Dagestan and Indo-European languages based on the analysis of their basic vocabulary (according to the Swadesh dictionary) – pronouns, verbs, adjectives, nouns, etc. Based on the results of the study, some preliminary conclusions are made about the affinity of considered languages. The theoretical significance of the study lies in specifying and clarifying the question of the possible genetic affinity between the Nakh-Dagestan languages and Indo-European languages, clarifying and expanding the range of languages included in the Indo-European family and the Nostratic macrofamily.

1. Introduction

Modern linguistics is characterized by the coexistence of three paradigms: comparative-historical, system-centric and anthropocentric, an analysis of which is presented in the relevant studies (Shakhovsky, 2002; Terechova, 2014).

Due to the fact that a language is a holistic phenomenon that is closely related to the cognitive functions of the psyche, at the current "post-non-classical" stage of development of science with its integrative tendencies, the difficult question of combining the three designated paradigms into an integral (psycholinguistic) paradigm is relevant.

The solution of this problem is possible to find by the joint efforts of the international scientific community, in particular, within the collaborations of scientific organizations working in the framework of various branches of the social and human sciences (psychology, linguistics, cultural studies, logic, etc.).

As a contour of the future integral (psycholinguistic) paradigm, a method of integral linguistic analysis is being developed based on the combination of the methodology of seminal seismology tested by a large number of researchers of the Russian Voronezh Theoretical Linguistic School (Makhaev, Sternin, & Ibragimov, 2019), as well as with comparative history and comparative typological research methods tested on the Chechen language analysis (Vagapov, 2011).

2. Problem Statement

The method of integral linguistic analysis can contribute to solving various issues in the field of socio-humanitarian sciences, in particular, the issue of identifying a possible affinity between the Indo-European and Nakh-Dagestan languages.

The Indo-European and Nakh-Dagestan languages have been and still remain under the attention of the world researchers (Gamkrelidze & Ivanov, 1984; Nikolayev & Starostin, 1994; Khaidakov, 1973; Kibrik & Kodzasov, 1990; Klimov & Khalilov, 2003; Sandeck, 2018; Arnaud, 2019).

At the present stage of linguistics development, the Nakh-Dagestan languages belong to the Sino-Caucasian macrofamily.

At the same time, the results of our studies led to a preliminary conclusion about the affinity between the Nakh-Dagestan and Indo-European languages. Consequently, the Nakh-Dagestan languages should be included in the Nostratic macrofamily.

3. Research Questions

The research question is the basic vocabulary (according to the Swadesh dictionary) of the Nakh-Dagestan and Indo-European languages: pronouns, adjectives, numerals, nouns, verbs, etc.

4. Purpose of the Study

The purpose of the study was to detect a sort of affinity between the Nakh-Dagestan and Indo-European languages based on an analysis of their basic vocabulary (in accordance with the Swadesh dictionary).

5.   Research Methods

The study used the method of integrated linguistic analysis, which includes five stages (Vagapov, Makhaev, Bataev, Mazhiev, & Mazhiev, 2019):

1) compilation of an initial list of lexical units of the studied languages (according to the Swadesh dictionary), and their comparative analysis,

2) etymological filtration,

3) seminal analysis of lexicographic meanings (the result is a unified lexicographical meaning),

4) seminal analysis of verbal associative reactions (the result is psycholinguistic significance),

5) comparative analysis of ULZ and PLZ.

The paper presents the results of the first and second stages of the study.

6.   Findings

The study revealed many lexical parallels between the Nakh-Dagestan and Indo-European languages - pronouns, adjectives, numerals, nouns, verbs, etc.

Pronouns

I [1] PIE *eg-o // *ek-o // *es-o [I]: 1) Ven. ekho, Greek. ego, L. ego, Goth. ik [I], E. **I** ~ Nakh *yaħ [face]; [my, my ego; honest, dignity] > Slav. ja [I];

2) Lith. aš, Lat. es, Armenian – es [I], Skrt. aham, Av. azam, O-Ch-Sl. az [I] = Nakh *sa, *as [I]: Chechen so, erg. as [I], Ing. so, az, Tush. so, as.

1a. **me**: Slav. *mene, L. mihi, Skrt. mahiya, maya [by me], Av. mana, Rus. *мне, меня*, Lit. manei, man (Fasmer, 1967) ~ Nakh *man- // *men, *ma-li [who]: Chechen mila [whu], minex [somebody, someone, anyone], Ing. mala [whu], Tush. me^n, relative pronoun – mena.

Thou /**you**/ [PIE *thu: OPrus. tou, tu, Skrt. tvam, tuvam, L. tu, Goth. thu (Fasmer, 1973) ~ Nakh *tħo [you]: Chechen ħuo, cf. phonetically Chechen txo [we (exlusive)], erg. oxa].

We [PIE *uei-: Germ. *wei-es, OE. we, ORus. *вие* [we both] ~ Nakh vai 'we', dial. vei]

That [PIE *da [that] ~ Nakh *da-ħa > Chechen d ʕa [that; there]

This [1] PIE *ko-, *ki- [this, that]: Germ. *hi, OE. [he, him, his] E. here (Pokorny, 1959) ~ Nakh *qa: Chechen qu [this] < *qa, qara [these] < *qa [this]

Adjectives

Big [1] PIE *bol-: Skt baliyan [stronger], balam [strength], LG pal [strong, firm; tight, tout; hard, rough], Bulg. *боле* [bigger], Rus. *более, больше* ~ Nakh **bāla, bol-u** [grow up; increase; rise];

2) PIE *aug- [to increase], *wogs- // *wegs- [to grow]: OE eacan [to increase], weaxan [to grow] (AHD, 1507) ~ Nakh *aq'an > *ħaq'a, ħieq'a [to grow]; Nakh *-aqq-an [to increase], *-aqq-un [big]: Ch j-oqqa [big], *pl* j-aqqij, v-oqqa, b-oqqa [big], diegh d-aqqa [to grow];

Black [PIE *erg- // *reg-, *reg^{u}os - [darkness] (Pokorny, 1959): Gr Erebos [a place of darkness under the earth] ~ Nakh *arg- // *jarg- [black]: Chechen 'arža]

Cold [PIE *g'el- // *k'el- [cold; to freeze]: Lith. šaltas [cold], šaldyti [to freeze], Osset. sald, Avest. sareta- [cold] (Fasmer, 1973; Pokorny, 1959) ~ Nakh *šali > šiel- [cold]: Chechen šieldan [to freeze, to cold], šiila [cold], ša [ice]

Dry [PIE *****ters-** // *****tors-** (Pokorny, 1959): Germ**.** *thursan- [to feel thirsty], E. thirst [to be thirsty], L. *torsere [drought], *torsor [torrid weather], Av. tarsu [dry]. From PIE *****ters-** [tremble, shiver, be frightened] (Skrt. trasati [tremble], Iran. *tarsa [shiver, be frightened], Slav. *tresti). ~ Nakh. *****tarsa-**, iter. *****tersa-** > Chechen tarsa [laugh loudly]', tiersa [neigh], Ing. tiersa, Bats. tersa^n. The connection between the meanings [be frightened – shiver – neigh does not require special explanations, which cannot be said about the meaning of [feel thirsty, be thirsty], which is referred to them in the relation of additional distribution, presented in homonymous i.e. *****ters-** // *****tors-** [feel thirsty, drought, dryness (in a mouth)]. Despite the significant semantic difference, here we are dealing with an example of a divergent polysemy: the meaning [feel thirsty] should be raised sequentially [dry up, shrivel up] < [become weather beaten; swing, tremble from heat]. Compare topologically 2) PIE. *****saus-** [dry away], Skrt. śośana [dryness, drought, dry season], Osset. sosæn [dry month], [a month when horses shake their heads], sosæn kænyn [shake heads (about horses in a hot season)] ~ Nakh. **sousa** 'вздуться', iter. **sijsa** [spit, infest; *metaphorical meaning* – to be sulky with], centum languages qousa, *iter*. qijsa. Cf. šэ-śhe-ś'эn [june], literally [horse-head shaking]; Arab. хьамхьам[1] [laugh loudly] when хьамхьам[2] [be hot, be heat].

Numerals

One [1) PIE *se-m- [one]: anc.indian sam // san [together], Gr. heis < hens < hems [one], homos [together], hama [together with], he-teros 'other; getero-' < *sm-**tero**-, E. same, some; Rus. samo 'self' ~ Nakh *****sa** [one] > *sana [together, in the same time], *sam(m)a // *sammo [one, someone] (erg. from sa [one]), *sa-**tera** [the same, to be like] > Chechen cħatera;

2) PIE °oino- [one, unique]: OE. an, anig [one, anyone], OHG. ain, L. unus [one], unicus [sole, single'] (Pokorny 281), cf. Turki on '10' < [one hand; arm];

Not affiliated with Rus. *один*, senior glory. jedin = Dag. * od-in // * oth-in // * jid- '10' = Nakh itt '10' = George. ati '10' = Semit. jad // jod // jid 'hand' = Nakh att 'right hand' (cf. Chechen 'āma' study, learn ',' āmina 'studied, learned'> 'ēmana ~ Semit. amin' true, right ', Hurrit . eman '10');

Two [PIE *dwo '2' ~ Nakh *dwo '20' > *t'γo > Chechen t'q'o // t'q'a '20' = Adyg. t'o '2' (d > t'q': Chechen sieda [star] > Ing. siet'q'a, ʔad [bow] > ʔat'q'a [to press], Chechen lieda [leak] ~ liet'q'a [whine], ħada [rush, dash] ~ ħat'q'a [urine], Ing. nod ~ Chechen not'q'a 'pus'.

Linking words

not [1) PIE *an-, *ne [not] ~ Nakh *an > Ch a̱^{n} 'a negative particle; 2) PIE *****ma** ~ Nakh *****ma** [a prohibitive particle].

Nouns

Ashes [PIE *as- [to burn, glow] ~ Nakh *āša // ōša [black sand, slag, scoria]; PIE *sem-'summer' ~ Nakh *kim > čim 'ashes', juq' 'ashes', joq'a [drought] ~ jug [south]

Bark [1) PIE *sker-: Rus. *кора, скора, скорняк, шкура, шкорка*. ~ Nakh qovra, č'q'or.

2) Nakh *kaw-st*: Chechen *kowst*, dimin. kewst-ig < *kawstig, Ingush *kɔst* – «A cognate of PIE *keu-* 'skin', with an extra suffix -st-».

Belly [1) PIE * bel- [to blow, swell] (Pokorny, 1959) ~ Nakh * balan, * bulan [to swell];

2) PIE *g^{u}ei- [live] (< 'гнуться, выгибаться, округляться'), *givota: Avest. gaya [life], gayo [live], Rus *живот, живой*, Lith gyti [enliven] (Fasmer, 1967) ~ Nakh *gag > *gai [belly], *gau [ring, circle];

3) PIE *kere [to cut]: Gr kardia [heart, stomach, orifice]; Slav. *červo: Rus. *черево* ~ Nakh *kari, *kera [belly]: Ing. kier, Chechen kijra; Cheb. dial. čivraš [intestines].

Bird [Avest. mэrэga, Pers. murgh [bird] ~ Nakh *bargh-ul [cock] < *margh-ul]

Blood [PIE *kreu- [raw flesh]: Av. khru [piece of blood's meat], khrura- [bloody], Skrt. kruras id., L. cruor [blood], crudus [bloody, raw], ON. hrar [row], E. row, Rus. *blood* (Pokorny, 1959; Fasmer, 1967) ~ Nakh ghaur-: Chechen ghuordan, ghuoruon [to freeze], ghuoruor [freezing], ghura [a cold], ghuorz // ghuorzuolg [freezing piece]. Initial meaning for [blood] was [crud, coagulating (liquid)].

Verbs

Burn [1] PIE * deg- // * dog- [burn]~ Nakh * dāga [burn]> dēgi [burned], dōgu [burns];

2) PIE * aidh- [to burn] ~ Nakh * -attan [bake; roast, toast, fry];

3) PIE * bheg- [to warm, * burn] (Pokorny, 1959): Germ. * bakan [to bake], OE. bacan, OHG. backan ~ Nakh * bagan [to burn, shine]

PIE. **ater** [fire], **aith**- // **aidh**- [bake]: OE. ad, OS. ed [fire], OHG. eit [heat], Celtic * ati [bake], PIE *iat [fire] ~ Nakh **j-attan** [bake, burn]: Chechen j-atta id., mälxa attalaħ [under the hot sun]. Cf. Turk. * at [fire].

Die [1] PIE * dheu-, * dhuei- [disappear, die]: Slav * daviti, Germ. * daujan ~ Nakh * dien [kill], * daj ʾan [kill]: Chechen die [kill], pl daj ʾa, *dial* dava [kill];

2) PIE *uel- [die]: Germ. wal-, ON valr [the slain in battle], OE. wæl [field with dead bodies], Lith. velionis [the deceased], Latv. veli [souls of the deceased], Tokh. And wal- [die], Luv. wal (a), (Gamkrelidze & Ivanov, 1984). ~ Nakh *v-al-an [die];

3) PIE *mrto- [dead]: Skrt. mrta, L mortuus, Lith. mirti [to die] ~ Nakh *mard > muord // myord-ig [tough piece of meat].

Drink [PIE. **mel**- // **mol**- [grind], **melg** [beverage, milk]. A malke [milk], M.-Ir. melg, Gothj. miluks, OHG. miluh, лит. malkas [sip; gulp], Latv. malks, malka [a drink], malkot [drink with small sips], Rus. *молоко*, *молокита* [bog, marsh], Serb. mlava [river, water] ~ Nakh. **malaⁿ** [drink], iter. **mielaⁿ**, **molug** [drinking, a drink, beverage] is a participle from *mala* [drink], iter. *mīlug* from iter. *mīla* [drink]: Chechen *mala*, iter. *mīla*; molag / molug, iter. mülag / mülug. Cf. for semantics PIE. **ekʰo**- // **okʰo**- [water], Tokh. A yok, Hitt. aku [drink], L. aqua ~ Nakh. **j-aqa** [drink mother's milk, suckle breast].

Eat [PIE *ed- / *et- [eat; food]: OIc. ata [meal], E. ate; Hitt. et- // ad- [eat], Pal. at- [eat], Skrt. admi, atti [eat]; Urartu atu- [raid; sack; rout] (Dzhaukyan, 1963) ~ Nakh *āta [pound, grind, chop]. There is no doubt that the meanings [grind, chop and eat] are interconnected, cf. Skrt. psāti [grind, devour]; Lith. krušti [grind, pound], Rus. *крошить, крошка* (хлеба), *кроха* – Serb. *крух*, Sloven. kruh [bread]; Chechen dieqʾa [to devide], dāqʾa [bit, piece, part] ~ *daʾa* [to eat] from Bats. daqʾa [to eat].

Fly [PIE * pel- // * pol- [to drive; thrill]: Greek pallo [to thrill, shake], L pellere [to push, drive, strike] ~ Nakh * pall-u [butterfly]

Go, **walk** [Av. vaδayeiti [force to go] ~ Nakh. v-uodajta [force to go].

Skrt. vahayati [he forces to drive] from vahati [he leads, carries] ~ Nakh. v-axa // v-agha [to go], v-aghajta [to force to go].

OE **gan** [go], E go ~ Nakh * ghan [go]: Chechen * gha in ghaħ [if go], ghuo [go!]

OE. ***eodan** [go] in ME. **yede**, *past* **eode**, **eodon ~** Nakh. **juoda** [go]: **jeōdu** [go, goes], **juōdah** [if he goes].

PIE ***uelg**-) // ***uolg**- [go, leak, rain]: E. walk, OE. wealcan [to roll, toss], OIs. valka, Slav. vlaga ~ Nakh ***v-alxan** – ***v-ielxan** [go, leak, rain, cry/tear out].

PIE * lel-: Skrt lelajati [it rocks, swings], lalayati [it caresses], Bulg lelyam, leleja [rocking], Lith leliuoti [swing, rock, sway], Latv. leluot [rock to sleep, lull] ~ Nakh * lielan [move], * lieluon [rock to sleep, cherish; foster; to lead; to drive; take care of, look after].

Hear [PIE ***ghaus**- [hear; ear]: Goth. hausjan [hear], OHG. horen <* xozen (G. hören), OE. hieran <* hiezan, Germ. * xauzjan (Pokorny 1959); Skrt. ghosa [son, noise], Av. gaoša [ear, hear], OPers. gauša [ear], Osset. qūs / ghos [ear], qūsyn / ighōsun [hear]. ~ Nakh. ***ghasan** [hear] (Chechen khaza, Ing. Khaza, Bats. Khac'a^n [ear, understand]. Cf Hurrit. Xaz - [hear], Urartu. xas- [hear, listen]].

Kill (1) OHG quellan [torment], OE cwiellan [kill] < [press, squeeze; crush] ~ Nakh q'ovlan [press; close, shut], iter. q'ielan [squeeze] > Chechen q'ovla^n, qijla^n;

2) E die ~ Chechen daj $^{\text{ʔ}}$a [kill]; dial (Akk), Tush. dav-;

3) PIE ***uen**- [beat; win] ~ Nakh * vien [beat; kill];

4) PIE ***dhen**- [beat] ~ Nakh ***dhien** [beat; win];

5) PIE ***bhen**- [beat] ~ Nakh ***bien** [kill]

Stand [1) PIE *sta-: Iran. sta- [stand; to put, place], Kurd. westan [stand; be tired], Slav. *stati, Rus. *стать*, Lith. *stoti*, Latv. *stat* ~ Nakh ***uotta**: [stand; be tired]: Chechen huotta, Ing. uotta, bats. otta^n has the equivalents in the Dagestan languages (And. *б-ичIчIиду* [stand up, get up], Avar. *чIчIизе*, Akhv. *гьечIчI-*, Karat. **гьечIчI-*, Bag. *гьецIцI-* [stay], Arch. *уццис* [stand] < *уттис), in which geminate **тт** appropriately turned into **цц** // **цIцI** // **чIчI**. In the Indo-European languages, the dissimilation of *tt > st* happened, cf. Chechen *меттиг* [place] – Rus. *место*.

2) PIE *ista: L. sisto, Gr. histemi, Av. histaiti, OPers. hišta [he stands], Rus. *вставать* ~ Nakh. *iter.* *itta [stand up, rise; be tired]: Chechen hitta. Appropriately corresponds Botl. *гьичIчIи* [rise, stand], Ghodob. *гьиччи* [stand up] (< *гьитти), Hin. *ича*, Tsez. *ича*, Khvar. *эча*, Bezh. *эчал* [stand].

7. Conclusion

Thus, the results obtained at the first and second stages of the study lead to a preliminary conclusion about the affinity between the Nakh-Dagestan and Indo-European languages and the need to include the Nakh-Dagestan languages in the Nostratic macrofamily. Further, in the framework of the rest stages of the research, a semantic analysis of lexicographic meanings is needed to conduct with the aim to identify their unified lexicographic meanings. Then, at the fourth stage, psycholinguistic associative experiments should be carried out. Based on the results of the experiments, an array of verbal associative reactions will be obtained, the semantic interpretation of which will reveal the psycholinguistic meanings of zoononyms of the Nakh-Dagestan and Indo-European languages i.e. meanings, actually represented in the linguistic consciousness of speakers of the studied languages. And as final, the fifth stage is based on conducting a comparative analysis of ULZ and PLZ to identify the relevance degree of semes in the linguistic consciousness of speakers belonging to the Nakh and Indo-European languages. The authors offer to scientists from different countries to invite to research collaboration.

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