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Words for the Animal Elephant/Mammoth in Relation to the DNA Genealogy Data

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Abstract

The onomatopoetic Mongol word for the animal elephant, *zaan*, reflects the primordial Eurasian word for the trumpeting animal mammoth. Subsequently it had diversified into the many variants such as *shəŋ*, *siaŋ*, *sioŋ*, *saŋ*, *chaŋ*, *slon*, *silonit*, *glan*, *zilonis*, *zihon*, *zo*, *masan*, *tsonoqua* and many other local forms. The endings <n> and <ny> are characteristic for Europe, whereas <ŋ> is characteristic for East Asia. Exceptions to this continuum are the Cambodian (Khmer) word *damri* and the Lithuanian (Baltic) word *dramblys*. DNA Genealogy and geophysical data indicate that about 68,000 years ago the people having the Y Chromosome haplogroups A00, A0, A1a, A1b1, and B survived on the East African highlands and spread later across Africa, whereas in the area of Alps and Balkans in Europe there survived the people having the Y Chromosome haplogroups BT and CT, whose descendants subsequenly split into the Y Chromosome haplogroups C through T, which in time spread all over the world. This may be the source of the observed similarities.

Keywords

Words for the Animal Elephant, Areas of Words, Y Chromosome Haplogroups, DNA Genealogy

1. Introduction

During last years, Jandáček (2013a, 2013b, 2014, 2017) studied the words for the animal elephant in central and western Eurasia, in southern Africa as well as in South East Asia. The collected data are discussed from a limited linguistic point of view as well as from the point of view of the latest genetic, especially DNA Genealogy as well as geophysical data.

2. Data Collected by Jandáček

Data about words for the animal elephant were gathered from literature and some dialect nuances were gathered *in situ* as Jandáček traveled through Asia and Africa.

In Table 1 there are collected the data about the words for elephant in Eurasia.

Table 1. Words for the animal elephant in Eurasia.

No.	Language	Word
1	Polish	słoń
2	Sorbian	slon & słon
3	Slovak	sloń
4	Czech	slon
5	Ukrainian	слон (slon) – female = слониха
6	Belarusian	слон (slon) – female = сланіха
7	Russian	слон (slon) – female = слониха (slonikha)
8	Slovenian	slon – female = slonica
9	Croatian	slon
10	Bosnian	slon
11	Serbian	слон (slon)
12	Macedonian	слон (slon)
13	Bulgarian	слон (slon)
14	Roma	slono
15	Kalderash	woroslano, slono
16	Latvian	zilonis
17	Amharic-Ethiopian	zihon
18	Mongol	zaan
19	Chinese	sδaŋ (siang)
20	Hakka (south China)	sδoŋ (siong)
21	Japanese	zo
22	Tibetan	glan
23	Laotian	saŋ (sang)
24	Thai	chang*
25	LongNeck Karen	t!sa!ŋ
26	Balong	masa'n
27	Hmong	sueh
28	Khmu	sijang
29	Northern Thailand	jang
30	Mon (Tibetan-Burmese)	cɟoung
31	Khmer (Cambodia)	damri
32	Lithuanian	dramblys
33	Tocharian A	onkalam
34	Tocharian B	onkolmo

*The ch in the Thai word is more like a sɟ, thus sɟa'ng.

Some similarity indicate also the names of the Amerindian Mythological Elephantine Ogress *tsonoqua* [No. 35], *dzunnukwa*, *dzoo-noo-qua*, *dzoonokwa*, *tsunokwa*, *dzonokwa* etc., as well as the Hebrew *siloni* or *silonit*, the Fourth Plague upon Egypt.

The word for the animal elephant is in Semitic languages totally different—Arabic *fel*, Hebrew *feel* or *peel*. They expanded the words *peel* or *feel* or *fel* into many parts of Central Asia as well as into Mediterranean, Western and Northern Europe, Table 2.

The West Caucasian (Table 2) as well as many European languages including all the Germanic and Italic languages had adopted the Arabic or Greco-Latin forms of the word for the animal elephant, Table 3.

Table 2. Words for the animal elephant derived from Semitic.

Language	Word
Farsi	feel
Azerbaijani	fil
Kazakh	pil
Pushtu	pil
Uzbek	pheel
Armenian	plugh
Georgian (Kartuli)	spi'lo
Chechen	piyl
Tatar	fil
Tajik	fil
Turkish	fil
Farsi	feel

Table 3. European words for the animal elephant.

Language	Word
Greek	feel or elephantas: ελέφαντας
Latin	elephantus
Basque	elefante
Finnish	elefantti or norsu
Estonian	elevant
Icelandic*	fill
Faroese (Viking)	filur
Hungarian	elefánt
Afrikaans	olifant
Irish Gaelic	eilifint
Scottish Gaelic	ailbhean
Welsh Gaelic	elffant
Yiddish	helfond
Kiribati	erebanti

*Ostensibly from the Viking travels.

Table 4. Some African words for the cognate of elephant.

Language	Word
Kalanga	zhou (žou)
Karansa	zhou (žou)
Setswana	tlou
Shona	nzou
Baherero	ndjou (ndžou)
Harero	otjou (otžou)
Ngoni	njovu
Kaonde	nzovu
Subiya	uzovu
Tonga	nzovu; mnuzovu
Nyanja	njomvu
Bemba	insofu
Ndebele	indlovu
Mbukushu	ndthovu
Tsonga	ingl/rofu
Mbukushu	ndthovu
HambuKushi	ndhovuo
Zulu	inglofu
Bayeyi	ingloufu

Some African words for the cognate of elephant are presented in Table 4. They categorically contain dental and/or alveolar sounds, which (together with <o> and optional <l>) superficially resemble the *slo* part in *slon*. Often, however, the lexicography of the words below is deficient. There is usually a plosive or a click element to the sound, which is quite impossible for native speakers of Indo-European languages to replicate. Thus, it may be a vestige of the earlier Khoisan (https://en.wikipedia.org/wiki/Khoisan_languages#Other_.22click_languages.22) rather than the latter Bantoid.

The Bantoid Languages also show few similarities to the Eurasian languages in their words for elephant. In Table 4 it is evident that dentals <s>, <t>, <th> <z> and <ž> plus an open vowel <o> are common phonemes as they are in Eurasia. Alternately, by placing the tongue on the alveolar ridge (upper gum) instead of passing air through the teeth additional sounds are possible. Thus alveolar <n>, <d>, <l> and dental <s>, <t>, <th>, <z>, and <ž> sounds are quite interchangeable.

3. Discussion

3.1. Lexicons Re: Elephant

Slon is the Slavic word for elephant and at this time is used by peoples from the Czech Republic and Slovenia to Vladivostok. It survives in the vestigial com-

munities of Polabian Slavs along the upper and lower Elbe River and in Slovenian communities in Italy, Austria and Hungary, Table 1.

In Latvian (a Baltic language) the word for elephant is *zilonis*, and in Amharic (the language of Ethiopia) the word for elephant is *zihon* (http://amharicteacher). This begs the question: "Why should the Horn of Africa and the Shores of the Baltic have such similar lexemes for elephant, and why should the Slavic word *slon* be centrally included?" The Georgian word is *spilo*. It appears to be a hybrid between the Semitic *pil* and the Slavic *slon*. The Tibetan word for elephant is *glan*. The Slavic words for Gold and Grain are Zlato and Zrno respectively. This demonstrates that the sounds <g>, <z> and <s> mutate across the spectrum of languages. The words for ivory and elephant often merge in lexical domains. Thus, the Tocharian A word for elephant is *onkalam* whereas the Tocharian B word is *onkolmo*. These words seem to be related to the Slavic words for elephant tusk—namely *okel* or *kel*. The Tocharian languages were spoken in western China. The Korean word for ivory is *sang-a*.

Hakka is a south Chinese dialect and the form spoken by natives of Formosa. The Hakka pronunciation for the word for elephant is *siong*. Poles pronounce and write the <l> in *slon* as a palatalized <ł>. Thus in Polish the word is written *słon'* but pronounced *swon'*—with palatalizations of the <l >and <n>. In a similar way, in a dialect of Slovenian east of its capital Ljubljana locals pronounce *slon* as *suɔn*. They palatalize the <l> to a <u> or English <w> and pronounce the <o> as a short and stressed schwa, <ə> (Perdih, 2015).

The <l> sound is absent in the Orient, and often diminished in Slavic languages and/or dialects. In Japanese the basic word for elephant is *zo*, but if one intends to be very respectful one uses the formal *zosan* which means "He, the highly respected elephant".

Evidently, in Europe and Western Asia there are three sources for the words for elephant:

#1. The phonemic source from the Greek *elephantas* and subsequently Latin. The Greeks ostensibly borrowed the word from Sudan where it means "the fountain" or "source of ivory".

#2. The Semitic source from Arabia and Levant is represented by *pil*, *peel*, *fil*, *feel*, etc.

#3. The autochthonous European and Asian *slon*, *siong*, *zaan*, *zilon*(*is*), etc.

The sound pair <sl> is frequent in Slavic languages but infrequent in other tongues. It is absent in Latin and Greek. Apparently, the West Europeans accepted as a loanword *elephant*. The word *elephant* was embraced from the Romans and the Greeks. The Greeks and Romans were much more "Mediterranean" people than "European" in orientation. Ostensibly, the Greeks imported the word *elephant* along with ivory from Sudan regions of Africa, where the root-word was Hamitic: *elu*. Roman hegemony spread the word *elephant* throughout Europe.

One must seriously consider the likelihood that prior to the introduction of the word *elephant* to many peoples of Europe, all of Europe used the original

and autochthonous word *slon* (in some modified forms). The word *elephant* was introduced to Europe by the Greeks and proliferated by the Romans. Prior to 5000 years ago we can be reasonably certain that *slon* was the word for the animal elephant in Western Europe as well in Central Europe and Asia.

We can present an 8-step logical argument that Western Europeans used the word *slon* before they adopted the Greek/Latin loan-word *elephant*:

1) The Slavic word for the animal elephant—*slon* is totally different from the standard word in Latinic and Germanic languages—*elephant*.

2) Hungarians, Finns, Basques, Greeks also use forms of the word *elephant* in their languages.

3) Slavs share their *slon* word with Latvians and peoples in Eastern and Central Asia.

4) Obviously, the peoples using the lexical forms of *elephant* have been using such as a loan word from Greek = ελέφαντας eléfantas.

5) The Romans modified the Greek word to be *elephantus*.

6) Latin form has been adopted by most languages of Western and South-Western Europe.

7) This begs the question what word(s) did those peoples use before they accepted the word *elephant* as a loanword from the Romans and the Greeks?

8) In absence of a better candidate for a word—used in antiquity, it is likely that the various forms of *slon* were used in Western Europe as such terms are used today from Central Europe to Thailand.

The Bantoid languages in Africa, **Table 4**, on the other hand, share some similarity of *tlou/dlou/jou/zou* to *slon* in the Slavic languages. In Indic languages, e.g. in Sanskrit *gaja* (https://en.wikipedia.org/wiki/Gaja), Hindi *hāthī*; *haathi* (www.hamariweb), Tamil *yāṉai* (www.google+tamil), there is observed no match with European and Bantoid expressions for *elephant*. This is reminiscent of the lexicons concerning herding and animal husbandry and the vocabulary regarding cereal crops. In Sanskrit the words for animal husbandry are similar to the Slavic, while the Sanskrit words for grain cultivation are dissimilar from the Slavic (Skulj et al., 2006, 2008). This indicates that the Aryans, who arrived India about 3500 years ago, accepted the aboriginal Indic terminology regarding the animal elephant.

In Southeast Asia, the Thai word is *chang* (http://adaythai). In Laos the word for elephant is *sang* (https://www.google.com/webhp?hl=en&tab=mw#bav=on.2,or.r_qf.&fp=241e6960f679dffb&hl=en&q=what+is+the+laotian+word+for+elephant+%3F). The words *chang* and *sang* resemble the Slavic word *slon*.

The Latvian (Baltic) word for elephant is *zilonis*, and as such, it resembles the Slavic *slon*. The Lithuanian (Baltic) word for elephant is *dramblys* and as such resembles the Cambodian (Khmer) word *damri*. Evidently the two extant Baltic languages are not related in their words for the animal elephant. Whereas the Latvian word *zilonis* resembles the Slavic *slon*, the Lithuanian word *dramblys* resembles the Khmer of Cambodia word(s) for elephant *damri* (www.wordhippo)

thum-rey (http://wiki.answers.com/Q/How_do_you_say_elephant_in_KhmerAnswers.com) or *domrey* (www.himandus) (in fact pronounced *dambrey*, Jandáček, 2015). In travels by Jandáček through South East Asia in 2015 there was observed that the indigenous people categorically drop the <s> sound at the end of a word. When speaking English they say "pry" instead of "price", "how" instead of "house", "sick" instead of "six" or "whore" instead of "horse". This prompts to speculate that the original Khmer word for elephant used to be *dambreys*. Possible understanding of the word *dramblys* = the trumpeting animal. In Slovene: trobiti = to trumpet; tromba (oldfashioned) = the trumpet, the trump; trobec = elephant's nose. In Czech: troubiti etc. Similar forms of the word are common throughout Europe.

While the words *fil*, *feel*, *pil*, *peel*, etc is evidently an import from Levant and Arabia, and *elephant* is a loanword from Sudan in Africa, *slon/siong* stands alone as a truly ancient Eurasian word. Perhaps the mammoth hunters used a variant of the word *zaan* > *słaŋ* or *słoŋ* > *slon/siong*. Mammoth ivory and bone decorated the living and the dead and were traded and marketed across the northern continents. The ancient mammoth habitat extended from Portugal across Eurasia and Beringia up to eastern Canada (Kahlke, 2015). This could mean that the word *slon* originally marked i.a. the animal mammoth and that it was not until later, when mammoths were gone for a long time, to start using it for the animal elephant. In tropical areas (eg India), however, they used different words for the animal elephant, which was not synonymous with mammoth.

Mammoths survived as isolated populations on islands until about 3750 to 4000 years ago (https://en.wikipedia.org/wiki/Wrangel_Island). By 4000 years ago humankind was well into historical times and knowledge of the strange beasts and their ivory was common not only among the elites, but also among commoners.

Palaeoloxodons of Northern China (only 3000 years ago) were more closely related to African elephants (*Loxodont*) rather than to the Asian (*Elephas*). It is meaningful that Northern Chinese had experiential knowledge about elephants till very recently (http://phenomena; Li et al., 2012).

The extension of the *slon*-like words for elephant from the Slavic part of Europe across Central to East Asia observed here, parallels the extension of some of the ceramics and figurines in several cultures in Eastern Europe and China as well as the R1a haplotypes observed by Klyosov & Mironova (2013). This parallelism may indicate that the R1a people, the Aryans, extended the word *slon* to the east and possibly they were those who exterminated the *Palaeoloxodons* of Northern China about 3000 years ago.

As languages evolve and speciate they have a proclivity to simplify and abbreviate long words. Using this model, we can speculate that the Baltic languages indeed have retained very ancient and protracted words for the animal elephant.

The Tocharian words for the animal elephant *onkalam*, *onkolmo* are likely from the Slavic-like word for tusk = *okel*, *keł* or *kel*. *Ngar* is the Thai word for ivory. The <r> in it is semi silent and <ł> like, and ergo the word is close to *ngał*

and not very different from *keł*.

It is reassuring that there is a high degree of predictability that languages of Eurasia have similar lexeme for elephant in their native language. The almost universal term for elephant across Eurasia is some derivative of *słəŋ*. This is true for extant languages, extinct languages and minority language. It is equally true for languages belonging to the various language families such as Ural-Altaic, Sino-Tibetan, Indo-European, Mon-Khmer and others. Categorically, the word for elephant begins with a dental <s> or <z> and terminates in a nasal <n> or <ŋ>.

The Mongol word *zaan* seems to be the best onomatopoeic representation of the trumpeting sound of the elephant. Europeans, on the other hand, had more generations to forget how the Chinese palaeoloxodons or woolly mammoths sounded. Thus in Mongolia there may be a sound of more fidelity of the "voice" of elephants than in the Slavic tongues.

For the sake of argument let us consider that the original word for elephant was based on the onomatopoeia of the trumpeting mammoth. Perhaps it sounded like ZZZAAAAN! As such it is probably best preserved in the Mongol word for elephant: *zaan*. The onomatopoetic *zaan* would have diversified into the many variants such as *siaŋ*, *sioŋ*, *saŋ*, *chaŋ*, *slon*, *silonit*, *glan*, *zilonis*, *zehon*, *masan*, *tsonoqua* and many other local forms. This diversity of variants has as its root the word *słaŋ* or *słəŋ*. The diversification took place in different areas at different times.

The TransEurasian linguistic reconstruction *słəŋ* is a blend of sounds, which typically constitute the word for the animal elephant (or previously mammoth) from Central Europe to Thailand (in Tropical South-Eastern Asia). S*łəŋ* fine-tuning is subject to modification as it passes through various language families across all of Eurasia. For instance, Latvian is a Baltic language, Polish is a Slavic language as also are Russian, Polabian, Slovenian, Macedonian, and tongues of most locales between Ljubljana, Skopje, Vladivostok and Prague. Mongolian is an Altaic language. Tibetan and Chinese belong to the Sino-Tibetan family. Thai and Lao languages belong to the Tai-Kadai family. Other language families, which embrace the *słəŋ* model as their word for the animal elephant include Tibetan-Burmese, Japonic-Ryukyuan, and Mon-Khmer. There are spillovers into Alaska and the NW coast of America in the Athapaskan languages, and into the Horn of Africa with Amharic.

In spite of the fact that we are dealing with eleven different Language Families and a plethora of individual languages, the words for the animal elephant categorically begin with a dental <s/z> and end with a nasal <n>, <ŋ> or <nj>, <ň>.

The middle part of *słəŋ* (*łə*) ranges in pronunciation from <a> or <o> or <uo>, <wo>, to an alveolar contact <l>, to Polish <ł>, to schwa = <ə>—as undifferentiated semivowels. Not surprisingly, in Eastern Asia, speakers avoid the <l> sound. Thus we are dealing with the fact that in Deep Structure the word *słəŋ* is ubiquitous. In local specific expression it is subject to ethnic modifiers.

Czech works well to demonstrate how to mutate the <n> in *slon* into the <ň> (Slovenian <nj>, pronounce as <ny>) in derivatives of the word. Thus there is

one *slon* but several *slonji* (pron. *slonyi*). Female elephant is a *slonjice* (pron. *slonyice*), a baby elephant is a *slunje* (pron. *slunye*). In other words the <n> is palatalized as in the word *konj*.

Thus the <ŋ> at the end of *słəŋ* may manifest itself an <n> or <nj> or <ŋ>, depending on locale or other modifiers. <n> and <nj> are characteristic for Europe, whereas <ŋ> is characteristic for East Asia.

There is also another interesting point of view on the words for the animal elephant. Namely, there is a number of words for the giant elephant-like ogres, for example the Amerindian Mythological Elephantine Ogress *tsonoqua*, *dzunnukwa*, *dzoo-noo-qua*, *dzoonokwa*, *tsunokwa*, *dzonokwa*, etc., which appear at the first glance as a combination of the Russian *slonikha* and Amerindian *squaw* to form the word, which resembles a "Sloní Squaw". On the other hand, the Hebrew word *siloni* or *silonit* describes the Fourth Plague upon Egypt. These words deserve a separate study.

A rather speculative scenario of the develpoment of words in **Table 2** and **Table 3** would unify other words for elephant. The hunters identified mammoths and other members of the elephant family by their call ZZZZAAAANg naming them *zaan*. It possibly developed in a progression such as this: *zaan* >>> *słəŋ* > *səłəŋ* > *səłə* > *sələ* > *pələ* (> *peel*) > *fələ* (> *feel*) > *fel* > *el fel* > *elephas* > *elephans* > *elephant*, or, > *fələ* > *fəlu* > *elu* > *elephas* > *elephans* > *elephant*.

There are essentially two ways to account for the fact that all Slavs have the same word for elephant. One way would be that the word *slon* is over 10,000 years old and was already ubiquitous throughout Europe including the Iberian Peninsula and the British Isles.

The other scenario is less convincing. In the 19th Century scholars promoted the idea that until the 6th Century AD all Slavs were limited to the swamplands and marshes of the Pripyat River on the border between Belarus and Ukraine. The theory proposes that millions of Slavs exploded from the swampland and occupied two thirds of Europe in the 6th Century AD. While the Byzantine and Western Roman scribes mentioned every tiny clan, which was on the move, nobody noticed the Slavs entering Central Europe. Subsequently an individual must have coined the word *slon* and sent messengers to all corners of Slovandom to instruct people to use the word *slon* if they ever saw a very big animal with a very long nose and very big teeth.

Besides the similarity of folk expressions for elephant/mammoth, there are interesting also other similarities in the folk expressions, for example the similarities of the folk expressions for the dragonfly in which any kind of an association between the dragonfly and the snake is expressed (Kiauta, 2002).

3.2. Relation to the Y Chromosome Data

Previous results of the study of the words for the animal elephant (Jandaček, 2013a, 2013b) were commented from the point of view of DNA Genealogy. The DNA Genealogy data indicated at that time that the word *słəŋ* (*slon*) seems to be

carried by the Eurasian people having the Y Chromosome haplogroup K-M9, which arose around 55,000 years ago (Klyosov, 2013b).

The overview of new data till 2016 and their meaning has been published (Perdih, 2016) as well, but subsequently new important pieces of information were published. These shed additional light onto such questions. Especially important are the following pieces of data:

1) The ancestors of present humankind did not develop in Africa about 50,000 to 100,000 years ago but elsewhere (Klyosov & Rozhanskii, 2012b; Klyosov et al., 2013; Klyosov, 2014a, Fuss et al., 2017, Hublin et al., 2017), where they had common ancestors from which there split the Denisovans about 800,000 (657,000 to 973,000) years ago and Neanderthals about 400,000 (326,000 to 482,000) years ago (Fu et al., 2013, cf. also Meyer et al., 2016).

2) The trunk of the old genealogical tree of humankind (Klyosov, 2014c: 1849; Poznik et al., 2016, http://www.yfull.com/tree/) presents the data of when and from which predecessor descended the extant Y Chromosome haplogroups. The data presented by Poznik et al. (2016) and http://www.yfull.com/tree/ coincide within the uncertainty limits and the latter ones are presented here.

3) The "oldest" haplogroup known at present is the African haplogroup A00-L1284 formed about 235,900 years ago, but it is not the ancestor of any other haplogroup known at present. The same holds true for the African haplogroups A1a-M31 formed about 133,400 years ago, A0-L991 (between 190,400 and 163,000, Poznik et al., 2016), A1b1-L419 formed about 130,700 years ago, and B-M60 formed about 88,000 years ago. The ancestor of haplogroup B-M60 and of all the other presently known Y Chromosome haplogroups, i.e. haplogroups C through T, was the haplogroup BT-M91, which formed about 130,700 years ago from the same ancestor as the presently African haplogroup A1b1-L419.

Haplogroup BT-M91 suffered a bottleneck event about 64,000 ± 6000 years ago (Klyosov & Rozhanskii, 2012b). Its non-African descendant (in parentheses the approximate time of the haplogroup formation in years ago) was the haplogroups CT-M168 (88,000) from which derived the haplogroup DE-M145 (68,000) (and its descendant haplogroups D-M174 (65,200) and E-M96 (65,200)) as well as the haplogroup CF-P143 (68,500). From the haplogroup CF-P143 there formed the haplogroup C-M130 (65,900) and F-M89 (65,900). From the haplogroup F-M89 derived in one or another sequence all the other haplogroups known at present, for example G-M201 (48,500), H-L901 (48,500), I-M170 (42,900), J-M304 (42,900), K-M9 (47,200). From the haplogroup K-M9 there formed haplogroup P-P295 (45,400), L-M20 (42,600), T-M184 (42,600), N-M23 (36,800), and O-M175 (36,800). From the haplogroup P-P295 there formed the haplogroup R-M207 (31,900) and Q-M242 (31,900). From the haplogroup R-M207 formed the haplogroup R1-M173 (28,200), and from it the haplogroup R1a-M420 (22,800) and R1b-M343 (22,800).

4) About 68,000 (71,000 to 57,000) years ago, coincident with MIS 4, a big cosmic body fell into the Pacific Ocean causing a wave many kilometers high. It

flooded most of the continents, except the East African Highlands and the region in Alps and Balkans in Europe (Yurkovets, 2015, Yurkovets & Vasilenko, 2017). It is not yet clear whether it caused the Toba eruption or they were two independent events. However, the impact of a cosmic body in Russia about 40,000 years ago, which formed the Ladoga Lake and which ashes devastated the Russian Plane, caused the eruption of the Caucasian and Mediterranean vulcanos (Yurkovets, 2012, 2014).

5) Another important information was derived from the European skeletons of about 30,000 years ago and later (Fu et al., 2016). In those skeletons (in the Czech Republic, Rumania, Russia, Germany, Belgium, Spain, Italy) there were discovered the Y Chromosome haplogroups BT, CT, C, F, I and the haplogroups HIJK and IJK, which derived from the haplogroup F and which are ancestors of haplogroup I.

Putting together these groups of data gives rise to the following conclusions. On the East African Highlands there survived the males having Y Chromosome haplogroups A00, A0, A1b1 and B together with their females. In the region in Alps and Balkans in Europe there survived the males having Y Chromosome haplogroups BT and CT with their females having the mtDNA haplogroup U. There is still open the question whether some humans survived in the Caucasus Mountains and/or Himalayas.

After this event the African survivors expanded across most of Africa. The European survivors expanded subsequently across Eurasia, entered Americas, Australia, and the males having the Y Chromosome haplogroup E entered Africa, where it is now the main haplogroup (Poznik et al., 2016).

Where formed the Y Chromosome haplogroup DE from CT is not known yet nor the exact ways of expansion of the Y Chromosome haplogroups D and E. The Y Chromosome haplogroup D is observed now mainly in Tibet, on the Andaman Islands and in Japan. The people having the Y Chromosome haplogroup E are observed now mainly in the Near East, Europe, and especially in Africa, where this is the most frequent haplogroup.

The Y Chromosome haplogroup C seems to had been formed in Europe, since it has been discovered in some ancient skeletons in Europe (Fu et al., 2016), where it seems now to be extinct. The Y Chromosome haplogroup C is now characteristic for Mongols, some Amerindians and Australian Aborigins.

The Y Chromosome haplogroup F seems to had been the most successful one since from it formed the most extant haplogroups (G, H, I, J, K) and their descendants represent now the majority of humankind. The Y Chromosome haplogroup F has been discovered in ancient skeletons in Europe (Fu et al., 2016) but now it is rare. Also the Y Chromosome haplogroup I has been discovered in ancient skeletons in Europe (Fu et al., 2016). Its past and present situation presented Brandt et al. (2015) and Klyosov (2010a, 2011a, 2012b, 2015b).

One of the descendants of the Y Chromosome haplogroup F, namely the haplogroup K was very productive as well. It is now very rare, as well, but its des-

cendants we find all over the world. The Y Chromosome haplogroup K seems to had expanded east. From it there formed the haplogroup LT (45,400), which expanded south, whereas in Siberia there formed the haplogroup P (45,400).

From the haplogroup LT branched off the haplogroup T (42,600), with membership from Ethiopia to Estonia, then haplogroup L (42,600), whose members live in India and Middle East, and the haplogroup NO (41,500), which migrated to the South East Asia. There formed from the haplogroup NO the haplogroups N (36,800) and O (36,800). The haplogroup O is now the main haplogroup in China, Tibet, Vietnam, Cambodia and Japan. Part of the members of haplogroup N migrated north.

From the haplogroup P there formed in Siberia the haplogroup Q (31,900), whose descendants live now in North East Asia and in Americas, as well as the haplogroup R (31,900), whose members remained mainly in the Altai region, and there formed from the haplogroup R the haplogroup R1 (28,200), and from it the haplogroup R1a (22,800) and R1b (22,800).

The Y Chromosome haplogroup G formed from haplogroup F somewhere between the Balkans and the Caucasus. It expanded east to present Afghanistan and there formed the haplogroup G2a (Klyosov, 2016c), which subsequently expanded west and it was one of the bearers of agriculture into Europe. On intrusion of the Y Chromosome haplogroup R1b people into Europe about 4500 years ago, previous Europeans were largely exterminated and the rest of its bearers remained there, whereas most of its bearers live now in western Caucasus, especially in Ossetia, where a substantial part of them have non-European subgroups of the Y Chromosome haplogroup G2a (Rozhanskii, 2016).

In Central Asia there formed from the haplogroup R (about 31,900 years ago) the haplogroup R1 (28,200), and from it the haplogroup R1a (22,800) and R1b (22,800) originated. After the LGM, the people having haplogroup R1b migrated west and settled the Middle Volga River region about 13,000 years ago, where they formed the Pre-Kurgan and Kurgan cultures. Gradually they expanded south. Those who remained about 6000 years ago north of the Caucasus Montains formed later the Yamna Culture etc., and did not advance west into the Central or Western Europe but south to Mesopotamia. Those who advanced beyond the Caucasus Montains about 6000 years ago reached Mesopotamia and founded there the Sumerian state. From there some of them migrated west into Egypt. From Egypt they continued south into Central Africa and west across the Northern Africa. About 4900 years ago they entered the Iberian penninsula and from there they (as the bearers of the Bell Beaker culture) conquered Western Europe to Ireland and Scandinavia, intruding also the Central Europe (Klyosov, 2008, 2009, 2010b, 2011a, 2011b, 2011d, 2012a, 2013a, 2014b).

As the haplogroup R1b (22,800), also the haplogroup R1a (22,800) formed from the haplogroup R1 (28,200). After the LGM, the people having haplogroup R1a migrated southeast to present Cambodia, and the majority of them migrated southwest reaching India about 13,000 years ago, eastern Arabia about 10,000

years ago, the Fertile Crescent, Anatolia and the Balkans about 9000 years ago. They reached the westernmost and the northern Europe at about 6000 to 5600 years ago. After the attacks by the Y Chromosome haplogroup R1b people a number of the Y Chromosome haplogroup R1a people escaped from the Western and Central Europe onto the Russian Plane, and from the Russian Plane they expanded east as far as Northern China, south to the Near East (Mitanni), Arabia, Iran (Avestians), and India (Aryans) (Rozhanskii & Klyosov, 2009, 2012; Klyosov & Rozhanskii, 2012a; Klyosov, 2014c, 2015a, 2016a, 2016b). It is not yet definitely clear by which routes the Y Chromosome haplogroup R1a people advanced and which lifestyles and cultures they practiced. These data indicate that a substantial part of the extant East Slavs, as well as the Avestians in Iran and Aryans in India derived from the Central Europe.

There is a general opinion that the Y Chromosome haplogroup N people (Finno-Ugric) were the aboriginal inhabitants of the northern Europe. Haplogroup data, e.g. Brandt et al. (2015), Klyosov (2011c, 2015c, 2015d) show, however, that the first inhabitants there were the Y Chromosome haplogroup I people, to whom later on the advent of agriculture admixed the Y Chromosome haplogroup R1a people. The Y Chromosome haplogroup N people formed in South-East Asia about 36,800 years ago and subsequently spread north and west reaching the Altai region about 14,000 years ago, the Ugric region east of the Ural Mountains about 6000 years ago, crossing the Ural Mountains about 3000 years ago arriving in the Baltics about 2500 years ago (Klyosov, 2011c, 2015c, 2015d).

The similarity of the Khmer (Cambodia) word(s) for the animal elephant i.e *damri*, *thum-rey* or *domrey* and the Lithuanian (Baltics) word *dramblys* seems counterintuitive. However, keeping in mind that the Y Chromosome haplogroup N formed in the South-East Asia about 36,800 years ago from the haplogroup NO in parallel with the haplogroup O and subsequently spread north and west arriving to the Baltics about 2500 years ago (Klyosov, 2011c, 2015c, 2015d) and that exactly in Lithuania it is the major haplogroup, this similarity is less surprising.

In the nearby Latvia, where the frequency of the Y Chromosome haplogroup N is somewhat lower, the word for elephant is *zilonis* and it is more Slavic-like than that in Lithuania. It is interesting also that in Latvian there can be observed many Slovene dialectal words (Nikčević, 2006).

In view of data collected above, the widespread similarity of words for the animal elephant is not surprising. They seem to derive from the ancient mammoth habitat and on expansion of humankind tens of millenia ago, **Figure 1**.
There are, however, also other derivatives of these data. For example, the fact that the Y Chromosome haplogroup N people arrived in European Russia and Baltic countries later than about 3000 years ago and admixed to the inhabitants having the Y Chromosome haplogroups I and R1a, disproves the explanation valid till now that there developed from the *Indo-European the Balto-Slavic linguistic complex, which split subsequently into Baltic and Slavic. The new haplogroup data presented above show that the primordial language in that area was

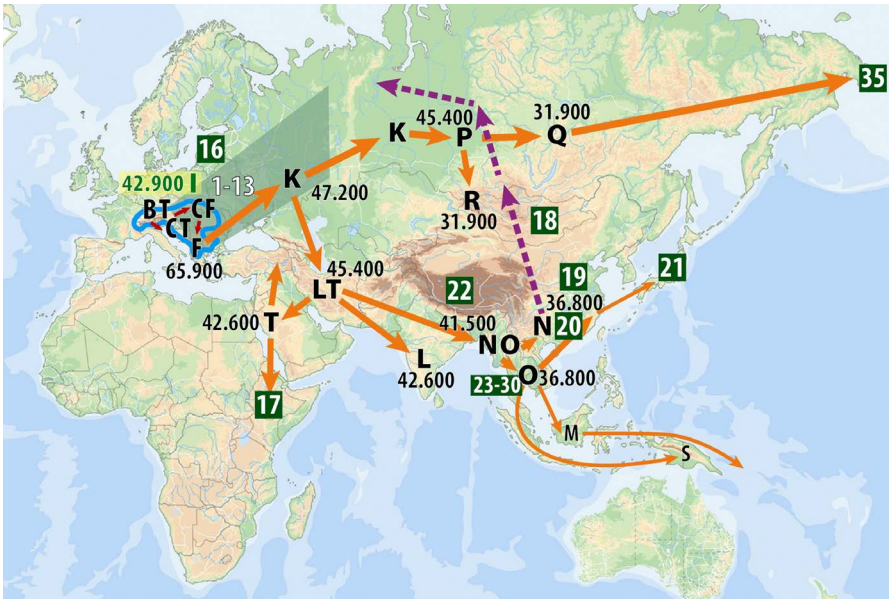

Figure 1. Map of the main Y Chromosome haplogroups expansion across the mammoth habitat combined with the approximate position of present slon-like words for the animal elephant taken from **Table 1** as numbers from 1 through 35.

proto-Slavic and that Baltic derived from it on admixture of the Finno-Ugric people having the Y Chromosome haplogroup N.

This opens also the question, which was the aboriginal Proto-Indo-European. On the one hand, the Aryans arrived India from Europe (Rozhanskii & Klyosov, 2009, 2012; Klyosov & Rozhanskii, 2012a; Klyosov, 2014c, 2015a, 2016a, 2016b). On the other hand, the Y Chromosome haplogroup R1a derived from the Y Chromosome haplogroup R1 (28,200) somewhere near the Altai Mountains about 22,800 years ago, whereas the Y Chromosome haplogroup R1b derived from the Y Chromosome haplogroup R1 somewhere in the vicinity about the same time (http://www.yfull.com/tree/). There are now spoken Turkic languages. When the Y Chromosome haplogroup R1b people arrived Western Europe after about 4800 years ago, they were speaking Altaic (Proto-Turkic) (Alinei, 1996-2000, 2000, 2003; Klyosov, 2011d) in spite of having had lived away from the present Turkic speaking area for about ten millenia.

It is hardly probable that on their formation from the Y Chromosome haplogroup R1 about 22,800 years ago in the Altai region, the Y Chromosome haplogroup R1a people would speak Proto-Slavic whereas the Y Chromosome haplogroup R1b people would speak Proto-Turkic. Available data suggest that the Y Chromosome haplogroup R1a people turned proto-Slavic on their way into Europe or in Europe, whereas the Y Chromosome haplogroup R1b people turned Indo-European within the Europe.

This and the fact that there are observed several linguistic traces, which indicate the Slavic substrate in languages in Europe, e.g. in Basque (Jandáček & Arko, 2002; Jandáček, 2003, 2004), in ancient Gaulish (Ambrozic, 1999, 2000, 2002a, 2002b, 2010; Serafimov, 2006; Serafimov & Tomezzoli, 2010; Deacon,

2017), on British Isles and in Scandinavia (Stanonik, 1996), in denominations of toponyms, words and customs in the Slovenian way in Alps and on the British Isles resp. elsewhere (Tuma, 1923, 1925, 1926; Bizjak, 2002, 2015; Rant, 2007, 2008, 2014; Rant, 2006, 2011, 2014, 2015; Verbovšek, 1995) indicates that the aboriginal Proto-Indoeuropean was Proto-Slavic and their speakers were the Y Chromosome haplogroup I, mtDNA haplogroup U people. The immigrants, e.g. the agriculturists of about 7500 to 6000 years ago were either already Proto-Slavic speaking or turned Proto-Slavic in contact with the Y Chromosome haplogroup I people or lived separated from them, whereas the Y Chromosome haplogroup R1b people turned Indo-European after about 4800 years ago and formed the so-called Celtic languages.

Usually one considers that a female accepted into a family turns to the language spoken in the family. In Western Europe one has to consider also the possibility of the scenario that the offspring of a low number of Proto-Turkic speaking new local rulers having a substantial number of subjugated aboriginal females formed a language mix, which subsequently developed into "Celtic".

In view of the presented DNA Genealogy data it would be interesting to re-evaluate the explanation by Warnow et al. (1996) that "It appears to point to a situation in which Germanic began to develop within the Satem Core (as evidenced by its morphology) but moved away before the final satem innovations. It then moved into close contact with the "western" languages (Celtic and Italic) and borrowed much of its distinctive vocabulary from them".

According to the data known at present, especially the DNA Genealogy data, but also the data presented by Lie (1991) about the similarities between German and Korean, the data by Chang (1988) about the similarities between German and Chinese, which are both Kentum, as well as the -ng (-ŋ) ending in both Germanic and Oriental languages and the including policy of the Germanic leaders at the beginning of AD, the explanation by Warnow et al. (1996) would mean that some of the ancestors of present Germanic people originated in Europe among (or as) the Proto-Slavic speakers, then left Europe about 4500 years ago as Aryans, moving east reaching northern China about 3500 years ago (Rozhanskii & Klyosov, 2009, 2012; Klyosov & Rozhanskii, 2012a; Klyosov, 2014c, 2015a, 2016a, 2016b). Advancing east they mixed with previous inhabitants to become the Proto-Germans. The ancient Proto-Germans influenced the Proto-Chinese and *vice versa*. After being expelled west, they mixed in Europe with the "Celtic" people and during the time of the Roman Empire and afterthem the Italic people influenced their language to develop present Germanic languages.

In short, the Y Chromosome haplogroup I people had been the aboriginal Europeans and seem to had been the Proto-Slavic speakers. In contact with newcomers of other language groups either the newcomers turned to Proto -Slavic or the previously Proto-Slavic speakers lost their Proto-Slavic but turned the non-Indo-European newcomers into Indo-European.

Until a more compelling hypothesis based on new and improved data

emerges, we must adhere to the paradigm that prior to about 68,000 years ago the word *zaan* > *slɔŋ* was ubiquitous throughout Europe. In Europe, the survivors of the cataclysm, which occurred about 68,000 years ago, had the Y Chromosome haplogroups BT and CT and used the word *zaan* > *slɔŋ* as they referred to the animal elephant or mammoth. They inherited this word from their ancestors living in Europe before the said cataclysm. They and their descendants subsequently expanded across Asia. Where these people hunted mammoths they retained a cluster of similar words.

Around 68,000 - 62,000 and 43,000 - 36,000 years ago (Yurkovets, 2011: p. 1641) glaciation exposed new land bridges to mammoth and human migrations.

In the first case, i.e. after the cataclysm of around 68,000 ago, in the areas once flooded, land biota had to establish itself. Subsequently, mammoths and humans followed. In the second case, i.e. around 43,000 - 36,000 years ago, again the newly exposed land bridges allowed for the expansion of mammoth and human migration into the "new world" lands.

The people, who would expand across the mammoth hunting grounds around 62,000 years ago could include besides those having had the Y Chromosome haplogroups BT and CT also those having had the Y Chromosome haplogroups C and D.

During the next cooling, i.e. prior to about 36,000 years ago, along with them the people having Y Chromosome haplogroups G, I, K and P could had occupied the area.

The Y Chromosome haplogroup C exists now i.a. in Mongolia, where the word for the animal elephant *zaan* is observed, cf. No. 18 in **Table 1**. The Y Chromosome haplogroup D exists in Tibet and Japan, where the words *glan* and *zo*, respectively, are used, cf. No. 22 and 21 in **Table 1**. The descendants of the Y Chromosome haplogroup P, e.g. those having Y Chromosome haplogroup R1a are in Europe, mainly among Slavs, where the word *slon* is now observed, cf. No. 1 through 13 in **Table 1**, whereas the Y Chromosome haplogroup Q members are observed now in the north-east Asia and Americas, where the Amerindian Mythological Elephantine Ogress *tsonoqua* and its variants are reported.

The ancestors of the majority of present humankind survived the catastrophe of about 68,000 years ago in Europe and expanded subsequently all over the world, some also circulating around. Thus it is not surprising that the word for an animal known in one or another form to all of them has similarities all over the world.

All these explanations based on the latest DNA Genealogical and geophysical data are to be thorougly re-evaluated also from the points of view of other data, e.g. archaeologic, linguistic, etc, taking as arguments not the interpretations considered valid till now but data, and the new evaluation has to be based on data only and not on obsolete interpretations.

4. Conclusion

Patterns of haplogroups of human populations are evident in the Arctic, Subarc-

tic and Temperate regions of the Northern Hemisphere. Indications of the same origin exist in Eurasia, Alaska, Canada and extend throughout the Americas. Evidently, in the past this included the semi-continent of Beringia. In a like manner, lexicons referring to mammoths suggest that the mammoths were an important resource for the survival, development and expansion of humans.

Mammoth hunters spread their genes, mammoth products, and jargon of their trade in the late Paleolithic. *sɬəŋ* is the "magic word" which binds the extant human populations of the region.

Thus there appear to be correlations between the local nuances of the word *sɬəŋ* and the geographical distributions of haplogroups in Eurasia. With further genetic research and additional linguistic finds more correlations are likely to be observed.

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