
REMAINS OF PROTO-
INDO-EUROPEAN
LANGUAGE IN ROMANIAN

Complementary evidences on the primary
territory of the Language

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Biographical note

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Owns a Ph.D. in philosophy and a practice as lawyer since 1996. In 2004 he contributed as a sole specialist in setting up a professional association at national level and he set up a private court in association with 1,200 lawyers in 2013. Over the years, he promoted various new methods to improve the practice of law by writing books on the basic legal citation of judicial texts, and in particular on the theory of the judicial precedent, to ensure equality of rights. The interest of the topic was generated by the study of conjunctions that made possible the emergence of the current system of jurisdiction and the intent that leads to the violation of the rule of law. The author has an interest in the history that made possible the current social perception.

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As a background Remus is licensed in Mathematics (1997), with a MSc specialization in Biostatistics (2001), and owning a PhD in applied statistics (2007). For 12 years he was an academics at the University of Medicine and Pharmacy “Iuliu Hatieganu” in Cluj-Napoca being the owner of the Biostatistics Course. In this position he was participating into 3 research grants and published over 10 scientific papers from the pharmaceutical & medical data processing and statistical modelling field. Then Remus started his own consultancy company (www.inflectionpoint.eu) delivering design of data & analytics processes with applications into various industries. In this position, he was involved in more than 40 applied data science projects delivered for global companies, including clients from Forbes500. <https://www.linkedin.com/in/remus-octavian-campean-a4404726/>.The co-author has an interest into data transcription and analysis of

human interaction. From here the preoccupation for digging into historical transformation of languages.

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ABSTRACT

After remember grosso modo, some pro and contra argument of the linguistic reconstruction and semantic density analysis, we expose some controversial issues related to Romanian.

The next part is meant to strengthen and structure the approach, by applying some mathematical computation methods with regards to phonological similarity assessment. An edits distance metric is applied to compare phonetic transliterations between PIE reconstructed root terms and meaning like corresponding Romanian words. For those terms that prove to be identical for a number of incipient phonetic symbols, an additional heuristic distance metric is applied. All computations are done using the R programming language, by parameterizing the functions of “stringdist” package.

After that we used a list of 200 words of linguist Morris Swadesh, to make a comparison with a hypothetical reconstruction of J. Pokorny to Romanian language. Order to reach it, we found 2222 matches to all references cited, some identity is surprising and to others I rearranged the material. Every Romanian word, which

finds correspondence in PIE reconstruction, it seems to have a close phonetic structure, and a semantics more obvious than those maintained in languages that served as a reference. Because phonetic and grammatical changes are unidirectional, once widespread, there would not be justification for a "restocking" lexical base of original area, even if the language is obviously evolving.

Due to population movements that occurred in the last 6,000 years, in and out of the territory, the population that initially used this language is radically changed, which brought with it significant changes in cultural habits, but important remains of the PIE language, seem to have been preserved, in Romanian.

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1. Justification of perspective

Current research on the common ancestor of the Indo-European family of languages, is mostly based on linguistic reconstruction. Reconstructing some aspects of the parental language is both an end in itself and a help in order to understand the links among the languages of the Indo-European family; but it is also an attempt to explain the historical development of the languages. Reconstructions have enabled linguists to interpret almost every aspect of the mother tongue by interpreting texts from various daughter languages, in which this so-called "primordial language" would have left linguistic traces. The most significant part of the Comparative Linguistic is now the phonological reconstruction.

There is a broad consensus among scientists that the PIE's phonemic inventory can be reconstructed quite accurately, although there is still the debate on the phonetic construction of the phonemes. Most Indo-European specialists now tend to have greater confidence in the reconstruction of the phonetic system than in many of the reconstructions of individual lexemes or morphological or syntactic phenomena ¹.

If the identified reconstructions have been or are real, it seems to be a question that started contradictions between linguists.

There are some who claim that they cannot "reconstitute," a language from the past, but there may eventually create formulas that describe the systematic relationship between the sounds in the daughter tongues.

Others argue that reconstructions are vague approximations of the PIE language, and they cannot be accurate because even the proto-language would have had dialects, being involved only in the approximation of a single proto-form, and that the reconstructions are not made for a specific moment.

1. Clackson 2007, 27

Finally, there are those who expressed some confidence in the method of statistical reconstruction.

Thus, for example, when reconstructing the Proto-Romanic language from the Roman daughter languages, the reconstruction safety can reach 95% for phonology and 80% for grammar. The longer the time the language has been spoken, the lesser the confidence in reconstruction is likely to decrease ².

Reconstructed forms can be exchanged in the traditional system combined with the variety of new systems proposed in a somewhat mechanical manner, but ultimately the exact form of words seems to have a secondary importance ³.

Another problem is the occurrence of semantic density because a loaded term meaning most likely will be diluted once it left home (ex. RO *a păli* or *viață*). However, the root taken in daughter languages, often seems to have been semantically improved, with the passage of time, and therefore this semantic density attributed to the original word seems to have decreased in safety.

The basic language of the Indo-European linguistic family is a proto-language that has never been certified, being only rebuilt. Since proto-language can be identified by collecting all the deductions from the daughter languages, the ability to separate innovation from what has been maintained is essential for the reconstruction of the original. The "comparative" method, in its narrow, phonological sense, makes to the greatest extent, the segregations, using the comparative method of the historical linguistics.

Innovations, classified as sound changes, are capable of producing morpheme homophony; phonemic mergers, and phonological non-deductible substitutes.

Thus, if a phonemic or A-language phonemic combination would have B-related correspondence in a set of morphemes, but also another phoneme / combination in another set of morphemes, then the A language is innovated in this detail. If A has in all the details innovated and B in none, A is a descendant

2. Mallory 2006, 50

3. Mallory 2006, 53

(or the later stage) of B and B is the ancestor (or the previous step) of A. In this case, the B language can be set before the A language ⁴.

The so called Proto-Indo-European language (PIE) could have been spoken somewhere in the Black Sea region before the middle of the 5th millennium BC, and the population that used it dispersed, resulting in branches certified in chronological order: Anatolia (extinct), Indo-Iranian, Greek, Italic, Celtic, German, Armenian, Tocharian (extinct), Albanian and Balto-slavic ⁵.

The imaginary lines that mark on a linguistic map the spread of Indo-European isoglosses, share a common point that touches a part of what today is the Balkan Area and especially part of what today is the common territory of Romania, Hungary, Croatia and Serbia, bordered by the Carpathians, the Austrian Alps and the Dinaric Alps. However, without a phylogeny mutually agreed, it cannot get a key essential for evaluating the assumptions competing⁶, and this phylogeny seems impossible to reconstruct the past in terms of movements of populations over time.

Taking into consideration the assumptions as above, I made a first appreciation of the fact that the old language could be preserved in a certain form, especially among the archaisms of a language still in circulation. I have also noticed that in the Black Sea region, the Romanian language is in contrast to any language spoken around its borders (Hungarian, Serbian, Russian, Bulgarian, Turkish, etc.).

Because the rebuilt forms and the semantic density are important elements, although ultimately are in the centre of controversy over the narrow field of approaches, it remains to bend, like those who have studied the subject from the beginning over, a comparison between the reconstituted forms (PRI, IElex) and the deductions from the Romanian language. This latter language seems to be a combination of everything around it and thus it is seen as being formed later.

In addition, we have established the need for support in contemporary theories on phonetic reconstruction and semantic density.

4. Woodard 2008, 230
5. Woodard 2008, 231
6. Mallory 2013, 148

2. About the Romanian language in short

In the Latin language groups, the Romanian language seems to have borrowed massively from their neighboring countries, including the many words in the 200 Swadesh list, such as "a trăi" (from OS "trajati" - to last, continue), "a lovi" (from OS "loviti" - hunting, hunt) and "zăpadă" (from OS "zapadati" - to fall) ⁷.

As a result of observing the borrowings from the Slavic languages, the Gray-Atkinson model incorrectly places Romanian out of the Latin branch. However, if sound and grammar changes are taken as the first consideration, it becomes clear that the Sardinian language, rather than the Romanian language, stands out as the most distinct member of the Romanic group because the other languages, including Romanian too, share common innovations that were not found in the language spoken in Sardinia ⁸.

But there is a synonym in Romanian that seems to be somewhat older as a testimony, for this v. "a trăi" / s.n. "trăi" namely RO *vîață, vîu, vîe, vîi*, ROT "ghiu" [*g^wîû*], "ghie" [*g^weĵə*], and the introduction of the term OS did not remove the other. În PRI 708 *g^weĵ-3* și *g^weĵə-* : *g^w(i)ĵē-* : *g^w(i)ĵō-* : *g^wī-*, , often improved with -u, which has the correspondent for NE "to live", we find a proximity of ROT "ghiu" [*g^wîû*], "ghie" [*g^weĵə-*].

As a semantic RO *vîu, vîe, vîi*, adj., s.n. :

I. 1. (often noun) who is alive, living; endowed with life. Loc.adj.și adv. *De vîu =*

7. Pereltsvaig 2015, 84;

8. Pereltsvaig 2015, 85;

being still alive. Loc.adv. *Pe viu* = directly. Exp. *Prin (sau cu) viu grai* = spoken. Rip someone (or get someone's skin) *de viu* = Be merciless to someone, ask someone more than he can give; to rob someone. *Viu sau mort* (alive or dead) = in any state, whether alive or not; at any cost. (Noun, Exp) *A fi mort între vii* (Being dead between living) = being as dead.

Nici cu viii, nici cu morții (neither with the living nor with the dead), it is said of a sick person who does not die or not recover.

Morții cu morții și viii cu viii, (the dead with the dead and the living with the living), it is said as a courage to those who console hard to the death of a loved one. Who has feelings. *Rană (sau carne) vie* (wound (or flesh) living)= wound (or flesh) of a bleeding body from which the skin has been taken. That persists, which is still alive. *Tradiție vie. Limbă vie* (Traditional life. Live language) = language that is spoken and evolving, which is in circulation. (In the Christian view) Eternal, immortal, everlasting.

I. 2. Full of life, uninteresting; With swift, lively movements. Animated. Live talk. (About the Eye) Which denotes lust, intelligence; Ager, lively.

I. 3. (About plants) Vigorous, full of sap, healthy, green. (About Water) Running fast. (About Fire) Who burns well, with big flames.

I. 4. (About sounds) Loud, powerful. (About light, about light sources) Hard, strong, dazzling. (About colors) On; brilliant.

I. 5. (About abstracts) Intense, strong. Severe pain.

II. n. (rare) Life.

The etymology of RO *viu*, appears in dictionaries, to be derived from the LAT *vivus*, but here its meaning is limited: "alive, fresh, be alive". It is still possible to dilute the meaning in the Latin official dictionaries.

Returning to the above examples, in addition to Latin, OS *trajati*, too, has a much narrower meaning: "to last, to continue", referring to the semantic palette of Romanian which is extremely intense and may even suggest the appearance of maintaining a certain originality.

Similarly, as phonetic and semantic preservation, for "a lovi", PRI 1112. laidh-, lidh-; RO *loví, lovesc (hit, strike)*, vb. IV. 1., *leziúne, leziuni* (lesion, injuries), s.f. ; și PRI 1805. sneig^{wh}- RO níngé (falling snow).

A problem of the Romanian language is the alleged separation from the other Roman languages, a division that Bouckaert and colabs (2012) establish as being about 270 CE, when part of Dacia ceased to be part of the Roman Empire. However, it is not clear whether the Romanian language comes directly from the Latin spoken in the Roman province of Dacia or from the Latin of a group of migrants arriving later. If the latter scenario is true, then the date of separation between the Romanian language and its sisters must be much later than the 270 CE. It is true, however, that since the first written Romanian text dates back only from the 16th century, we have no direct evidence of the early stages of the language ^{9, 10}.

The old Romanian dialects are homogeneous and mutually intelligible in a high degree, therefore do not fit into a scenario which establishes that the current language descends from the Latin language spoken in Dacia before 270 CE.

The surprising uniformity of the old Romanian dialects indicates that the Romanian language does not descend from Latin once spoken in Dacia, and therefore the date when Dacia ceased to be part of the Roman Empire is irrelevant for dating the emergence of the Romanian language ¹¹.

If Romanian descended from Latin spoken in Roman Dacia, prior to the date of 270 CE, it would have had to be spread later in areas that were not part of the conquered territory.

If this had been taken place, it would be expected to find a greater differentiation of the dialect from the "old Romanian territories" of Roman Dacia compared to the areas where the language arrived later. A parallel can be made

9. Pereltsvaig 2015, 102;

10. Letter of Neacsu, 1521;

11. Pereltsvaig 2015, 102;

with the large dialect differentiation in the basic countries of Russia (the European side), as compared to the newly acquired territories such as Siberia or the Far East¹².

If the Romanian language did not appear in part from what is Romania's territory, no other place could be found justify to such a movement of the population, which would then have included the whole territory of the country today, and including the Republic of Moldavia. So, most likely, Romanian language was formed in an area that includes the country's current territory. But if so, how can it be explained its basic resemblance to Latin, perhaps the most developed language in Europe at that time (270 EN), and on this similarity, the borrowings from the Slavic languages spoken in the neighbourhood, and especially the common lexicon with Hungarian language ?

Could it be just a simple result of cultural exchanges brought together, or, if allowed to say this, a dilute of a "primordial" tongue in the immediate neighbourhood and much more than that. Another aspect is the supposed disappearance of the Dacian language, the Indo-European language attested by Herodotus and Tucidides somewhere in an area that includes the present territory of Romania, which would not leave any relevant traces¹³, of course if these traces are not even considered the basic vocabulary of the Romanian language.

Thus, as we can see, a simple chronological mark "270 CE" for the separation of the Eastern Romanic languages from the other members of the family of languages, based on the historical event of the Roman withdrawal from Dacia, is misleading and does not say anything about the real history of the Romanian language. Moreover, as far as historical linguistics is concerned, the date is arbitrary¹⁴.

By limiting myself to observing the linguistic phenomenon, I noticed the reconstructions quoted by Pokorny J. in his work "*Indogermanisches etymologisches Wörterbuch*" Francke, 1959 and next to almost every reconstruction, I identified a

12. Pereltsvaig 2015, 103;

13. Mallory 1997, 145;

14. Pereltsvaig 2015, 104;

reference to Romanian, and sometimes I made short comments. For the Proto-Indo-European lexicon, the source considered to be invaluable, although slightly outdated, is Pokorny ¹⁵.

I have wanted to look for a possible correspondence between the term Proto-Indo-European and the Romanian one, and also the fact that in Romanian there was a wider range of meanings from the processed material than the other Indo-European languages. These meanings kept around the word that may even suggest originality.

Languages are evolving and are basically trying to form an articulated system capable of conveying a most relevant part of reality. The reconstituted variants of the old Proto-Indo-European language are part of a historical phonetics that attempts to retain and reproduce the groups of phonemes used at one time. The Romanian language seems to have had a long and little known historical course, and it is worth highlighting the aspects I consider that deserve careful study in the short comments inserted in the text of the article.

My approach tries to look at language, as a whole, a complex model that can present sub-parts, but the words do not regard them individually as separate pieces for which different assembly methods are allowed in complex lexical structures.

Therefore, a homogeneous approach is needed for all aspects of the grammar, their morphological patterns and derivatives, syntax, constructions and composition of the long sentences. The linguistic root of the word can be neither separated as part of the expression nor by the affixes, without the risk of losing the content of the communication.

This significance is associated with a larger unit, a corpus composed of a multitude of words that can be put into a pattern, and once it is composed it can designate a functional valid communication, belonging to a certain cultural group, by an entire population. In order to identify a primordial language, besides the possibility of reconstruction of the linguistic structure, various other elements, still

15. Woodard 2008, 244;

in use, should be associated indicating the lexical meaning of the word irreducibly morphological.

3. Metric for assessing phonetic similarity distance between pairs of reconstructed root terms and spoken words in circulation

To assess the difference between the root Swadesh terms and corresponding word kept in the Romanian spoken language an appliance of Levenstein distance is used on the transliterations of both PIE and corresponding Romanian word.

It is important to underline that this metric is used only to measure the distance between pairs of words in terms of numbers of transformations between each other, and not with the intention of clustering groups of words by the values of the distances. We make this important note as some studies are indicating that such kind of metrics are not recommended for classification purposes¹⁶ but just for measuring distances between strings, in our case transliterated phonetic strings.

The Levenshtein distance (LD) is a string metric for measuring the difference between two sequences. In our case the strings represent the transliterations into International Phonetic Alphabet, IPA¹⁷, of Swadesh reconstructions and spoken Romanian corresponding words. Thus, both Swadesh root term and Romanian word become sequences that can be computed in order

16. Greenhill 2011

17. <http://www.internationalphoneticalphabet.org/ipa-sounds/ipa-chart-with-sounds/>

to obtain a measure of the difference between them. The Levenshtein distance between two words which are compared is the minimum number of single-character edits (insertions, deletions or substitutions) required to change one word into the other. In our case the characters are phonetic IPA characters and the direction of the transformation is from the Romanian term to the Swadesh reconstructed term.

Mathematically, the Levenshtein distance between two strings x and y , of length $|x|$ and $|y|$ respectively, is given by $Lev_{x,y}(|x|, |y|)$ where

$$Lev_{x,y}(i, j) = \begin{cases} \max(i, j), & \text{if } \min(i, j) = 0 \\ \text{otherwise} \\ \min \begin{cases} Lev_{x,y}(i-1, j) + 1 \\ Lev_{x,y}(i, j-1) + 1 \\ Lev_{x,y}(i-1, j-1) + 1 \end{cases} \end{cases}$$

So, $Lev_{x,y}(i, j)$ is the distance between the first “i” characters of x and the first “j” characters of y . When $x_i = y_j$ the value of the transformation is 0 and 1 otherwise.

Thus, the distance between the source string (s) and the target string (t) is the number of deletions, insertions, or substitutions required to transform s into t . The closer to 0 the final value of the distance the more similar the two strings are¹⁸.

An implementation of this distance function can be found into R language, the package “stringdist” by Maintainer Mark van der Loo¹⁹. The indicative syntax of “amatch” function is:

```
amatch(x, table, nomatch = NA_integer_, matchNA = TRUE, method = c("lv"),
       useBytes = FALSE, weight = c(d = 1, i = 1, s = 1, t = 1), maxDist = 0.1,
       q = 1, p = 0, nthread = getOption("sd_num_thread"))
```

where the arguments are:

x : elements to be approximately matched (the source string)

18. <http://people.cs.pitt.edu/~kirk/cs1501/Pruhs/Spring2006/assignments/editdistance/Levenshtein%20Distance.htm>

19. <https://cran.r-project.org/web/packages/stringdist/stringdist.pdf>

table: lookup table for matching (the target string)

nomatch: the value to be returned when no match is found

matchNA: Should NA's be matched? Default behaviour mimics the behaviour of base match, meaning that NA matches NA

method: Matching algorithm to use, Levene in our case ("lv")

Example. Using Levenstein distance metric let's assess the phonetic similarity between Swadesh reconstruction and Romanian for two main terms belonging to the "family group" of terms: *father* and *mother*.

Family group term: *father*.

Swadesh reconstruction of the meaning *father*: tata, tēta

Romanian word having the exact same meaning: tata.

In order to be more explicit we are going to apply the algorithm iteratively showing the full calculation matrix. So, to transform the Romanian phonetic string "tata" (source string) into the phonetic Swadesh reconstructed string "tēta" (target string) the obvious change is that the mid front unrounded vowel "ē" has to go into the open central vowel "a". Let's see how this is computed in terms of Levenstein distance metric.

	Source string	t	a	t	a	iterations
Target string	0	1	2	3	4	i
t	1	0	1	2	3	i=1
ē	2	1	1 - change	2	3	i=2
t	3	2	2	1	2	i=3
a	4	3	3	2	1 - final score	i=4
iterations	j	j=1	j=2	j=3	j=4	LD = 1

So, LD (tata, tēta) = 1 which means one substitution of the second vowel (a to ē), so minimal difference.

Family group term: *mother*

Swadesh reconstruction of the meaning *mother*: amī. (Target string)

Romanian word having the exact same meaning: mama. (Source string)

So, following the same computation, given that in this case to transform mama into amã it is about a deletion (first “m”) and a substitution (a with “ã”) the phonetic distance is $LD(amã, mama) = 2$. Still a minimal difference.

Far more complex distance metrics can be applied. The simple Levenstein distance metric has been applied just to demonstrate that the phonetic similarity between PIE reconstructions and Romanian words is possible and even with this simple approach the similarity turns to be quite obvious even for non-Romanian speakers. Starting from the simple Levenstein string distance more refined metrics can be considered, taking into account refinements like:

- In case of deletions: if the place where the deletion has been done, beginning or end of the word or in the corpus of the word;
- In case of replacements: if the replacement is from the same group of vowels or, being the same vowel but with a different pronunciation (open central “a” against open near-back “ä”)
- In case of insertions: the place of insertion into the word, if the inserted sound is mimetic or not (like “mmama vs. ama”), etc...

These are directions for future development of this study in order to refine the phonetic similarity measurement.

4. Swadesh list 200. Compared PIE - Romanian language

Until the 1950s, no objective linguistic methods were used to establish language differences, known since antiquity, between the contemporary language and the one spoken in earlier historical periods.

There were only relative linguistic chronologies, by associating a language with the movement of a population and thus fixing it as being in use in a certain period, exclusively on the basis of archaeological evidence.

Historical languages, such as Latin, Teutonic, Church Slavic, Greek, Persian, Sanskrit, have been seen as coming from a single prehistoric language known as Proto-Indo-European. The words are linked to various agricultural concepts, and no word that can be attributed to any metal seems to have survived ²⁰.

Apart from the archaeological evidence, an opinion has been formulated that a lexical-statistical method for dating linguistics can be added, based on the fact that the non-cultural vocabulary tends to be permanently replaced in an approximately constant proportion ²¹.

Whenever a linguistic community separates, because of migrations or family ties, such as marriages, common ceremonies in general, trade, etc., language changes in an area become more or less independent of those which take place in another area ²². Swadesh M. formulated the hypothesis of a constancy of lexical retention in a language that separated from the mother trunk for periods of 1000 years, and also on the same criterion established degrees of drawing near among different languages.

20. Swadesh 1953;

21. Swadesh 1952;

22. Swadesh 1953;

In order to calculate the time period in which the separation took place, words put on a list were compared, which had as their first criterion their universality and not a cultural criterion, which would be the education of certain persons specialized in certain activities (*Swadesh 1952*). Up to a point, with evidence from historical texts, the way how people talked at a certain historical moment can be reconstituted.

The problem arises when trying to reconstruct the previous forms and structures of a language, beyond a period also called pre-historical one. Efforts for the reconstruction of the ancient, non-textually unrecognized languages are still in a provisional and highly controversial phase. The term "linguistic paleontology" is given to a technique that allows conclusions to be drawn on the material and non-material evidence of the cultures of ancient peoples by extracting samples from the languages they used.

This evidence is almost exclusively lexical. If it can be shown that an ancient people used a word for a particular object or practice, then it is likely that respective people were familiar with that object or practice ²³. There have been several attempts to introduce statistical methods oriented on various aspects of historical linguistics, and the oldest and simplest of them is the lexical-statistics.

The central idea is that certain words in any language are constantly replaced over time. If multiple languages are linked then a representative sample of each vocabulary can be chosen and the percentage of common elements is calculated ²⁴.

In order to make a lexical-statistical calculation possible, the related words must first be identified, and second, a standardized set of vocabulary elements, a matter that has been solved by the linguist Swadesh M., who set up word lists (*Swadesh 100 list*, *Swadesh 200 list*). Lists contain words that change more slowly than the general vocabulary: pronouns, small digits, names of parts of the body, simple verbs and adjectives ²⁵.

23. Trask 2015, 343;

24. Trask 2015, 350;

25. Trask 2015, 351;

The more similar is the vocabulary between the two languages the closer they are, and the time elapsed since the separation is shorter.

I did not want to emphasize any moment of separation between the Romanian language and the other Indo-European languages, but a comparison of the Romanian language with the reconstructions of the Indo-European vocabulary, relying also on a set of words that are independent of the cultural environment and have the capacity to remain somewhat constant over time ²⁶. In order to justify my effort, I also considered other evidence that do not belong to the linguistics field, such as archeology or even classic Greek.

In the original English list, translated into Romanian, I added the reconstructions of J. Pokorny and some references taken from IElex. I did this taking into consideration the semantic value of the phonetic construction and not for a mere phonetic resemblance.

In many cases, the IElex references allow the reconstruction of the PIE, if the point of reference provided by the Romanian language is taken into account (ex. ne.- right / ro. - drept / hit. - āra, alb. - drejt, ossetic - rast, vedic sanskrit - ṛjús, old Norse - rettr etc.).

The figures that precede the Pokorny's reconstructions correspond to those in my notes "*Aspects on the original source of words in Romanian language. Words with unknown etymology.*" Vol.1, 2, Cluj-Napoca 2017.

Pokorny's paper consists of a total of 2222 references intending to provide an overview of the lexical knowledge of the Proto-Indo-European language accumulated around in the twentieth century. This work is now slightly outdated, especially for its conservative character, which ignores the laryngeal theory and the limited inclusion of the material specific to Anatolia. The references are taken from 188 languages and the work remains, however, the main reference tool for researchers, especially since I have not noticed that any major correction has been made. Only such an approach, as Pokorny's, has the chance to set landmarks in identifying the Proto-Indo-European language. I have approximated that a very

26. Swadesh 1952, 1953;

high percentage of reconstructions find their correspondence in Romanian.

I tried to approximate the sounds of Romanian language, by following their functional valorisation and by looking for a corespondance in Romanian of the word element with a distinct lexical meaning, as identifiert by Pokorny, who did not include the Romanian language among his references. For the root I found I personally gave the pronunciation of the Romanian words according to the International Phonetics Alphabet. But this attempt also requires new approaches and a thorough and detailed research.

Here is the list, of the table as it was completed by me. I pointed out in bold letters the phonetic transcription of the Romanian words and then the reconstructions mentioned by Pokorny.

(NE – New English / RO - Romanian language, ROT - Romanian language dialect of Transylvania / PRI – Pokorny root index)

NE. / RO.ROT. / PRI.				
1.	I / eu [eu] 446. eġ-, eġ(h)om, eġō 529. eu - 2 1228. me -	70.	feather / pană, rot. [penā] / 1480. pen -1 IElex TohB paruwa	139. to count / a număra rot. [nemār] / 1371. nem -1
2.	you (singular) / tu (singular) [tū] / 2047. tū	71.	hair / păr (de pe cap) (ro. pār) / 1447. pār - IElex *pulo-	140. to say / a zice, a spune [spūne] 1828. (s) pel - ; ro.vorbă, rot. [uābā] 2072. uāb - 2124. uek ^w - 2167. uer-6
3.	he / el [ēl] / 437. ē 1, ō	72.	head / cap [kāp] / 840. kāp -, kəp-	141. to sing / a cânta, cânt [kant] / 835. kan -
4.	we / noi [nōi] rot. [nō] plur. [nōs] / 1354. ne -3, nō -, plur. nēs -, nōs -	73.	ear / ureche [urekē] / 2218. urek -	142. to play / a (se) juca, joc rot.[ġhōc] / 680. ġhō
5.	you (plural) / voi, dumneavoastră (plural) [voju] ? (arh.) / 798. ju -	74.	eye / ochi, rot. [ok ^w] / 1412. ok^w -	143. to float / a pluti ? / 841. kāpo - (capu, [kāpo] deasupra?) (insufficient materials)

6.	they / ei [ei] 439. <i>e-3</i> , ei- , <i>i-</i> , fem. <i>ī-</i>	75.	nose / nas [nas] / 1349. nas-	144.	to flow / a curge , rot. cure [korje] 743. <i>g^whðer-</i> 1009. koro-s , korjo-s
7.	this / acest(a), aceasta (neutru), ăsta, rot. [ātta], aist, atta) / 42. <i>ais-1</i> 127. ātos , atta	76.	mouth / gură [gürā]/ 1437. <i>ōus-1</i> : <i>əus-</i> <i>IElex</i> * <i>h₁oh₁s-</i>	145.	to freeze / în+gheață, rot. [gheatsə] 773. <i>jeg-</i> 642. gheləd-
8.	that / acel(a), aceea (neutru) ăla [alā] (rot. <i>ōl'</i>) / 59. alā , 437. <i>ē 1</i> , <i>ō</i>	77.	tooth / dinte / ro.rot. [dendé]? 441. ed- <i>IElex</i> * <i>h₁dónt-</i> , * <i>h₁dŋt-</i>	146.	to swell / a se umfla / ro. crește), rot. [ghrəshte] 654. <i>gher-3</i> , <i>ghrē-</i> : <i>ghrō-</i> : ghrə- 688. (<i>ghrē-</i> :) <i>ghrō-</i> : <i>ghrə-</i>
9.	here / aici, încoace, rot. [aist] / 42. <i>ais-1</i>	78.	tongue (organ) / limbă (organ) [lŋbuā] / 361. <i>dŋghū</i> , dŋghuā <i>IElex</i> * <i>dŋgh^wéh₁s</i>	147.	sun / soare rot. [sūole] or [sāuoré] / 1652. <i>sāuel-</i> , sāuol- , <i>suuel-</i> , <i>sul-</i> , <i>sul-</i> <i>IElex</i> * <i>sóh₂w!</i>
10.	there / acolo, încolo, aia, celălalt, ăla [āla] / 59. alā	79.	finger nail / unghie [onghie] / 1422. onogh- (: <i>ongh-</i> , <i>nogh-</i> ; kelt. <i>ŋgh-</i>), ongh-li- <i>IElex</i> * <i>h₃nóg^h-s</i>	148.	moon / luna ? (insufficient materials) <i>IElex</i> * <i>méh₁ŋs</i>
11.	who / care [kāre] / 800. kā-	80.	foot / laba piciorului, labă [labhā] / 1108. labh-	149.	star / stea rot. [sté] / 1891. stēr- <i>IElex</i> * <i>h₂stér</i>
12.	what / ce rot. [ke], cum [kom] / 801. <i>kā</i> , ke , kom	81.	leg / picior rot. [pēdcor] / 1454. pēd-2 , <i>pōd-</i> (<i>in lat.</i> <i>pes</i> , <i>pedis</i>)	150.	water / apă rot. [ak^wā]/ 2. <i>ab-</i> / 52. ak^wā- : <i>ēk^w-</i> <i>IElex</i> * <i>ak^wā</i>
13.	where / unde, încotro rot. [ue] / 2190. ues-7	82.	knee / genunchi rot. [ġenunč] / 571. ġenu-1 , ġneu- / 548. <i>gei-</i>	151.	rain / ploaie, plouă [plouə] / 1200. lou- , louə-
14.	when / când / (insufficient materials) n.a. * <i>kond</i>	83.	hand / mână [mənā], rot. [monu] / 1307. mə-r , gen. mə-n-és , <i>mŋtós</i> <i>IElex</i> * mon-u-	152.	river / râu, gârlă [g^welə] 713. <i>g^wel-2</i> , g^welə- , <i>g^wlē-</i>
15.	how / cum (insufficient	84.	wing / aripă [aripə] /	153.	lake / lac [lak] art.

	materials) n.a. *kum		1604. <i>rejə-</i> , <i>rī-</i>		[laku]) / 1117. <i>laku-</i>
16.	not / nu rot. [nē, nei] / 1352. <i>nē1, nē, nei</i>	85.	belly / burtă = stomach [stomak] / 1212. mak- 1903. stomen-	154.	sea / mare (substantiv) rot. [mōre] / 1326. mori, mōri
17.	all / tot / plin rot. [plēn] 1467. <i>pel-1, pelə-, plē-</i>	86.	guts / măruntaie, mațe / (ro. cârnat) rot. [ghornāts] 659. gher-5, ghor-nā	155.	salt / sare [sāre] / 1826. <i>sp(h)ē(i)-3, spī-</i> und sphē- : sphə-
18.	many / mulți (insufficient materials), n.a. *multī	87.	neck / gât [ghet] / 573. ghp(h)-, gēbh- 1123. lauk(o)- (ləuk-)	156.	stone / piatră, rot. [keâtřə] 872. keipo- , koipo- 1171. <i>lep-3</i> 1183. <i>lēu-2 : ləu-</i> 1417. <i>ond-</i> , <i>ŋd-</i> IElex *h ₂ ekmon
19.	some / câtva, niște sau singur, rot. <i>singwor</i> (insufficient materials) IElex *solwo-	88.	back / spate [sphathe] ? / 1882. <i>(s)teig^w-</i>	157.	sand / nisip [ŋsiph] / 1396. ŋsi-
20.	few / puțin / micu rot. [mīghu] 1337. <i>mreghu-</i> , mřghu-	89.	breast / piept [pekth] / 1496. perk-1	158.	dust / praf [praph] 1505. pēs-2 , nazal pēns- (ro. pulbere, polen) [pelen] 1469. pel-2b, pel-en-, pel-t-, pel-ŋ-
21.	other / alții / alt [oltzī] / 53. <i>al-1, ol-</i>	90.	hear / inimă / cord [kōrd] / 934. (<i>kered-:</i>) <i>kerd-, kērd-, křd-, kred-</i>	159.	earth / pământ [pəmənth] / 1476. <i>pelə-</i> , plā- IElex *d ^h gh ^(e) m, *d ^h égh ^h -m
22.	one / un [ūn] / 439. e-3, ei-, i-, fem. ī- 793. jo-	91.	liver / ficat rot. [jek^wāt] / 777. jēk^w-ř(t-) , Gen. <i>jek^w-</i> <i>n-és</i>	160.	cloud / nor [norh] / 481. (<i>enebh-2</i>), <i>nebh-, embh-</i> , <i>ŋbh-</i> 1356. nebh-2 IElex * néb^h-os
23.	two / doi rot. [duōī] / 369. duō(u) 2198. ŋī-1	92.	to drink / a bea, beat rot. [bat] (160. bata-	161.	fog / ceață / negură [dhegūrə] ? 391. <i>dhem-</i> , dhemə- IElex *(s)neŋd ^h -, *(s)noŋd ^h -.
24.	three / trei [trei] / 2027. trei-	93.	to eat / a mânca, mânc rot. [menənk] 1286.	162.	sky / cer rot. [kēru] / 941. kē-ro-

			men(ə)k- / 1291. <i>menth-</i>	
25.	four / patru rot. [k ^w ethrɥ] / 1098. k ^w etɥer-, k ^w etuõr-, k ^w etur- m., k ^w etes(o)r- f.	94.	to bite / a mușca / mușc [mɥshk] / 1216. mako- sau moĕ-o- 1218. makh-o- s, -(s)lo- 1276. mēmso-, mē(m)s-ro-	163. 2132. ɥel-7, ɥelə-, ɥlē- IElex *kewero-
26.	five / cinci [ĉenĉ] / 1482. penk ^w e	95.	to suck / a suge [shūgh] / 381. dhē(i)- (daneben dh-ei-?)	164. snow / zăpadă, nea, v. ninge / [ning ^w -(e)] 1805. sneig ^w h- IElex *snejg ^w h-
27.	big / mare (adj.) [mōrĕ] / 1233. mē-4, mō- / 1240. meĝ(h)- : mĝ(h)-	96.	to spit / scuipt rot. (s)cpjū / 1852. (s)p(h)jēu- : (s)pjū-, (s)pīɥ-	165. ice / gheață [gheatsə] ? / 642. gheləd- IElex *yeg-
28.	long / lung rot. [longho] / 333. del-5 com. (d)longho- /d/longho-s:	97.	to vomit / a vomita, vomă [ɥemə] / 2136. ɥem-, ɥemə	166. smoke / fum / mocnește [meughnshte] ? / smog [(s)meugh] 1798. (s)meukh-, (s)meug-, (s)meugh-
29.	wide / larg rot. [lerg] / 1174. lerg-	98.	to blow / a sufla, a pompa [bha ^m bha] 149. ba ^x b-, bha ^x bh-, pa ^x p-	167. fire / foc [bhok] / 271. bhleu-(k)-, (-s)-, IElex *h ₂ eh ₁ -t(e)r- *péh ₂ -ur, *p(e)h ₂ -ɥén-*h ₁ ng ^w -ni-
30.	thick / gros [grōs] gras [gras] / 555. gel-1 595. gras- :grōs- / 740. g ^w retso-	99.	to breathe / a respira [resphira] ? / 1538. pneu- (cu re. -repeat)	168. ash / cenușă [kenushə] / 906. ken-2, kenə-, keni-, kenu-
31.	heavy / greu [ghrēu] / 582. ĝeu-, ĝeɥə- (în plus geɥə-) 601. greut- 674. gheub(h)- 698. ghrēu-1 : ghrəu- : ghrū- 699. ghrēu-2 : ghrəu- : ghrū- 719. g ^w er-2, g ^w erə-, g ^w erəu-, g ^w erī- 1039. kreu-2	100.	to laugh / a râde rot. [rēd] / 1585. rēd-1	169. to burn / a arde [ārt(e)] / 124. āt(e)r-
32.	small / mic rot. [māk] / 1217. māk- : māk- 1280.	101.	to see / a vedea, văd rot. [ɥadh] / 2073. ɥadh-	170. road / drum / rot. [druām] 354. deu-3,

	men- 1280. men- 1337. mreǵhu-, mǵhu-				deṽə-, duā- , dū-
33.	short / scurt [skurt] / 1738. (s)ker-4, (s)kerə-, (s)krē-	102.	to hear / ? a auzi, auz [āṽdh] / 981. k̄leu-1, k̄leṽə- : k̄lū-	171.	mountain / munte rot. [mōnghe] / 1285. men(e)gh-, mon(e)gh- , mṽgh-
34.	narrow / îngust [anǵhūst] 85. anǵh-	103.	to know / a ști / (ro. ind. uite sau vb. uite) rot. [ṽ(e)ith] 2110. ṽ(e)id-2	172.	red / roșu [roṽ] / 1627. reudh-
35.	thin / slab rot. [slēbh] / 1770. slēg ^w -	104.	to think / a (se) gândi [ǵendí] / 567. ǵen-2, ǵenə-, ǵnē-, ǵnō- 759. g ^w hren-	173.	green / verde rot. [kē(r)kē] ? / 876. kēko
36.	woman / femeie / IElex * g ^w ěn , * h̄iesor- (insufficient materials)	105.	to smell / a mirosi / ro. brahă [bhraghā] 287. bhrag- sau bhrə-g-	174.	yellow / galben rot. [ǵhelbhen] / 637. ǵhel-1 (și ghel-?), ca i-, u- sau n- tare; ǵhelə- : ǵhlē-, ǵhlō- : ǵhlə-
37.	man (adult male) / om rot. [omu] / 1221. manu- s sau monu-s; / IElex *hznēr (insufficient materials)	106.	to fear / a se teme, teamă rot. [t̄iemə] / 2016. t̄ieg ^w -	175.	white / alb [alb] 61. albho-
38.	man (human being) / om rot. [omu] / 1221. manu-s sau monu-s; IElex **wiHrós (n.a. "erou")	107.	to sleep / a dormi [dòrm] / 364. drē- : drə-, extins dr- ēm-	176.	black / negru, sur [sur] 1396. ṽsi- 1951. suordo- s
39.	child / copil [cophil] / (insufficient material)	108.	to live / a trăi / viață, viu, vie, vii rot. ghiu/ghie [g ^w īu] 708. g ^w eǵ-3 și g^weǵə- : g^w(i)ǵē- : g^w(i)ǵō- : g ^w ī-	177.	night / noapte [nok ^w te] / 1370. nek^w-(t-) , nok ^w -t-s
40.	wife / soție rot. [sots] 1669. sek ^w -1)	109.	to die / a muri, moarte rot. [moruthe] / 1294. (mer-3), mor-(u)- / 1295.	178.	day / zi [dī] / 322. dei-1, deǵə-, dī- , dǵā-

			<i>mer-4, merə-</i>		
41.	husband / soț rot. [sots] / 1669. sek ^w -1	110.	to kill / a ucide, a omorî, omor [ōmaur] 1226. mau-ro-	179.	year / an [en] / 123. at-478. en-2
42.	mother/ mama [māmā] / 75. am(m)a, amī 1204. mā / 1225. mātér-	111.	to fight / a se bate, a lupta, lupt [leupht] 1112. laidh-, lidh-1189. leug-1	180.	warm / cald [kāld] / 812. kāi-3, kī-
43.	father / tata [tata] / 1960. tata- , tēta- u. dgl	112.	to hunt/ a vâna [uēnə] / 2137. uēn-1, uēnə-	181.	cold / rece, frig, ger [ger] 557. gel(ə)-3 ; frig [srīg] 1867. srīg- , srīgos-
44.	animal / animal / (insufficient materials)	113.	to hit / a lovi rot. [liuī] / 1112. laidh-, lidh-	182.	full/ plin [plēn] / 1467. pel-1, pelə-, plē-
45.	fish / pește rot. [peiske] / 1463. peisk- , pisk-	114.	to cut / a tăia rot. [tuēi], tăios [taios] / 40. ajos- 314. <i>dā</i> : <i>də-</i> and <i>dāi-</i> : <i>dəi-</i> : <i>dī-</i> / 856. <i>kāu-</i> , <i>kəu-</i> 1957. <i>tāl-</i> 2052. tuēi-1 2058. <i>tuerk-</i>	183.	new / nou [neu] / 1386. neuos- , -jos
46.	bird / pasăre [bhāsore] / 195. bhāso- or <i>bhēso-</i> <i>IElex *h₂éu(-)i-</i>	115.	to split / a despica, a tăia v 114) tai [dāi] 314. <i>dā</i> : <i>də-</i> și <i>dāi-</i> : <i>dəi-</i> : <i>dī-</i> 2052. tuēi-1	184.	old / vechi / (insufficient materials) ro.senior [senior] 1691. sen(o)-
47.	dog / câine rot. câine [kune] / 1077. kūon- , kun-	116.	to stab / a înjunghia, a băga [bhag] 257. bhlag-	185.	good / bun [bhun] / 182. <i>bhād-</i> (s.n.) 250. <i>bheudh-</i> , nazal bhu-n-dh-
48.	louse / păduche, leneș [lenesh] 1201. <i>lūs</i> , gen. luu-ós	117.	to scratch / a zgâria, a scărpină, ghera [ghera] 657. gher-3 și gherə- , <i>ghrē-</i> v. 648, 653, 656.	186.	bad / rău rot. [rēu], prost / 1580. rē-5
49.	snake / șarpe rot. [selpe] / 1675. sel-5 (ro.reptilă) [rēptlə] 1617. rēp-1 (rep-?)	118.	to dig / a săpa rot. [sāph] / 1687. seng^w-	187.	rotten / putred [purthered] / 503. ered-
50.	worm / vierme rot.gheme [k ^w ṛmi] / 1101. k^wṛmi- / 2151. uer-3: A. uṛmi-s,	119.	to swim / înot rot. [nət] / 1800. <i>snā-</i> , snə-(t-) , <i>snāu-</i> , <i>sn-eu-</i> , <i>sn-et-</i>	188.	dirty / murdar rot. [maidar] 1211. mai-2 (moi-?)

	<i>uḡmo-s</i>			
51.	tree / copac, pom, arbor(e) [erbhære] 513. er(ə)d- (<i>r/ə/d-</i>), <i>er(ə)dh-</i>	120.	to fly / a zbura, hop rot. [uēp] 2147. uēp- : uəp- IElex *g ^w el- *peth ₂ -	189. [dherebht] / 405. dherebh-
52.	forest / pădure, codru [kaidrō] 819. kaito-	121.	to walk / a umbla, a merge, mergem, merg rot. [bherem] 241. bherem-1 651. ghengh-; rot. [méi], restricted from "mére", with the meaning "merge") 1243. mei-3 IElex *g ^h red ^h -	190. round / rotund, colac rot. [k^weləc] 1089. k^wel-1 , k^welə- ; roată [rothā] 1620. ret(h)-
53.	stick / băț [bats] ? / 153. bak-	122.	to come / vin, a veni (rot. ghini) / (PIE mat.insuf.) IElex *g ^w em-	191. sharp (as a knife) / ascuțit [askūtzit] , tăios / 1057. kū-
54.	fruit / fruct [bhrūg(t)] 309. bhrūg- ; rod [ōd] 1405. ōg- , əg-	123.	to lie (as in a bed) / a se culca, a sta culcat, stă [stā] / 1869. stā- : stə-	192. dull / tocit, bont, rot.dâmb [dhābh] / 370. dhābh-1 , nazal. dhamb(h)- ; ro. tâmp [dhamb(h)]
55.	seed / sămânță, boabă rot. [bhabhā] 181. bhabhā	124.	to sit / a se așeza, a șede rot.[sed] 1654. sed -	193. smoth / neted, măcinat, moale, rot. [molē] 1257. mel-1 (sau smel-), melə- : mlē- , mel-d- : ml-ed- , mel-dh- , ml-ēi- : mlī- , melə-k- : mlā-k- , mlēu- : mlū-
56.	leaf / frunză / (insufficient materials)	125.	to stand / a se ridica în picioare, a sta în picioare / a sări rot. [sērī] 1663. sēik- , sīk-	194. wet / umed, ud [udh] / 2135. uelk-2 , uelg- / 2186. ues-3
57.	root / rădăcină [rədəčnā] / 2175. u(e)rād- , u_rrād- , urād-	126.	to turn (intransitive) / a se învârti / colac rot. [k^welək] 1089. k^wel-1 , k^welə-	195. dry / uscat [euskat] ? / 534. eus-
58.	bark (of a tree) / scoarță (de arbore) / (insufficient	127.	to fall / a cădea, cad rot. [keid] 869. keid-	196. correct / corect, just [jeust] 792. jeuos-

	materials) cojă [cōjā]				
59.	flower / floare / (insufficient materials)	128.	to give / a da, dă [dā] / 313. dā -	197.	near / apropiat, aproape / (insufficient materials)
60.	grass / iarbă [erbu] / 499. er-4 (er-t-, er-ȳ-)	129.	to hold / a ține / prinde [bhrendhé] / 294. bhrendh-	198.	far / (în) depărtat, departe, uitat [uitā] (PIE mat.insuf.) IElex *u _i -itós
61.	rope / frânghie, funie, coardă rot [kōrdhō] / 420. dhō- 421. dhō[u]-	130.	to squeeze / a strânge, strâng, rot. [streng] / 1908. <i>strenk-</i> , streng-	199.	right / drept (contrarul lui „stâng”), dreapta / PRI IElex (mat.insuf.)
62.	skin / piele, rot. [piəle] / 1457. pej(ə)-, pī-	131.	to rub / a freca / șterge, rot. [sterg] 1898. sterg- (see 133)	200.	left / stâng [stj _i ŋg], (contrarul lui „drept”) / PRI (mat.insuf.) IElex *(H)sej _i uó-
63.	meat / carne [kārne] / 1038. <i>kreu-1</i> , kreuə- ; <i>krū-</i> ; <i>kreus-</i> , <i>krus-</i>	132.	to wash / a spăla, ploaie [blo _u ə] 1200. <i>lou-</i> , louə- <i>lăvor</i> , rot. [louər]	201.	at / la (mat.insuf.)
64.	blood / sânge [sāng ^{wé}] / 521. ēs-ŕ(g^w) , gen. <i>ē-s-n-és</i>	133.	to wipe / a șterge, șterg [suerg] / 1946. suerbh- (also suer- ?) (see 131)	202.	in / în (mat.insuf.)
65.	bone / os [os(h)] / 1433. ost(h)- ; <i>ost(h)i</i> , <i>ost(h)r(g)</i> , obl. <i>ost(h)-(e)n-</i>	134.	to pull / a trage, rot. [dhreg̃] or [treg] / 423. dhreg̃- 2026. treg-	203.	with / cu [k ^w ō] , de, la, prin / PRI (mat.insuf.) IElex *pe *kom
66.	fat (noun) / grăsime, slănină, spârc [selp] 1680. selp- 378. <i>dheb-</i>	135.	to push / a împinge, cădea, rot. [g ^w edh] 705. g^wedh- (ro.struni) 1899. (s)teu-1	204.	and / și, dar, că [k ^w ə] / PRI (mat.insuf.) IElex *k ^w e
67.	egg / ou [ôû] / 1440. <i>ozgho-</i>	136.	to throw / a arunca, rot. țâp [ȳep] 2146. ȳep-2	205.	if / dacă, că, să / PRI, IElex (mat.insuf.)
68.	horn / corn [korn] / (n.a.) qeren ebr. קֶרֶן	137.	to tie / a lega [leg̃] / 321. <i>dēg-</i> , 1128. leg̃- , 1145. <i>leig-4</i> , <i>leig̃-</i>	206.	because / deoarece, pentru că, că / PRI, IElex (mat.insuf.)
69.	tail / coadă, rot. [kōdə] / 889. <i>kel-3</i> , 996. <i>kōləmo-s</i> , kōləmā , 1404. <i>ōd(e)go-</i> sau <i>ōd(e)g^wo-</i>	138.	to sew / a coase, cos [k ^w ōs] / 1088. <i>k^weġ-</i> , <i>k^wōġ-</i> , k^weġ- s-	207.	name / nume [nōmŋ] / 487. <i>en(o)mŋ-</i> , (o)nomŋ, nōmŋ

5. Instead of conclusions

I am not a specialist, nor did I have the competence or the time needed for a thorough linguistic study, or to go through a more comprehensive anthropological material. So, I do not want to formulate conclusions with claims of comprehensiveness. I tried to suggest another possible perspective of addressing the Indo-European controversy, one in which I did not suppose that the proto-language PIE is missing and is no longer in use, as a unitary lexical and grammatical corpus, but it is used on a narrow territory, being seen as a late form (270 EC) under various cultural contexts.

This diversity is the one that misleads at a first glance and establishes the formation of the language at a historical moment after the formation of the languages supposedly constitutive of the Romanian language (Latin, Classical

Greek, Old Slavic, and now French, then English); or why Sanskrit has more accurate correspondence in Romanian than in other Indo-European languages.

Nobody explained with sufficient details, where the language of the Dacians disappeared, and whether it is possible for it to be incorporated into the spoken Romanian language. The vocabulary considered as autochthonous according to the Romanian Academy, would be somewhere at 0.18% of the lexical mass ^{27, 28}.

From the material presented above, which was also collected by Pokorny, other functional values of the sounds, which converge to a new significance, can be detached.

Each term found by J. Pokorny is a phonetic approximation of the original root, and the author must have not claimed that he has come to identify his word and its vocalisation, just as it was used in the PIE. The landmarks considered led to a certain reconstruction, which obviously meant to be as faithful as possible to the original. The Romanian language has never been taken as a reference, because by the time, as it is today, this language is considered, without a pertinent justification, as having a late training process after the conquest of Dacia by the Romans (101- 102 CE) and later the Aurelian's withdrawal (275-276 CE). Thus, in addition to the Slavic loans, the lexical and / or phonetic diversity was explained.

In most cases, however, observing a semantic vector, the reconstruction analogy with its Romanian correspondent is obvious and cannot be the result of a mere coincidence. In the absence of convincing counter-arguments, there is no reason to question the fact that Proto-Indo-European resembles, more or less, the phonetic entity carefully reconstituted and accepted by most linguistic historians ²⁹.

Only an identification by linguistic comparison taken to the extreme and on a whole lexical corpus, along with irrefutable archeological arguments, can point to a certain territory.

So, by approaching another perspective, we observe that human genetic

27. DOOM over 62,000 worlds, and after;

28. Mihăilă, 2006, 115 words;

29. Bryant 2001, 73;

researches point to a great wave of changes around the 3,000 BC, wave that does not seem to originate in the Near East (including Anatolia, too).

Linking the language to genetics, however, seems to be an uncertain matter, as language can and often spreads independently of the gene flow ³⁰.

Compared to the current hypotheses, which indicate that the PIE homeland is located in the East of the Black Sea (Yamnaya) steppe, or, in the current version, in the South Black Sea area (Anatolia) recalls a presentation that took place at the Institute MAX PLANCK in 2015, pointing to an alternative solution.

Thus, after studying 1.2 million genomes - unique nucleotide polymorphisms on a sample of 26 Neolithic human relics (~ 6,300 BC) in North-West Anatolia, it was revealed the existence of a homogeneous population, genetically similar to the first farmers in Europe ($F_{ST} = 0.004 \pm 0.0003$ and the frequency of 60% of chromosome Y of the haplogroup G2a). The model of an early Neolithic farmer in Central Europe and Iberia seems to have been a genetic blend of ~ 90% Anatolian and ~ 10% hunter-gatherers in Europe, suggesting a reduced influence of the Europeans in the Mezolithic before dispersing of the European farmers inside the continent.

The Neolithic Anatolians differ from all current Western Asian populations, suggesting that genetic changes took place in some parts of this Neolithic region. It is suggested that the language spoken by the homogenous group of European farmers in Neolithic Anatolia is unlikely to have been the same as that spoken in the Yamnaya steppe, whose ancestors were shepherds in Eastern Europe and a different population of the Caucasus / Near East. This involves different alternatives of dispersion of the Indo-Europeans, to the accepted theories of Yamnaya Stepes or Anatolia, and the real variant seems to be on the European Black Sea side.

In addition to paleo-linguistic researchs and of human genetic material, the analysis of old DNA of the domestic animals can serve as a powerful tool in tracking the movement of prehistoric populations. For example, recent studies have highlighted some aspects of the history of domestic animals and especially old ovine

30. Pereltsvaig 2015, 135;

specimens ³¹. The results suggest that domestic sheep seems to have made its way to China from the European Black Sea Region around the 5,000 BC. Domestic pigs, even if we limit ourselves to those from the *Sus scrofa* group, have many origins of wild races and a respectable history of about 10,000 years.

However, European native pig breeds appear to be more similar to those of Turkey than those in Western Europe ³², which may also originate in the Proto-Indo-European space, and their spread on the old continent, linked to population movements. Tamed horses seemd to have more areas where they were tamed, so I will not seek here to on one or the other theory.

Troy was not the homeland of the populations that were called "Luwian" ("Ru-wa-ni-jo" ³³), earlier than the archaeological observations on the destruction of Troy II (ca. 2,600-2,500 BC), the first period in which the proto-Indo-European populations arrived, from somewhere in the Balkans ³⁴ and it is the last time we can speak about the Proto-Indo-Europeans.

According to a widely accepted point of view, even Greek speakers, or rather a language from which the Greek language was developed, called the mello-Greeks, arrived in the current territory of Greece at the beginning of Early Helladic III, somewhere around 2,300 BC. The Mello-Greks followed the Epirus way, and they came fom the north of the Danube. Recent historians settled the origins of the Greeks somewhere in today's territory of Romania ³⁵.

The Indo-European heritage of ancient Rome is well established as the Latins and therefore the Romans spoke an Indo-European language and worshiped the Indo-European gods. Georges Dumézil tried to prove that the institutional and intellectual patrimony of the Romans was organized according to a Proto-Indo-European model ³⁶. The foundation of Rome by Romulus and Remus, fed by

31. Da-Wei 2007:

32. Alabarella 2007, 25;

33. Wedmer 2007;

34. Bachhuber 2013, 283;

35. West 2007, 8;

36. Walbank 2008, 54-55;

a she-wolf, and the subsequent twins fratricide necessary to found the city, are probably the most suggestive events proving the Proto-Indo-European origin.

On the other hand, there were found genetic affinities among the historical provinces of Romania and Central Europe as revealed by an mtDNA analysis.

Samples from 714 individuals from the historical provinces were studied, by analyzing the mtDNA control region and coding markers to encompass the complete landscape of mtDNA haplogroups. It was observed a homogenous distribution of the majority of haplogroups among the Romanian provinces and a clear association with the European populations. A principal component analysis and multidimensional scaling analysis supported the genetic similarity of the Wallachia, Moldavia, and Dobrudja groups with the Balkans, while the Transylvania population was closely related to Central European groups ³⁷. Homogenous distribution of the majority of haplogroups among the Romanian provinces, does not correspond to the conquest of Dacia by Rome (approximately 14% territory) and points to a much older factor that created this homogeneity.

This opinion, which I summarized briefly, that of enriching the Romanian language, with a significant corpus from the Proto-Indo-European Lexicon (PIE), does not appear to have been scientifically formulated, not even as a working hypothesis. It is worth highlighting the combination of the lexic of Latin, Slavic and Greek languages present in the Romanian and the obvious phonetic correspondences, closely linked with those of semantics, in connection with the hypothetical reconstructions of the old Proto-Indo-European language, as it was reconstituted.

The root has undergone with its dispersion and the integration of a pre-existing culture an obvious change, but the same semantic overlaying phonetics allowed it to conserve. Here, an excessive theorizing will remove even the object of the study. Having many verified information about language changes, linguistic historians have, long ago, realized that phonological and grammatical changes are unidirectional, and many examples of grammatical free morphemes can be linked to

37. Cocoş 2017;

illustrate this point of view ³⁸.

Giving credibility of this theory, once the PIE language was spread, probably due to overpopulation ³⁹, there would be no justification for the basic lexico-phonetic "repopulation" of the original training area, even if it is obvious that the language is continually evolving.

38. Pereltsvaig 2015, 67;

39. Dumézil 1993, 24,78.

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ACRONIME

OS – vechea slavă / old slavic

NE – engleza contemporană / new english

PRI – indexul rădăcinilor Pokorny / Pokorny root index

RO - limba română / romanian language

ROT – limba română dialectl din Transilvabnia / Romanian language dialect of Transylvania

LAT – limba latină / latin language

PR – pronunție / pronunciation

CE – era noastră / common era

BCE – înaintea erei noastre / before common era

arh. - arhaic - archaic

art. - articulat / articulate

