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Abstract: This paper contradicts the centum-satem linguistic hypothesis that appeared in the intention of reconstructing the Proto-Indo-European language based on the evolution of dorsal consonant classes. Considering the peculiarities of the linguistic and cultural South-Eastern European context, we found that the centum-satem isogloss is unsatisfactory for our intention of explaining this context. In this respect, we designed a mixed research, in order to identify features of the Indo-European languages, based on an analysis of some morphological units from lexical fund of words of the languages under scrutiny. We included 123 Indo-European languages in the research corpus, analyzing the distribution of linguistic branches and groups in relation to words from the main lexical fund: water, to be and brother. Furthermore, we traced isophones and isoglosses and compared them with the centum-satem isogloss. We found that archaeological and anthropological data sustain the hypothesis of the Indo-European languages classification based on proposed isophones/isoglosses and not on the centum-satem isogloss. The present paper is important because it casts a different analytical light upon the Indo-European languages distribution, starting from the area where the two families of isoglosses intersect, specifically the South-Eastern European area.

Keywords: South-Eastern Europe, Indo-European languages, centum-satem, isoglosses, Balkan linguistic unity, Kurgan theory

1. INTRODUCTION. BOUNDARIES OF THE CENTUM-SATEM HYPOTHESIS

We initially intended to approach the cultural area of reference by means of a mixed method of investigation, qualitative-quantitative, and further on, within this particular area, to set the foundation for a qualitative research focused on the role of the southeastern European cultural context in configuring cultural sign systems. In order for us to be able to focus on the configuration of the local cultural background, we thought it was important to consider some referential theoretical elements: the hypothesis of a South-Eastern European cultural and religious syncretism, put forward by the Lithuanian archaeologist and pre-historian Marija Gimbutas and by the French linguist André Martinet and the hypothesis of the Balkan "linguistic union", promoted by the Slovenian linguist and philologist Jernej Bartol Kopitar and analyzed by the Russian phonologist Nicholas Trubetzkoy (a representative of the Prague Linguistic Circle) and by the Romanian academician Al. Rosetti.

From this starting point, so long as "Old Europe", in Marija Gimbutas' acceptance (1989:49) constituted a cultural whole, a cultural entity existent between the interval 6.500-3.500 B.C., based on a matriarchal society, a theocratic, peaceful, loving and art-making one that preceded the patriarchal Indo-Europeanized societies of warriors from the Bronze and Iron epochs,

our attention needs to center on those linguistic elements that can be analyzed specifically. "Old Europe's" languages, which offered the constitutive background for the "Balkan linguistics" topic, should the "theory of substratum not be sufficient for the explanation of these coincidences among languages that are genealogically related, "(Rosetti, 1938/1943:29), cannot yet be reference elements for the study of cultural particularities. In case this hypothesis were plausible at the level of phonetic or morphologic analysis of the Balkan area's current languages, in other words if there were a common pre-Indo-European substratum, this would mean that the exhaustive analysis (both from a synchronic and a diachronic perspective) of various words belonging to the Indo-European basic lexicon could configure a complete and correct picture of some distinct and particular linguistic areas. More precisely, should the IndoEuropean languages have developed based on an Indo-European substratum, then, both the extinct and existing languages of this area would preserve common elements (especially their consonants).

Such an approach to the topic under debate opposes the classical organization of Indo-European languages based on the centum-satem isogloss. The isogloss represents a distinct area on a map, within which there are specific linguistic particularities. Isoglosses, generally used within the inferior linguistic divisions: group, subgroup, section, language, dialect, subdialect, vernacular, distinguish between aspects related phonological particularities to (isophones), semantic particularities (isolexes). particularities of syntactic constructions or distinct ways of inflecting some words. Obviously, the most well known isogloss is the centum-satem isophone, the distinction between its components being noticeable within the Indo-European languages, in accordance with the evolution of dorsal consonants. Its name originates in signifiers of the term one hundred in Latin (centum) and in Avestan (satom). The isogloss, when related to dorsal consonants' evolution, regards the reconstruction intention of the proto-Indo-European language, starting from the studies of the German linguists Franz Bopp (1835), August Schleicher (1871) or Karl Brugmann (1886). Karl Brugmann divided the Indo-European language family into labialized and non-labialized languages, reminding of the above-mentioned isogloss' distribution. The terms centum and satem were for the first time used by Peter von Bradke (1890) in reference to the two classes of the language family, highlighted on a map by a vertical line that divides Indo-European Eurasia into two parts, respectively, at phonetic level, by retention of initial k- for the terms denoting one hundred in centum languages, and in assibilation - phenomenon that consists of transforming a non-sibilant sound into a sibilant sound, respectively, k- into s-, š or s' in satem languages (Ruhlen, 1991:54).

INDO-EUROPEAN	LANCHACES.
INDU-LUNUI LAN	LANGUAGES.

I. EASTERN (=satem)	II. WESTERN (=centum)
A. INDO-IRANIAN:	A. GERMANIC
1. INDO-ARYAN	B. ITALO-CELTIC:
2. IRANIAN	1. ITALIC
B. Armenian Ron	nanian 2. CELTIC
C. Albanian	C. GREEK
D. BALTO-SLAVIC:	
1. BALTIC	
2. SLAVIC	

Figure 1. Centum-satem classification of Indo-European languages

Centum-satem distribution, proposed and promoted as a dividing element between Eastern and Western Indo-European cultural provinces, was put under investigation by the specialized criticism and it was amended, after the identification of Hittite and Tocharian from the *satem* area as *centum* languages.

Among the critics of von Bradke's isogloss were linguists such as Colin Renfrew, Philip Baldi, Francisco R. Adrasos, Françoise Bader or Isidore Dyen. Dyen (1990a:385-391), for example, by mentioning syntax and morphology of adjectives, promotes the idea of a Slavic-Germanic subgroup, thus amending the idea of a *centum-satem* distribution. Dyen's amendment mainly regards the disproportionate treatment of assibilation and the intersection of isoglosses:

The Indo-European distribution centum-satem is considered a Proto-Indo-European isogloss, despite the fact that it limits the assibilation of palatals in a group of languages and it implies the fusion of palatal and velar series into others. This happens because it may appear reasonable to look at each series as if it were a unit and to take into account that other Indo-European isoglosses interconnect with the centum-satem isogloss.

Under such circumstances, by considering the *centum-satem* isogloss, we cannot take the hypothesis of the Balkan languages group into account, correspondingly, the hypothesis of the cultural and religious syncretism of this area. Still, should there be a common fund of a pre-Indo-European cultural entity; these hypotheses had to be valid. Accordingly, *centum-satem* isogloss should be crossed by another/other isogloss(es) that would lead to a natural distribution of the Indo-European language family into other over-branches.

2. RESEARCH METHODOLOGY

studying the Balkan linguistic When particularities to identify the role of the cultural context in configuring linguistic codes, we will focus on both descriptive and explanatory objectives. In order to identify such particularities, we will subject words from the Indo-European languages basic vocabulary to analysis, for establishing isoglosses based on their analysis. The general objective of the study, GO, consists of the identification of language particularities within the Indo-European area, by means of analysis of some morphological units, belonging to these languages' main lexicon, that carry meanings (words and morphemes). For the achievement of this objective, we highlighted not only the specificity of these words based on the branches, sub-branches, groups and sub-groups of languages, but also the existence of common elements, so that isoglosses can be established. The specific objectives, SO, of our study are as follows: SO1: establishing isoglosses of the morphological units under analysis and their comparison; SO2: comparison of those isoglosses with the *centum-satem* isogloss and interpretation of results obtained.

The preliminary documentation included, apart from the mentioned authors' works and the analysis direction, the linguistic realities existent in our study area, especially in the area of the Indo-European language family: Baltic, Slavic, Italic, Celtic, Germanic, Greek, Anatolian, Tocharian, Albanian, Armenian and Thraco-Phrygian. The social documents used are dictionaries of the Indo-European languages, more precisely, of the active languages, respectively, linguistic resources regarding the analyzed morphological units of the extinct languages. Our research focuses on the linguistic and cultural reality of the Indo-European area; the study comprises approximately 200Indo-European languages, out of which, 124 languages will be under scrutiny, such as: 53 Indo-Iranian, 7 Baltic, 13 Slavic, 15 Italic, 7 Celtic, 14 Germanic, 2 Greek, 4 Anatolian, 2 Tocharian, 1 Albanian, 1 Armenian and 3 Thraco-Phrygian. Nevertheless, since not all linguistic branches are made of active languages, in circulation today, not all of these 124 languages will represent units of analysis and record. Individual languages (in detail, wherever there is dialectal richness or particularities of certain dialects) constitute units of analysis and record. For the identification of language particularities in the Indo-European area, we focused on both divisions of language and dialect, and linguistic divisions of a higher degree of generality: sub-branch, group, subgroup, and segment. The research instruments were used for a total number of 81 languages and more than 20 dialects, belonging to the Indo-European branch.

The projective endeavor holds a double interpretation, namely, deduction out of theory and direct experience. With regard to the deduction resulting from theory, given our intention to represent delimitations of certain linguistic particularities by means of isoglosses, we will make direct reference to the linguistic wave theory, or *Wellentheorie*, developed by

Johannes Schmidt in 1872, according to which, linguistic changes spread in waves, starting from the epicenter:

according to Schmidt's wave model, linguistic changes spread outward concentrically like waves, which become progressively weaker with the distance from their central point (Campbell, 1998/2004:213).

The wave theory confers researchers the freedom to identify linguistic elements based on which isogloss families may be achieved. Words' structure, within this framework, is the outcome of various influences, coming from different spreading directions of linguistic "waves". Schmidt's method is reductionist and it condenses the history of linguistics to etymology; therefore, this method should be applied with some caution. It is this reason why the etymological endeavor must not be singular (quantitative methods would be, in this case, insufficient); it needs to be doubled by interpretation and comparison of results of similar endeavors, from other study areas of culture forms: anthropology, archaeology etc.

For the comparison of findings, we applied a theory deriving from archaeology: the theory of Kurgans, formulated in 1956 by the American research of Lithuanian origin, Marija Gimbutas. The theory of Kurgans is the reference element for formulating hypotheses with regard to the origins and spread of the Indo-European population. In accordance with this theory, and based on archaeological facts, the "primordial homeland" of Indo-Europeans lies in the Pontic-Caspian steppe. For our projected comparative analysis, we intended to identify a positioning of the isoglosses in relation with the epicenter, taking into account the evolution phases of the Kurgans culture. Thus, there were Kurgan I (early 4th millennium B.C., in the Volga water catchment area, the Samara and Seroglazovo cultures being illustrative); Kurgan II-III (late 4th millennium B.C., with a coverage area up to Northern Caucasus, representative being the Srednâi Stod and Maikop cultures) and Kurgan IV (early 3rd millennium B.C., covering the entire steppe area between the Ural mountains and the Dniester river, culture Pit Grave). The Kurgans were followed by successive waves of their expansion, as follows: wave I - 4.300-4.200 B.C., wave II - 3.400-3.200 B.C., and wave III approximately 2.800 years B.C. (Gimbutas, 1989:68-70). At the same time, we will mind the

local cultures' structuring, namely, pre-Indo-European cultures - 6.500-3.500 B.C., in the Adriatic area: Impresso, Danilo/Butmir and Hvar; the Aegean area: Pre-Pottery, Proto-Sesklo, Sesklo and late Neolithic; Central Balkans: Starčevo-Cris (stages I-III) and Vinča-Turdas (stages I-III); Eastern Balkans: Karanovo (stages Wallachia I-VI); Oltenia, and Dobrudja/Dobrogea: Boian, Gumelnița; Moldova and Western Ukraine: Dniester-Bug and Cucuteni (proto stages, A, AB si B); the middle course of the Danube river: Liniar and Lengvel; Tisa river: Tisa Alöld Bük, Tiszapolgár-Bodrog-Keresztür (Gimbutas, 1989:59).

The Kurgan theory is useful because it forwards the idea of a "secondary homeland" of the Proto-Indo-Europeans in the area delimited by the Globular Amphora Culture alongside of Elbe, Vistula, Dnieper and Dniester rivers, which divided into Bell-Beaker and Corded Ware Pottery cultures, and later on, lead to the appearance of the Italic, Celtic and Germanic linguistic families, as well as of other extinct or partially extinct linguistic groups. As far as the direct experience is concerned, the contact with Balkan cultures (including linguistic contact), made us follow the research in the direction of Kopitar and Martinet hypotheses, by means of the wave theory and Kurgans theory.

Starting from these theoretical foundations and from the experience of cultural contacts, we formulated the following projective directions (working hypotheses); 1. If we set up isoglosses of the words belonging to the main lexicon, then, these lines separate branches or groups of Indo-European languages ; 2. If the isoglosses separate branches/groups of Indo-European languages, then, either Balkan languages would be situated on the same side of the isogloss, or within the Balkan languages, there are linguistic "remains" (coming from the local lexicon) that include the protolanguage in the same language class with the Balkan languages; 3. If it is possible to set up isoglosses that separate branches or groups of Indo-European languages, then they are influenced by Kurgan invasion waves.

The schematic presentation of the deductiveinductive enterprise may be represented as follows:



Fig. 2. Deductive-inductive reasoning of the predictive dimension. Design of working hypotheses

The approach to our investigation was possible to achieve through a working instrument relevant for researches of similar types, namely, through document analysis. Study of documents represents the main applicable strategy for historical research; nevertheless, it does not apply only to this type of research. Therefore, we used document analysis as our research method, more precisely, the indirect, mixed observation (holding a preponderantly external character but also participative, in case of the Romanian language). From the perspective of the linguistic research methods typology, because our intention was to design an adequate description and an interpretation suitable for the paradigmatic organization, we needed some modern mixed methodology, based on structuralist reasoning. This methodology implied a functional analysis, focused on the paradigmatic dimension. specifically, on what was relevant for the accomplishment of the communicative function of language, respectively, on distributional analysis (preponderantly aiming the syntagmatic dimension, yet useful for the interpretation of paradigms), implying the study of rapports with regard to the language distribution - its characteristic of appearing in various contexts and neighborhoods. Our information sources for the current research were documents: dictionaries, treaties etc. and artifacts that provided us with data related to the structure of morphological units carrying meanings specific to languages or dialects of the indo-European area.



Fig. 3. Research methods, techniques, processes and investigative tools

In order to design the descriptive scheme of our research, we used structuring based on the research directions highlighted by the deductive enterprise of shaping the working hypotheses. Thus, we identified the Indo-European languages and their distribution into segments, sub-groups, groups, sub-branches, branches and we identified structures of words from the main lexicon of the accessible Indo-European languages (with the exception of extinct or isolated languages). Then, we set up isoglosses, we compared those isoglosses with the *centum-satem* isogloss, we interpreted results and we compared our results with the ones obtained through archaeological studies.

The type of research methods, techniques, procedures and instruments, included together within the framework of a system of rules and principles of knowledge, depends directly on previous stages, which are illustrated by Figure 3.

3. RESEARCH FINDINGS

In agreement with Sala and Vintilă-Rădulescu's work entitled *Limbile lumii. Mică enciclopedie* (1981) ["Languages of the World. A Concise Encyclopedia"], we identified 122 existing or extinct Indo-European languages, included within linguistic branches, sub-branches, groups and sub-groups, representing the majority of the known Indo-European languages¹. For instance,

¹ The 123 Indo-European languages included in the research corpus are the following, related to language sub-branches, groups, branches, subgroups and sections,: Indo-Iranian branch: Indo-Aryan (or Indic) group: Dardic (or Dardu) sub-group: Kashmiri, Khowar (Chitrali), Kohistani, Pashayi, Phalura (Palula), Shina; Central Indo-Arvan sub-group: Bhili, Gujarati, Hindi, Khandeshi, Punjabi, Rajasthani, Sindhi, Urdu; Eastern Indo-Aryan sub-group: Bengali, Bihari, Oriya; Northern Indo-Aryan sub-group: Garwhali, Kumaoni, Nepali (Nepalese), Western Pahari; Sinhalese-Maldivian subgroup: Maldivian, Pali, Sinhalese; North-Western Indo-Aryan sub-group: Lahnda, Sanskrit; Nuristani subgroup: Kosali, Marathi, Romani; Iranian group: Modern Eastern sub-group: Ormuri, Ossetian, Paraci, Pashto, Wakhi, Yaghnobi, Yazgulyam; Modern Sangleci, Western sub-group: Balochi, Gilaki, Kurdish, Luri (Lurish), Mazandarani, Persian (Farsi), Tajik, Talysh, Tati (Azari); Old Eastern sub-group: Avestan, Chorasmian, Scythian, Sogdian; Old Western subgroup: Parthian (Pahlavi), Median, Kati; Baltic branch: Eastern group: Curonian, Latvian, Lithuanian, Selonian, Zemgalian; Western group: Old Prussian; Slavic branch: Eastern group: Belarusian, Russian, Ukrainian; Western

out of more than 100 Indo-Iranian languages, only 53 are included in our analysis, yet, not all of them may be considered referential for our research. In the view of achieving a valid and applied analysis, we chose to make reference to words belonging to the main lexicons of the languages, words whose structures should not have been subjected to drastic changes, save for the case of some major cultural influences.

Holding particular interest in the structuralist functionality (Saussurean) of linguistic rapports, both from synchronic and diachronic perspective, but choosing methods, techniques, procedures and instruments related to causality, we intended to stop over these rapports, without pretending that we would clarify the etymological causality. This fact comes to strengthen our reserve toward the possibility of a linguistic reconstruction starting from an etymon - a presupposed, "invented", morphological unit, phonetically reconstructed through some regular semantic and phonetic evolutions. Moreover, in the absence of regularity - a phenomenon characterizing the linguistic evolution -, in the absence of cultural artifacts archaeological proofs, the etymon may transform into an erroneous source when approaching the diachronic whole. Consequently, the review of structures of morphological units under analysis does not have the role of highlighting particularities in the reconstructive intention, but the intension of highlighting distributive particularities. In this respect, our intension was to make use of fundamental words, such as the verb

"to be", as an auxiliary verb used to form more complex grammar structures, present in all Indo-European languages, which constituted the root for some nouns, created from the long infinitive form: *"fiire"*, *"fire"* and *"fiintă"* ['being' in English].

Secondly, starting from an observation of the Romanian linguist Cicerone Poghirc (1967:8):

If I have the intention to establish the etymological association between the Latin word aqua and the Romanian apă, it is sufficient for me to know that, generally, qu from Latin became p in Romanian, and that the unstressed a turned into ă, still I do not really need to know the reason why it happened so.;

however, in our case, wanting to know why that linguistic phenomenon occurred (in one way or another), we chose to examine the word "water". On the other side, in our intention to focus on family relations, we selected the word "brother" because "mother" and "father", probably originating in some onomatopoeia and found, in very similar forms even outside the Indo-European area, may lead to the impossibility of validating the working hypotheses.

Analyzing the noun "water" in 71 Indo-European languages and 16 Indo-European dialects, we identified the following forms: Indo-Iranian branch: Indo-Aryan (or Indic) group: Dardic (or Dardu) sub-group: Khowar - ugh, Kohistani – ví, vě, Phalura – wíi; Central Indo-Aryan sub-group: Gujarati – panee, Hindi – a:b, Punjabi - awb, Sindhi - paarnii, Urdu - aab; Eastern Indo-Aryan sub-group: Bengali - ambu; Northern Indo-Aryan sub-group: Nepalese – pani; Sinhalese-Maldivian sub-group: Maldivian - fen, Pali - uda, udaka, Sinhalese - va tu ra; North-Western Indo-Aryan sub-group: Sanskrit - ap, *udaka*; Nuristani sub-group: Marathi – *ap*, Romani - pani, pawni; Iranian group: Modern Eastern subgroup: Pashto - obe, Yaghnobi - op; Modern Western sub-group: Kurdish - aw, av, Persian - $\bar{a}b$, Tajik – ob; Old Eastern sub-group: Avestan – aiwyô; Baltic branch: Eastern group: Latvian *ūdens*, Lithuanian - vanduo; Western group: Old Prussian - wunda, wundan; Slavic branch: Eastern group: Belarusian - vada, Russian - vada, Ukrainian - voda; Western group: Czech - voda, Kashubian - woda, Polish - woda, Slovakian -Southern group: Bulgarian - vodi, voda; Macedonian - voda, Serbo-Croatian - vode, Slovene - vodo; Italic branch: Umbro-Sabellian group: Proto-Italic sub-group: Ligurian $- \alpha goa$, Venetic – aba, àcoa, àcua, àiva; Latin group: Latin - aqua, aquae; Romanic sub-branch: Ibero-Romance group: Catalan - l'aigua, Portuguese -

group: Czech, Kashubian, Polabian, Polish, Slovakian, Sorbian; Southern group: Bulgarian, Macedonian, Serbo-Croatian, Slovene; Italic branch: Umbro-Sabellian group: Osco-Umbrian sub-group: Oscan, Umbrian; Proto-Italic sub-group: Illyrian, Ligurian, Raetic, Venetic; Latin group: Latin; Romanic subbranch: Ibero-Romance (Iberian) group: Catalan, Portuguese, Spanish; Gallo-Romance group: French, Occitan; Italo-Romance group: Dalmatian, Italian, Rhaeto-Romance (Rhaetian), Romanian, Sardinian; Celtic branch: Island group: Gaelic sub-group: Irish, Manx, Scottish (Gaelic); Brittonic sub-group: Brittonic, Cornish, Welsh; Continental group: Gaulish (Gallic); Germanic branch: Scandinavian group: Danish, Faroese, Icelandic, Norwegian, Swedish; Western group: Afrikaans, Dutch, English, Flemish, Frison, German, Luxembourgish, Yiddish; Eastern group: Gothic; Greek branch: Greek, Old Macedonian; Anatolian branch: Hittite, Luwian, Lydian, Palaic; Tocharian branch: Agnean, Kuchean; Albanian branch: Albanian; Armenian branch: Armenian; Thraco-Phrygian branch: Thracian group: Dacian, South-Eastern Thracian; Phrygian group: Phrygian.

água, Spanish - agua; Gallo-Romance group: French - l'eau, Occitan - aiga; Italo-Romance group: Italian - acqua, Rhaeto-Romance - aua, ava, ova, Romanian – apă, Sardinian – ábba, imbre (Logudorese) - àcua (Campidanese) - eba (Sassarese) - èa (Gallurese) - algua (Algherese) êgua (Tabarchino) - vena d'a. cantaréddu (Logudorese, Gallurese) - a. di bucato lisciónu (Gallurese) - a. marina salatissima aqua fatta (Campidanese) - piccolo corso d'a. vadìna (Gallurese); Celtic branch: Island group: Gaelic sub-group: Irish – uisce, Manx – ushtaghey, ushtev, Scottish - uisge; Brittonic sub-group: Brittonic – dour, Cornish – dowr, Welsh – dwfr, *dŵr*; Germanic branch: Scandinavian group: Danish - vand, Faroese - vatn, Icelandic - vatn, Norwegian - vann, Swedish - vatten; Western group: Afrikaans - water, Dutch - water, English water, Frison - wetter, German - Wasser, Luxembourgish - Waasser; Greek branch: Greek *νερό*; Anatolian branch: Hittite – uappa, vâdar,; Tocharian branch: Agnean - wär, Kuchean - war, *āp*: Albanian branch: Albanian – *uië*, *vadë*: Armenian branch: Armenian - get. We found that there were two important roots to words denoting "water" in Indo-European languages, which we defined in terms of Sanskrit terms ap and udaka.

Based on this distribution, we could reach the following conclusions, useful in setting up the ap*udaka* isogloss: Indo-Iranian languages are preponderantly *ap* languages, many of the subgroups (mainly from the Indic) keeping both forms; exceptions are the Maldivian-Sinhalese languages, that are udaka languages, including a pre-Indo-European root used in Maldivian, fen, which developed independently in relationship with Sinhalese; Baltic, Slavic, and Germanic languages are, without any exception, udaka languages; Celtic languages, excepting the Brittonic subgroup, are mainly udaka, which are related to the non-Indo-European root dwr-, probably pre-Indo-European); Italic languages are preponderantly ap, although both roots are found in some of these languages, including Romanian; Greek fundamentally differs from other Indo-European languages, having a completely distinct term: vepó; Tocharian languages have both characters, being predominantly udaka; Anatolian languages and Albanian have both characters.

Regarding the distribution of the verb *"to be"* forms, we found the followings: Indo-Iranian branch: Indo-Aryan group: Dardic sub-group: Khowar – *bos*; Central Indo-Aryan sub-group:

Gujarati – $v\tilde{u}$, Hindi – aswiwva (aswiwv – being), Punjabi - baņa (asatitava, hasatī - being), Sindhi - insaana (being), Urdu - $b\bar{u}d$ (being); Eastern Indo-Aryan sub-group: Bengali – batā; Northern Indo-Aryan sub-group: Nepalese - astiva (being),; Sinhalese-Maldivian sub-group: Pali - atthika (being), Sinhalese - sae ma tta; North-Western Indo-Aryan sub-group: Sanskrit – as, bhu; Nuristani sub-group: Marathi - astiva (being); Iranian group: Modern Eastern sub-group: Pashto sta, shta, Yaghnobi - ast; Modern Western subgroup: Mazandarani - be, Persian - bud, Tajik *bud*; Old Eastern sub-group: Avestan – *astu*; Baltic branch: Eastern group: Latvian – $b\bar{u}t$, Lithuanian – *būti*; Slavic branch: Eastern group: Belarusian – być, Russian – byť, Ukrainian – buty; Western group: Czech – $b\dot{y}t$, Kashubian – badze (for future), Polish – być, Slovakian – byť; Southern group: Bulgarian - става, съм, Macedonian биде, Serbo-Croatian – biti, Slovene – biti; Italic branch: Umbro-Sabellian group: Proto-Italic subgroup: Ligurian - stâ, êse; Latin group: Latin existo, existere, existiti, existitus; Romanic subbranch: Ibero-Romance group: Catalan - ser, Portuguese - estar, Spanish - ser, estar; Gallo-Romance group: French – $\hat{e}tre$, Occitan – $\hat{e}sser$; Italo-Romance group: Italian – èsser, Romanian – a fi, Sardinian - èssere (Logudorese), èssiri (Campidanese), essi (Gallurese), èsse (Gallurese, Tabarchino), èsser (Algherese); Celtic branch: Island group: Gaelic sub-group: Irish -bi. Manx *bee*, Scottish – *biti*; Brittonic sub-group: Brittonic - bezañ, Cornish - bós, Welsh - bod; Germanic branch: Scandinavian group: Danish - være, Icelandic - vera, Norwegian - være, Swedish vara; Western group: Afrikaans - te wees, Dutch te zijn, English – to be, Frison – syn, wêze, German - zu sein, Luxembourgish - sinn, bass, ass, Yidish - sein; Greek branch: Greek - είναι; Tocharian branch: Agnean - es (skente - they are), Kuchean nes-, ste-, stare; Albanian branch: Albanian - të *jenë të*; Armenian branch: Armenian – *linel*.

Analyzing the distribution of the verb "to be" forms in Indo-European languages, we find that, starting from the roots as- (to be) and bhu- (to be, to become) present in Sanskrit, the Indo-European branches are divided as follows: Indo-Iranian languages are both as- (within Iranian languages, excepting the modern Western subgroup) and bhu-(some of them keeping both characters); Baltic, Slavic, and Celtic languages are, without exception, bhu- languages; Scandinavian Germanic subgroup is bhu-, while the western ones (except English) are *as*- at infinitive and *bhu*- in conjugation; Italic languages are mainly *as*- type, although both roots are found in some of these languages, including Romanian; Greek, Albanian, and Tocharian languages are *as*- type, while retaining elements deriving from radical *bhu*-; there are important similarities between *ap-udaka* and *as-bhu* isoglosses.

Regarding the forms of the noun "brother", useful for identification of relationship between the occlusive and the fricative found in bhulanguages, the results are the following: Indo-Iranian branch: Indo-Aryan group: Dardic subgroup: Khowar – brar, Kohistani – $t\Lambda t\bar{a}$, $t\Lambda t\bar{u}$; Central Indo-Aryan sub-group: Gujarati – $b \ge n.d^h u$, Hindi - bira:dar, Punjabi - bei, bir, bau, brw, bwei, Sindhi - bhaau, Urdu - bhai; Eastern Indo-Aryan sub-group: Bengali - bhāi; Northern Indo-Aryan sub-group: Garwhali - bhaai, Nepalese bhai; Sinhalese-Maldivian sub-group: Maldivian beebee, Pali - bhātuka; North-Western Indo-Aryan sub-group: Sanskrit – brātŗ-; Nuristani sub-group: Marathi – *bāndhava*, Romani – *pal*; Iranian group: Modern Eastern sub-group: Pashto - wror, Yaghnobi - burodar; Modern Western sub-group: Kurdish - bra, Persian - birādar, Tajik - barodar, Baltic branch: Eastern group: Latvian - brālis, Lithuanian - brolis; Western group: Old Prussian brote; Slavic branch: Eastern group: Belarusian brat, Russian - brat, Ukrainian - brat; Western group: Czech - bratr, Polish - brat, Slovakian brat; Southern group: Bulgarian – brat, Macedonian - brat, Serbo-Croatian - brat, Slovene - brat; Italic branch: Umbro-Sabellian group: Proto-Italic sub-group: Illyrian, Ligurian fradél, fradélo fræ, Venetic – fradél, fradélo; Latin group: Latin - frater, fratris; Romanic sub-branch: Ibero-Romance group: Catalan - germà, Portuguese irmão, Spanish - irmão; Gallo-Romance group: French - frère, Occitan - fraire; Italo-Romance group: Italian - fratello, Rhaeto-Romance fragliuns, fardagliùns, fradgliuns, Romanian frate, Sardinian - armanu, frade (Logudorese), fradi germanu, (Campidanese), fradeddu frate, frateddu (Gallurese), frê (Sassarese). (Tabarchino), germà (Algherese); Celtic branch: Island group: Gaelic sub-group: Irish - deartháir, dearthair, Manx - braar, Scottish - bràthair; Brittonic sub-group: Brittonic - breur, Cornish broder, Welsh - broder; Germanic branch: Scandinavian group: Danish - broder, bror, Faroese - bróðir, Icelandic - bróðir, Norwegian bror, Swedish - bror; Western group: Afrikaans broer, Dutch - broer, English - brother, Frison broer, German - Bruder, Luxembourgish -

Brudder; Greek branch: Greek – $\alpha \delta \epsilon \lambda \varphi \delta \varsigma$ (Old Greek, *phràtēr*); Tocharian branch: Agnean – *pracar*, Kuchean – *procer*; Albanian branch: Albanian – *vëlla*; Armenian branch: Armenian – *egbayr*.

After analyzing the noun "brother" in Indo-European languages, we found a unique root, reconstructed in proto-Indo-European, *bhreh, $t\bar{e}r$, from which the current nouns in different languages are deriving. The difference is marked by the use of the initial consonant, which remains occlusive in certain languages (either aspirated voiced *bh*, or unaspirated voiced *b*), or become fricative in other languages (voiceless *f* or voiced *v*).

This distribution of languages, superposed on *as-bhu* isogloss, transforms it into an isophone. We find, therefore, that: Indo-Iranian languages keep the aspirated voiced occlusive, even if there are cases of the presence of the unaspirated voiced occlusive; Baltic, Slavic, Germanic, and Celtic are characterized by the presence of the voiced occlusive (noteworthy the unity of form, in this case, in Slavic languages); Italic languages are characterized by converting the voiced occlusive in voiceless fricative (excepting the Ibero-Romance group and a part of Sardinian dialects, that use a different root, which is non-Indo-European); Geek and Albanian are characterized by voiced and voiceless fricatives; Tocharian languages are unique, using the voiceless occlusive, p; there are many similarities between the distribution of b(h)-f isophone related to the forms of the noun "brother" and to as-bhu isogloss.

4. SETTING UP OF ISOGLOSSES AND THEIR COMPARISON WITH THE *CENTUM-SATEM* ISOGLOSS

For the observation and comparison of isoglosses, as well as for the interpretation of results, there was need for some aiding instruments, namely, some maps to display areas of linguistic branches and sub-branches and areas regarding the linguistic particularities of word structures under analysis: "*water*", "*to be*" and "brother".

Setting up the three isoglosses, we could observe that their display coincided for the most part. Still, the most important modifications regarded the very area on which our research was focused, the Balkan area. On the one side, we found that the Northern linguistic branches: Baltic, Slavic, Celtic and Germanic held common features, irrespective of their isogloss (Tocharian languages are added, also). On the other side,

Southern languages have common features, although part of them, probably the oldest ones, kept both features: Indo-Iranian languages (especially those from the Iranian group), Anatolian languages, Greek, Albanian, Latin and Romanian.

The common isogloss intersected the *centum-satem* isogloss in the Balkan area. In order to represent branches/groups of Indo-European languages in setting up isoglosses/isophones, we used the following colors: red – for the Indic group, Indo-Iranian branch; magenta – for the Iranian group; with the other Indo-European languages, pink – for Baltic branch; green – for the Slavic branch; blue – for the Italic branch; dark green – for the Celtic branch; garnet-red – for the Germanic branch; orange – for Greek; red – for Anatolian; dark blue – for Armenian. The Thraco-Phrygian branch, made up of dead languages, was not represented.



Fig.4 Ap-udaka isogloss



Fig.5 As-bhu isogloss



Fig.6 Bh-, b-/f- isophone



Figure 5. Comparison between *ap*, *as/udaka*, *bhu* isoglosses (red) and *centum/satem* isogloss (black)

5. INTERPRETATION OF RESULTS AND THEIR COMPARISON WITH RESULTS OBTAINED ON BASIS OF ARCHAEOLOGICAL AND ANTHROPOLOGICAL STUDIES

5.1 Isogloss ap-udaka. Starting from Poghirc's hypothesis with regard to the role of causality of languages, let us bring up the non-compliance of the phonetic relevance criterion in the evolution of the Romanian apă (mr. apă, megl. apă, apu, istr. ape) < acqua, under the circumstances in which the Sanskrit term is *ap*-, with its declensions *āpas*, apas, abhis, the Avestan term is ap, the Persian $\bar{a}b$, whereas the recorded forms are āp, correspondent in Hittite is uappa. From the Sanskrit word derives a possible criterion of Indo-European languages distribution, as compared to the classical centum-satem typology. With Hittites, considering the geographic relevance, there are, in fact, two words that refer to the same reality:

uappa and vâdar. The latter is also present in Sanskrit, as udaka, out of which derived, through Hittite, the Irish uisge, the English water, the German Wasser, the Russian voda, the Lithuanian vanduo. Phonetically and semantically close to the Sanskrit udaka, we have the word ud [wet]. In present day Albanian, probably due to its Illyrian inheritance, there are two words derived from udaka: ujë and vadë. It is probable that the other Illyrian tribes, on the Eastern and South-Eastern coasts of nowadays Italy, Messapians/Messapii, Salletines, Calabrians, Poediculls, and Apulls and from the North-Eastern coast, the Venetians, had used a derived form of *udaka*. It is remarkable that the Latin aqua could not modify it, not even on the territory of present Italy. With Sardinians, there is reminiscence from the Indo-European non-Latin tribes, a term close to the Aryan root: abba.

It is surprising, in this respect, the spread of the Latin aqua: Italian – acqua (Sardinian abba, Puter, Vallader / Engadin valley. ouua), Rhaeto-Romance (Sursilvan, Puter, Vallader aua, Ladin Dolomitian ega, Friulian aghe), French eau, Occitan aiga, Catalan agua, Old Occitan aigua, Spanish agua, Portuguese agoa. Some Celtic influence is not excluded. The existence of the word to the Western part of the peninsula makes us believe the influence is pertinent, from a diachronic perspective, and it is explicable through the Latins' migration from the East. Let us not omit that in Hittite, there is a root eku-, in words such as ekutteni [you drink] (the verb to drink - second person plural), while in Old German we meet the word Ache [water] (whereas in Hittite, due to the variety of dialects of the old Anatolian territory, there was a root - aku, in the word a-ku-wa-an-na, for example). The phonetic pertinence is an indicator for our taking this path into consideration, the ap-udaka typology, through which a distinction is made between languages (linguistic branches) with vowel harmony and those with poor consonantism, as compared to languages with strong consonantism, especially in initial position and without vowel harmony, in relation with the *centum-satem* typology, through which we differentiate languages with different reflexes of the gutturals either followed by other gutturals or by siflant or hissing fricatives. It is the same Albanian territory that offers us a pertinent model of interpretation: the combination of two languages, sharing the same origin, yet, differently featured (Martinet, 1994:52), one of a supposedly centum character: Illyrian (Krahe), the other, characterized as satem: Thracian (Bonfante). André Martinet is very strict about the satem

character of Albanian, despite the fact that the word *qind* reminds of *kentum, kent*. The French linguist considers that palatalization of consonant *k* turns it into [s] or [θ], such as the case of *vis* [Eng. place], compared to the Greek *ouxóç*. Following the *ap-udaka* criterion, the example would be similar: taking the *udaka* character fro Illyrian, this character would be double through the display of *ap* languages features. The appearance of vowel \ddot{e} [\check{a}], both in Romanian and in Albanian could be explained through the mechanical force of the intensity stress (subsequent phenomenon of Latinization of Romanian).

With the other *satem* languages (Slavic languages especially) predominant is semivowel \hat{a} , whose evolution would have started from a local fund, pre-Indo-European, only to set connection within the Euro-Asian languages mega-family: Indo-European, Caucasian, Uralic and Altaic. Let us also have a look at the argument of the surprising Basque language, a pre-Indo-European, Mediterranean language, belonging to а supposedly Euskara-Caucasian language family. Shall we understand that the Northern-Mediterranean area, belonged, in ancient times, to an Asian population, from whom there resulted the Basque language, and from whom we are left with the proof of a dead language, namely the Etruscan, Paleo-Mediterranean language? On basis of this hypothesis, the Iberian Peninsula would have been the theater of some linguistic interferences of remote origin, Hamitic, Asian or Japhetic (Indo-European)? In such case, it is easier to understand the etymological structuring, at least in the Mediterranean basin. In this area, the first etymological stratum is clearly pre-Indo-European, maybe Asian (now considering the Caspian reference). Nevertheless, we can only speculate on it, so long as influences from the above-mentioned area cannot be proven. There might have been some borrowings from unknown/partially known languages, which does not offer us anything else but a working hypothesis on a territory where we can sense the uncertainty and fluidity of some proto-languages that we cannot access through the practice of reconstruction

We could also bring up the fascinating Etruscan civilization, whose origin used to be debatable even for ancient writers. Herodotus spoke about a migration from the territory of old Lydia, from where, around 1200 B.C., part of a population, together with their King Tyrsenos, fled because of famine, to the Western coast of the Italic peninsula. Hellanicus, and also Anticlides argued that the people led by Tyrrhenos were

Pelasgians. Yet, Dionysus of Halicarnassus considered that Etruscans were indigenous, that they had lived in Etruria forever. It is interesting that this hypothesis is the only one that may be supported by Etruscan culture and mythology. Etruscans considered themselves aborigenes, they would not recognize any founding hero (see Tyrrhenus) and they did not call themselves Tyrrhenians, but Rasenna. However, migration of some Eastern Indo-European population took place, at the end of the 2nd millennium B.C., the millennium. Mycenaean Therefore, the presupposed king (hero) may have led the Latin people toward the Western coast of the Italic peninsula, yet, not to the South of Rome, and not to the North. Latins might have come from Lydia, because they were of Pelasgian origin. Lydia was occupied by Indo-Europeans at that time (1200 B.C.). Even the name of the land, Lydia or Lydói, comes from a supposedly Indo-European root, *lewdho, *lowdho, also found in German - Leute [men]; Russian - l'udi [men, world]; Lithuanian *liaudis* [people]: Latvian – *laudis* [men]: Old Slavic - ljudŭ [people], ljudje [men]; Greek ελεύθερος [free man]; Latin - *līber*, *līberi* [child]; Old Indic - rodhati [to grow]; Gothic - liudan [to grow].

Lydian is considered a late dialect of Western Hittite (this explains resemblances between Latin and Hittite), in which there are Luwian, Mysian, Phyrigian, Greek and Iranian influences. It would then be impossible for Etruscans to have had their origins on the Eastern coast of the Mediterranean Sea. Hence, we are going to emphasize, aided by language evidence, the impossibility for Etruscan to have Pelasgian/ Lydian origins. Etruscan was the only non-Indo-European language spoken on the territory of present Italy. There existed linguistic unity throughout the entire Etruscan homeland, from Fiesole up to Rome, more precisely, from the Arno River to the Tiber River, from the Apennines to the Tyrrhenian Sea (Bonfante, 1986/1996:90). Inscriptions found off the coasts of Troad, on the Aegean island of Lemnos where Tyrsenians lived, according to Tucidide, and their non-Indo-European language, resembling Etruscan does not necessarily represent proofs of this people's migration; rather, it is a proof of the Paleo-Mediterranean (non-Indo-European) linguistic substratum of the Southern European languages.

5.2 Isogloss *as-bhu*. A different possible typology of the Indo-European languages could be accomplished based on their rapport with the verb

"to be": $bh\bar{u}$ - [to be; to become], out of which resulted the English to be, Russian byti, Breton bevan, German ich bin, Latin fui, Romanian a hi, a fi (only in Infinitive form), through the evolution of the unaspirated labial into an aspirated labial (bh > b), respectively, as- [to be], conjugated in Present Indicative asmi, asi, asti, smas, stha, santi; $\bar{a}sti - [is]$; as - (Hieroglyphic Hittite); as-(Luwian); es- (Cuneiform Hittite); see a sî, a si (Maramureş), far from the Latin fieri, mentioned as its origin. The presence of both forms in Romanian (both in cases of the noun 'water', and the verb 'to be') indicates a higher closeness to the Indo-Iranian linguistic area.

Broadly, the typology *bhū-as* is superposed on the ap-udaka typology. Although Infinitive forms from German, Yiddish and Dutch seemingly come from as-, the conjugation in the Present Indicative sends us to *bhū*. Apparently originating in aslanguages, Bulgarian has the Infinitive *бивам* – [to exist], but also the classical Slavic form *oum*, this time, as a noun, meaning [existence, living, lifestyle]. The derivative noun *6umue* indicating 1. [existence, living]; 2. [existence, reality], or the adjective *bumos* [living], as well as the abovementioned terms indicate the development of Bulgarian on basis of *bhū*-, with an *as*- substratum. The mixture *bhū-as* is also present in the Southern languages. Should Infinitives, as well as the verb conjugation in Indicative in French - être, Italian essere, Spanish – ser. estar, Portuguese - ser. estar remind of an as- character, the same reality is not valid for Romanian, as we could observe.

Romanian is the language that has the reverse situation of German, Yiddish and Dutch. The Infinitive displays a $bh\bar{u}$ - feature, whereas Romanian verb displays as- features. For sure, long time ago, the common linguistic roots of the Romanian forms and of the Sanskrit verbs mentioned above were to be found on the territory of current Romania. It was confirmed, by archaeological evidence, that the area of Indo-European languages formation included our national territory. Should we, then, accept Candrea-Densusianu (2006:121)hypothesis. according to which the Romanian Infinitive is a borrowing from the Latin *fieri*? We are told, among other things, that this Infinitive form replaced the Infinitive esse (Ciorănescu, 1954-1966/2002:32), has which Romanian correspondents in the forms of the verb conjugated in Present Indicative. In this case, could the old term esse have influenced Romanian? Or, was the Romanian a late borrowed term, like in Latin? Southern languages keep the characteristics of *as*-, fact confirmed by means of Romance languages. Latin is also *as*-. The borrowing *fieri*, from *bhū*- is relatively late. Greek, a pre-Latin language, has the forms $\epsilon i \mu \alpha i$ for the Infinitive and $\epsilon \sigma \tau \omega$! –[(so) be it!], in other words, it belongs to the same category. The Albanian *eshtë* is no exception. Similarly, neither the term *es*-, in Cuneiform Hittite, nor *as*- in Hieroglyphic Hittite and Luwian contradict our supposition. Maybe the only term that might send us to *bhū*- is the Persian *boudan*, in Farsi dialect. Yet, even in this case, we would have half an answer, since the presence of *āst* confirms the coexistence of the two terms.

We would be tempted, then, to believe that the Romanian Infinitve is a late borrowing of the Latin term, which was also borrowed, *fieri*. Still, this supposition cannot be true so long as Romanian has one term, *fire*, with deep significance and much more complex, semantically, than the Latin constructs from *fieri*. *Fire* coincide in its meaning with the Sanskrit noun formed out of the root $bh\bar{u}$ -: $bh\bar{u}$ – [ground/land], $bh\bar{u}mi$ – [soil, terrain]. Thus, an old Indo-European pair of verb-noun, designating existence, has as correspondents the Sanskrit $bh\bar{u}$ - $bh\bar{u}$, but also the Romanian $a\,fi-fire$.

Consequently, we took into account an old bhū- reminiscence in the Eastern as- languages (ap- languages). In other words, the successive waves of Indo-European populations heading Westward enriched Eastern as- languages of the area crossed by these populations, irrespective of their final destination, with both ap-udaka, as-bhū forms. Not by chance, the same territories preserve both forms in their colloquial languages, no matter which the current typology might be. We can only speak about different strata, but this aspect cannot lead to anything different but to a confirmation of words' oldness in the language ($bh\bar{u}$ stratum preceedes as stratum), and not the other way round, as is the case of Latin, which, being a new language compared to Persian, Old Greek or Thracian, borrowed the term later, from the $bh\bar{u}$ substratum. There were also other territories, as well, subsequently conquered by Latins, that nowadays constitute or used to constitute areas of bhū isoglosses: Dalmatian fir, Old Venetian fir, Old Lombard fir sau Old Genoese fi(r). Another argument in favor of the pre-existence of the two linguistic strata is given by the absence, in Sanskrit, of the verb 'To Have', expressed by means of $bh\bar{u}$ -, as - [to be]. To be (and its derivative nouns) substituted the verb to have until late, as in Greek, see Dosoftei's *Psaltirea* [Psalter]:

"Au împărțit toată ființa lor la săraci" [They shared all their being to poor people]. The common origin is not excluded, either; in Greek, we have $\beta i o_{\varsigma}$ – life, coming from $bh\bar{u}$ -, and $\tau o \beta i o_{(\varsigma)}$ – wealth; accordingly, this might be an explanation of 'wealth' through 'being'.

Not even the Past Participle of the Romanian could have come from fuistis. By opening, the labio-velar vowel \check{u} may transform in labio-velar \check{o} , but the phenomenon is not characteristic to the presupposed borrowing in Romanian. Exceptions, in this case, are questionable for Latinists, who believe that the opening occurred much earlier, in Vulgar Latin (not confirmed, yet). The variant $f\tilde{u}istis > *f\tilde{u}stis > fost$ relies on the argument of the Italian *foste*, which would confirm the presence of vowel o in Latin, but also on the identity in form, in Romanian, between the Participle form and the II-nd person plural of Perfect Simple Indicative (Ivănescu, 1980:118-119). That is, so long as Indo-Europeans, coming from the East, leave behind forms, throughout the entire *ap* area, that meet the of phonetic (following rules phonetic transformation) and semantic pertinence, Romanians would have needed to borrow these forms from Latin, by means of some invented terms from Vulgar Latin. Certification of simus and sitis is not satisfactory for the hypothesis of some intermediaries from Vulgar Latin, given the fact that the transformation of u > i > stressed \hat{i} , for the I-st person plural Present Indicative cannot be included within a regular phonetic evolution, and similarly, nor can the turning of *estis* into *sitis*. by the loss of the tone/open vowel and its replacement with a close variant, in the next syllable, which becomes stressed. Moreover, not even the later on transformation of i > stressed \hat{i} is reliable.

Regarding the noun derivative *ființă*, it seems to have appeared in Romanian, from the Gerund fiind, with the suffix -intă added (Ciorănescu, 1954-1966/2002:326-327), see also uşurintă, trebuință, suferință, cuviință, cerință, putință etc. Puscariu's variant, according to which fiintă is a borrowed from a presupposed term of Vulgar Latin **fientia*, following the model *essentia* < *esse*, view shared by Noica, as well, cannot be validated. In Romanian, the word *esență* appears much later, at a time when the native *ființă* has already appeared. Likewise, in Sanskrit, the verb bhū (Inf.), bhavati (Pres. Ind. III-rd pers sing.), bhava (Imp.), bhavişyati (Fut.), Gerund and Present Participle are composed by means of a similar suffix: -ta: bhūta. Turned into a noun being becomes bhūti -[existence, but also prosperity, wealth, luck].

Coming back to the Romanian *ființă*, Noica was about to find out:

in our language, $fiint\check{a}$ [being] is too easily combining with terms to whom it might and should oppose. In our case, $fiint\check{a}$ is not closer to the idea of *essence*, that is the reason for being, than to *existence*, that is, the act of being; it does not express the virtual more than the actual, the law more than life, the status quo more than being, permanence more than becoming. (Noica, 1987:42).

These are all but semantic arguments, of some internal formations that covered or stressed what the pre-existent word *fire* left behind. This very monolithic unit ființă-firei comes to confirm the hypothesis of the construct within a given cultural background, not the borrowing. Let us take the example of the other Indo-european languages, in which *being* is an auxiliary construct of the verb to be, with a very narrow ontological perspective, a little bit far from being as becoming (Heidegger used Sein, a noun derivative from sein – [to be], traduced into Romanian as fire [the status of existing], and not as *ființă* [being]!): Breton boud, Manx beays, bee, bioys, Welsh bod, Irish beith, Dutch (humaan)wezwen, Sapanish, Portuguese ser (humano), French être, Italian. essere, Swedish varelse, Slovenian (lúdská) bytost, Bulgarian съмествуванеs, Latvian būtiba.

5.3 Isophone bh-, b-/f-. The Sanskrit term brātr- (brother) has many similar correspondents in European languages, such as Lat. frater, -tris, Germ. Bruder, Russ. brati, Bret. breur, Eng. brother. Moreover, the Skt. bratr- derivate *brātrtva* – brotherhood has correspondents in the present language, see Russ. brat'stvo. In Romanian, terms like brother begin only with certain groups of consonants, more frequently with groups composed by an occlusive or spirant consonant, followed by a lateral dental one, l, or a vibrant one, r. Therefore, the occlusive b, that can be replaced by the spirant f, due either to Latin influence (by direct borrowing), or to other phonetic rules that have influenced, in time, the Indo-European area.

The presence of the occlusive consonant in udaka languages is a characteristic of those languages. This rule is in the spirit of the phonetic tendency of minimum mouth opening in speaking, through the replacement of not voiced labial occlusive (opening I) by not voiced labial occlusive (opening 0), and through the replacement of the vowel from the toned syllable, with maximum opening, V (vowel a) by vowels with opening III

or IV in Celtic, Germanic, Baltic and Slavic languages, followed by the loss of the second vowel. In Slavic languages there exists a 'remnant' of the Old Indo-European languages, which consists in final occlusive consonant dipping, equivalent of vowel *r* in Sanskrit. This distinction between northern and southern languages was noticed early in the last century by the Swiss linguist Ferdinand de Saussure. In *Cours de linguistique générale*, Saussure (1967/1972:203), Saussure noted:

Certaines langues du Nord accumulent les consonnes, certaines langues du Midi font un plus large emploie des voyelles, d'où leur son harmonieux. Le climat et les conditions de la vie peuvent bien influer sur la langue, mais le problème se complique dès qu'on entre dans le détail: ainsi à côté des idiomes scandinaves si chargés de consonnes, ceux des Lapons et des Finnois sont plus vocaliques que l'italien lui-même. On notera encore que l'accumulation des consonnes dans l'allemand actuel est, dans bien des cas, un fait tout récent, dû à des chutes de voyelles post toniques; que certains dialectes du Midi de la France répugnent moins que le français du Nord aux groupes consonantiques, que le serbe en présente autant que le russe moscovite etc.

issue northern Unfortunately, the of consonantism was not thoroughly analyzed, so that counterexamples of languages that are not Indo-Europeans (Sami, Finnish, and Estonian, for example) may not contradict the theory. Northern Indo-European languages, i.e. udaka languages, keep the consonant clusters feature. The southern counterexample of Serbian proves the rule, Serbs being a Slavic population, therefore belonging to udaka branch of Indo-European languages. Being ap, Romanian keep features specific to southern languages.

The presence of the term in Macedo-Romanian: *frate*, Megleno-Romanian: *frati*, and in Istro-Romanian: *frote*, phonetically close to the Daco-Romanian term and to the Latin *frater*, but far from *fratrem* indicates its old character. The Latin influence is not excluded, yet, the imposition of a term that, according to Puşcariu, Candrea and Densuşianu, must have evolved from the etymon *fratrem*, with its losing of r, through dissimilation, is hard to believe. Candrea and Densuşianu take the accusative form *fratrem* into account, and argue that, by dissimilation, the form *fratem* resulted, and later on, it lost its final –*m*. (Candrea, Densuşianu, 2006:128). We can regard the problem in the light of two phenomena: the former, consisting of the drop of the final consonant of the Latin variant, in the event this word was borrowed from Latin, whereas in case of *fratrem*, the drop of -m is of "Latium origin, but also Umbrian and Oscan" (Ivănescu, 1980:122); the latter, consisting of the preservation of initial b-, in udaka languages, but also found in Sanskrit, the voiceless labiovelar spirant (f) coming probably from the voiced labiodentals spirant (v). The former phenomenon contradicts History, Latium people pre-existing Latins, the same as the Oscan-Umbrian tribes, presented in Vergil's Aeneid, in other words, we could speak of an apheresis, not a syncope: *frater* < *frate*. In the latter instance, b >(v >) f indicates the same etymological trajectory, from East to West. This reasoning is also sustained by the presence of the word barâdar in Farsi (Modern Persian), which indicates a lack of alteration from an occlusive into a fricative to the East, although in an *ap* language. However, in this situation, etymology of other words is contradicted; for instance, the Romanian bătrân < Latin veteranus, Romanian beşica < Latin vesica etc. To solve the inconvenience, Candrea and Densuşianu (2006:46) "invent" some terms by means of reconstruction, for example, *bessica, thus explaining the presence of the voiced occlusive in Italian dialects from Erto, Muggia, Rovigno, Gombitelli, Versilia, Urbino, Canistro, San Fratello, Trieste, Modena, Parma, Piacenza, Arezzo, Sicilia, Corsica or Sardinia. Yet, the dialectal richness of nowadays Italy is not because of Latin, and it cannot be explained through it. The troublesome băşică (beşică)[English bladder] holds the merit of indicating another possible path, from b to f, through the voiceless labial occlusive, p, found in Albanian $p \bar{s} i k \epsilon$.

The two hypotheses send, due to the impossibility of the occlusive consonant to come from the fricative, to the conclusion that the Indo-European languages of Western Europe originate in the the Indo-European languages of the East (hypothesis proven by archaeology). At least, in case of the omnipresent word *frate* (we could not have found a more suitable example), the hypothesis of its eastern origin is validated.

5.4 Comparison of linguistic results and results obtained from archaeological/ anthropological research. South-East European area is considered the hearth of ancient European civilizations, by some anthropologists such as: Marija Gimbutas (1963; 1973; 1980; 1985 etc.), originator of the theory, ideologically associated with a particular feminist perspective on archaeology/anthropology, and not with a pro-Balkan perspective, Leon E. Stover & Buce Kraig (1978), Bruce Kraig (1980), Miriam Robbins-Dexter (1984), Shan M.M. Winn (1995), Georg Feuerstein et al. (1995/2005:58-59), Calverley (2005), Joan Marler (2006), David W. Anthony (2010), Harald Harmann (2014) etc. A strong cultural block, with identity and own roots, consolidated in this area. This cultural block represented the basis of a thriving Neolithic civilization, simultaneously and fully equivalent with Mesopotamia and Anatolia civilizations and preceded, instead, the Sumerian one. During Old European Civilization period, as Marija Gimbutas (1989) called it, or Danube Civilization period, as was mentioned in André Martinet's study (1994), before migrating Indo-European tribes enter this space, the writing was invented (see plates from Tărtăria and figurines engraved from Turdaş, pottery with inscriptions from Vinča, other household items with Linear engraved signs, discovered in Fafos, Kosovska Mitrovica, or Gradeshnitsa, near Vratsa) and urban settlements and adorned temples were built.



Figure 6. Megalithic and Danubian civilizations (Old Europe) before Indo-European invasion (Vth Millennium B.C.)

The first contact between Indo-European population and cultural complex Cucuteni occurred before 4000 B.C.. This contact resulted in mutual influence of both cultures, and not to the disintegration of any of them. Basically, in the second half of the fifth millennium B.C., between 4,300 and 4,200 B.C., occurred the largely dissolution of the Old European Civilization, as a result of the Kurgan population invasion in Danube basin, as Marija Gimbutas (1989) mentioned.

Despite the "disintegration" of urban and rural settlements, of disappearance of painted pottery, of the sanctuaries, frescoes, sculptures, symbols and writing, and of the appearance, in turn, of horses, fighting, weapons, and patriarchal structures, despite the fact that Europe became a mixture of cultures, Cucuteni culture located in the area of immediate contact with the Indo-Europeans, survived thanks to the compact nature of communities (about 1,000 homes in an area of 300-400 acres) and thanks to the mutual influence, to the simultaneous assimilation of both cultures elements. Karanovo culture disintegrated and was replaced by Cernavoda I complex; Vinča-Turdaş culture was pushed westwards (in present-day territory of Croatia, Bosnia-Herzegovina, Slovenia and Hungary); Tiszapolgár group was forced to retreat to the hearth of Transylvania, towards Petresti culture; Lengvel culture moved up to the territory of present Germany and Poland.



Figure 8. The effects of the first wave of Indo-European invasion (red arrows). Displacement of Old Europe cultures (black arrows)

The second Kurgan wave (3,400-3,200 B.C.) disintegrated all pre-Indo-European cultures, excepting Cotofeni culture and Baden hybrid complex. But within the 800 years between the two massive invasions, a cross-contamination between Indo-European and pre-Indo-European cultures took place. The territory of the present day Romania became Kurgan launch pad for Western Europe. Moreover, on this territory language, customs and religion practices are modelled.

In terms of reconstruction of a language, speaking of "linguistic ancestors", we find the area of appearance and modeling of Western Indo-European languages, of the entire complex of languages and dialects in Europe, in a large territory, strongly Indo-European influenced, with particular Danube Civilization elements included, which was inhabited by representatives of Old Basically, Europe cultures. the Carpathian mountain arch protected population from invasion, the massive part of Kurgan waves moving upstream along the Danube and or bypassing the Northern Carpathians. East-Balkan and Aegean cultures tightened to the South. Thus, two cores of symbiosis developed there: one, the Northern, inside the Carpathian arch, subject to continuous population/cultures movements, and another, on the South bank of the Danube, away from such influences. In these two areas, symbiosis between male pantheon of Indo-Europeans conquerors and female Old European pantheon of fertility and culture occurred. In the Southern nucleus, religious syncretism is directly linked to the Greek miracle:

On a souvent parlé du miracle grec. Même si nous prenons nos distances vis-à-vis d'un terme qui ne peut que bloquer la réflexion et freiner la recherche, nous pouvons y voir une façon un peu naïve de caractériser cet amalgame assez remarquable de puissance créatrice et de vigueur expansionelle issu de la symbiose de la fécondité danubienne et de l'agressivité des nomades. (Martinet, 1986/1994:53).

On the one hand, in the north, the IIIrd Kurgan wave pushed Baden-Vučedor culture to Bosnia, Herzegovina, Adriatic Sea Islands, Germany, Bohemia, and Moravia. This "push" is due to successive movements of farmers' cultures (of Old Europeans) Pecica and Nagyrév. On the other hand, Globular Amphora culture (from the lower basin of the Dniester) was pushed to the north and northeast (up in present Baltic States). In this context, the core of Nordic languages emerged a variety of idioms and cultures:

linguistic research has shown that, at some point in prehistory, there was a core of cultural and linguistic stage, that later developed a wide variety of idioms and Indo-European cultures. It was also shown that specific analogies of many Indo-European idioms are, perfectly clear, a detail too fine to be explained by a polygenetic theory or by intra-linguistic borrowings. (Thieme, *apud* Gimbutas, 1989:237).

The cradle of European civilization is therefore in the area marked by Balkan and Carpathian Mountains, and is more accurately defined by the middle and upper Danube. Since 7th millennium B.C., Danube population thrives in this area, but further influence on the whole Europe was huge.

Les fouilles faites à date relativement récente dans les Balkans et dans le bassin du Danube permettent de mieux apercevoir les conditions dans lesquelles se sont produites les expansions indo-européennes vers le sud-ouest à partir des steppes de l'Eurasie. Dès le septième millénaire avant notre ère, se développedans ce coin du monde, berceau du néolitique européen, une culture qui va être exposée, à partir du cinquième millénaire, aux incursions des nomades des kourganes et qui va reculera de ce fait vers les côtes de la mer Egée et la Crète pour céder finalement vers la fin du troisième sous la pression d'Indo-Européens, les Achéens, mais non sans avoir profondément marqué les envahisseurs. (Martinet, 1986/1994:52)

The Balkan linguistic unit, to which referred Trubetzkoy and Russo, is explained therefore. Moreover, the Greek miracle and linguistic similarities between the Scythians and Greeks could be explained. Do not forget that, while the first pressures in pushing Indo-European area eastwards appeared on the banks of Dniester, while the horse (warrior) civilization begun to dream to western fertile territories, inside the Carpathian arch and in the south bank of Danube writing already appeared.

On a longtemps pensé qu'au troisième millénaire avant notre ère, ce n'était que Mésopotamie et dans la vallée du Nil qu'on devait chercher les premières traces, par exemple dans le domaine de l'écriture, de ce qui devait déboucher sur la culture de l'Occident. En fait, on peut suivre chez les Dannubiens l'évolution d'un graphisme à partir de signes d'origine culturelle, qui mène, au quatrième millénaire, à ce qui paraît être un syllabaire, dont on peut se demander s'il ne serait pas à la source de ceux qu'on retrouve plus tard en Crète. (Martinet, 1986/1994:53-54)

5. CONCLUSIONS

We can affirm that there is a substratum unity of the current Balkan languages (pre-Indo-European and Indo-European/Thracian), over which, either a Latin or a Slavic stratum is superposed. Our supposition is based on the linguistic statistics initiative concerning form particularities of morphological units within the Indo-European languages, but mostly, it is a consequence of our results analysis and of comparison of the study results with other results (historical, anthropological). These superposed substrata led to language particularities that displayed either a different character from the substratum, or, both characters. Taking into account the working hypotheses, our conclusions are as follows:

1. With regard to the first hypothesis, this is validated largely, except for some particularities related to the Dardic and Sinhalese-Maldivian, which do not belong to class *ap*-. For the others, different from the *centum-satem* distribution, where an Italic language, Romanian, is placed in the *satem* class, whereas the others are maintained in the *centum* class, the language distribution by *ap/udaka*, *as/bhu* isoglosses and by the isophone *bh-*, *b-/f-* commonly separates linguistic unities of the branch size (mention should be made that in the Indo-Iranian area, Anatolian and Balkan, there are both forms of the morphological units studied)

2. The second hypothesis is valid, too. Languages of the South-Eastern area determine either the situation on the same side of the isogloss (the mixed character *as/bhu*), or, despite the Slavic over-stratum influence (in case of *ap/udaka* isogloss and *bh-*, *b-/f-* isophone), they preserve some 'remains' of toponymic, hydronimic nature, respectively, some morphological and syntactical structures that send to the Thracian and pre-Indo-European substrata.

3. The third hypothesis is confirmed through the comparative analysis between linguistic research and archaeological and anthropological ones.

From a simplified, but not reductionist perspective, we can observe that our hypotheses have been largely confirmed. This study casts doubt on the most well known isogloss in the Indo-European language family, *centum-satem*, that is related to the different evolution of dorsal consonants, and which has some ideological Aryan (Indo-Germanic) arguments. А different perspective, that does not separate eastern and western Indo-European languages by an isogloss based on fricatization (namely satemization) of eastern I.E. languages, which really this is a process that characterizes the southern I.E. languages, is required to be taken into account. The main purpose of this paper was to question an isogloss that is applied to reconstructed (imagined) languages, to parents of current I.E. languages. The fact that it was possible to put into question the centum-satem isogloss with linguistic, historical, and anthropological arguments is a starting point for future studies.

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