

## Some novel views on the prehistory of western Eurasia

(Amended version, October 2009)

### Abstract

Geo-political realities of the 19<sup>th</sup> Century AD had an inordinate impact upon the nomenclature of the then emerging field of linguistics. One trivial isogloss - for "One Hundred" in Avestian "*Satem*" and in Latin "*Centum/Kentum*" had become sacrosanct for many as the absolute divide between two forms of "Indo-Germanic" languages. A new system of understanding the Indo-European Languages as "Core" and "Peripheral" is proposed for the 21<sup>st</sup> Century. Certain developmental stages during the last 100,000 years are identified, and a paradigm shift is proposed.

### Linguistic challenge

By western understanding, the discipline of linguistics started in 1786, when Sir William Jones expressed his view that "Sanskrit is of more perfect structure than the Greek, more copious than the Latin, yet bearing to both of them a strong affinity as if sprung from some common source. The same origin have also the Gothick and the Celtick, though blended with a very different idiom, and also Old Persian might be added to the same family." This was one of the cornerstones of modern western linguistics, which became subsequently the leading approach. Additional publications by Friedrich von Schlegel in 1808, Franz Bopp in 1816, and Jakob Grimm in 1819, lead to the foundations of comparative linguistics. Due to exclusive use of Sanskrit, Persian, Greek, Latin, and Germanic, the name Indo-Germanic was coined [1]. Observe that Slavic was not included. Also, if Gothick and Celtick were blended with other idioms- is it legitimate to ask if Slavic languages were blended with foreign idioms or did the Slavic languages escape major blending?

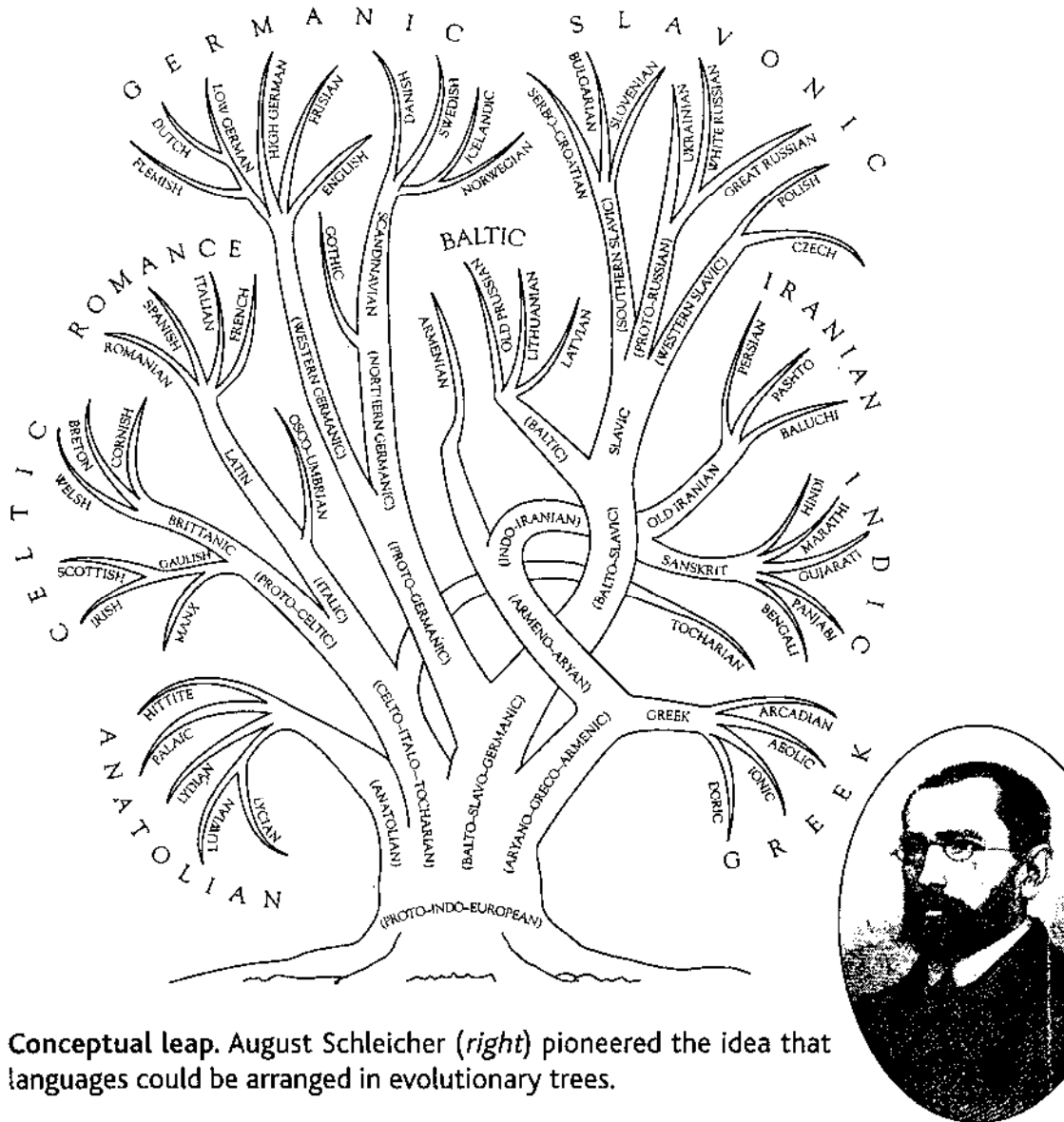
The *Kentum-Satem* division of Indo-European languages was finalized by contributions of several authors in 1890. There are continuing discussions about the origin and extent of this phenomenon. Sometimes it was presented as a fundamental division of Indo-European languages. Of the 5 possible explanations of the phenomenon, finely the 3-tectal-series-system prevailed [2], although it is not universally accepted and some authors prefer the 2-tectal-series-system [3]. However, in 1965, G. R. Solta has shown that the *Kentum-Satem* isogloss was overrated as a diagnostic feature and a tool of true componential analysis. It ought not be revered as a defining wedge, which segregates Indo-European languages into two well-defined entities. It is only a single isogloss among many [2]. More and more linguists are following this view and cease to give gravity on this type of division.

### Core-Peripheral approach

Having observed that palatalizations and de-palatalizations in Indo-European languages do not coincide with the *Kentum-Satem* division, and being dismayed with the undeserved reverence towards this *Kentum-Satem* division of Indo-European languages, we approached this question from another point of view [4]:

We looked at the Schleicher's Language Tree, Figure 1, not from the side but from the top. The new view resulted in a different division of Indo-European languages, namely into the *core*

languages and *peripheral* languages [4], Figure 2. At the same time, a working hypothesis about the origin of Europeans was presented [5].



Conceptual leap. August Schleicher (*right*) pioneered the idea that languages could be arranged in evolutionary trees.

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Figure 1. The Schleicher's Language Tree

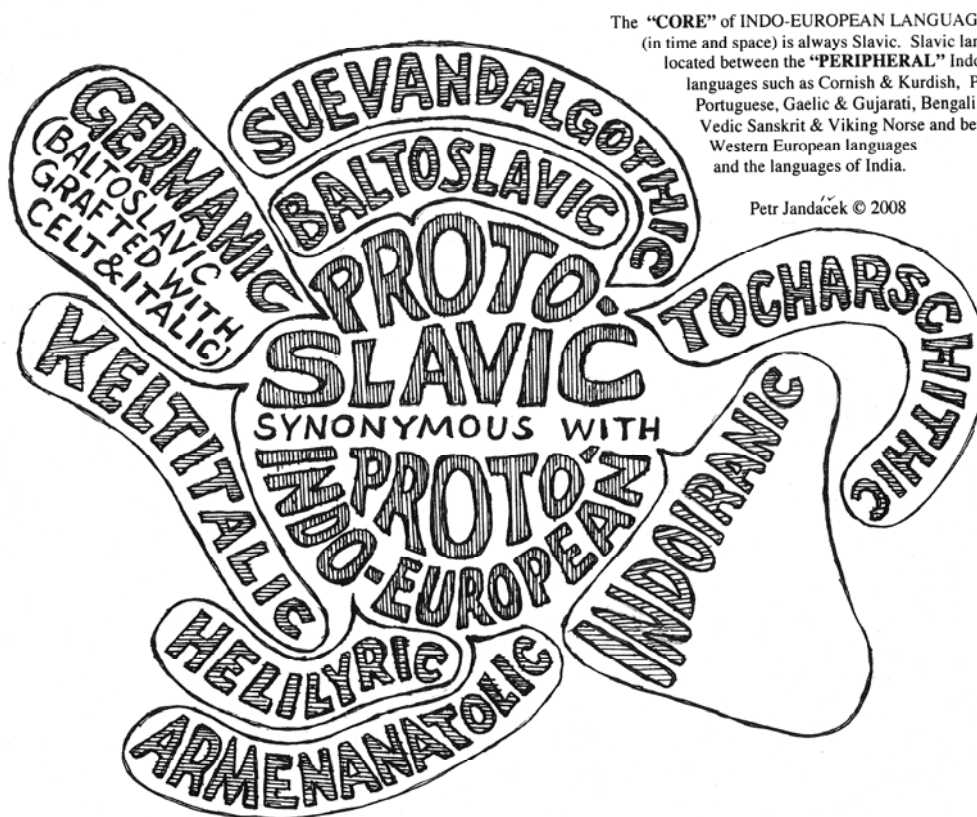


Figure 2. Indo-European Language Tree as seen from above.

The original [4] *Core-Peripheral* approach needs some revision. However, and in any case, the *core* languages remain to be the Slavic ones, whereas the *Kentum* languages are, in any case, *peripheral*. This is well in line with attempts to explain the *Kentum* effect by the involvement of Sudanic languages, Kafir languages in Hindukush, North Pamir languages, Caucasus languages, Tocharic, and Anatolic languages, cf. [2,3]. Indicative is also the statement of W. Jones expressed in 1786 that "the Gothick and the Celtick are blended with a very *different* idiom". The question persists: what would be his opinion if he had used also Slavic. Would he had thought that Slavic was blended with some other idiom - or would he think that Slavic was mostly unblended?

On the other hand, present-day authors contributing to Wikipedia [3] sometimes avoid the term *Kentum* and refer to Indo-European languages as simply - *Satem* and *Non-Satem*. While the *Satem* languages display integrity and a core of similarities, those languages that used to be called *Kentum* lack cohesiveness.

There is still the open question whether all languages relevant to clarify the origin of the so-called *Kentum* languages have been considered. Other Euro-Asian or African languages may yet find an extended membership in (or contribution to) what used to be called "*Kentum*". They may include (by some leap of faith) besides those mentioned above also some Ural-Altaic, Finno-Ugrian and even Turko-Tatar and Mongolic. It seems not likely that any more languages would ever join the *Satem* Core.

It is strange indeed that *Non-Satem*, which is not integrated - but disintegrated into many dissimilar languages - could have spawned the highly integrated (uniform) *Satem* languages. Now

this fact is explained by the late formation of *Satem* languages from \*Indo-European, but this explanation appears less and less compelling. It is more probable that the (uniform) Slavoform *Satem* gave rise to the peripheral multiform *Non-Satem* or *Kentum*. Uniformity spawns multiformity. Not the other way around. On the other hand, how could it happen that from patently *Kentum* languages: Latin, Celtic and Germanic, with their various mixing and blending did not produce anything like a true *Kentum* but rather *Semi-Satem*?

The linguists explain it by later palatalizations. But, what triggered these palatalizations? At the moment there is no evidence of any other real cause than the *Satem* substratum. The reverse direction of action would effect depalatalizations.

The insecurity of the doctrine of *Kentum* affirmation is evident in the vacant space depicted by the "gray area" stretching between Eastern Baltic and Northern Adriatic (Diachronic map and the Gray Hole [6] along the Amber Road, Figure 3).

This is exactly the area occupied by the ancient Veneti - Venedi (and Wends). The geographic location of the "gray area" also corresponds to the Corded Ware region of the Lusatian culture. Corded Ware horizon and the hypothetical situation around 2000 BC [6] indicate a drastic disagreement between the real situation and the learned construct.



Figure 3. Bachmann's [6] map of Kentum and Satem languages

Consequently, the following points are presented:

- The German attempt in the 19<sup>th</sup> Century to marginalize the Slavic role in the "Indo-Germanic" Languages was largely successful. This misinformation must be rectified, and the Slavic languages must be recognized as being *key* to the Indo-European phenomenon. The Slavic languages are not to be viewed as a peripheral branch of the Indo-European Languages, but should be recognized as the *trunk* of the Language Tree from which the other branches received their substance and sustenance [7], which is presented in Figure 2.

- "Indo-Germanic" is a neologism which should be abandoned. Since Indo-Aryans branched off from the "Slavic Mother Tongue" (and "Slavic Mitochondrial and Y-chromosome genes") some 9,000 years ago [8], and since Germanic Languages branched off from the "Balto-Slavic" source only perhaps 4,000 years ago and subsequently incorporated Celto-Italic elements: "It appears to point to a situation in which Germanic began to develop within the Satem Core (as evidenced by its morphology) but moved away before the final satem innovations. It then moved into close contact with the "western" languages (Celtic and Italic) and borrowed much of its distinctive vocabulary from them..." [9], the term "Indo-Germanic" is as misleading as there would be in the animal kingdom the expression "Trilobito-Avian" (of trilobites & birds).
- We posit that the Slavic Languages as the organic *trunk* of the Indo-European Language Tree yield better terminology for the language branches. These branches would be Slav-Indoiranic, Slav-Armenian, Slav-Tocharian, Slav-Suevandalgothic, Slav-Keltitalic and Slav-Helilyric. Thus, for sake of a more accurate understanding of the phenomenon we must create a new lexicon. Based on the 19<sup>th</sup> Century word choice of "Indo-Germanic" it would seem legitimate to apply a more accurate designation such as "Indo-Slavic". Similarly, to the west (based on the contributions of Ringe et al. [9]) we are justified in using terminology such as "Germano-Slavic". Preliminary evidence had suggested to a few linguists that Tocharian A and B are somewhat linked to Italic (Kelt-Italic). But based on geography, proximity, and the possible migration routes we are forced to accept Slavic as the missing link between western Europe and Chinese Turkistan.
- Dictates of foreign elites (German, Hungarian, Italian, French etc) have been imposed upon speakers of several Slavic languages and/or dialects. However, standardized Slavic "literary" languages have also been forced upon the speakers of dialects. The ancient mosaic of the Slavic substratum throughout Europe was best preserved in those areas where national states failed to impose a standardized language dictated from capital cities. Regional Slavic dialects survived best in Slovenia and adjacent (Slovenian speaking) regions of Italy, Croatia, Austria and Hungary. Similar preservation of dialects survived among the Polabian Slavs, among the Lusatian Wend-Sorbs and in Moravia.
- Remarkably, Slavic elements persisted with great frequency in Old English of a thousand years ago. For example, in the Lord's Prayer "Fader Ure" [10] Old English used the Slavic word for *bread* - "hlaf" as in Chleb, Hleb, Chlieb, Chlib etc. If one reads Psalm 23 in Old English [11] it sounds much like a Slavic language. In this respect Old English is more Slavic than Modern English. Cf. also the case of surnames [12]. Similar observations that an older version of a language is more similar to Slavic than a younger one, have been made also in the case of some other old languages, e.g. Sanskrit (Vedic vs. Classical Sanskrit, as well as vs. modern I-E languages in India) [13], Etruscan [14] p. 344, and Greek (Homer's vs. Classical) [15,16].
- We can lump certain language branches into "super-branches" like Iranian languages can be lumped with languages of India into Indo-Iranic, and Celtic and Italic languages can form a super-branch "Keltitalic". But, ultimately all the branches and super-branches issue from the Slavic trunk. The Slavic languages did not grow out of an "Indo-Germanic" trunk.
- Proto-Slavic is in fact synonymous with Proto-Indo-European and ought to be replaced in all literature. As well as, that the Indo-European languages did not form only by the spontaneous internal development within the proto-Slavic, but first of all on interaction with languages of other language groups.

- Slavic languages (because they were one of the substrata in Europe) continue to be more mutually intelligible than do the more recent Germanic, Romance, Celtic and other languages on the Continent.
- The Veneti of northern Italy and Wendi, Venedi and other Slavic people of western and central Europe (and especially along the Amber Trail) who share similar spelling were the prototype western Slavs and part of the prototype Indo-Europeans. The Slavic people *did not* move westward from the Pripyat River marshes merely 1500 years ago but were autochthonic population of Europe since the Stone Age. Cf. also respective genetic data in [17]. If there were any Slavic migration of any significance they would be in modern times towards Vladivostok. The Slavic toponymy observed in many parts of Europe [14] pp. 13-47, could be inherited from prehistoric Venetic-Slav populations or their predecessors.

The Core/Peripheral model [4] together with other published explanations [18] seems to be a good tool to explain this.

From the proto-Slavic core in the Southeastern, Southern and Central Europe (originated from the Danubian, Aegean, Black-Sea, and possibly Adriatic refugia during the Last Glacial Maximum) the people expanded, especially after the introduction of agriculture and stockbreeding in Neolithic. On expansion they mixed with the indigeneous settlers of those areas. In the west, proto-Slavic people mixed with those originating from the Thyrrenian and possibly Adriatic refugium. If we take as the basis the assumption that the non-Indo-European Basques, although they accepted several I-E expressions [19,20], are by analogy to Hamel et al. [21,22] the last remnants of the aboriginal population from the Thyrrenian refugium, then we would conclude that the expanding proto-Slavs would had turned other peoples originating in the Thyrrenian refugium into Indo-European but not in all instances Slavic.

If, however, we take as the basis the genetic data, which indicate that the Indo-European speaking west Irish Connaughts have about 98% of the Y-chromosome haplogroup R1b1, whereas the non-Indo-European speaking Basques have about 85% of it [23], as well as the findings of Villar [24,25] that the Basques (i.e. part of ancestors of present-day Basques) are relatively late immigrants, then this part of the scheme has to be substantially changed. Namely into the form that the people in the Thyrrenian refugium (and in any case also those in the Adriatic one) were a kind of Indo-Europeans, which in contact with the expanding Slavs turned in some places Slavic, whereas in others they retained most of their characteristics.

Let us consider as probable first the assumption that the non-Indo-European Basques are the last remnant of the aboriginal population from the Thyrrenian refugium

In the east, the proto-Indo-Slavs mixed on the one hand with those living north of Pamir and Himalayan regions, and with these influences they absorbed to some extent their language features which the 19<sup>th</sup> Century scholars identified as Kentum (Centum). From north of Pamir and Himalaya, by about 2000 BC these mixed people started to intrude into Europe, subduing the peripheral regions of Satem proto-Slavic peoples and introducing the acquired characteristics. The latter lost many Slavic characteristics, but did not include yet all the innovations. The Greeks, on the other hand, have also Hamitic ancestors [26], who may had been intruders into the southern part of Slavdom bringing with them the Kentum characteristics, which some linguists see in Sudan [2].

South of the Pamir and Himalayan region remained to be populated by Indo-Slavic population mixed during millenia with neighbouring populations. Without major external pressures they remained in the Satem fold. Satem-like features dominated early Sanskrit, but in post-Rigvedic

Sanskrit texts one can detect the appearance of other features at the corresponding depreciation of Satem elements under the influence of Dravidian and other loans [2].

### **Amended Timeline approach**

A Time-Line of past events that led to present situation is provisionally as follows:

- "Out of Africa" due to warm and dry climate by around 130 000 BP. Expansion mainly along the southern European and Asian coasts till about 70 000 BP;
- The Toba explosion and serious cooling around 70 000 BP. Survival of few thousands of peoples, mainly at the coasts, mainly in the tropics and subtropic regions. Besides in Africa, there is the probability of human survival in other climatic refugia protected from the influx of cold air from north by high mountain chains especially in India, but also in Eastern Asia, Northern Africa (Egypt), Levant, Fertile Crescent, the Aegean and other Mediterranean areas. Among these people we would find the Proto-Slavs. In this respect, the monocentric (monogenetic) approach introduced by some interpretations of the Bible, should be replaced by a polycentric (polygenetic) paradigm, at least for the last 70 000 years.
- Subsequently, the survivors expanded from these refugia into the interiors of Europe and Asia. We have the first evidence of symbolic/aesthetic culture in the form of the oldest known bone flute. The flute was found in Divje Babe Cave in Slovenia (Divje Babe = *Wild Hags*). The age of this musical instrument is between 55,000 and 60,000 yBP. It may be an artifact transitional from Mousterian to Aurignacian culture. And, not to ignore the possibility that the toponym itself indicates an uninterrupted settlement in those environs of people of the same type for at least 30,000 years. This suggests a remote (but irreducible) possibility that early Slavophonic Homo Sapiens Sapiens co-existed in the region with Homo Sapiens Neanderthalensis. Cf. also [27].
- Western Mediterranean refugium or north-western Africa was the source of human expansion into territories of present Spain, France and Italy. This is made evident by the frequencies of the R1b haplogroup among present-day Basques, Irish, and to a lesser extent elsewhere in western European including the Scandinavian and even Saami populations. We must not be dismissive about this evidence. Let us recognise these people as proto-Thyrrhenians (rather than Italidi [28], since they resided not only on the Italian peninsula but all around the Thyrrhenian Sea and in adjacent lands towards the Atlantic).
- Besides the origin and spread of the Y-chromosome haplogroup R1b, there is to be put the question of the origin and spread of the haplogroup I. The centers of this haplogroup are in Sardinia, in Sweden, part of Ukraine and in western Hercegovina, cf. e.g. [29]. Was the gene flow from Sardinia to Scandinavia to western Ukraine to western Herzegovina and its surroundings, where the first step of spread would parallel the spread of R1b after LGM? Or was this genetic flow in some other direction (from Ukraine through the Balkans and on to Sardinia and Scandinavia? Or, from the Balkans to Sardinia and to Ukraine and from there to Scandinavia? Or from Scandinavia into other destinations? Or even somewhere from Central Asia into these parts of Europe?)
- East Mediterranean survival or expansion of proto-Slavs from northeastern Africa (or from India [30]) in the Levant, Fertile Crescent, Aegean, Black Sea and Danube area is to be taken seriously. The age of the "Out of India" origin, estimated by anthropological and linguistic data [30], is supported also by the diversity distribution of the Y-chromosome haplogroup R [31].
- The 30 000 BP situation indicates that the proto-Thyrrhenian people lived from the Atlantic Ocean to the Adriatic and Scandinavia, whereas proto-Slavs populated the areas east of them

in the above mentioned areas. We should not exclude the possibility of their mixing in the areas of contacts.

- We can reasonably assume that till about 20 000 BP the people from the Northern and Central Europe retracted into the Last Glaciation refugia. Proto-Slavs retracted mainly into the Black Sea refugium, into the Balkans and partly also into the Adriatic refugium. Proto-Thyrrhenians retracted mainly into the Thyrrhenian refugium. More to the south the situation remained largely unchanged. In the refugia for thousands of years there was much mixing and homogenization of the population(s).
- By around 20 000 BC (Sea of Galilee) first indications [32] of sedentism among people who might have been fishermen. Sedentary fishermen seem to have been most amenable to develop later the agriculture.
- Hunters/gatherers were more amenable to develop stockbreeding, stationary or nomadic, possibly after 10 000 BC.
- All these groups were motivated well before that time to develop techniques for food preservation and protection.
- Preserved food enabled at least small groups to travel large distances, by land and/or by sea.
- By around 14 000 BC there is an expansion from the coastal areas of the LGM refugia northward and into the mountains; especially from the Adriatic refugium as the lowlands near the Adriatic coastline are now below the sea level. Opening the east-west barriers around Ural and Thurgay Gate enabled the Finno-Ugric people to spread northwest towards Baltic.
- Fertile Crescent, ~8500 BC: Domestication of several cereal species and pulses, as well as sheep, goats and cattle took place [32]. Approximately at that time there is probable the first spread of nomadic stockbreeders towards north and east. And from there in several waves towards the Central Asia.
- Before 6000 BC separation of proto-Indo-Aryans and proto-Slavs [17,30];
- By about 6000 BC, on the one hand the first expansion of agriculture in the Balkans and Black Sea area. It proceeded mainly by learning, trade, and travel [33]. On the other hand, intrusions of proto-Arabs (or other proto-Semites) into proto-Slavic regions in Mesopotamia by about 6000 BC, into proto-Slavic Palestine around 1850 BC and massively after the Exodus, by around 1200 BC;
- By about 5600 BC, when fresh water in the "Black (fresh-water) Lake" was overwhelmed by salt waters of the Mediterranean which caused a very significant rise of water level and formation of the Black Sea, there appeared the next wave, more efficient, longer lasting expansion of agriculture, mainly along the rivers, progressively as far as Scandinavia, northern Mediterranean, western Europe and British Isles, causing Indo-Europeanization of substantial parts of indigenous proto-Thyrrhenian peoples, and introduction of Slavic-like vocabulary into Basque.
- Merging of material cultures [34] indicates Indo-Europeanization of (proto-Finnic [35]) proto-Balts (by proto-Slavs arriving from the Danube area) into Balto-Slavic till about 3000 BC, etc, producing linguistic and genetic clines observable still at present time, and being in line with the Czech and Polish mythology about the arrival there of their ancestors [36];
- In parallel, there took place an additional expansion of nomadic stockbreeder proto-Slavs from Near East and (South-) Eastern Europe into Central Asia and about 4000 BC reaching as far as China. On their way they were mixing with indigenous peoples. One of these groups would become later the Tocharians;
- By about 2000 BC, their expulsion by the Chinese started their intrusions towards west into Europe and Near East; e.g. Hyxos around 1750 BC into Egypt;



- Their main intrusion into Europe and Near East after 1300 BC resulted in form of the "Peoples from beyond the Sea" around 1200 BC. Turko-Tataric expressions for leaders of Etruscans [37,38] as well as the presence of the Y haplogroup HG26 in Italy [17] indicate that they were possibly commanded by Turko-Tatar people;
- After defeats on attacking Egypt, especially after attacks from Libya, the retraction of their vestiges into Europe is a reasonable scenario and it is indicated also by the mythology. Subduing the original population they formed "new peoples" like Etruscan, Oscan, Umbrian, Latin. Some other groups of them formed the ravaging groups in the central Europe, which promoted erection of defensive architecture (forts) over vast areas;
- By around 700 BC these ravaging groups were driven north into previously proto-Thyrranian/protoSlavic Scandinavia, where they mixed and became the foundation stock of proto-Germans, who expanded intruding (approx. 200 BC to 200 AD) south, east and west into traditionally Gaulish, Baltic and Slavic regions. Later, the Anglo-Saxons subjugated the Celtic and other peoples of the Britain.

A vignette of this time-line is presented in Figure 4 indicating graphically the course of some events that led to the development of Indo-European languages as we know them today.

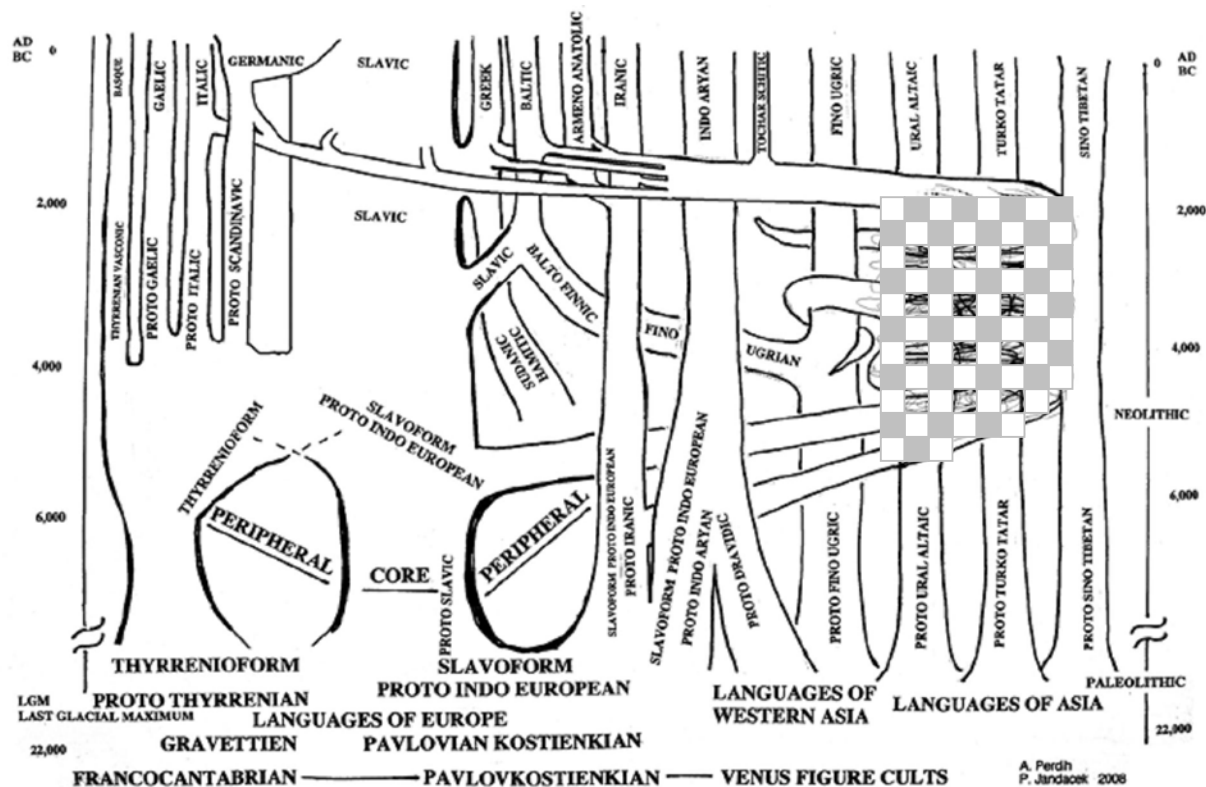


Figure 4. Indo-European Language Tree as seen from the side in the time span from about 8000 to 0 BC.

### Addendum

The scheme of the proto-Thyrranian/proto-Slavic development presented in Figure 4 and in the text above was based on the generally accepted supposition that the non-Indo-European Basque is the true heir of the proto-Thyrranian language [21,22] and that therefore the original

proto-Thyrranian language was non-Indo-European. If, however, we take into account also the genetic data, which indicate that about 85% of present non-Indo-European speaking Basques have the Y-chromosome haplogroup R1b1, whereas the Indo-European speaking west Irish Connaughts have about 98% of it [23], as well as the findings of Villar [24,25] that the Basques (i.e. part of ancestors of present-day Basques) are relatively late immigrants, then this part of the scheme has to be changed. Taking into account all new data, including those of Skulj et al. [30], it indicates that the origin of Indo-Europeism is in India and that it is very old, at least 70 000 years if not about 100 000 years. Namely, India was during substantial coolings (e.g. before about 70 000 years and also during the Last Glacial Maximum) one of the least distressed areas because it is protected from north by the highest mountain chains on the Earth, and therefore a refugium enabling the survival. And that the I-E phenomenon was connected mainly to the Y-chromosome haplogroup R, which during time split into subhaplogroups. The people of the subhaplogroup R1b1 (i.e. proto-Thyrranians and their heirs in western Europe) retained of the complex original Indo-European language much of the complexity of the verbal system and simplified the noun system, whereas the people within the subhaplogroup R1a1, especially the proto-Slavs and their heirs, simplified first of all the verbal system and less the noun system. In view of above data, the origin of the non-Indo-European Basques will have to be looked for in the possibility of the immigration of a military group from the Caucasus region or even more to the east, for example after the defeat during one of the last attacks of the "People from beyond the sea" from Lybia into Egypt, which enforced the elite dominance. This consideration is illustrated in Figure 5.

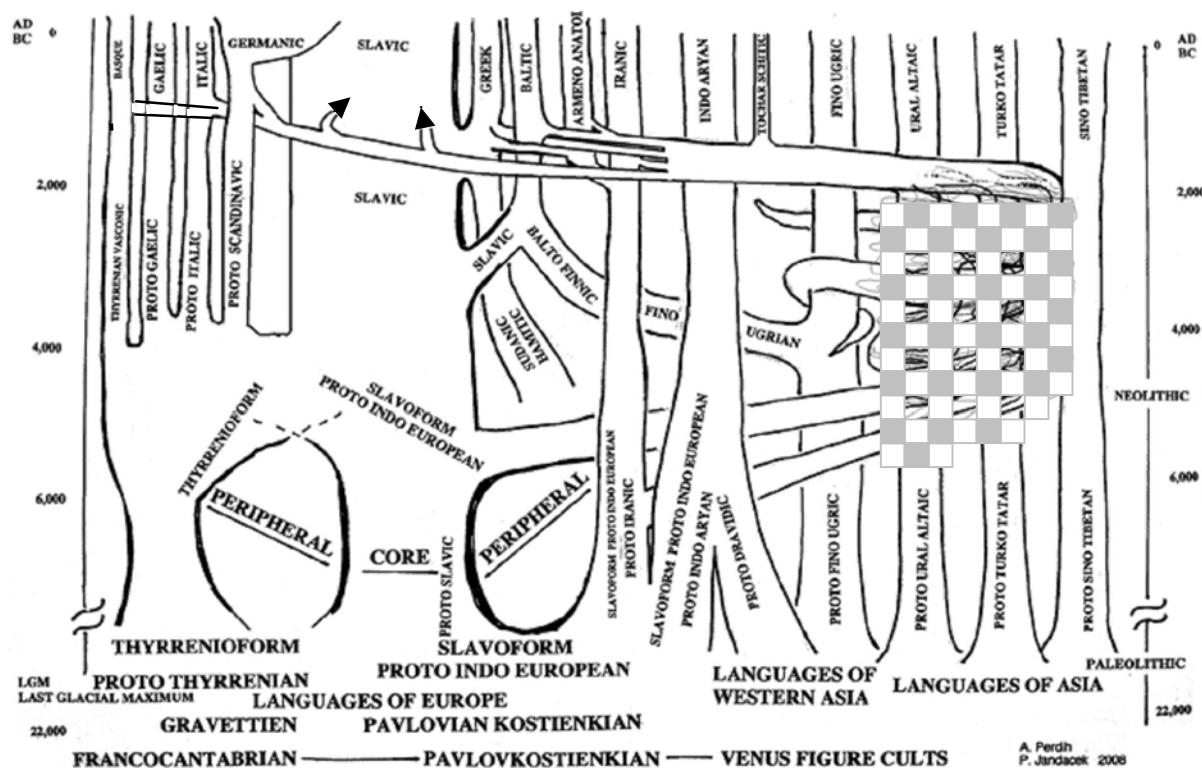


Figure 5. Indo-European Language Tree as seen from the side in the time span from about 8000 to 0 BC including the possibility that part of the ancestors of Basques are later arrivals.

Numerous origins and splittings will be necessary to look for in a much more distant past than we are used to at present. There is the likelihood that genetic and linguistic migration was not a one time event, but was likely to be free flowing back and forth for many, many generations.

## Conclusions

The Kentum I-E languages are thus derived from Satem ones and not vice versa. These events did not proceed through internal developments in the proto-Slavic I-E languages, but primarily by the influence of proto-Slavic on neighbouring non-I-E languages by events which produce patois, pidgin, creole and other such derivations - as the consequences of elite dominance. And *vice versa*, by influence of non-I-E languages on parts of proto-Slavic. Subsequently, it was followed by elite dominance effect of some of the newly formed Kentum groups over some of the Satem ones.

The massive extinctions of Indo-European languages in the past [34], being it physical or only linguistic, should be sought for not only in Europe, but also in south-west Asia.

There the development hunter/gatherer > hunter/harvester > mixed farmer (farmer/stockbreeder) resp. fisherman/gatherer > fisherman/harvester > fisherman/agriculturist might have been performed by proto-Slavs. In the later periods (e.g. by the sixth millenium in Mesopotamia, after about 1000 BC in Palestine, still later in Anatolia) the proto-Slavs were subdued, exterminated, assimilated or replaced by other populations or have gradually lost their linguistic characteristics due to elite dominance.

In Europe, however, the neolithic proto-Slav farmers/stockbreeders seem to have expanded into previously non-Slavic, also non-I-E areas, forming on the one side the Balto-Slavic cline north of Carpathian mountains, whereas north, south, and west of the Alps they effected general Indo-Europeanization or more specific Slavization of most of the people descended from the Thyrrenian Sea refugium. After the Roman conquest, and especially after the German conquest, the Slavic communities in western Europe (Great Britain, France) and in central Europe (Germany, Switzeland, Austria, Hungary, Italy) experienced gradual decline and were finally systematically assimilated during last centuries.

Great caution must be exercised when extracting supposedly \*Indo-European features from Baltic languages. Namely, the Balto-Slavic complex had not formed until about 4000 to 3000 BC [34] from the primordial proto-Finnic [35] and incoming proto-Slavic, with later contributions from other sources. It is possible that when a non-Slavic feature found in Baltic languages is proclaimed as Indo-European, this feature may be in fact non-Indo-European by origin. This warning applies also to other "peripheral" Indo-European languages.

In future research it is imperative also to distill the proto-Thyrrenian features ostensibly preserved in Saami, Old Irish, western Irish dialects (especially in Connaught, Munster, Ulster, Leinster [23]), Old Norse, Basque, Berberic, Sardinian, and possibly even in the most archaic western and eastern Slovenian dialects.

When doing this type of research, geolinguistic principles are to be considered. However, one must keep in mind, that the rule that "the center is innovative, whereas the periphery is conservative", is a secondary, not a primary rule. When the languages are in isolation, they are quite stable and change slowly. Whereas, in contact with other languages, they are less stable and as a result change faster. The changes start with borrowings and they increase with the introduction of the logic (structure) of the other language. The combination of both effects is reflected in the innovations. Thus, it is the consequence and not the cause that "the centers, where different people meet, are innovative. The periphery, especially in isolated places, is conservative".

And, besides the present [28] static Theory of Continuity, a Dynamic Theory of Continuity is to be put together based on the lines presented above.

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