



ENQUIRING THE NATURE OF PELASGIC LANGUAGE(S) VIA INFORMATION SYSTEMS MODELLING

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ABSTRACT

The term “Pelagic” refers herein to the language(s) spoken by the Pelagian people, who were considered by ancient Greek scholars as indigenous inhabitants of the prehistoric Aegean region and Greece. Both the existence of a single Pelagian nation and the very language itself has been disputed. The relevant argumentation for and against includes diverse evidences from archaeology, anthropology, ethnography and linguistics. In order to facilitate the classification, interconnection and interpretation of so diverse relevant tokens for enquiring the nature of Pelagic language(s), the application of Information Systems modelling in Humanities is demonstrated in this paper. The implementation of the preferred modelling method, named OMAS-III, denotes that Pelagic exists as an Indo-European language that most probably belongs to the Anatolian family, something that will potentially require the internal revision of the linguistic taxonomy of the latter. This implementation also indicates, with caution, that remnants of Pelagic have survived in a small fraction of the Albanian vocabulary that practically coincides with the endangered dialect of the Arvanitan Greeks (which is called Arvanitics herein), still spoken by elders at southern Greece.

KEYWORDS: *Pelagic, Pelagian, Information Systems modelling, Anatolian languages, OMAS-III, Albanian, Arvanitan Greeks, Arvanitics.*

1. INTRODUCTION

The term “Pelagic” language refers herein to the one or more languages spoken by the controversial people, called Pelagians, considered by many scholars as the indigenous inhabitants of prehistoric Greece and the Aegean region, before the arrival of the Proto-Greeks [1]. Ever since the dawn of the Classical Era (6th century BCE, onwards), the ancient Greek scholars had either contradictory or obscure opinion about the Pelagians [2]. In fact, everything about them is controversial: the nature of their ethnicity, the places of their inhabitation, their language and the etymology of their name. Each case will be briefly summarized in the following subsections, respectively.

1.1 Ethnicity

It is not clear whether Pelagians had been a single ethnos (i.e., ethnic entity) or merely a characterization of prehistoric non-Greeks, in general. The ancient Greek scholars refer many ethnonyms, besides Pelagians (e.g., Kadmeians, Pelopans, Danaans, ...). According to Hecataeus of Miletus, they were not Greeks, originally. According to Homer (*Iliad*), in the Trojan War, some of them had been allied to Greeks and others to Trojans. According to Dionysius of Halicarnassus, they were a

Greek tribe, while according to Herodotus, the Aeolians, Achaeans, Ionians and Dorians (the four historical groups of Ancient Greeks) had been originally branches of them. Seemingly after the Trojan War, most of them joined the Greek ethnos, the Trojan War being very beneficial, according to Isocrates, because it united the Greeks. Among those Pelagians were the Ancient Athenians (Ionians), who, according to Plato, regarded themselves as genuine Greeks, compared to others. One is certain, that they were an autochthonous population [2] of Late Neolithic and Bronze Age Greece.

1.2 Inhabitation

Once again, the ancient Greek scholars located the Pelagians here and there, all over Greece and the Aegean region, something understandable since they were referred as nomads, while Herodotus refers that the previous name of Greece had been “Pelagia” [2].

1.3 Language

The language of Pelagians, as an Indo-European one or not (henceforth, IE), is mainly based on linguistic evidence, regarding toponyms of similar linguistic form to ones in Minor Asia or other words. These scholars that argue for the IE linguistic origins attribute to them: (1.3.i) an identity akin to Greek [3];



Anatolian [4]; Thracian [5]; Old/Proto-Albanian (originally proposed in 1854 by J.G. von Hahn) [6]; an unknown, although IE, identity [7]. The scholars that have argued against the IE origins attribute: (1.3.ii) an Ibero-Caucasian linguistic identity [8], an unknown non-IE one, based on religious/mythological customs [9] and the so-called “Old European” [10].

1.4 Etymology

According to the Ancient Greek mythology, the Pelasgians were named after Pelasgos, son of Zeus and Niobe (Apollodorus) and first autochthonous king of Peloponnese (Pausanias) [2]. Even so, the problem of the etymology is transferred to Pelasgos. According to Sakellariou [11], 15 different etymologies have been proposed in the last 200 years, although most of them being “fanciful”. The most linguistically sound is the one originally proposed by Murray [12], meaning “neighboring land”. In particular [13], the name “Pelas-g-os” looks like a purely Greek word, derived from the usual expression “hoi pelas”, meaning “the neighboring people”, and this -g- that can be easily explained either from the stem of “gaea” (land) or from the IE root that is also found in English “go”. Therefore, their name must have meant “those who occupy lands neighboring to us” or “those who have come to our vicinity”, both fitting perfectly to the contemporary archaeological context.

2. METHODOLOGY

In order to reveal the nature of the Pelasgic language (henceforth, simply Pelasgic), after so much controversy involved, a holistic approach was deemed appropriate. For this purpose, a systemic model has been applied that originates from the Information Systems’ repertoire. Namely, OMAS-III (Organizational Method for Analyzing Systems) is the specific modelling tool/technique [14] that has been successfully applied to the study of various phenomena in Humanities, including education [15-23] and training [24-26], career counseling [27-30], and, especially regarding the herein interest, applied linguistics [31-34] and archaeology [35, 36].

More specifically, according to OMAS-III, all the elements that are required for the thorough study of an issue can be classified in seven categories: (2.i) the causal, (2.ii) the ruling, (2.iii) the factual (input), (2.iv) the resulting (output), (2.v) the human, (2.vi) the spatial and (2.vii) the temporal ones. After being gathered and classified, the interconnections between them are enquired. Depending on the nature of the issue, one of these categories contain the elements that represent either the solution to the studied problem or the results of the inquiry. The order of study also depends on the nature of the issue. In this particular inquiry, the result sought (2.iv) was the discovering of the nature of Pelasgic. Therefore, all

the available tokens have been classified in the remaining six categories.

3. APPLICATION

The present inquiry will initiate with the ruling elements (2.ii), because they set the criteria for accepting or rejecting hypotheses and proposals. In addition, the spatial (2.vi) and temporal elements (2.vii) have been already well defined. The former are focused on Greece and the Aegean region (subsection 1.2), while the latter regard directly the ages until the end of the 2nd millennium BCE and indirectly the end of the 1st millennium BCE.

3.1 Ruling elements

The ruling elements herein define the guidelines for collecting, organizing, analyzing and interpreting the related data and tokens. They can be roughly characterized to consider the usage of definitions, the selection of related data and the manner of processing them. These elements are presented as enumerated (in parentheses) and commented rules below, in terms of either what to do or avoid:

(3.1.i). The definition of “ethnos” refers to people who consciously share a common culture (language, religion and customs, in an undetermined mixture of importance) [37]; it is neither about genetic/anthropological relationship nor about common citizenship.

(3.1.ii). The ideologically focused or guided research, as observed elsewhere [38], causes the selective exploitation of sources and the convenient or biased interpretation of evidence (arguments for the aim), as well as the aposiopsis of the (known) inconvenient ones (arguments against the aim).

(3.1.iii). The interpretation of social events (in History or Prehistory) in a linear manner, neglects the phenomenon of acme and decline of human societies; societies exhibit a circular/periodical behavior [38].

(3.1.iv). The lack of multidisciplinary inevitably causes hasty, extempore, inaccurate and/or exaggerated hypotheses/theories; the system(at)ic approach [35, 36] serves ideally the multidisciplinary study of human phenomena.

(3.1.v). The direct connection of remote in time evidence with others, without having intermediate tokens, should be avoided.

(3.1.vi). “... there are no generally recognized linguistic criteria on the basis of which the time of mutual separation between two related languages can be assessed ...” [39].

The following set of rules should be especially applied in cases of deciphering ancient scripts [40]:

(3.1.vii). The deciphering text should be in its established form, not a “corrected” one convenient to the aspiring decipherer (see also 3.1.ii).

(3.1.viii). The direction of writing should be carefully considered.



(3.1.ix). The class of script must be established; namely, is it phonographic, pictographic or mixed, with or without diacritical marks (?).

(3.1.x). Sound techniques should be used for the decipherment (acrophony, rebus, comparison with other related scripts).

(3.1.xi). The hypothetical languages should be reasonably chosen.

(3.1.xii). The decipherment should be internally coherent, with few irregularities, and making plausible sense.

(3.1.xiii). The text must be long enough to support a decipherment; this rule is closely associated with the *unicity distance* in cryptography that estimates the minimum required length (L) of a text (total number of its signs) in order to achieve a decipherment [41], and with the demonstrable formula of Mackay [42] that estimates the approximate number of unique signs (S_s) in any given sample of a text (L), namely, the number of different signs of an alphabet, syllabary or another writing system that this text is written with.

Therefore, in a given text of an unknown writing system/language that has a total number of signs {L} and a number of different signs { S_L } there ($S_L \leq S_s$, $S_L \leq L$): $S_s = (L^2 / (L - S_L)) - L$. The Mackay's formula, when was applied to the classical Cypriot syllabary of 56 signs, calculated an estimation of 51 signs [40]. To account for this deviation of 5 signs, the following correction is suggested herein:

(3.1.xiv). $S_c = 1.1 \times S_s$ (since $56/51 = 1.098$).

3.2 Causal elements

The scientific interest about Pelasgic has been quite long, considering that, although all of the ancient Greek scholars mentioned Pelasgians, nothing much had been specifically written about their language(s). Therefore, the very existence of Pelasgic has been questioned, although it seems prematurely [13]. Besides that, the proposals of the linguistic affinity of Pelasgic include directly or indirectly many languages that have been already mentioned (see subsection 1.3). These proposals that can be specific enough (in terms of linguistic, archaeological, historical, ethnographic and geographical evidence) to be commented herein, raising also other than linguistic issues (hence being causal in their nature), are the following:

(3.2.i). The IE group of Anatolian languages [43] that include Hittite, Palaic, Lydian, Luwian, Lycian, Milyan, Carian, Sidetic, Pisidian [44] and Tyrrhenian/Etruscan; those of the languages that had been spoken in the Aegean Sea's region were Lydian, Luwian, Lycian, Milyan, Carian and Tyrrhenian (alias Tyrsenian [45]).

(3.2.ii). The IE Phrygian, a language closely related to Greek but not to Anatolian ones (see 3.2.i) [46]; the Phrygian/Vrygian/Brygian people had been an ethnos of Balkanic origin (Macedonian-Thracian),

also attested to Southern Greece and Minor Asia, according to ancient Greek scholars [47].

(3.2.iii). The so-called Old-European, a language of non/pre-IE origin [48], hypothetically spoken in Europe before the arrival of Indo-Europeans from the Pontic-Caspian steppes (the Kurgan hypothesis); this notion is very speculative in most aspects of its conception (see [39]).

(3.2.iv). The identification of Albanian with Pelasgic has become a target for the Albanian nationalism that aim at establishing the autochthonous of the Albanians in the region, despite the scientific/linguistic rejection of this affinity [49]; the readers herein may be amused by the following masterpiece of Albanian chauvinism (enclosed in quotation marks), based on the similarity in form and meaning of initially 60 Albanian words to Hittite [50] (the author's comments follow the semicolon):

- "Based upon the language that Hittites have spoken, a dialect of Pelasgian-Albanian language ..."; the reverse cannot be considered as a potential option.
- "Therefore the ancient Sumerian language constitutes a dialect of Pelasgian language and has much similarity with today's Albanian language ..."; based on the convenient identification of Pelasgian with Albanian (rule 3.1.ii).
- "Later on these regions, ... became part of the Empire of Alexander the Great, the great Albanian, who with 25 thousand Albanians conquered Persian Empire ..."; Alexander the Great had his paternal grandmother (Eurydice) and his mother (Olympias) princesses of Epirotan (Greek) origin [51] that (according to Peza & Peza [50]) they fully identified with Albanian ethnos, as well as the rest of the Macedonian (Greek) soldiers, regardless of the characterization of ancient Macedonian as the most conservative Greek dialect, closest than any other to the Proto-IE roots [13].
- "Albanian language, as a special sub branch [of the IE Family], branches circa the year 6900 B.C. and they think that its age dates circa the year 600 B.C."; see rule 3.1.vi, among others to follow next.

Obviously, rules 3.1.i-ii are absolutely violated.

3.3 Human elements

The human elements (2.v) herein include the anthropological, ethnographic and archaeological evidence of the studied region (2.vi), since antiquity (2.vii). They are factual in nature (2.iii), but they are classified separately herein, to have the importance of human factor emphasized. Their consideration will commence with the claims of the Albanian nationalism (3.2.iv).



(3.3.i). Although Albanian folklore and mythology are of pagan origin (“Paleo-Balkan”) [52], the anthropological studies show that the Albanian genetic ancestry does not differ from other European peoples and especially these of the Balkans [53]. Therefore, the debate about the origin of the Albanian ethnos is mainly based on linguistics (rule 3.1.i), while even if a regional population continuity could be proven, this does not infer linguistic or especially ethnic continuity [54]. The Albanian language, which has been affirmatively documented just since 1462 CE [55], exhibits an inflectional concatenative morphology that is typical of Southern and Eastern European languages. In terms of vocabulary, “Albanian seems to have lost more than 90 per cent of its original vocabulary in favour of loans from Latin, Greek, Hungarian, Slavonic, Italian and Turkish.” [56], the former (i.e., Latin) accounting for 60% of the total [57]. Regarding this very high percentage of Latin vocabulary in Albanian, Kargakos [97] states that the etymology of the name “Albanian” originates from the Albanum mountain, about 20 km from Rome. In its foothills Alba Longa was built, the original cradle of the Romans, which was destroyed by the eruption of a volcano in the years of Tylos Ostylios. Soldiers from this area, who were called Albani, guarded the famous Egnatia Road during the Roman rule, which started from Durres and reached as far as Byzantium. Even if this huge percentage (90%) is somewhat overestimated, the remaining 10+% is too low to justify any ancestry of Albanian to Pelasgian (“its original vocabulary”), as the Albanian circles wishfully like to claim [58]. This part as well can be a loan, since an extremely non-conservative language is demonstrated here. In fact, there are a few words of this original vocabulary, like “hekur” (iron) or “zemër” (heart), that have an unknown etymology, regarding either Proto-IE or any other known regional language [59]. Along with this unknown etymology, the most recent categorization of IE languages classifies Albanian to the Daco-Albanian group, in contrast to the Anatolian and Graeco-Phrygian ones [60]. This classification argues for those scholars who had suggested that between the 3rd and 6th centuries CE the Albanians migrated southwards, initially to Romania and then further southwest to the present-day Albania [61-66]. Even for those numerous scholars that argue for the Illyrian origin of Albanian (e.g., see [67]), Thucydides reported that when the Greeks colonized the coasts of present-day Albania, in the 7th century BCE, they found only Vrygians (3.2.ii) there [47]; the first Illyrians (“Taulantians”) migrated there about a century later [68]. This event excludes any direct connection of Albanian to Pelasgian, other than loanwords passed on by previous inhabitants. Thus, the related to Hittite (or another Anatolian language) vocabulary of Albanian [69] is indeed invaluable for the identification of Pelasgian (as it will be

mentioned herein, later on), but not for the purposes of the Albanian nationalism, namely, to confirm the existence of a Proto-Albanian ethnos at southern Balkans prior to the Medieval Ages.

(3.3.ii). According to the hypothesis of Old-European (3.2.iii), some non-IE languages had been spoken in Neolithic Europe (7000-1700 BCE), until they were gradually replaced by the migrating Indo-Europeans, coming from the steppes of the Pontic-Caspian region [70]. The notion of Old-European is linked to the civilization of the Danube valley (5000-3500 BCE) and its associated but undeciphered script [71], as well as to Basque, Etruscan [72] and Pelasgic [58], being non-IE languages. In the case of Basque, for example, the hypothesis that they were an indigenous population (and language), being gradually isolated by the IE migration, is preferred to the reverse option of having been a migrating population from the steppes to an IE Iberia, as well. So, to begin with this notion and until now, genetics provide tenable argumentation: The Balkans at the beginning of the 3rd millennium BCE (i.e., 3000 BCE) had been already inhabited for 3,500 years by a mixed population that originated from Anatolia and locals, “with intermittent genetic contact with steppe populations occurring up to 2,000 years earlier than the migrations from the steppe that ultimately replaced much of the population of northern Europe” [73]. The latter migration, since 2900 BCE, is attributed to the Yamnaya (or Yamna) steppe pastoralists [74] that had reached Britain by 2400 BCE, through Central Europe [75]. Yet, there are no genetic traces of them in Anatolia (e.g., among the IE Hittites), putting the theory for the spread of Proto-IE from the Pontic-Caspian region at risk [76]. Nevertheless, the Yamnaya people had also a genetic ancestry from a population of Near East [77] (which is reminding of rules 3.1.i and 3.1.iii). The above evidences lead to the other theory of Proto-IE spread from Anatolia instead [78], based on the “archaic” linguistic features of the Anatolian languages, compared to the rest of the IE ones. The Anatolian languages are attested since the 2nd millennium BCE and their projection much further in the past tends to violate rules 3.1.i and 3.1.v, although not impossible. Yet, even in this case, at the time of interest regarding Pelasgic (2nd millennium BCE), the IE languages (and populations) were dominant in eastern Mediterranean [39] and the identification of Pelasgic with an Old-European language of non-IE origin should be rather excluded (even the nature of the alleged Old-European cannot be determined, unless the Danube scripts are deciphered, according to rules 3.1.vii-xiv).

(3.3.iii). Regarding the identification of Pelasgic with the IE Phrygian/Vrygian/Brygian (3.2.ii), it should be initially noted that the ancient Greek scholars referred to Phrygians as a distinct ethnos, considered by Herodotus of speaking the most ancient of



languages [47]. The Phrygian language is so much related to Greek as to form a common group of IE languages, the Graeco-Phrygian one [60]. It has been estimated that between 2300-2000 BCE the Phrygians had inhabited Thrace, Macedonia, parts of Thessaly, they had scattered communities in the rest of southern mainland Greece [79], by the end of the 2nd millennium BCE northwestern Anatolia [80] and the southern present-day Albania [47]. With the reservation of rule 3.1.i, the linguistic affinity and the geographical vicinity between Phrygian and Greek leads to the assumption that there is also a common anthropological ancestry. The genomic composition of the Mycenaean Greek and Minoan Crete populations revealed that they were genetically similar, having 75% of their ancestry from the first Neolithic farmers of western Anatolia and the Aegean, with the remainder from ancient populations related to those of Iran and the Caucasus; in addition, “the Mycenaeans differed ... in deriving additional ancestry from an ultimate source related to the hunter-gatherers of eastern Europe and Siberia, introduced via a proximal source related to the inhabitants of either the Eurasian steppe or Armenia” [81]. This genomic composition has been attested to Modern Greeks, as well, with a statistically insignificant percentage of Asian haplogroups and none from Africa [82]. This composition may justify a moderate ethnic diversity of strictly IE origin in southern mainland Greece of the 2nd millennium BCE [83]. Moreover, a broader genetic homogeneity has been recorded by Cavalli-Sforza [85], regarding the “Mediterranean” genotype, that includes the populations of western Anatolia, of Balkans roughly north of the Jireček Line [84] and of southern Italy (“Magna Grecia”). Haarmann [70] attempted to dispute Cavalli-Sforza, regarding the extent of this region, by stating that Greek populations did never settle, e.g., as far as central Anatolia etc. Haarmann confuses the ethnic identity with the anthropological one (rule 3.1.i). The anthropological homogeneity of the periphery of the Aegean Sea has been attested as such even before the Early Neolithic era, having eventually (i.e., since Bronze Age) two subtypes: the continental (main/highlanders) and the Aegean one (coast/islanders) [86]. In this respect, a genetic difference between Phrygian and Greek speaking populations cannot be anthropologically traceable, while the hypothesis that they both migrated in the region from far north by the late 3rd millennium BCE is not anthropologically verified. Subsequently, the suggestions about the autochthonous of the Greek language [87], at least since the 3rd millennium BCE [88], are valid. In conclusion, at the middle 1st millennium BCE that the ancient Greek scholars wrote about the obscure Pelasgians, the Phrygians were well-known to them as a distinct ethnos. If their languages (i.e., Pelasgic and Phrygian) had anything in common, then the ancient Greek scholars should

have mentioned something about it. Therefore, any affinity of Pelasgic with Phrygian should be limited. (3.3.iv). Finally, considering the potential affinity of Pelasgic with the Anatolian languages (3.2.i), the anthropological and ethnographical context of the 2nd millennium BCE will be outlined first. Regarding anthropological evidence, as presented previously (3.3.iii), no significant differentiation is attested between the populations of western Anatolia and southern Balkans. It could be claimed that the populations of southwestern Anatolia belong to the Aegean subtype of the Mediterranean genotype. It is especially reminded that they lack any genetic ancestry with the Yamnaya pastoralists (3.3.i). It is also noted that there is not a single case in the European history where a pastoral population (e.g., Ostrogoths, Visigoths or Franks), migrating or invading to agricultural/urbanized regions/societies (i.e., Italy, Spain or France respectively), being a minority (just like the genomic evidence denote in southern Balkans), managed to impose their language to the locals; on the contrary. Even the Romanians, situated at the very geographical corridor of migrations/invasions from the steppes to Balkans, remarkably managed to retain their Romance language. The eastern Balkans of mid-3rd millennium BCE had been such a place; it was not a land of savages, as demonstrated by the ornate artefacts from various metals [89]; that civilization is manifested 1,000 years earlier than the known long-distance commercial networks of the Mycenaeans towards Scandinavia [90] and the Levant [91]. Otherwise, the afore-mentioned context in Anatolia can be assessed both directly and indirectly. In the cultural zones of western Anatolia, the inner one (i.e., the relatively eastern that can be extended to the central Anatolian plateau) was dominated by the Luwian culture, which generally exhibited indirectly a certain influential contact with the early Greek world [92, 93]. The most influential zones of Anatolia had been the coastal one, in conjunction with the neighboring Aegean islands, inhabited by Lydians, Carians and Lycians (in a North to South order, respectively). The Lydian contact has been attested since the 1st millennium BCE [94], but a projection to the late 2nd millennium BCE is mainly from Greek mythology. The Carians had been an ethnos frequently mentioned by the ancient Greek scholars (e.g., by Homer in Iliad). They believed that they were related to Lydians and Mysians, as well as having a myth claiming a common ancestry with the Greeks, living in a close symbiosis, for more than a millennium, initially with the Mycenaeans and then with the Ionian Greeks. Since the 5th century BCE, the Carians gradually gave up their ethnic identity, culture, language and script, in favor of the Ionian Greek ones [95]. Their voluntary assimilation exhibits the same pattern as the one of Pelasgians (see section 1.1). Finally, the Lycians are the last population speaking



an Anatolian language to be mentioned. They were known by the Ancient Egyptians as allies of the Hittites, since the mid-2nd millennium BCE, and part of the Sea People (“Lukka”) [96]. Like their neighboring Carians before them, the Lycians had been voluntarily Hellenized after the campaign of Alexander the Great (ca. 300 BCE).

3.4 Factual elements

Given the scope of this study to determine the nature of Pelasgic, the factual elements herein are solely linguistic. Therefore, summarizing the presented argumentation so far, the ancient Greeks (since the 1st millennium BCE, onwards) had a vague idea about the nature of Pelasgic, in comparison to their knowledge about all the other neighboring languages (and nations) that included Thracians, Phrygians (3.3.iii) and the then existing Anatolian ones (3.3.iv). The cultural, anthropological and ethnographical evidence (see section 3.3) demonstrate that by the 2nd millennium BCE (at least [98]) there were only IE languages spoken at Greece, with the exception of Crete [13, 99]. In addition, the geographical disperse of the Pelasgian settlements, according to the ancient Greek historical sources [79], and the ethnographical patterns exhibited by Carians and Lycians that are identical to the mentioned for the Pelasgians ones (3.3.iv) directed this research towards an inquiry for a language (i.e., Pelasgic) related to other Anatolian ones, although without excluding a-priori other regional influences. In this respect and according to Finkelberg [39]: “there is reason to suppose that the languages that once were thought to constitute the so-called ‘pre-Hellenic substratum’ belong to the Anatolian group of the Indo-European languages.” Consequently, an overview of the Anatolian languages is initially considered necessary.

(3.4.i). The Anatolian languages constitute an extinct branch of IE, comprising Hittite, Palaic, the Luvic sub-branch [98] and Lydian [100]. There is a considerable confusion of terminology with the Luvic (or Luwic) sub-branch, which is often called just “Luwian languages” (confused so with original Luwian) or “Neo-Luwian languages”, the latter implying that they separated from the original Luwian. Considering rule 3.1.vi, a relative chronology in the development of languages (e.g., see [98]) is preferred herein instead of an absolute one (e.g., see [74]). Therefore, the term “Luvic (/Luwic)” [101] will be used herein to denote this language family that consists of Carian, Luwian, Lycian, Milyan, Pisidian and Sidetic. Recently Woudhuizen convincingly argued for the characterization of Etruscan as a “Colonial Luwian” language [102]. Yet, the inclusion of Etruscan in the Tyrsenian (or Tyrrhenian) family of languages [103] may require a revision of the Anatolian taxonomy. The Tyrsenian family include Etruscan, Rhaetic, probably Camunic (as arguably related to Rhaetic) and the so-called Lemnian from the Aegean island of

Lemnos, where it has been found on two inscriptions and a small number of other extremely fragmentary material [104]. The consequent question is whether to classify Tyrsenian as a sub-branch of the Luvic family or as a branch of the generic Anatolian. In the latter case and depending on a potential relation of Lydian with Etruscan [105] or Lemnian, Lydian could be either included in the Tyrsenian family or remain a distinct language of the Anatolian IE-family.

(3.4.ii). The connection of Anatolian languages with Greek are well attested, including Hittite, Luwian, Carian, Lydian, (pre-)Lycian and, especially for the herein inquiry, an unidentified Luvic language arguably of northwestern Anatolia [106], which, by the way, is opposite to the islands of Lemnos and Imbros. These two islands had been inhabited by Pelasgian settlers, according to Strabo, and especially Lemnos by those Pelasgians expelled from Attica, according to Herodotus [72]. Thus, in the 1st millennium BCE, three islands were considered by the ancient Greeks to be still inhabited by Pelasgians: Lemnos, Imbros and Crete [13]. Herodotus, half Carian himself, referred about Pelasgians “that he cannot be certain about the language they spoke, but judging from some remnants of Pelasgian speaking people and various place-names left in Greece, he concludes that they spoke a barbarian (i.e., non-Greek) language” [13]. Presumably, this language (i.e., Pelasgic) could not have been either the known Thracian/Phrygian (3.3.iii) or Carian, although both Finkelberg [39] and Woudhuizen [79] suspect that it is highly likely to be Anatolian, especially a western one. In 2008, B.Z. Szalek published a long catalogue of common or similar words between Eteocretan, Linear A, Etruscan, Lemnian, Carian and Eteocypriot [107], demonstrating so the relevant linguistic influences. In 1912, I. Thomopoulos published a monumental work that presented a meaningful decipherment of the Lemnian inscriptions (3.4.i), along with the supposed Eteocretan inscriptions of Crete (i.e., Pelasgic), by using the “original vocabulary” of Albanian (3.3.i), considering it Pelasgic. He had also demonstrated the linguistic affinity of the “original vocabulary” to Lycian, Carian, Etruscan and Hittite, among others. That work was republished commented in 1994 [108]. Unfortunately, written in Greek, it passed unnoticed by the international archaeolinguistic community, while in Greece it was largely (and rather deliberately) ignored, trapped in the expediencies of regional nationalisms (i.e., Albanian and Greek), because Thomopoulos was neither a linguist nor a philologist [109]. Despite its inevitable inaccuracies and exaggerations, if the essential part of Thomopoulos’ work [108] will be linguistically verified, then it will result in the definite classification of Pelasgic as an Anatolian language; specifically, either the language of the Luvic family



spoken in Greece, different from Luwian because of their vocalism [110] or, alternatively, a language of the Tyrsenian family (3.4.i). Finally, it will identify the “original vocabulary” of Albanian with Pelasgic, leading so to the last linguistic/ethnic dispute below. (3.4.iii). The Albanian language comprises two main dialects, the northern Gheg and the southern Tosk. Both consist of several dialects, where among those of the Tosk one is Arvanitics, the dialect of the bilingual Arvanitan Greeks, who mainly live in Attica and the surrounding regions (southern Greece) [111]. Arvanitics is an endangered language, because it has been rarely written, along with several other reasons combined [112]. It has been cut off by the rest of the Albanian dialects since the 13th century CE and, being very conservative, it has retained the medieval linguistic elements of Albanian [111], having increased Greek elements [113] because of the bilingualism. Due to these peculiarities, Arvanitics are of great interest for the study of Greek-Albanian linguistic relations [114]. Alas, Arvanitics and Arvanitan Greeks are a target of the Albanian nationalism for their whatever purposes (3.3.i), while many Arvanitan Greek publicists react by rejecting the identification of “their” language (actually, the “original vocabulary”: 3.4.ii) to Albanian, claiming it to be an extremely archaic Greek language [115]. Regardless of the tenability of this dispute that refers to the “original vocabulary”, which is beyond the scope of this study, the Arvanitic vocabulary [116] is an additional valuable source for the attestation of Pelasgic in Thomopoulos’ work [108], being medieval in origin and thus of the oldest possible linguistic tools available for this purpose.

4. CONCLUSIONS

Even if it seems that the ancient Greeks had used the term “Pelasgians” as a generic one to denote ancient populations of the Aegean periphery (i.e., Greece and western Anatolian coasts), nowadays this term and the corresponding language (i.e., Pelasgic) is not necessary to be so vague. In the 2nd millennium BCE, this broader region had been inhabited by populations that ethnographically can be denoted as Pelasgians, Anatolians (Lycians, Carians, etc.), Greeks and Thracian/Phrygians, the latter three indisputably speaking IE languages. The anthropological evidences (see subsection 3.3) do not infer any major differentiation, unless the existence of two sub-types, a more “mainlander” and a more “islander” one (3.3.iii). In this respect, mostly the Anatolian languages could be reasonably linked to “islanders” (3.3.iv). In addition, the ancient Greek sources located the Pelasgians to the same, more or less, coastal areas or islands inhabited once by Anatolian speaking populations [79]. One of those islands had been Lemnos (the other important one being Crete), which plays a key-role in the identification of Pelasgic (3.4.ii). According to the

ancient Greeks, Lemnos had been affirmatively inhabited by Pelasgians (“Tyrsenian” Pelasgians), who left there a few inscriptions; although undeciphered, these inscriptions have been designated as written in the so-called Lemnian language, which in turn is classified in the same linguistic family with Etruscan; the Etruscan have been recently characterized as an Anatolian language (3.4.i). Therefore, the Pelasgians of Lemnos spoke a language potentially related both to Etruscan and to the Anatolian linguistic family (3.4.i). By this inference, Pelasgic can be initially affiliated with the IE branch of Anatolian languages.

In 1994, the unnoticed and neglected work of Thomopoulos [108] had been republished, where, meaningful decipherments of the Lemnian (and some Cretan) inscriptions are presented (3.4.ii). These, unverified yet, proposals were achieved by using the so-called “original vocabulary” of Albanian, which practically coincides with the Arvanitic dialect of the Arvanitan Greeks of southern Greece (3.4.iii), indisputably of IE origin. Moreover, this “original vocabulary” has been connected with other Anatolian languages, including Etruscan. If it will be proved correct, this attempt will definitely classify Pelasgic as an IE language of the Anatolian family, whose remnants have survived in Albanian and/or Arvanitics. It will also cause a revision of the content and taxonomy of the Anatolian, as a family of IE languages. Finally, regarding the birthplace of the Proto-IE language, the overall content of this study indicates that the neglected third hypothesis, besides the Pontic and the Anatolian one (3.3.ii), that of Balkans [117], cannot become obsolescent yet; moreover, a fourth unifying one has emerged, proposing the Proto-IE as a coastal koine of the Black Sea, developed because of the intense trading networks in the Late Chalcolithic and Early Bronze Ages, all around Black Sea [118]. For this inquiry, the application of Information Systems modelling in Humanities, especially via OMAS-III (see section 2), constitutes a comprehensive conceptual method for the classification, interconnection and interpretation of the diverse relevant tokens, as it has been demonstrated herein.

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