


## On Indo-European Prosthesis

### Sobre la prótesis indoeuropea

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### Abstract

The origin of the vowel that is sometimes found before sonorants, especially before /r/, in Armenian and Greek has been a traditional subject of debate in Indo-European Linguistics. While some authors explain it as a mere prothetic vowel, the followers of the so-called *laryngeal theory* consider it rather as another evidence of this odd phoneme.

**Keywords:** Proto-Indo-European; Laryngeal; Prothetic vowel.

### Resumen

El origen de la vocal que encontramos a veces ante sonante, sobre todo ante /r/, en armenio y griego ha sido tradicional objeto de disputa en el seno de la Lingüística indoeuropea. Mientras algunos autores la explican como una mera vocal protética, para los seguidores de la teoría laríngea se trata de una evidencia más de este insólito fonema.

**Palabras clave:** indoeuropeo; laríngea; prótesis.

In his *Dictionnaire de la langue gauloise* X. Delamarre (2003: 50 s. *anuan*) collects the existing alternative reconstructions for ‘name’ in its laryngeal version: *\*h<sub>1</sub>néh<sub>3</sub>-men-*, *\*h<sub>1</sub>nh<sub>3</sub>-men-*, *h<sub>1</sub>nóm-en-* describing them later as «laryngeal juggling with metathesis»<sup>1</sup> (Delamarre 2003: 107), reconstructions that Pokorny (1959: 391) displays in its prelaryngeal modality: «*en(om)h<sub>2</sub>-*, *(o)nomh<sub>2</sub>-*, *nōmh<sub>2</sub>»* for a root that would be attested with such a meaning in Albanian Tosk *emën*, Armenian *anun*, Avestan *nāma*, Breton *ano*, Cornish *hanow*, Old Slavic *ime*, Gothic *namo*, Greek ὄνομα, Old Indian *nāma*, Hitite *lāman -la-a-ma-an*), Latin *nōmen*, Iron Ossetian *nom* and Digor Ossetian *non* (Testen 1997: 722), Old Prussian *emnes*, Turfan Tocharian *ñom* and Kucha Tocharian *ñem* or Umbrian *nome*, a root considered also present as a copy from the Indo-European part in the Finno-Ugric group of the Uralic group, with variants such as *nimi* in Finnish and *nēv* in Hungarian.

Regularly and based on testimonies such as those of the Armenian *anun* and the Greek ὄνομα, or eventually on testimonies provided by some Celtic languages (Breton *ano*, Cornish *hanow*...), laryngalists systematically reconstruct –almost by *medical prescription*, one might say– a laryngeal. In reference to the Armenian, Ritter (1996: 17), for example, maintains: «The most notable coincidences with Greek are the reflexes of the Indo-European laryngeals in antecoronal initial position (“*prosthetic vowel[s]*”). Similarly for Ajello (1993: 234): «A peculiar phenomenon of Armenian is the significant development of prosthetic vowels: the presence of such vowels in Armenian can be partly explained by admitting the existence of a laryngeal in the reconstructed Indo-European word»<sup>2</sup>.

Thus, some, as we have seen, would reconstruct here a laryngeal *H<sub>1</sub>*, which is considered vocally associated with a timbre /e/, precisely, by the way, the only timbre in which we do not see this case documented either in Armenian, which presents /a/, or in Greek, which presents /o/. Perhaps for this very reason any of the three basic laryngeals, as De Vaan (2008: 412 s. *nōmen*) observes, have finally been proposed for the initial element, decanting this same author (*ibidem*) for the laryngeal *H<sup>3</sup>* and offering the two alternative roots of *h<sub>3</sub>neh<sub>3</sub>-mn* and *h<sub>3</sub>nh<sub>3</sub>-men*.

Necessarily simplifying the presentation now, let us say that both the Armenian and the Greek groups would be characterized, in effect, by being able to present in some words inherited from Indo-European an additional previous vowel where the other groups usually present an initial sonant: /l- m- n- r-/. A very relevant fact is that in Greek this vowel historically only appears regularly before /r/ and that likewise in Armenian the «consonant that is systematically avoided in initial position is /r-/, but sporadically the vowel attack is also used to avoid initial /l-/, /m-/ and /n-/»<sup>3</sup> (Ajello 1993: 235).

Thus, the Greek corresponds with ὀρέγω ‘[ex]tend’ to the Irish *rigim* ‘I extend’ and Latin *regō* ‘I direct - I straighten’, the Greek responds with ἐρεύγομαι ‘I vomit - I burp’ to the Latin *rūctō* ‘I burp’; in contrast to the Latin ‘red’ *rubrum* (accusative), Western Tocharian or B *ratre* and Vedic *rudhirá-*, Greek presents ἐρυθρός etc. For this reason, in historical Greek an initial /r/ in a patrimonial word –that is, of Indo-European etymology– regularly betrays the drop of another previous consonant. Thus, the verb of the famous sentence by the philosopher Heraclitus of Ephesus (540-480 a.C.) πάντα ῥεῖ “everything flows” –that is to say:

<sup>1</sup> «jongleries laryngales avec métathèse».

<sup>2</sup> «fenomeno peculiare dell’armeno è costituito dal notevole sviluppo di vocale protettiche: la presenza di queste vocali in armeno si può spiegare in parte ammettendo l’esistenza nella forma ie. ricostruita di una laringale».

<sup>3</sup> «consonante che sistematicamente è evitata in posizione iniziale è /r-/, ma sporadicamente l’attacco vocalico viene impiegato anche per evitare /l-/, /m-/, /n-/ iniziali».

everything is temporary— has its correspondence in the ancient Indian *srávati* ‘flows’, where the initial /s/ is maintained, which must therefore have fallen in Greek at a time after the intolerance of initial /r/. Also for Greek *ῥῖγος* ‘cold’ the correspondence with Latin *frigus* ‘cold’ invites postulating a primitive initial sequence /sr/ (Pokorny 1959: 1004 s. *srīg-*; Chantraine 1999: 973 s. u.; *lege infra*). Similarly, the initial /r/ in the historical classical form *ῥόδον* ‘rose’ of Ionic-Attic Greek was preceded by a consonant in preclassic times, as evidenced, among other facts, by the form of the Aeolian dialect *βρόδον*. In short, in Greek the examples of «initial ῥ- [...]» come mostly from the evolution of groups like \*sr- or \*wr-»<sup>4</sup> (Adrados, Bernabé & Mendoza 1995: 293).

In contrast, the Greek treatment of the other initial sonants is much less regular and even occasionally oscillating. For ‘light - mild’ we have Old Slavic *lьgьkъ* with Polish *lekki*, Gothic *leihts* with German *leicht*, Latin *leuis*, Lithuanian *leñgvas* or *lengvùs* and Sanskrit *laghú-*, but Greek *ἐλαχύς* ‘small’. For ‘free’ there is Latin *liber* but Greek *ἐλεύθερος*. To the ‘fog’ of Armenian *mēg*, Old Slavic *mьgla* with Polish *mgła*, Old Indian *mēgháh* (‘cloud’) or Lithuanian *miglà* Greek counterposes *ὀμίχλη*. Armenian *inn* and Greek *ἐννέα* presents additionally for ‘nine’ an initial vowel where the common language no longer has /n/: Albanian *nëntë*, Breton and Cornish *nau* with Welsh *naw*, Gothic *niun*, Old Indian *náva*, Latin *nouem*, *ñu* in both Tocarian languages... However, initial sonants are also sometimes perfectly stable in Hellenic words of very good Indo-European ancestry such as *λείπω* ‘I leave’ (*cfr.* Latin *[re]linquō* ‘I leave’), *μήτηρ* ‘mother’ (*cfr.* Latin *māter*) or *νέος* ‘young’ (*cfr.* Latin *nouus* ‘new’).

Actually —and the detail seems quite significant— this treatment also extends to the initial sibilant, so one would be tempted to say that the vowel prosthesis occurred in Greek and Armenian before continuous consonants and specifically before typical and basic ones: /l m n r s/. However, this last modality actually occurs only before the so-called *liquid s*, that is: before the preconsonantal /s/. Thus, for ‘star’ both Armenian (*astł*) and Greek (*ἀστήρ*) present again an initial vowel as opposed to the Cornish *steyr*, Gothic *stairnō*, Latin *stella*, Eastern Tocarian *šreñ*, or Vedic *stár*. Apparently the Hittite could in this point align with the Greek, since we have records of the type *ispānt-* or *sipānt-* ‘libate’ for the same root that we find in Latin *spondēre* ‘promise - to commit - to marry’ and Greek *σπένδω* ‘libate’ and *σπονδή* ‘libation’, but because of the ambiguity of the writing we cannot here be sure of the Hittite testimony (Kimball 2017: 254). Unlike which, as we shall now see, happened with the historical vowel before /r/, the vowel before liquid s did not occur in Mycenaean. So we have, for example, *pe-ma* for *σπέρμα* ‘seed’, since «In initial the /s/ before a consonant is not marked»<sup>5</sup> (Bernabé & Luján 2006: 106). The few exceptions, given the syllabographic nature of the Mycenaean script, do not allow us to suppose that the corresponding vowel was actually pronounced (Bernabé & Luján 2006: 106), but rather it points to a graphic record to note, when deemed appropriate, the real presence of the simple initial /s/.

As said, from the laryngeal theory these vowels are seen as the reflection of an old... yes, of course, laryngeal! Thus, with regard to the three supposed vowel reflexes of the laryngeals in Greek Buvenik (2017: i 641) observes that these «are also found in initial position (where they were formerly treated as prothetic vowels) as in *érebos* ‘darkness’ from \**h<sub>1</sub>reg<sup>w-</sup>*-, *anér* ‘man’, and *omíkhlē* ‘mist, fog’ from *h<sub>3</sub>migh-*». Note incidentally the risk of circular reasoning involved in the automatic assignment to *ἔρεβος* of a laryngeal *H<sup>1</sup>* by beginning with /e/, to *άνήρ* of an *H<sup>2</sup>* by beginning with /a/, to *ὀμίχλη* of an *H<sup>3</sup>* by beginning with /o/ and so on... The

<sup>4</sup> «ῥ- inicial [...] proceden en su inmensa mayoría de la evolución de grupos como \*sr- o \*wr-»

<sup>5</sup> «En inicial la /s/ ante consonante no se marca».

fact is that, in effect, non-laryngalist Indo-European Linguistics explained —and also continues to explain— the phenomenon, on the other hand, as a case of vowel prosthesis, thus, for example, Safarewicz (1986: 402), who presents the historical vowel as «probably the result of a particular change made in still pre-Greek times. To such secondarily created initial vowel we today call *prothetic vowel*»<sup>6</sup>.

We can specify the *pre-Greek* character of the process: it dates back to at least the 2nd millennium BC, since in the Mycenaean Greek of that time one can well collate, for example, the classical Greek *ἐλεύθερος* ‘free’ with the Mycenaean *ereuterose* (Chantraine 1999: 336 s. *ἐλεύθερος*. item Bernabé & Luján 2006: 122: *e-ru-ta-ra* ‘red’ cfr. *έρυθρός*). Even authors very prone to laryngalism have been in this case in favor of the explanation as a vowel prosthesis, as is the case of Bernabé: «the presence of a prosthesis cannot, without more ado, be considered as evidence of a lost laryngeal. Attributing the prosthesis to the presence of a laryngeal and then reconstructing the laryngeal because there is a prosthesis is a flagrant *petitio principii*»<sup>7</sup> (Adrados, Bernabé & Mendoza 1995: 292; seconded here by Luján 1996: 364).

The question, therefore, to be elucidated lies in trying to determine if said historical vowel would truly come from a laryngeal segment, whatever its coloratura (or numbering), in which case Armenian and Greek would maintain a more archaic stage than other languages, or if it were a real prosthesis, in which case the vowel would not represent any old Indo-European phoneme but an innovation now shared, now carried out independently in Armenian and Greek. In the latter case, secondarily, it would be convenient to inquire under what conditions or contexts such historical and at least three-thousand-year-old vowel could have been generated.

A first objection —of course, not definitive but indicative, like all those that will follow— to the laryngalist proposal would be that of the scant economic simplicity of such an assumption, since it accepts as more relevant the minority testimony of two linguistic groups against the testimonial majority of the ten of the remaining Indo-European groups.

Secondly, the laryngalist position obviously implies accepting that the minority testimony is the conservative one and that all the other languages would have innovated in unison, suffering an apheresis or loss of a short initial vowel. The process itself is not problematic, even Modern Greek lost a fair amount of the unstressed open-syllable-initial vowels that Ancient Greek had: *ἐροτῶ* ‘I ask’ → *ροτῶ*; *ὑψηλός* ‘tall’ → *ψηλός*... In the Romance sphere there are also examples of analogous processes: Italian *vescovo*, Portuguese *bispo* or Valencian *bisbe* have lost the initial *e-* of *episcopus-* ‘bishop’ and also the Spanish *migraña* with respect to its Greek etymon *ἡμικρανία* or the Friulian *legri* ‘joyful’ (← Latin *alacre-*). The /i/ of Greek-Latin *historia* disappeared from the Italian *storia* ‘history’ like the /a/ of *amor* in the Spanish phrase *por mor de*. It is further believed that the international *ghetto* proceeds ultimately from Latin *Ægyptu-* ‘Egypt’, so it would have lost the initial vowel, already monophthongized at the time (Italian *ghetto*, Provençal *guet*; Meyer-Lübke 1992: 15 <sup>n</sup>236 s. u.). Also in Logudorese Sardinian we have apheresis, for example, in [kr'ezja] from Latin *ecclesia-* ‘church’ (Blasco Ferrer 2016: 39)... etc. But what, as we see, normally constitutes a sporadic or marginal process, in the Indo-European linguistic ensemble it would have nevertheless systematically

<sup>6</sup> «prawdopodobnie wynik szczególnej zmiany, która się dokonała jeszcze w epoce pragreckiej. Taką wtórnie wytworzoną samogłoskę początkową nazywamy dziś samogłoską protetyczną».

<sup>7</sup> «la presencia de prótesis no puede, sin más, considerarse como testimonio de una laringal perdida. Atribuir la prótesis a la presencia de una laringal y reconstruir luego la laringal porque hay prótesis es una flagrante *petitio principii*».

affected all the languages in approximately 85/90% of the linguistic groups, without seeing what reason could have made it lose without more ado so many laryngeal entities and without leaving a single trace in said groups.

Thirdly, conservatism is as a rule more typical of the languages or dialects of the periphery and it is difficult to see how this peripheral condition could be applied to Armenian or Greek, languages that at least historically do not occupy marginal geographic positions as do, on the other hand, the westernmost Celtic, the eastern Indian and Tocharian or the northern Baltic and Germanic, all of them groups where the initial vowel in question does not appear.

Fourthly, the phonotactic foundation of an initial laryngeal-plus-sonant sequence is not well seen either. Even accepting that *H* or a form of *H* once represented the most frequent *laryngeal*, the glottal fricative /h/, initial sequences of the type /hl hm hn hr/ or /hs/ followed by consonant are quite unusual in languages. In short, it is hard to see how something similar to the banal /h/ could be generalized in a phonetic context that is so inauspicious, so hardly natural, or at least so unusual.

In the fifth place, it turns out that, seen from the point of view of the proposal of a prosthetic vowel, the process in its essence would be a phenomenon of linguistic recurrence or *recidivism* in Armenian, since in this language copies from Middle Iranian with initial *r* present prosthetic [e] or [a] (generally [er] and [ar]); thus, Middle Iranian *rang* → Armenian *erang* ‘colour’ or Middle Iranian *rāt* → Armenian *aṙat* ‘abundant’. However, the most recent copies no longer have the prosthetic vowel and «in later loans initial *r*- is preserved» (Clackson 2017: 1121). *Mutatis mutandis*, the same can be said about the vowel in question before liquid *s*, since «Iranian loanwords also present a phenomenon of sporadic vowel prosthesis also in the case of *sp*- and systematic in the case of the consonantal link typical of Iranian *xš*- which gives Armenian *šx*-: cfr. *ašxarh* ‘world’»<sup>8</sup> (Ajello 1993: 235). Thus, in a real, historical situation, what is evident is that the Armenian does not preserve any vowel –or laryngeal– but that simply performs a banal phenomenon of prosthetics. Therefore, here the laryngealist proposal would violate the principle –also, of course applicable to the linguistic reconstruction– of «scientific unitarianism, according to which we must assume for prehistoric times the same behaviour in the processes of evolution, contact and diffusion of languages that we observe in the historically documented periods»<sup>9</sup> (Gorrochategui 2007-2008: 1191).

Sixth, the explanation of the vowel as a prosthesis before initial /r/ in Armenian is consistent with the general avoidance of the stop group plus /r/ before a vowel (∅rV), sequence that in this language mechanically generates a metathesis (Vr∅) and both initial and interior: Vedic *śubrá-* ‘brilliant’ but Armenian *surb* ‘saint’ (Ajello 1993: 235), while also in this case the explanatory capacity of the laryngalist proposal remains again as an isolated phenomenon and *ad hoc*.

Seventh, the fact that in Greek the additional vowel is always short is more consistent with the hypothesis of a prosthetic vowel than with that of a laryngeal, which according to traditional laryngalist theory is regularly at the origin of most of the historical long vowels of the Indo-European languages. Again, the circular reasoning that precisely because we always have short vowels in Greek in this case, here by chance the laryngeal would never have come

<sup>8</sup> «prestiti dall’iranico inoltre presentano un fenomeno di prothesi vocalica sporadica anche nel caso di *sp*- e sistematica nel caso del nesso consonantico tipico dell’iranico *xš*- che dà arm. *šx*-: cfr. *ašxarh* ‘mondo’».

<sup>9</sup> «unitarismo científico, según el cual debemos suponer para épocas prehistóricas el mismo comportamiento en los procesos de evolución, contacto y difusión de lenguas que observamos en los periodos documentados históricamente».

into contact with any vowel, is clearly refutable. Because of its non-distinction between long and short vowels, the Armenian testimony cannot be used here.

In eighth place, since in real phonetic descriptions the phonemes usually described as laryngeal are associated with laryngeal or glottal sounds and being /h/, the glottal fricative, the most frequent phoneme in this series and also very present in both ancient Greek as in the Armenian languages, if we accept the laryngalist perspective, then it is not understood why these languages would not have developed this solution here and presented, therefore, initial aspiration. Indeed, one might expect, for example, rather /h'onoma/ (†ὄνομα) with aspiration than /'onoma/.

In ninth place, at least for Armenian, the prosthesis is phonologically very congruent with its general tendency to vowel supplementation or spontaneous generation of a vowel—very generally [ə]—a phenomenon in this language, as is known, very extended in internal position, that is to say: as an epenthesis. Thus, *grel* 'write' is pronounced [gər'eɪ] in contemporary Armenian.

In tenth place, the evaluative comparison of proposals for very analogous phenomena that are more observable in other languages also advocates the explanatory hypothesis of the prosthesis. Thus, before a couple of toponyms like Spanish *Rentería* - Basque *Errenteria*, we know thanks to the etymology (derived from the Spanish *renta* 'rent - income') that it is not the first language that would lose an initial before-sonant vowel—or laryngeal—but rather the second language that would seek a prosthetic vowel, since Basque is reluctant to all initial /r/ and has been historically, so that old Latin words of the type *rege-* 'king' have been regularly copied as *errege*.

Along the same lines and eleventh, the hypothesis of vowel prosthesis before liquid s- is congruent with the typologically banal phenomenon of prosthesis that, without going literally any further, we find in Western Romance: Latin *stella* → French *étoile*, Spanish *estrella*, Portuguese *estrela*... The reluctance to initial /s/ before a consonant remains fully operative in contemporary Spanish, a language that still automatically generates a prosthetic /e/ in this position. (cfr. English *standard* → *estándar*; English *slogan* → *eslogan* and even the brand *Movistar* is pronounced /mobiest'ar/! for feeling like a composite of English *star* etc.). Similarly in the Indo-European ensemble the sequence /s/ before /r/, a group that tends to be complex in terms of articulation, is treated by means of formulas that avoid it, such as /str/ or /fr/. Thus, in front of the ancient Indian *srávati* 'flowing' or *srava-* 'flood' or Lithuanian *sravėti* 'distill - filter' we have German *Strom* 'torrent - stream', Latvian *straume* 'torrent', Polish *strumień* 'torrent' or the Thracian name of river *Στρώμων*. For its part, the transition from /sr/ to /fr/ is found in Latin (for example, *frigus* 'cold', cfr. Greek *ῥῆγος*) and in Brittonic Celtic (for example Breton *fron* 'nose' as compared to the Irish *srón*). Again, the passage from zero to the prosthetic vowel (0 → V) or the emergence of another consonant (0 → C or C<sup>1</sup> → C<sup>2</sup>) offers many more linguistic parallels than the unprecedented passage of a laryngeal segment to a vowel (H → V).

Twelfth, the laryngeal theory involves here an internal, regular and general change, but the dissimilar tolerance to the various sonants involved suggests rather a contact phenomenon, since, fundamentally due to diachronic, dialectal, diastratic and diatopic differences, in the phenomena of linguistic contact the results tend to be less regular and sometimes even sporadic and contradictory. Thus, for example, in Latin both *ampulla* 'ampoule - little bottle' and *amphora* 'amphora' come from the same Greek root with the aspirated labial (/p<sup>h</sup>/), a phonetic type that was introduced into Latin only in a second phase of greater contact with Greek. Likewise, for example, in an ancient phase of Latin, *lampada*, -æ 'lamp - luminary' was obtained from the Greek accusative *λαμπάδα*, in a way that, as attested

by Spanish *lámpara*, remained in popular speech in front of the most recent and cultist word *lampas*, *-adis* from the nominative *λαμπάς* with genitive *λαμπάδος* (cfr. also French *top* → Spanish *tope* but in more recent times English *top* → Spanish *top* etc.). Thus, while, as we saw, intolerance was greatest for initial /r/, it could be said to be least for initial /m/: Armenian *mard* ‘man [mortal]’, Greek *μορτός* ‘man - mortal’ in a gloss of Hesychius (c1057 Schmidt) like German *Mord* ‘murder’, Avestan *mərəta-*, Old Church Slavonic *mrьtvъ* ‘dead’, Ancient Indian *mṛtá-* ‘dead’ and *martá-* ‘mortal’, Old Irish *marb* ‘dead’, Latin *mortis* (genitive) ‘dead’ and *mortuus* ‘dead’ or Lithuanian *mirtis* ‘death’.

In thirteenth place, the typological material also supports the prosthetic explanation, since the restriction of sonants in the initial and especially of the liquid ones and especially of the vibrant one is a phenomenon documented in very diverse and distant linguistic groups, which suggests that it is a resource with a certain *universal* scope and, therefore, essentially based on common human articulatory or phono-acoustic characteristics. To continue with the emblematic and most frequent case of restriction of initial /r/, let us remember that, in addition to Basque, also in Iberian its two vibrants «never appear in initial position»<sup>10</sup> (Velaza 1996: 42). Also the vibrant \*r was not allowed in initial position in Proto-Uralic either, «but numerous borrowings from Indo-European and non-Indo-European languages, even from remote times, totally changed the situation [...] Still today, however, in a Finnic-Ugric language of the Permian group, Udmurt or Votyak, the presence of [r] is not allowed in word-initial position»<sup>11</sup> (Manzelli 1993: 435). In addition, the prohibition of initial /r/ is still operative in the Samoyedic group of the Uralic linguistic ensemble and even more: in Proto-Samoyedic «there seems to have been a tendency to extend this restriction to the other liquid ., as well, for most of the Uralic items with \*l- show \*y- in proto-Samoyedic» (Janhunen 1998: 464), although the alternative explanation is possible here that we are facing a simple process \*[l → j]. Likewise, words beginning with /r/ and /n/ are also, for example, very doubtful in the Nilo-Saharan languages (Bender 1997: 821, 834).

In the fourteenth and last place, the typological material also supports the prosthetic explanation in the sense that the addition of an initial before-sonant vowel is a phenomenon not only documented in a good number of languages but also precisely in languages geographically not far from Armenian and historic Greek. So the qualitative clue is added here to the quantitative. Thus, the initial vibrant was not tolerated in the ancient language of the Hittites either. Likewise and exactly as in Spanish, in Kurdish the strong vibrant in initial [r] is allowed but not the simple [r] (McCarus 1997: 694). Likewise, the two great and related non-Indo-European languages of ancient Anatolia, about which we have some information, have similar restrictions. In Hurrian the «liquids /l/ and /r/ do not appear in word-initial position» (Wilhelm 2008a: 85) and in Urartian there are no «words with initial [r-]» (Wilhelm 2008b: 108). Similar phonotactic restrictions are found in the Turkic ensemble: «Initial r- is assumed not to have existed in Proto-Turkic, and it still does not occur in native words» (Johanson 1998b: 104). The same happens with the other liquid: «Initial l- is assumed not to have existed in Proto-Turkic, and it still only occurs in copied words or after loss of an initial vowel» (Johanson *ibidem*). Also in South Siberian Turkic «The liquids /l/ and /r/ and the nasals /m/ and /ŋ/ do not occur initially in native words» (Schönig 1998: 405). Already

<sup>10</sup> «nunca aparecen en posición inicial».

<sup>11</sup> «ma numerosi prestiti da lingue indoeuropee e non indoeuropee, risalenti ad epoche anche remote, hanno completamente mutato la situazione [...] Ancor oggi, tuttavia, in una lingua ugrofinnica del gruppo permiano, l'udmurt/votiaco, non è consentito ad [r] di comparire in prima posizione».

in Old Turkic «Nasals appear word-initially only in interrogative elements» (Erdal 1998: 140). In short, in the Turkic linguistic ensemble «Word-initial *n, m, ŋ, l, r* are avoided, the only seemingly native exception being the interrogative *ne* ‘what’ [...] Loanwords and liquids are often provided with prothetic vowels» (Johanson 1998a: 37). Similarly Manzelli (1993: 435): «In the Turkic and Mongolic languages, there was an absolute prohibition of liquids in word beginnings, although now, in most cases, they are allowed in loanwords (often ancient) from Arabic or Indo-European languages»<sup>12</sup>.

Certainly a language in which neither initial /l/ nor /n/ nor initial /r/ nor antecorsonantal initial /s/ were admitted offers a very little Indo-European phonological pattern. Consequently, the series of arguments exposed invites us to reject the hypothesis of the laryngeal theory: the Indo-European root would actually begin with a sonant, possibly a form like \**náman-* ‘name’ or similar, and it would be the speakers of Armenian and Greek who would have innovated by adding directly and almost automatically in these cases simply a prosthetic vowel. A corollary to this would therefore be the reasonable suspicion that when these events occurred, these languages would have been in contact with non-Indo-European languages that were reluctant to use sonants in word initial position.

Thus, the simplest explanation consists in supposing that we are dealing with an ordinary phenomenon of contact between Greek and Armenian with a language[s] with more severe restrictions than the Indo-European group for some initial sonants or for some initial consonant groups. Conversely, the oddest and less plausible explanation would be to see here an archaism concerning those two languages, Greek and Armenian, and much more an archaism that implied the presence of a laryngeal. Anatolia or its area of influence seems, of course, the most propitious scenario for this phenomenon of linguistic contact that occurred at least shortly before the Mycenaean period and both because of the intermediate position of Anatolia between historical Armenian and Greek.

## REFERENCES. Abbreviations

- Handbook...* = KLEIN, Jared, Brian JOSEPH & Matthias FRITZ (2017): *Handbook of Comparative and Historical Linguistics*. Berlin / Boston: De Gruyter Mouton, 3 voll.
- Phonologies...* = KAYE, Alan S. (ed.) & Peter T. DANIELS (adv.) (1997): *Phonologies of Asia and Africa*. Indiana: Eisenbrauns, 2 voll.
- The Ancient...* = WOODARD, Roger D. (2008): *The Ancient Languages of Asia Minor*. Cambridge: Cambridge University Press.
- The Turkic...* = JOHANSON, Lars & Éva Á CSATÓ (edd.) (1998): *The Turkic Languages*. London / New York: Routledge.

## Works

- ADRADOS, Francisco R., Alberto BERNABÉ & Julia MENDOZA (1995): *Manual de Lingüística Indoeuropea. I. Prólogo. Introducción. Fonética*. Madrid: Ediciones Clásicas.
- AJELLO, Roberto (1993): “Armeno”. In A. Giacalone Ramat & P. Ramat (curr.): *Le lingue indoeuropee*. Bologna: Società Editrice Il Mulino: 225-254.

<sup>12</sup> «Nelle lingue turche e mongole vigeva la proibizione assoluta di liquide in inizio di parola, benché ora, nella gran parte dei casi, il fatto sia consentito nei prestiti (spesso antichi) dall’arabo o da lingue indoeuropee».



- BENDER, M. Lionel (1997): "Nilo-Saharan Phonology". In *Phonologies...*: II, 815-838
- BERNABÉ, Alberto & Eugenio R. LUJÁN (2006): *Introducción al griego micénico. Gramática, selección de textos y glosario*. Zaragoza: Prensas Universitarias de Zaragoza.
- BLASCO FERRER, Eduardo (2016): *Corso di linguistica sarda e romanza*. Firenze: Franco Cesati Editore.
- BUVENIK, Vit (2017): "The phonology of Greek". *Handbook...*: I, 638-653.
- CHANTRAINE, Pierre (1999): *Dictionnaire étymologique de la langue grecque. Histoire des mots*. Paris: Klincksieck.
- CLACKSON, James (2017): "The lexicon of Armenian". In *Handbook...*: II, 1115-1132.
- DE VAAN, Michiel (2008): *Etymological Dictionary of Latin and the other Italic Languages*. Leiden / Boston: Brill.
- DELAMARRE, Xavier (2003<sup>2</sup>): *Dictionnaire de la langue gauloise. Une approche linguistique du vieux-celtique continental*. Paris: Éditions Errance.
- ERDAL, Marcel (1998): "Old Turkic". In *The Turkic...*: 138-157.
- GORROCHATEGUI, Joaquín (2007-2008): "Lenguas y genes: aplicaciones a la prehistoria de la lengua vasca". *Veleia* 24-25: 1185-1201.
- JANHUNEN, Juha (1998): "Samoyedic". In D. Abondolo (ed.): *The Uralic Languages*. London / N. York: Routledge: 457-479.
- JOHANSON, Lars (1998a): "The Structure of Turkic". In *The Turkic...*: 30-66.
- JOHANSON, Lars (1998b): "The History of Turkic". In *The Turkic...*: 81-125.
- KIMBALL, Sara (2017): "The phonology of Anatolian". In *Handbook...*: I, 249-256.
- LUJÁN, Eugenio R. (1996): *Los numerales indoeuropeos* (diss.). Madrid: Universidad Complutense.
- MANZELLI, Gianguido (1993): "Aspetti Generali delle Lingue non Indoeuropee d'Europa". In E. Banfi (cur.): *La Formazione dell'Europa Linguistica. Le lingue d'Europa tra le fine del I e del II millennio*. Firenze: La Nuova Italia: 427-479.
- MCCARUS, Ernest N. (1997): "Kurdish Phonology". *Phonologies...*: II, 691-706.
- MEYER-LÜBKE, Wilhelm (1992 [= 1935]): *Romänisches etymologisches Wörterbuch*. Heidelberg: Carl Winter Universitätsverlag.
- POKORNY, Julius (1959): *Indogermanisches etymologisches Wörterbuch*, Bern / Stuttgart: Francke Verlag: II voll.
- RITTER, Ralf-Peter [& MARTÍNEZ GARCÍA, Francisco Javier] (1996): *Introducción al Armenio Antiguo*. Madrid: Ediciones Clásicas.
- SAFAREWICZ, Jan (1986): "Język starogrecki". In L. Bednarczyk (red.): *Języki indoeuropejskie*. Warszawa: Państwowe Wydawnictwo Naukowe: I, 397-447.
- SCHMIDT, Moritz (1867<sup>2</sup>): *Hesychii Alexandrini Lexicon*. Jena: Hermann Dufft.
- SCHÖNIG, Claus (1998): "South Siberian Turkic". In *The Turkic...*: 403-416.
- TESTEN, David (1997): "Ossetic Phonology". In *Phonologies...*: II 707-731.
- VELAZA, Javier (1996): *Epigrafía y lengua ibéricas*. Madrid: Arco/Libros.

WILHELM, Gernot (2008a): "Hurrian". In *The Ancient...: 81-104.*

WILHELM, Gernot (2008a): "Urartian". In *The Ancient...: 105-123.*