

A “New” Ancient Indo-European Language? On Assumed Linguistic Contacts between Sumerian and Indo-European “Euphratic”

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It has been recently assumed that linguistic contact could exist between Sumerian and an unknown Indo-European language, called Euphratic, which could be attested as a substrate in Sumerian. This assumption is interesting enough regarding Indo-European historical linguistics, but a methodological and practical scrutiny shows that it raises to important difficulties and is untenable.

In several articles, G. Whittaker (1998; 2001; 2004; 2005) has recently made the assumption that linguistic contacts exist between Sumerian and an ancient Indo-European language, that he calls “Euphratic”. The kind of contact involved here is a pre-Sumerian Euphratean substrate attested in the language of the archaic tablets of Uruk IV and III. This language, which is not otherwise attested, would have influenced Sumerian at an early period and left traces in the lexicon and the writing system. The speakers of Euphratic would have been present in Southern Mesopotamia by the end of the 4th millennium, and would have formed “a pre-equestrian agricultural society practising animal husbandry” (2005:424; cf. 2003:384). From the linguistic point of view, Euphratic is defined by the author as a Western-type dialect related to Italic, Celtic, Germanic, preserving laryngeals, possessing a grammatical feminine gender and separated from the main body some time before 4000 BC.

Regarding Indo-European historical linguistics, the Euphratic hypothesis could be of particular interest since it involves the theoretical discovery of a “new” ancient Indo-European language. This bold hypothesis is interesting, but it raises some important difficulties and is untenable. It already has been discussed and criticized by sumerologists, and

especially by G. Rubio (1999; 2005). In the present paper, I shall come back to this question, mainly in regards to (Proto-)Indo-European linguistics.

Whittaker's theory relates to the Sumerian Question, that is the ethnic identity of the Sumerians, their homeland, and their linguistic affiliation. Archaeology gives different answers to all these questions, but it seems certain that Sumerians were in Southern Mesopotamia around the late Uruk period (Uruk IV-III, 3500-2900 BC). This presence is occasionally connected to the invention of writing. But linguistic studies of the archaic tablets of Uruk point to foreign elements, if not a foreign language. Since there is no necessary connection between material facts and language, archeology cannot identify the language of a given society solely on the basis of archeological facts. As G. Whittaker (2005: 410-411) and G. Rubio (1999:1) both assert, the key to the Sumerian question is thus a linguistic one.

The hypothesis of a substrate language in Sumerian is not new, and several attempts have been made to explain some anomalies and some words without Sumerian (or Semitic, Akkadian) etymologies (see Steiner 2005 for a critical synthesis). Therefore, as far as Sumerian is concerned, the general outlines of Whittaker's theory are based on traditional linguistic arguments: phonotactics, etymology, word order and writing. With regards to phonotactics, polysyllabic structure, morphologically unsegmentable Sumerian words, absence of vowel harmony, presence of medial clusters, and existence of variants for the same word are criteria for identifying possible loanwords (Whittaker 2005:412-414). Thus words like *ulušin* "beer", *ildag_{2/3}* "tree species", *kiši* "horse", *nun/nin* "queen" may be of foreign origin. As we shall see, in theory, Whittaker's methodology is founded on sound criteria (phonetic, semantic, areal and temporal plausibility, 2005:414-415). Yet in practice, he does not apply this methodology to the given examples. In sum, theory does not match the facts.

Concerning phonetic and semantic plausibility, his theory mentions requirements of regular phonetic correspondences ("a systematic correlation of sound structure to sound structure") and semantic proximity ("a demonstrable relationship in the real world between the semantic fields involved", Whittaker 2005:414-415).

Occasionally, Sumerian seems to bear a resemblance with the alleged Euphratic words, but this could be a mere

coincidence. If regularity in phonetic correspondence is one important element of the hypothesis, many of the words cited do not meet this requirement without difficulties. Thus Sumerian *nin*, *nun* “queen” are explained by Proto-Indo-European $*g^wn-\delta n$, and Sumerian *gan* “woman” by Proto-Indo-European $*g^wn-eh_2$ (*gan*, whose very existence is doubtful, is not mentioned in the *Pennsylvania Sumerian Dictionary*). The first one of these two forms seems to be related to Proto-Germanic $*kwen\bar{o}$, $kwen\bar{o}n$, cf. Gothic *qino* (Lehmann 1986 s.v.; Köbler 1989 s.v.). The second one is in fact the oblique stem of $*g^wen-(e)h_2$ (genitive g^wn-eh_2-s). There are several problems in these pseudo-correspondences. On the one hand, Whittaker has selected two different reconstructions for definite purposes: he has chosen $*g^wn-eh_2-$ in order to explain the presence of an initial /g/ in Sumerian *gan*; on the other hand, he employs $*g^wn-\delta n$ where the suffix enables him to justify the final nasal of *nin*, *nun*. Moreover, according to his reasoning, the same Proto-Indo-European $*g^wn-$ leads to Sumerian *g* and *n*. But he fails to provide any explanation to this phenomenon, whereas Proto-Indo-European $*g^w-$ is taken to lead to Sumerian *g* (Whittaker 1998:123). In addition, the borrowing from the alleged Euphratic $*mon-us-eh_2$ in Sumerian *munus* “woman” is doubtful, as well as the borrowing from Proto-Indo-European $*mon-u-s$ in Sumerian *nu*, *lu_2* “man”. In this case, the Euphratic form seems to be an *ad hoc* reconstruction based on the Sumerian word. Therefore, the phonetic correlations are problematic. Along the same line, the list of systematic correspondences (Whittaker 1998:122-126), however long it may be, does not square with the facts given by the author himself. Proto-Indo-European $*h_3$ is said to correspond phonetically to Sumerian *h/g* (/γ/) or Ø: it is supposed to be found in Sumerian *hadim* “garlic” ($*h_3od-ent-$, Armenian *hotim*, Latin *oleō*), *hab* “smell” ($*h_3od-m-eh_2$, Doric ὀδμᾶ, Albanian *āmë*), Sumerian *igi* “eye” ($*h_3ok^w-$, Sanskrit *ākṣi*, Greek ὄσσε). But how to explain Sumerian *si_8*, *sipad* (assumed Euphratic $*h_3owyo-so-i-s$ and $*h_3owyo-si-pah_2-s-$ respectively)? Similarly, if Proto-Indo-European $*p$ is reflected in Sumerian as *p/b* (see below *peš* “fish”), or *m* (Sumerian *mutna* “wife”, $*pot-nih_2$), how could Sumerian *kinga* “five” be borrowed from Proto-Indo-European $*penk^we$?

As the above mentioned examples indicate, in many cases, Whittaker's suggestions are no more than reconstructed Proto-Indo-European. Indeed, in the great majority of examples

(more than 200), Sumerian words are directly related to Proto-Indo-European prototypes: Sumerian u_8 (Old Sumerian u_3-wi) “sheep”, cf. Proto-Indo-European $*h_2ow-i-s$; Sumerian gud , gu_4 , “ox”, cf. Proto-Indo-European $*g^wou-s$; Sumerian $ubur$ “breasts”, cf. Proto-Indo-European $*uh_1dh_3$; Sumerian $temen$ “foundation”, cf. Proto-Indo-European $*dheh_1-men-$, etc. In a few cases only, a Euphratic intermediate formation is assumed, and in that case, it may be asked what this other reconstructed form with an asterisk really is. In some cases, it seems to be related especially to one attested derivative of some Indo-European language; in other cases, it seems to be closely correlated with a Proto-Sumerian assumed form. For instance, Sumerian $ulušin$ “beer” is explained by Euphratean $*h_2aluss-$, Proto-Indo-European $*h_2alu-t(-s)-$ (Whittaker 1998:128) or Proto-Indo-European $*h_2alu-s-no-$ (2004:393). However, this s -formation is attested nowhere in Indo-European languages. The only Indo-European counterpart of the reconstructions underlying the assumed Euphratic $*h_2aluss-$ are the Germanic derivatives, e.g. Old Norse ol ($*alub$), Old English $ealuð$, and even these forms lack the additional $-s-$ (Proto-Indo-European $*h_2el-ut-$). The other words cited, Greek $ἀλύδοιμος$ and Latin $alūmen$ are problematic (Chantraine 1968 s.v., Ernout-Meillet 1959 [1985] s.v.), and Hittite $*alwanza-$ “bewitch” is disputed (Tischler 1977 s.v., Kloekhorst 2008, s.v., but see also Polomé 1996). Moreover, Sumerian u_8 is supposed to be related to Proto-Indo-European $*h_2ow-i-s$, while other words for “sheep”, Sumerian udu , si_8 (this last not in the *Pennsylvania Sumerian Dictionary*) are related to a Euphratic prototype $*h_3owy-os-i-s$ (Whittaker 1998:139). In this case, the reconstruction is based on Luwian $hawias̄si-$ “sheep-bread”, which is a substantivized adjective in $-assi-$ on $*hawiyā-$ (Melchert 1993 s.v.). In these examples, the so-called Euphratic is in fact a specific Indo-European derivative (Luwian $hawias̄si-$) or it is modelled on Proto-Sumerian ($*h_2aluss-$).

Similar problems occur with all the postulated Euphratic prototypes, but a few more examples will be sufficient to show the weakness of the hypothesis. Sumerian $maha$, mah “great”, which is considered as a loanword from Euphratic mah_2h_2- , is nothing else but Sanskrit $mah-$ with the aspirate from $*-gh_2-$ ($*majH-$ > maj^h- > $mah-$, Mayrhofer 1986- s.v.). The other derivatives preserve the occlusive (Greek $μέγας$, Armenian mec , Hittite $mekki-$). Sumerian $nibru$ “Nippur” is based on Euphratic $*nebh-ro$, Proto-Indo-European $*nebh-$. In addition to the fact

that the etymology of proper names is often difficult to establish, this *-r-* formation is doubtful insofar as the attested derivatives are **-es/-os* and **-l-* formations (Sanskrit *nábhās-*, Greek *νέφος*, Hittite *nepis*, Old Church Slavic *nebo*, Latin *nebula*, Old High German *nebul*, Greek *νεφέλη*). The alleged Euphratic **nebh-ro-* is built on Sumerian *nibru*.

Sumerian *peš*, *piš* “fish” is reconstructed Proto-Indo-European **pisk-i-* by Whittaker. However, this last form is neither Indo-European nor Euphratic, but Latin: we do not have an Indo-European inherited name for “fish” (the name is dialectal, cf. Indo-Iranian Sanskrit *mátsya-*, Avestan *masyō*, and Greek *ἰχθύς*, Armenian *jukn* and Lithuanian *žuvis*). If Latin *piscis*, Gothic *fisks* and Old Irish *iasc* are related, the last two reflexes are thematic forms. Finally, Sumerian *kiši* “horse” is assumed to be related to Euphratic **h₁ekw-os-i-*, PIE **h₁ekw-o-*. Once again we can seriously doubt the linguistic status of the Euphratic reconstruction, as it is clearly based on the *i-*form of Sumerian. We do not know any derivative like **h₁ek w-os-i-* in attested Indo-European languages.

Elsewhere, Whittaker (especially 2001) adds the question of word order in the archaic tablets of Uruk (which seems to contradict the normal Sumerian word order), and he focuses especially on the question of unmotivated values of some cuneiform signs. Some Uruk IV signs have indeed values that are unrelated to them: for example, the sign depicting a horned animal has the Sumerian reading *gír₃* “foot”, which cannot be explained (Whittaker 2001:16). Another example is given by the sign for “beer” (depicting a jug), which has two values: *kaš* “barley, beer” and *bi* (this last reading is both syllabic and logographic “its, their; that”: Whittaker 1998:128; 2001:15-16). This problem has led some sumerologists to make the assumption that the language of the Uruk IV tablets was not Sumerian, but this language remains unidentified. Emphasizing that a writing system keeps traces of its origin, Whittaker explains the unmotivated values with the help of Euphratic (1998:113; 2001:38).

The problem lies in the distinctive types of borrowing postulated by Whittaker. These are the borrowing of words, that is of the phonetic shape and of the semantics, but also the borrowing of the sense only, or the borrowing of the phonetic shape only of an Euphratic (or Proto-Indo-European) word.

In this last hypothesis, writing factors play an important

part in the line of argument, but the scenario is improbable. In a first example, the author (2001:16) tries to explain the unmotivated phonetic value $\tilde{g}iri_3$ of the sign depicting a horned animal. As Whittaker says, a close match to the phonetic value of the Sumerian sign $\tilde{g}iri_3$ “foot” is provided by Proto-Indo-European $*ker(h_2)-wo-$ “deer, roe” or “ox, cow”. This kind of borrowing is linked here with the invention of writing, attributed to the speakers of Euphratic: “At the time of the adoption of the writing system from the Euphrateans, the Sumerians apparently reapplied the Euphratic value to the word in their own language that it most closely resembled phonetically”. It is very difficult to understand this statement. Is it likely that Sumerians had a sign for a horned animal, that they applied to this sign a Proto-Indo-European phonetic shape related to horned animal ($*ker(h_2)-wo-$), but that, at the same time, they gave to that sign a semantic value “foot”? From where does the meaning “foot” stem? The borrowing of an “empty shell”, that is of a phonetic shape without any meaning, is hardly conceivable.

Sumerian $\tilde{g}iri_3$ is part of an elaboration that goes one step further (2001:29-30). Sumerian *alim* “bison” and *lulim* “deer” are both compound signs and contain GIR_3 , namely the FOOT sign ($GIR_3 \times A + IGI$ and $GIR_3 \times LU + IGI$ respectively). Both terms are assumed to be loanwords from Proto-Indo-European $*h_1el-n-bho-$ (*alim*) and $*h_1el-n-im$ (*lulim*), without Euphratic intermediary. Whittaker wants to have us believe that the use of the sign GIR_3 motivates the relationship between the two terms and that it induces the borrowing from Proto-Indo-European. In addition to the difference in the Sumerian forms, which has no explanation, the semantic divergence is explained by a semantic shift from a cervid to a bovid species in Sumerian, before the beginning of Old Sumerian literature (2001:29). According to Whittaker, this semantic shift could find its justification in Proto-Indo-European where $*ker(h_2)-$ can point to a horned animal, a bovid or a cervid. The postulated $*ker(h_2)-wo-$ can mean “deer” or “cow” in Indo-European languages. As a matter of fact, the only possible reconstruction in this case is probably $*ker-wo$ with the general meaning “horned animal” and with a specialisation in different languages: Latin *cervus*, Welsh *carw* “deer”; Albanian *ka*, Lithuanian *kárvė* “cow” ($*-n(o)-$ and $-u-$ are only attested with the anit-root $*ker-$, cf. Nussbaum 1986:19, 155-156). Finally we have to assume here the

borrowing of the phonetic shape **ker-wo-*, without any meaning to explain the phonetic shape of the Sumerian word for “foot”. This is highly improbable and, as has been said, there is no explanation for this.

In another scenario, Whittaker tries to relate the Sumerian word *ildag_{2/3}* “tree species” to the same root **h₁el-n-* (1998:115, 143). Again, the reasoning is complex and rests on writing, phonetic and semantic factors: since *ildag_{2/3}* consists of the signs WATER + AUROCHS (*ildag₂*: GUD x A + KUR) or simply AUROCHS (*ildag₃*: GUD x KUR), the author assumes that the phonetic shape of the word for “aurochs” has been used for the word for “tree”. If we continue his reasoning, the “auroch” meaning would be specific to Euphratic. This is an *ad hoc* assumption, since the Indo-European languages only have the meaning “deer, doe” (**h₁el-en-*, cf. Arm. *etn*, gen. *etin*, Lith. *ėlnis*, OCS *jelenŭ*, Gk *έλλός*, **έλ-voς*). In these terms, there is no sign of the “horn” or anything similar. Moreover, Sumerian *gu₄*, *gud* “ox” is elsewhere related by Whittaker to PIE **g^wōu-*, which seems difficult to ignore in this specific case.

The second example cited above takes into account the sign depicting a jug, with the Sumerian values *kaš* “beer” and *bi* “its, their; that” (Whittaker 1998:128; 2001:15-16; 2005:403). According to Whittaker's theory, both of these have plausible Indo-European counterparts: Sumerian *kaš* is related to **k_wath₂-so-*, as in Russian *kvas* “fermented beverage of rye or barley”, while Sumerian *bi* is phonetically related to **pih₃-* “drink”. This last root would be attested in Sumerian *pihu* “beer jug” (Proto-Indo-European *pih₃-wo-*). The author offers no explanation as to how the phonetic shape of “drink” would have been used in the sense of “their, its; that”. Taking one step further, he connects Sumerian *bi* to a Proto-Indo-European instrumental ending **-bhi*. This ending occurs in adverbs and prepositions using “the imagery of the face for basic orientation”, such as **h₂ant-i* “in front, against” and **h₂nt-bhi* “on both sides, around” (Whittaker 2001:24-25). This case suffix would be reflected in the phonetic (and only in the phonetic) value of the sign depicting two ears, Sumerian

ḡeštu(nu). As Whittaker points out, this last sign is sometimes used for comitative expression (replacing the Sumerian comitative/instrumental postposition *-da*). All in all, *ḡeštu(nu)* would function as a semantic element for **h₂ant-*, and *bi* as a “Euphratogram”, from the writing (scribal) Euphratean tradition. The line of argument is extremely complicated and,

as far as I understand, Sumerian *bi* consists of two different things: on the one hand, it is a phonetic loan, a shape without meaning, from the Proto-Indo-European **pih₃*; on the other hand, it is the reflex of Proto-Indo-European **-bhi*, which in turn is related to the sign for “ears” because this sign is used to express spatial relations. This theory is untenable. Ultimately, one does not see why *bi* means “its, their; that”, how it could be related to the idea of “drinking”, and why it is used for comitative expression.

The general aspect of the alleged Indo-European language is fairly precise but remains open to criticism, notably regarding the western character of the dialect and the grammatical feminine gender. The feminine gender is of crucial importance for the general reconstruction of Proto-Indo-European and the dialectal fragmentation. In this case, the most plausible hypothesis, which is based on Hittite and other languages, is that Proto-Indo-European had two – and not three – genders for Proto-Indo-European (see, e. g. Meier-Brügger 2003:188-190; Matasowić 2004; Mawet 2005). It seems therefore difficult to postulate three genders for Euphratic, attested one millennium before Hittite. Despite this problem, Whittaker assumes Proto-Indo-European grammatical feminine in several Sumerian words. In fact, the Proto-Indo-European feminine gender in **-eh₂* assumed in these words is nothing else but the Sumerian final *-ah*. Sumerian *dara₃*, *durah* “fallow deer” is connected to **dork₂-eh₂*, Greek *δορκάς*, but the suffix *-ad-* and the dental initial are properly Greek. Sumerian *zarah* “grief, worry” is connected to **sworgh₂-eh₂* but the reflexes of **swergh-* do not show **-eh₂* formations (cf. Old Irish *serg* “illness, disease” (**swergo-*), Lithuanian *sergù* “I am sick”, TokharianA *särk-* “illness”). Sumerian *emerah* “wooden bowl”, is explained as **h₂emh(e)-tleh₂*, collective of **h₂emh(e)-tlom*. Whittaker cites Sanskrit *ámātra-*, but this last word rests on a suffix **-t_g-* (see Renou 1952:§210). Moreover, the above mentioned Sumerian *ḡan* “queen” and *munus* “woman” rest, according to Whittaker, on Proto-Indo-European **g^wn₂-eh₂* and Euphratic **monus₂-eh₂*. But the author offers no explanation as to how **-eh₂* simply disappeared in these words.

As for the last two methodological criteria, areal and temporal plausibility, it must be noted that the author does not endorse any of the theories about the Proto-Indo-European homeland that localize it in near Northern Mesopotamia, i. e.

Transcaucasia (ca. 4000 BC), Anatolia (ca. 7000 BC) and Southern Russia (ca. 4500-4000 BC). According to Whittaker, any of these regions could have been the point of departure of an Indo-European migration towards Southern Mesopotamia.

Regarding the temporal aspect more precisely, as G. Whittaker points out (2001:12 quoting Black), there is indeed a danger in projecting an ethno-linguistic group indefinitely back in the past, especially if the Sumerians are not ethnically and linguistically clearly defined. This observation makes sense, but is not applied to Euphratic and Euphrateans, who are projected far back into the 4th millennium. Moreover, as the author adds, the Euphrateans, being associated with the invention of writing, would have left no text, and they are neither mentioned nor recognized in the texts. For the author, the explanation is that populations in Mesopotamia are named according to their city-states or regions, not according to their language (Whittaker 2001:15). This kind of argument leaves the door open to any kind of speculation. Even though Euphrateans may not have been mentioned as "Euphrateans" or "speakers of Euphratic", the argument is nonetheless weak; they are not identified and cannot be identified with any population of Mesopotamia.

Moreover, Proto-Indo-European *stricto sensu* only consists of the linguistic abstractions based on comparison of attested languages. The only potential dating is a *terminus ante quem* about 2500 BC, some time before the first mentions of Hittite names in the Assyrian texts of the *kārum* Kanesh. All dating beyond this *terminus* — in Whittaker's theory, Euphratic should be attested some 1000 years before Hittite — can only be speculative, concerning both language and the ethnolinguistic community (see Untermann 1985; Zimmer 1988; Reichler-Béguelin 1994).

The actual existence of Euphratic remains highly implausible. Yet linguistic contacts between Proto-Indo-European and Sumerian are by no means improbable (Dolgopolsky 1986; 1989; Gamkrelidze and Ivanov 1995). Nevertheless, there is no reason to assume that such contacts would have taken place in Mesopotamia.

Ultimately, what is Euphratic but a linguistic projection? As I have suggested, Euphratic has no reality but seems to be either Proto-Indo-European itself, or a reflex of Sumerian. Judging from the few examples examined in this paper, the bases of the theory are weak, and the alleged Euphratic has no substance. To sum up, the construction of Euphratic is no more

than a fragile *château de cartes*.

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