Dissertation Summary

The linguistic relationships between Greek and the Anatolian languages

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Abstract

This summary presents the main findings of my DPhil. thesis, written under the supervision of Andreas Willi at the University of Oxford, on the linguistic relationships (with a particular emphasis on language contact) between Greek and the Anatolian languages between the second millennium and the first half of the first millennium BCE.

Keywords

Ancient Greek – Greek dialects – Anatolian languages – Hittite – Luwian – comparative philology – language contact

1 Synopsis

My dissertation investigates the issue of prehistoric and historical language contact between speakers of Greek and speakers of the Anatolian languages. It is the first systematic attempt to understand to what extent Greek and the languages belonging to the Anatolian branch of Indo-European (Hittite and
Luwian *in primis*) influenced each other between the second and the first millennia before our era, and in particular how much of early Greek language can be traced back to Anatolian models. This has been carried out through a case-to-case analysis of real or presumptive contact phenomena in the domains of phonology, morphosyntax, and lexicon (ch. 2–5). The introduction (ch. 1) offers an outline of the linguistic landscape of the Graeco-Anatolian area, together with some reflections on language phylogeny and contact. The final chapter (ch. 5) focuses on the dialect of Pamphylia, which is used as a control sample to check the ways in which a variety of Greek historically in contact with Anatolian dialects could be affected by language contact. I have offered a stratigraphy of possible contacts between Greek and the Anatolian languages by disentangling linguistic borrowings from independent innovations, and areal features from Indo-European archaisms. I have argued that several of the presumptive similarities between Greek and one or the other Anatolian language are either attributable to reasons different from contact, or need to be rejected because the alleged similarity was based on wrong premises or insufficient grounds. Any scenario envisaging diffused bilingualism is very difficult to uphold before the classical era. A certain degree of cultural contact is however undeniable, and certain contact-induced linguistic features seem to confirm it. The evidence is very often partial, and since absence of evidence is not evidence of absence, one should raise a firm caveat against the hyper-sceptical approach that has characterised some recent literature.

## 2 Graeco-Anatolica: towards a comprehensive re-assessment

This thesis is about the history of an idea, an idea that has been in the air for more than a century. Generations of Hellenists have been looking to the Ancient Near East to find the roots of Greek culture, and many Anatolianists tried to understand to what extent the lost Indo-European languages and civilisations of the Anatolian peninsula planted their seeds in the cradle of Western civilisation, enduring in one form or another.¹

The relationships between Greece and Anatolia during the second and the first millennia BCE are the object of a multi-faceted, complex and intriguing field of study, which has received the attention and efforts of archaeologists, historians, anthropologists, literary scholars, and philologists. It is as a member of the last category that I have produced this first step towards a comprehen-

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¹ For a brief history of a century of scholarship, see Bianconi (forthcoming).
sive reanalysis of the ‘relationships’ between (pre-Hellenistic) Greek and the Indo-European languages of Anatolia. The goal of my work is to offer an up-to-date and modern outline of the interactions between these two branches, which, despite being genetically related, are not particularly ‘close’ within the language family, but have been geographically adjacent for centuries.

Over the last decades, several hypotheses have been advanced that attempted to explain both ‘regular’ and peculiar linguistic features of Greek through the influence of an Anatolian language. In this work, I have endeavoured to gather as many of these hypotheses as possible, and have analysed them individually in order to understand to what extent language contact could or could not have taken place. Most previous attempts have been rather partial, and the rapid development of Indo-European linguistics, especially on the Anatolian side, has led me to reconsider this issue—which was at the centre of scholarly attention half a century ago, and is regaining popularity in the last few years—and to analyse as many features I was able to identify in as much detail as possible, before moving on to more holistic considerations.

The first and foremost risk in starting with a holistic approach is that of circularity: it is often easier to attribute a given similarity between two languages to language contact when there are other elements which independently point to the same process. By contrast, whenever the given similarity occurs in isolation, a different explanation (e.g. internal development within the given language) is preferred. As obvious as this might seem, these are (and should be) a posteriori speculations, possible only when they are built on a common ground everyone agrees on. Unfortunately, this is not the case when it comes to (alleged) Graeco-Anatolian contacts, where the fragmentary and often incomplete nature of the available sources forces scholars to argue for or against single cases of language contact on the basis of their overall (and often idiosyncratic) conception of the linguistic situation in that area at that time. These conceptions happen to often be aprioristic, since one regularly finds scholars, for instance, hypothesising that an obscure Greek word is a loan from an Anatolian language and citing in support further parallels, which, if taken singularly, are often supported only by the former. In an extremely simplified model: $a$ in language X may come from $A$ in language Y, and this is supported by $b$ in language X coming from $B$ in language Y; but if one goes to analyse $b$, the evidence in support of the derivation from $B$ in language Y may well be the fact that $a$ in language X may come from $A$ in language Y. The opposite reasoning is equally possible: $a$ in language X cannot come from $A$ in language Y, because it is in isolation, and it is unlikely that a transmission of a single feature happened. This kind of reasoning, of course, very much depends on the type of linguistic feature one is concerned with. In order to avoid circularity and to adapt the analysis of individual features to
one of the already proposed models (which are often in conflict), I have chosen to observe the plausibility of each item in relative isolation and to try to find independent proofs for or against each possible case of language contact, and then only subsequently bring the evidence together and produce an overall panorama of the situation, trying to fit the data from the Graeco-Anatolian area into one or more typologically known models of linguistic contact.

It should be clear from the outset that, among the many shortcomings of a piece of research which aims for completeness, one does have to take into account the presence of out-of-date and often simply wrong theories: anyone who has sifted through an etymological dictionary will have experienced this. Nonetheless, this should not prevent the scholar from including these theories when needed, and from giving the reader his or her take on the issue. This work is no exception, especially because it gathers ideas which have been conceived at very different stages of the evolution of the discipline. With this in mind, I have tried to make clear which ideas I support and which I reject as much as I could, and to ‘translate’ older ideas into more modern terms. As my late teacher Romano Lazzeroni used to say, “science is made of discoveries, but also of re-discoveries”, and much value may be found from time to time in (the modern reinterpretation of) older theories.

Constraints of space (and time) have prevented me from a thorough discussion of all the hypotheses that have ever been made (especially at the morphosyntactic level): I have therefore made a selection of those traits that have been at the centre of more recent discussion, and that are in my opinion more meaningful in order to understand the relationship and contacts between Greek and the Anatolian languages.

Very recent years have seen a surge in scholarly work in the broader field of contacts between the Greek and Anatolian worlds (and the Ancient Near East more broadly defined), and from the linguistic point of view, there have been contributions on individual problems of morphosyntax, lexicon, and phraseology, and a few articles, encyclopaedia entries, and parts of monographs re-assessing part of the evidence for contact between Greek and one or more Anatolian languages have recently been published.² This seems to be once more a popular topic among scholars, and a fair number of contributions have appeared since I began my research. I have tried to take into account most of them, and whenever time and space constraints made it difficult to discuss them thoroughly, I have given references for future research to build upon.

² Cf., among others, Yakubovich 2010:140–157; García Ramón 2012; Gasbarra & Pozza 2012; Hajnal 2014, 2018; Hawkins 2010; Melchert 2014a, 2014b; Bianconi 2015; Simon 2018; Oreshko 2018; Cotticelli-Kurras & Giusfredi 2018.
2.1 ‘Relationship’ and ‘relationships’

The title of my dissertation is intentionally reminiscent of James Clackson’s book *The Linguistic Relationship between Armenian and Greek* (Clackson 1994). Therein, Clackson offers a comprehensive assessment of all possible Graeco-Armenian isoglosses, and ultimately rejects the thesis according to which Greek and Armenian would have a special link on a genetic level (i.e., that the dialectal ancestors to the historically attested languages were particularly close or formed an intermediate unit). My aim is different, and so is my use of the term ‘relationships’, which is not exclusively referring to genetic affinity. The existence of a “Helleno-Anatolian” intermediate unit has never been postulated, and never should be, because—as becomes evident—there are very few reasons to assume that these two branches were particularly close in a remote (= Indo-European) phase. However, scholars have highlighted a great number of similarities that, if accepted, would point to an intense degree of contact. The goal of this study is to assess all these possible similarities, distinguishing contact phenomena from inherited features and typologically common developments. Thus, ‘relationships’ is used in its broader sense here, as it includes both genetic affinity (on which—it must be repeated—there is less to be said!) and contact phenomena.

3 Between isoglosses and loanwords: phonology, morphosyntax and lexicon

As anticipated above, my work has taken into account all traditional domains of (Indo-European) historical linguistics: phonetics/phonology, morphosyntax, and lexicon/etymology. What follows is a brief survey of the results of my case study analysis.

I have shown that some sound changes allegedly shared by Greek and one or more Anatolian languages which had been explained through language contact are typologically common \(m > n / _/\#;\) cf. Section 2.1) or simply not restricted to the varieties of these two branches (assibilation in some Greek dialects and in Hittite, cf. Section 2.3). At the same time, the prohibition of initial /r/ is probably an areal phenomenon shared by IE and non-IE languages of the Aegean-Anatolian area. The extension of this restriction is such that one can only envisage the presence of a common substrate or prehistoric contacts. These are however impossible to define with the data we have (Section 2.2). Unlike the *Auslaut* phonotactic restrictions shared by Greek and Luwian (Section 2.1), which may point to exclusive contacts (or common substrate), the absence of initial /r/ (which—I contend—should *not*
be hypothesised for reconstructed PIE) only tells us that Greek *might* have been affected by an areally diffused phenomenon in prehistoric times. Moving on to historic times, a study of Greek psilosis (Section 2.4), in relation to the hypothesis of its origin in the Greek regions of Asia Minor inhabited by speakers of Lydian, has revealed that the genesis of this phenomenon may well have been independent. This has been one of the chief examples of well-established and accepted theories being dependent upon very little data which may be drastically revised after the reconsideration of apparently insignificant details.

When one enters the domain of morphosyntax, the ground becomes even less firm, because grammatical interference often requires a substantial degree of language contact. In the first case study (Section 3.1), which included a comprehensive re-evaluation of the Homeric, Hesiodic, and Herodotean evidence, I have argued on the basis of the internal evidence that the basic value of the 'Ionic Preterites' (abbreviated IPs), i.e., those verbs formed with a suffix -(ε)σκ- attached to a present or aorist stem followed by secondary endings (e.g. φαίν-έσκ-ετο from φαίνομαι, φύγ-εσκ-ον from φεύγω) is similar to that of their Hittite counterparts. Contrary to the traditional interpretation, which regarded Greek -σκ- as an 'iterative' suffix, the unitary function of the IPs is that of an aspectual (namely imperfective) marker. Similarly to the Hittite šk-verbs, the IPs occur in strings and seem peculiar to narration. On these grounds I have re-evaluated (and proposed modifications to) the hypothesis of influence from Hittite.3 I contend that the idea of diffused bilingualism is difficult to uphold, suggesting instead that an eventual transmission might have taken place at the literary level. As in other cases (e.g. that of psilosis), it is rather difficult to sketch a realistic contact scenario, but if one regards the phenomenon as something peculiar to the language of narration (which clearly was not the case for psilosis), there is no need to postulate a condition of thorough bilingualism. The second morphosyntactic case study analysed (Section 3.2) has shown that the differences in the usages of Relational Adjectives (in -ιο-) in Greek and in the Luwic languages, together with the impossibility in proving actual contact between Luwian and Proto-Aeolic in a prehistoric phase, make the hypothesis of a contact-acquired feature (as per Watkins 2001) very difficult, and the idea of independent developments preferable. At the same time, I have pointed out a (certainly less far-reaching, but perhaps better defendable) possible contact-induced feature in Eastern Aeolic: the presence of pap-

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3 This was first put forward by Pisani (1960: 22) and famously re-adopted, in more recent times, by Puhvel 1991 and Watkins 2001.
ponyms in multiple Aeolic inscriptions from Asia Minor (one of which also displays a Relational Adjective), seems to reflect what happens not only in Hieroglyphic Luwian, but also in the immediately neighbouring Lydian (Section 3.2.3.1).

Lexicon is by far the most studied part of Graeco-Anatolian contact, and in the fourth chapter I have gathered a representative sample of possible exclusive isoglosses and loanwords. My approach has not been as nihilistic as that of some contemporary scholars (e.g. Simon 2018; Oreshko 2018), but nonetheless I have argued that a good part of the Graeco-Anatolian isoglosses should not be regarded as such, and that the most likely origin of many (though not all!) Greek presumptive loanwords is not from Anatolian. If one is ready to accept ‘irregular’ adaptations of Anatolian sounds in Greek, a few more items can be considered real loanwords. On the basis of those Greek words which seem to be explained better with an Anatolian etymology, it is possible to offer some considerations on the phonetic adaptations which might have taken

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4 The condicio sine qua non for the inclusion in my study is that someone has postulated either a Graeco-Anatolian exclusive lexeme or the Anatolian origin of a Greek word. For such an analysis, I have included most items I have been able to find after a thorough search of the main etymological dictionaries of Greek (EDG, DELG [+ suppl.], GEW) and of the Anatolian languages (HED, EDHIL, HEG, VELH), and of the secondary literature dealing with Graeco-Anatolian lexicon, without any aprioristic exclusion. However, given the necessity to produce a contained and coherent group of items, the search has been confined to the pre-Hellenistic era, and those loanwords and phenomena of language contact at the lexical level that might have taken place in post-classical Greek have been excluded. The same can be said about all onomastic material of alleged Anatolian provenance (e.g. Πήγασος, Παρνασ, Βάκχος), which has been left out of the following list because it deserves a separate and detailed study of its own.

5 The following are (more or less) likely Anatolian loanwords in Greek: Gk. γάγγαμον < Luw. kank-; Gk. δέπας < CLuw. tappaš- / HLuw. dibas-; Gk. ἱλίβατος < Luw. āla/i-; Gk. μόλυβδος ‘lead’ < Lyd. mariwa-da ‘dark’; Gk. ταρχύω < Hitt. tarḫu-; Gk. τυραν-νος < HLuw. tarrawanna/i-. On the contrary, for the following, an Anatolian origin can be reasonably excluded: Gk. ἄτυζομαι < Hitt. ẖatugi-; Gk. δάμαρ < Hitt. munus dammara-ı; Gk. ἰχώρ < Hitt. ẖarr-; Gk. ἔρα < Hitt. ἐshar; Gk. λαλέω < Hitt. lāla(n)-; Gk. ὑλίμη < Hitt. šulli-.

6 Specifically, if Luwian /a/ had been perceived as [o], then Gk. τολύπη could be derived from CLuw. taluppi-; if Luwian initial /t/ had been perceived as [th], then Gk. δεράπων < Luw. *tarpan(i)- and Gk. δόρφης < HLuw. tuwarsa-. More generally, if an Anatolian fortis stop was perceived as an aspirated stop in Greek, then Gk. σάφα might be a loanword from Hitt. šuppi-; if the laryngeal had been perceived as [h] and then dropped without leaving traces, then Gk. ὀβρυζα < Hitt. ẖubrušḫi- and Gk. δαΐ < Hitt. laḫḫa-. Finally, if both of these conditions apply, then Gk. ἄφενος could come from Hitt. ḫappina- (as per Szemerényi 1964: 144–148, contra Willi 2004). For all of the above, other accounts are possible, and sometimes likely. For Gk. ἄφενος (< Hitt. amiyar(a)-?) and Gk. ἄρσεα (< Hitt. arši-?), on the other hand, it is difficult to decide—although an Anatolian origin cannot be categorically excluded.
place in the borrowing process. We can confirm that most Anatolian consonants were adapted with the corresponding sound in Greek. However, we have seen that in order to accept some loanwords, we need to postulate different treatments of some sounds.\footnote{In particular, Greek might have: (1) adapted Anatolian fortis stops with voiceless aspirates (e.g. \(p\) = \(pp\) → \(p\hbar\)); (2) adapted Anatolian laryngeals with velar sounds, voiced in intervocalic position (\(h/\) → \(g\)), cf. σεγαλόεις < šēhali or aspirate (\(h/\) → \(k\)), cf. ταρχυό < Hitt. tarḫu-); laryngeal loss, however, is much less certain (cf. ḥappina- > ḥepos, and ḥal < Hitt. lahha-) as it is not always possible to identify which Anatolian language is the possible source of a Greek word; (3) shown imperfect correspondence of liquids, usually adapting /r/ with /l/ (μόλυβδος ‘lead’ < Lyd. mariwda-, τολύπη < Hitt. tarupp-). As for the vowels, one should note that: (1) Anatolian /a/ may have been perceived as [o] by the Greek ear (e.g. τολύπη < CLuw. taluppi- / Hitt. tarupp-); (2) there may have been oscillations between /e/ and /i/, which are otherwise found both in Greek- and Anatolian-speaking areas (e.g. ἀρσεα < Hitt. arši-, σεγαλόεις < Hitt. šēhali).} From a semantic point of view, it seems that most loanwords, together with most Wanderwörter, refer to objects of common use, which may have been diffused through commercial relations between the Aegean and the ancient Near East (e.g. δέπας, μόλυβδος, τολύπη, and perhaps δφανια). In this case, as in that of the loanwords referring to concepts until then unknown in the Greek world (e.g. τύραννος, perhaps θεράπων and θύρσος), one may see the application of the concept of “a new word for a new thing”. However, there is a smaller number of lexemes which are peculiar to a different register, namely that of ritual and of literary language, and which might have had a different path of transmission (ήλιβατος, ταρχυό, perhaps δαῖ and σιγαλόεις). A further methodological tenet should be emphasised at this point: the disparity and variability of the material we are working with (from mid-second-millennium inscriptions to late antique glosses) is often a crucial factor, and this applies especially to lexicon. Just to give an absurd example, as rigorous as one’s method can be, if—because of an accident of history—the entirety of pre-Byzantine Greek was lost, how could a linguist from the future (say, 5000 CE) exclude that Mod Gk. πάει [pai] ‘(s)he goes’ is related to (or even comes from) Hitt. pai- ‘to go’?

The case of Pamphylian, studied in the final chapter, revealed that in a situation in which Greek and one or more Anatolian dialects were certainly in close contact for a few centuries, the most affected domains were the lexicon (in particular its onomastic component) and the phonology, whereas the morphology and the syntax were left relatively untouched. I have analysed five case studies (lowering of the open-mid front unrounded vowel; aphaeresis; rhotacism; weakening of voiced velars; the quality of the linking vowel in compounds) which offer a panorama of possibilities that range from substrate to adstrate
influence. I have argued that some sound changes (e.g. Pamphylian rhotacism: \[d > r \mid V-V\]) occurred at a very early stage of Pamphylian, were triggered by contact with Anatolian languages, and were disappearing under the influence of Koine Greek. I have also suggested that some sound changes undergone by Pamphylian (e.g. \[e > a\]) seem to point to contact with some varieties of Luwian rather than to influence from Lycian, which is much more difficult to prove. Linguistic data confirm what textual and archaeological findings point to: in this region, there has been a prolonged and intense mix of cultures and people that eventually led, on the Greek side, to what has been considered by some ancient writers a population contaminated by βάρβαροι. This contact probably began already in the second millennium, but what we can see from our evidence (which, it is always worth recalling, starts in the 4th–3rd c. BCE) is sometimes difficult to classify as an archaism, a contact-induced or an independent innovation. We must stress, though, that the long isolation of Pamphylian from the other varieties of Greek may in principle point to the first two options: as per Bartoli’s geolinguistic principles, an isolated area is more likely to conserve archaisms, and the coexistence with speakers of indigenous languages (mostly belonging to the Luwic group), which probably led to bilingualism, favoured the introduction of several features (from what we know, mainly at the phonological level) from Anatolian into Greek. One may perhaps postulate a specific scenario of language contact, that of imperfect L2 acquisition, but it is difficult to draw final conclusions from the Pamphylian data alone.

We can therefore say that each piece of Graeco-Anatolian contact that we are able to isolate lies within a series of layers which are often hard to distinguish. If one looks at Greek and Anatolian from a purely genealogical perspective, the two branches are quite distant in the Stammbaum, and this is confirmed by the grammatical structure and the few lexical isoglosses of PIE date. While their genealogical closeness is insignificant, secondary contacts are a much more complex matter, as they are stratified over centuries: as we have seen, these were often overrated in older scholarship (especially from the 1960s), but at the same time the plain rebuttal one finds in recent scholarship is often based on the wrong premises or insufficient grounds.

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8 See e.g. Bartoli 1925; Bartoli & Vidossi 1923; Bertoni & Bartoli 1925.
Conclusions and afterthoughts

With this thesis, I hope to have started bridging a gap in scholarship by providing an up-to-date reference work for those scholars who are interested in early Greek language and in the linguistic (and cultural) landscape of the Graeco-Anatolian area. By disentangling linguistic borrowings from independent innovations, areal features from Indo-European archaisms, I have shown that contact is not responsible for many of the Greek linguistic traits analysed; however, those traits for which a contact explanation is preferable seem to point to certain registers and genres which are compatible with the scenarios of cultural contact independently reconstructed.

A good amount of work is still to be done. The most relevant linguistic features that I have left to future discussion because of constraints of time and space are: the origin of the suffixes -ιδης, -ηνη, and -ινδα; the ending of the first person plural active (-μεν vs. -μες) and other alleged similarities in the Greek and Hittite verbal paradigms; the usage of the particle ταρ in Homeric Greek and that of -tar in Luwian; the so-called Schema Pindaricum; the accusative of respect and the use of conditional particles (for the existing literature, cf. Section 1.2.5). In addition to this, one should expand the lexical section to cover every Greek item which has proposed by scholars in the last century (ideally including onomastics). All items, even the slightest or the most doubtful, would deserve a case-by-case analysis with no aprioristic assumption.

One of the most pressing questions, for which—sadly—there is no ready answer, is that of the spatio-temporal coordinates of any presumptive contact between Greek and Anatolian speakers.\textsuperscript{9} We still lack the details, but the historical sources point quite clearly to a very early Greek presence (even if temporary) in some parts of the Anatolian peninsula. First and foremost, Miletus (\textit{Millawanda}) and its surroundings are the most important locations, as suggested by some of the extant Hittite texts.\textsuperscript{10} There is also the possibility of an early presence of Greek in Cilicia, but this is much more difficult to prove (cf. recently Yakubovich 2015). One may or may not put this in relation to the early migration to southern Anatolia of those Greek-speaking peoples which would have been the ancestors of the Pamphylians of historical times.

A fuller understanding of the relationships between Greek and the Anatolian languages between the second and first millennia BCE would complement

\textsuperscript{9} Despite the claims of e.g. Bachvarova 2016, there is no consensus about where the cultural transmission might have taken place.

\textsuperscript{10} For instance, the 	extit{Indictment of Madduwatta} [\textit{AhT} 3 = \textit{CTH} 147] and the 	extit{Tawagalawa Letter} (\textit{AhT} 4 = \textit{CTH} 181).
much of the recent and on-going research on Near Eastern models of Greek literature, and could expand into (at least) two possible directions. Firstly, it would be worth gathering all presumptive instances of Anatolian phraseology in the Homeric language to see if and to what extent Homer shares motifs with the (specifically Indo-European) cultures of ancient Anatolia. One could also study the state of the Anatolian languages in the late first millennium BCE and early first millennium CE, when Koine Greek was assimilating all local languages, while observing the influence that they might have had on the Greek spoken (and written) in the Anatolian peninsula. Understanding the relationship between Greek and the indigenous languages of Asia Minor in this period is important both for the history of Greek and for that of Anatolian. Some scholars have argued that specific developments which became characteristic of Late and then Byzantine Greek (e.g. the fricativisation of the intervocalic voiced stops [b], [d] > [β], [ð] / V_V, or the voicing of /t/ after a nasal consonant [t] > [d] / N_) originated in the Greek spoken in this region, and these are—interestingly enough—very similar to analogous phenomena in some first-millennium Anatolian languages. The Greek evidence could then aid our reconstruction of the unattested stages of the Anatolian languages spoken in the region, as well as giving a better idea of the process of assimilation and ‘language death’. New questions would then arise: for how long did Greek actually coexist with the indigenous languages/dialects? What degree and what kind of bilingualism—if at all—are we able to postulate? Which parts of the language have been affected the most by language contact? Can our Greek evidence help us understand the phases of the decline (and eventual disappearance) of the Anatolian languages in the first millennium CE? These questions are certainly intriguing, but they should be left for another story.

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