Carlotta Viti (ed.)

Ancient Greek and Latin in the linguistic context of the Ancient Mediterranean

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of the Ancient Mediterranean

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Contributors

Mauro ARESU:
Research fellow in Latin Language and Literature at the University of Cagliari (Italy), Department of Literature, Languages and Cultural Heritage.
Email: mauro.aresu2@unica.it

Monique BILE:
Associate Professor (*Maître de Conférences*) Emer. of Greek and Latin Linguistics at the University of Lorraine (France), Department of History and Culture of Antiquity and of Middle Ages. Email: monique.bile@univ-lorraine.fr

Vit BUBENIK:
Professor Emer. of Linguistics at the Memorial University of Newfoundlands (Canada), Department of Linguistics. Email: vbubenik@mun.ca

Silvia CABRIOLU:
Post-Doc in Historical and General Linguistics at the University of Cagliari (Italy), Department of Literature, Languages and Cultural Heritage.
Email: silvia.cabriolu@unica.it

Gualtiero CALBOLI:
Professor Emer. of Latin Language and Literature at the University of Bologna Alma Mater Studiorum (Italy), Department of Classical and Italian Philology.
Email: gualtiero.calboli@unibo.it

Paola COTTICELLI-KURRAS:
Professor of Historical and General Linguistics at the University of Verona (Italy), Department of Cultures and Civilizations.
Email: paola.cotticelli@univr.it

Francesca COTUGNO:
Post-Doc in Historical and General Linguistics at the University of Verona (Italy), Department of Cultures and Civilizations.
Email: francesca.cotugno@univr.it

Filip DE DECKER:
Post-Doc holder of a Marie Skłodowska Curie Actions, European Fellowship, and research fellow at the University of Verona (Italy), Department of Cultures and Civilizations. Email: filipdedecker9@gmail.com

José Luis GARCÍA RAMÓN:
Universität zu Köln / Università Cattolica del Sacro Cuore di Milano (Italy), Dipartimento di Filologia Classica, Papirologia e Linguistica Storica.
Email: garcia.ramon@uni-koeln.de

Georgios K. GIANNAKIS:
Professor of Greek Linguistics at the Aristotle University of Thessaloniki & Center for the Greek Language (Thessaloniki, Greece), Department of Linguistics. Email: ggianak@lit.auth.gr

René HODOT:
Professor Emer. of Greek and Latin Linguistics at the University of Lorraine (France), Department of History and Culture of Antiquity and of Middle Ages
Email: rene.hodot@univ-lorraine.fr

Stella MERLIN:
Post-Doc in Historical and General Linguistics at the University of Naples Federico II (Italy), Department of Human Studies. Email: stella.merlin@unina.it

Anna ORLANDINI:
Professor Emer. of Latin and Greek Linguistics, "Centre A. Ernout", Paris-Sorbonne (France). Email: orlandinianna@libero.it

Valerio PISANIELLO:
Associate Professor of Historical and General Linguistics at the University of Chieti-Pescara (Italy), Department of Languages, Literatures and Modern Cultures. Email: valerio.pisaniello@unich.it

Paolo POCCETTI:
Professor Emer. of Historical and General Linguistics at the University of Rome 2, Tor Vergata (Italy), Department of Literary and Philosophical Studies and of History of Art. Email: paolopoccetti@tiscali.it

Luca RIGOBIANCO:
Researcher of Historical and General Linguistics at the University Ca' Foscari of Venice (Italy), Department of Humanities. Email: luca.rigobianco@unive.it

Carlotta VITI:
Professor of Greek and Latin Linguistics at the University of Lorraine (France), Department of History and Culture of Antiquity and of Middle Ages. Email: carlotta.viti@univ-lorraine.fr

Guy VOTTÉRO:
Professor Emer. of Greek and Latin Linguistics at the University of Lorraine (France), Department of History and Culture of Antiquity and of Middle Ages. Email: guy.vottero@univ-lorraine.fr

Rex WALLACE:
Professor Emer. of Classics at the University of Massachusetts Amherst (United States of America), Department of Classics. Email: rwallace@umass.edu

Emmanuel WEISS:
Associate Professor (*Maître de Conférences*) of Greek and Latin Linguistics at the University of Lorraine (France), Department of History and Culture of Antiquity and of Middle Ages. Email: emmanuel.weiss@univ-lorraine.fr

Michael WEISS:
Professor of Classics and Indo-European Linguistics at Cornell University, Ithaca, NY (United States of America), Department of Linguistics. Email: mlw36@cornell.edu

Ryan WINDHEARN:
Research fellow in Indo-European Linguistics at Cornell University, Ithaca, NY (United States of America), Department of Linguistics. Email: ryan.windhearn@gmail.com

Introduction: Language contact, comparative linguistics, and comparative literature in their historical and cultural context[1]

Carlotta Viti
(University of Lorraine)

1. Possible dialogues between language contact and historical linguistics

The popularity of linguistic research traditions often depends on factors external to language itself. In our global, multilingual and multicultural societies, a particular interest has recently developed in academia around the subject of language contact. In general linguistics, since Weinreich's (1977) pioneering studies on this topic, language contact has been the subject of publications with data drawn from many different languages (cf. Thomason & Kaufman 1988; Aikhenvald & Dixon 2001a; Thomason 2001; Matras 2009; Ansaldo 2013; Bakker & Matras 2013; Grant 2020, etc.). For example, it has been often observed that nouns (especially nouns other than kinship terms, body part nouns, personal pronouns and low numerals) are usually borrowed more easily than verbs or other parts of speech, and that lexical items in general are usually borrowed more easily than phonemes and morphemes (cf. Moravcsik 1978). But this also depends on the intensity of language contact. It is true that borrowing particularly prevails in situations of casual or superficial contact. In cases of intense contact such as substrate interference, however, structural transfer has no constraints, and usually occurs earlier and more extensively than lexical transfer (cf. Thomason & Kaufman 1988: 83 ff). For example, the Asia Minor Greek dialects studied by Dawkins (1916) adopt many features of Turkish grammar,

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ranging from the loss of gender and adjective-noun agreement to word order and even vowel harmony. In general, it is now recognized that manifestations of language contact depend more on the sociocultural settings of a speech community than on purely linguistic factors. More specific predictions can be made by considering social variables such as the presence of an indigenous superordinate group, a migrant superordinate group, an indigenous subordinate group or a migrant subordinate group (cf. Thomason 2001: 23), as well as prestige factors, since the same linguistic phenomenon may have different outcomes according to different variables of language contact. There are various theories of language contact, which is also acknowledged as a major mechanism of language change. For example, Harris & Campbell (1995) consider language contact as one of the three main mechanisms of syntactic change, alongside reanalysis and extension.

By contrast, in the past, language contact was neglected. This neglect is even more pronounced in the field of historical linguistics and Indo-European (IE) studies. The reconstruction of Proto-Indo-European (PIE) is achieved by observing mechanisms of internal language change. This is not only evident in Internal Reconstruction, by definition, but also in the Comparative Method. It is traditionally assumed that two or more structures are cognates only once language contact, as well as other possible factors of formal correspondence such as chance and independent drift, are ruled out (cf. Meillet 1925). Accordingly, the establishment of a genetic relationship is "an argument by elimination" (Harrison 2003: 215). The Neogrammarians, among the founders of the Comparative Method, invoked language contact only to explain exceptions to sound laws. Latin *rūfus* "red, reddish; redhaired" (< PIE *h_1rowd^h-ó-), for example, presents a radical fricative *f*, instead of a plosive as in *ruber* "red" (< PIE *h_1rud^h-ró-, cf. gr. ἐρυθρός), because it is borrowed from a Sabellic dialect, as the change PIE *d^h > *f* is unconditioned in Sabellic. Exceptions to sound laws are usually unsystematic (unless they can be subsumed under another more specific sound law). Still in recent times, Watkins (2001) considers the Comparative Method to be the best heuristic tool to describe language relatedness, and dismisses alternative models which also take into account areal diffusion (e.g., Punctuated Equilibrium, cf. Dixon 1997) as unsatisfactory. Contact is still currently often seen as "a confounding factor" (Walkden 2013: 96) in the establishment of genetic inheritance. According to Dunn (2015: 190), for example, "all historical linguistics is phylogenetic, since phylogenetics encompasses the scientific investigation of the descent of organisms in general", which in principle excludes the possibility of historical language contact. There have been studies of language contact in IE scholarship (e.g., Meid's 2012

writings on the contacts between Celtic and Germanic, as well as on Cimbrian, an Upper Germanic variety spoken in some northeastern regions of Italy which has been strongly influenced by Italian). These studies, however, have set out to discuss specific cases of language contact, rather than to establish a theory of language contact, as we have in general linguistics. Moreover, they are rare in comparison with IE studies on other linguistic topics such as historical phonology, morphology and (to a lesser extent) syntax. As the IE languages are the most studied languages of the world, this approach has also affected the diachronic study of other language families.

Anybody trained in IE linguistics, myself included, agrees with Watkins (2001) that the Comparative Method remains the most valuable scientific instrument of linguistic reconstruction in IE and beyond (cf. also Baldi 1990; Polomé & Winter 1992; Weiss 2015). As Weiss (2015) rightly points out, one of the great merits of the Comparative Method is that it enables the reconstruction of much deeper linguistic stages than those of our earliest written records. Being the best method, however, or being a correct method, does not mean being perfect or complete – no scientific method can have such pretensions, as it always implies a certain simplification of reality. The Comparative Method devotes more attention to form than to function, since changes affecting forms are more regular and therefore more predictable than changes affecting meanings. Owing to this, linguistic reconstruction is performed by simplification, since there is apparently no need for two or more forms for (what seems to be) the same function: given a form x and a cognate form y, the Comparative Method reconstructs one single form for the proto-language, which may be x or y or a different form from which both x and y descend – it does not reconstruct both forms. As such, the Comparative Method cannot always adequately deal with linguistic variation. This reduction of structural diversity is also a reason why language contact is traditionally excluded from the domain of reconstruction: language contact intrinsically implies language variation. Co-occurring structures, however, often show a functional competition, if function is not limited to the basic lexical-semantic level but also includes pragmatic, sociolinguistic, and dialectal factors. This functional competition, which may be captured by the framework of Construction Grammar (Goldberg 1995; 2006), for example, emerges even more clearly in situations of language contact. Moreover, if one accepts the uniformitarian assumption that languages of the past behaved in the same way as contemporary languages, functional competition and structural variation may be also reconstructed for proto-languages. The reconstructed PIE, for example, was neither simpler nor more regular than the attested daughter languages in morpho-syntax (cf. Viti 2015). Although a functional

competition can be more easily identified in different morphological and syntactic structures than in different phonetic representations, phonetics is also amenable to a functional analysis. For example, in Kiezdeutsch (the variety of German spoken by young generations in multicultural suburban environments, originally in Berlin-Kreuzberg), Weirich et al. (2020) have observed that the phonetic alternation between the voiceless palatal fricative [ç] (ich-laut) and its coronal variant [ɕ] may express distinct sociolinguistic connotations. Although the pronunciation [ç] as in Hochdeutsch predictably has a higher prestige than its Kiezdeutsch realization [ɕ], not all listener groups behave alike (e.g., the non-canonical pronunciation is more stigmatized by older listeners than by young listeners, by in-groups as opposed to out-groups, etc.).

Similar considerations may be applied to the Family Tree model. The results of the Comparative Method make it possible to represent the relationship among the various IE languages in a Family Tree, which does not allow cross-branching. That is, after two or more branches are separated, they do not intersect anymore. In this, sub-branching is typically established on the basis of shared innovations. The Family Tree is also a cultural product of its time. Schleicher (1861), one of the creators of the *Stammbaum*, was inspired by the newly developed method of the *stemma codicum* of the philological research tradition. The latter aims to establish the relationship among different manuscripts of a certain text, and reduces the *lectio* transmitted by two or more codices to one original version. The *stemma codicum* is also presented as a cladogram (cf. Hoenigswald 1963; Fisiak 1990). We have to consider, however, that the Family Tree may not be equally satisfactory to describe cognateness in all language families. It works well for the IE languages, for which it was originally introduced, because these languages have spread across an extremely large area, ranging from Iceland and Ireland to the West to the Tarim Basin (in modern-day Xinjiang, China) to the East, and some of them have been isolated from each other for centuries. When, however, a language family has remained in a relatively more restricted area, the structure of a Family Tree is more controversial. In Semitic, for example, which has remained substantially limited to the Near East until the Muslim conquests in the early Middle Ages, there are different models of classification (cf. Huehnergard & Rubin 2012), and sub-branching is much more debatable than in IE. Similarly, a Family Tree does not adapt so well to situations of extensive bilingualism, as in the languages of South East Asia, where cross-branching may occur.

At their time, the concepts of sound laws and of the Family Tree were also challenged, especially by scholars working on dialectology and modern languages (cf. Schuchardt 1885), whose complex developments were not easily amenable to the regularity of the Neogrammarians' *Lautgesetze*. Schmidt's

(1872) *Wellentheorie*, implying a gradual diffusion of linguistic features from its region of origin, was posited as an alternative to the *Stammbaum* to explain branching within the IE language family (cf. also Porzig 1954 for sub-branching and areal diffusion in IE). De Saussure's (1916) attention to the social factors underlying linguistic change was also critical of the Neogrammarians' reconstruction methodology. These alternative models (which are not incompatible with the Comparative Method in principle) were adopted by a minority of scholars. Otherwise, the Comparative Method has been tested by means of computational and statistical approaches, which are quite popular at the present time (cf. Ringe et al. 2002; McMahon & McMahon 2005, etc.; more recently, cf. Heggarty et al. 2023). The earliest statistical methods applied to historical linguistics, going back to Swadesh's Glottochronology in the 1950s, assumed a constant rate of language change (which is clearly not true). Later models, e.g., the "character-based models of change", continued to consider parsimony to be one of the most reliable criteria to account for branching, which is also controversial (cf. Dunn 2015: 196ff). The newest computational models, such as "likelihood methods", accept a variable rate of change, but still assume that this variability can be measured by means of mathematical algorithms. Some models evaluate the statistical likelihood of branching by means of the Bayesian Monte Carlo Markov chain. Different computational methods exist, whose reconstructions do not always overlap (cf. Widmer 2018).

Most historical linguists, however, are sceptical of computational approaches to language change. This is not only due to the fact that most historical linguists are unfamiliar with complex mathematical methods (this problem would be easily solved by collaborating with a computer scientist), but also and especially because they reject a basic assumption of these methods, that is, the idea that language change and language affiliation can be statistically predicted. In historical linguistics, most scholars hold that language change is regular a posteriori but *unpredictable* a priori (or at least not predictable by mathematical methods), and characterized by variation between different outputs in the intervening time: A > A/B > B, where there is no way to predict that A will change to B. For instance, in sound change, we commonly have [s] > [h] > zero, but some languages retain [s] (e.g., Indic), others develop [h] (e.g., Iranian) and others proceed to the development of zero (e.g., Greek psilotic dialects). If we have to put forward hypotheses as regards the more or less likely occurrence of change, these hypotheses depend on a multitude of linguistic and extra-linguistic factors, which by definition defy considerations of parsimony, and which cannot be captured by a mathematical algorithm (Ockham's razor usually does not work in language change, see below). Rural spaces, for example,

are usually more conservative than urban spaces (cf. Janda & Joseph 2003: 62-63). In periods of political, economic and social stability, language change is slower than during periods of turmoil or war (but we cannot predict based on mere linguistic features whether a speech community will undergo social instability). There is a difference between variation in social sciences, which can be measured statistically, and the implementation of a language change. See Lazzeroni's (1987) dated but still instructive observations against computational approaches to language change.[2] Especially for lexical features, matters of a speaker's choice play a crucial role (cf. Hagège 1993: 9ff). For ancient languages, we also have to take into consideration that the interpretation of a language change can also depend on text transmission, as some language varieties (especially those associated with socially higher registers) may have been better transmitted than others and may therefore not accurately reflect the language as it was really used. Typologists who know languages *prima manu* by fieldwork also realize that language change has no predictable rate and mainly depends on social and cultural factors. Consequently, they also do not appreciate computational approaches (cf. Aikhenvald & Dixon 2001b: 7 et passim).

The matter is not settled, however. As can be seen, the Comparative Method, as well as the Family Tree, are not a tenet established once and for all, but rather the result of a lively debate that has developed across two centuries (Hymes 1974; Fox 1995; Durie & Ross 1996). Although they are substantially correct, new findings from other language families or other geographic areas, as well as from dialectology and language contact, may be useful to elucidate certain linguistic phenomena concerning language variation which are not adequately captured by these theoretical tools.

The reluctance to contemplate contact factors in historical linguistics is based on two main assumptions, related to each other, which have been proven to be wrong in more recent literature. Firstly, it was assumed that internal and external language change are mutually exclusive, and secondly, that an internal explanation to language change is always to be preferred to an external one. Lass (1997: 201ff), for example, argues that explaining language change in terms of language contact must be the *ultima ratio* to be used only when an internal explanation (by means of analogy, reanalysis, etc.) is not available. This is because internal change always takes place, even without an external

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2   "*Ciò che, dunque, determina il 'tempo' del mutamento linguistico è la debolezza o la crisi di una tradizione, che lascia spazio alle varianti contrarie; e ciò che lo rallenta è, invece, la saldezza della medesima tradizione. Fatti culturali, dunque: il tempo della lingua non è il tempo della natura, ma il tempo della cultura.*" (Lazzeroni 1987: 32) I fully agree with this statement.

influence, while external change is not necessary. An explanation in terms of inheritance therefore seemed to be more parsimonious. This argument is substantially similar to that used by the Neogrammarians to account for sound laws. Terms such as "simple", "economic", "consistent" or "harmonious" also abound in structuralist studies, and are evaluated positively in comparison to complex, heavy or inconsistent systems. Although these beliefs continue to appear, especially in the generative research tradition, nowadays historical linguists commonly admit the possibility of multiple causes interacting in language change. Indeed, as Joseph (2013) observes, it is good practice in historical linguistics to take all possible factors into consideration, since a historical explanation has to be correct and complete, and not necessarily simple. Note that Joseph has worked intensively on Balkan languages – he understands the importance of language contact very well.

Dorian (1993) also contests previous assumptions whereby divergence and convergence in language change are simplistically associated to internal and external factors, respectively. She shows that language contact may bring about both divergence and convergence – it must be studied on a case-by-case basis. This may be seen as less economic, but it is more reliable. Moreover, a linguistic feature may develop by internal language change and *at the same time* be reinforced by the pressure of language contact. This is the logic of Heine & Kuteva's (2003) "contact-induced grammaticalization", that is, a kind of grammaticalization (i.e., an internal language change by which content words tend to become more grammatical with increasing formal erosion, fixed position, semantic bleaching, etc.) which also occurs in situations of language contact. Heine & Kuteva (p. 71-73) report the case of some Western Slavic languages, such as Sorbian, Czech, and Slovenian, which at least in the spoken language have developed patterns of marking (in)definiteness in a similar way to the article. While Czech and Slovenian use some demonstrative elements to mark definiteness, Sorbian has grammaticalized the use of the numeral "one" as an indefinite marker. On the one hand, these represent the typical paths leading to the formation of articles in languages. On the other, the influence of German is undeniable. German, which possesses both definite and indefinite articles, is spoken in geographically close areas which have always had an intense commercial and cultural interaction with West Slavic speech communities. Also in this case, contact-induced grammaticalization is especially observable in morpho-syntactic change, but phonology is by no means excluded. In both cases, the change may affect both marked and unmarked features. For example, retroflex consonants, which represent phonetically marked segments, could develop in the Satəm group of IE languages by internal language change

already according to the so-called "Ruki" sound law. In Indic, however, retroflex consonants have a much wider extension than in Armenian or Balto-Slavic. In Indic, retroflex consonants are presumably reinforced by a substrate effect of the Dravidian languages, for which a retroflex articulation is especially characteristic. Retroflex sounds can be reconstructed for Proto-Dravidian as well.[3]

Contact-induced grammaticalization may change past assumptions concerning language contact, as contact is not invoked anymore to explain the development of a seemingly unnatural change or of a language feature that appears to be inconsistent with other features of the system, but rather interacts with internal language change in the same direction. Note that the capacity to assess a directionality in language change is actually a strong point of the Comparative Method: a [p] changes into a [f] much more often than the other way round, so that, in the presence of a [p] in one language and of a corresponding [f] in another related language, we can also reconstruct [p] for their proto-language *ceteris paribus*. This directionality has been also extended from the domain of phonology, for which it was originally postulated, to morphology and syntax. For example, it has been demonstrated that the change from postpositions to case markers is much more frequent than the opposite change (cf. Hagège 2010; Givón 2021, etc.), so that the proto-language

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3   On the basis of current findings in contact linguistics, Hock's (1975) arguments that Ancient Indic retroflex consonants may have developed independently from Dravidian can no longer be retained. Hock observed that retroflex consonants may emerge in languages without external influences, that they are attested in varieties of Early Vedic with very few Dravidian lexical borrowings etc. Firstly, the fact that Indic retroflex consonants may have been influenced by Dravidian by no means excludes that in other languages (e.g., in some Southern Italian dialects, Sardinian and Norwegian) retroflex consonants may have developed spontaneously, without contact. Retroflex consonants may develop in different ways, and probably no change can be motivated only by contact, as probably no change can be only internally motivated – we have to examine them case by case. The argument that, since retroflex sounds may develop secondarily by internal language change, a contact explanation is "unnecessary", is a wrong argument, as it is founded again on an assumption of economy (that is, on the idea that a language change may have only one motivation) which is now surpassed in linguistic theory. Secondly, as we have seen, not only are internal and external factors not incompatible, but substrate interference starts with phonological, as well as syntactic features, rather than with borrowings. Cf. the discussion of the Indic case study in Thomason & Kaufman (1988: 139 ff), who are also in agreement with most scholars of South Asian languages, arguing for an early influence of Dravidian over Indic in retroflex articulation (cf. Emeneau 1956; 1980; Masica 1976, etc.). In general, the influence between Indic and Dravidian has been mutual, and does not exclude substrate and adstrate factors from Munda and other language families spoken in the area. The result of this complex interaction is South Asia as a *Sprachbund*.

of a language with postpositions and of another language with cognate case markers also has to be assigned postpositions. The same directionality may be identified in case of language contact. I have never had difficulties in accepting this concept as I saw it in operation in my own experience. The reader shall forgive this personal anecdote as it is functional to my argument. When I was working at the University of Zurich, German was my working language as well as the language of my daily life. When I had to express likes, I always said *ich mag X* "I like X" with canonical subject marking, instead of *X gefällt mir* with non-canonical subject marking. In most contexts both constructions are possible in German (apart from specific cases such as preferences concerning food, where we commonly use non-canonical subject marking with the verb *schmecken* "to taste"). Still, I consistently used *mögen* and not *gefallen.* Note that my mother language, Italian, only admits non-canonical subject marking with likes: *mi piace* has the same syntactic pattern as German *es gefällt mir.* (Italian is not like French, where the structure *X me plaît* exists but is less frequent than *j'aime X, j'adore X.* The latter options are not available in Italian for this function.) The same applies to my native dialect, Tuscan, which has a different verbal lexeme but the same syntax: *mi garba* (to.me it.pleases) "I like". Thus, when speaking in German, I used the pattern which was different from the one used in my mother language. I asked my Italian friends who were living in Zurich, and they told me it was the same for them. This is understandable when we consider that diachronically, in internal language change, experiential predicates tend to acquire canonical subject marking. In Old English, the verb *lician* "to like" required a dative experiencer, *listan* "to desire" (German *gelüsten*) an accusative experiencer, and so on. With time, the English language has lost many impersonal constructions of experiential predicates (cf. van der Gaaf 1904; Allen 1995, etc.). The pattern where the experiencer is also the subject turns out to be preferred in internal language change as well as in situations of language contact.

All this confirms that the exclusion of language contact from the practice of linguistic reconstruction may seriously impinge upon an adequate understanding of language change, since no language has evolved in isolation. As LaPolla (2009: 227) pointed out, "language contact is a part of the development of all languages, and so we cannot treat internal language change independently from changes influenced by language contact". Given the fundamentally communicative function of language, contact seems rather to be a *natural* condition of language, at both a microlevel (as in dialects and sociolects) and a macrolevel (involving different languages), and factors of multilingualism often have a profound effect on the development of a language. A scientific dialogue

is therefore needed between scholars of historical linguistics and scholars of language contact, who so far have been usually working independently from each other, to compare and combine their techniques, so that some findings of language contact may be incorporated into the methodologies of linguistic reconstruction. This implies an interdisciplinary relationship of historical linguistics in general, and IE studies in particular, with other disciplines focusing on language interaction and on its extra-linguistic context, such as dialectology, sociolinguistics, anthropological linguistics, pragmatics, discourse analysis, contrastive linguistics, and translation studies.

2. Intellectual history of language contact in Indo-European studies

If in principle there is no incompatibility between language contact and the Comparative Method, one may wonder why language contact has been so long neglected in IE studies as compared to other linguistic topics. This is probably also due to ideological reasons. In the past, it was long assumed that language was directly connected to "race", and this in turn discouraged the study of non-genetic linguistic relationships. We have to put the founding writings of IE linguistics in their historical context. Apart from more or less impressionistic statements about the possible relationships among various IE languages, the earliest serious endeavours to reconstruct the history of IE originated in a series of scholars mainly operating in 19th century's Germany – a period in which issues of race and nation, in various forms, played a prominent role in scientific and literary discussions. The first generations among these scholars, that is, Wilhelm von Humboldt (1767-1835), Jacob Grimm (1785-1863) and Wilhelm Grimm (1786-1859), Franz Bopp (1791-1867) etc. – immense scholars – were deeply influenced by Romanticism. This movement, which developed between the end of the 18th century and the first half of the 19th century, was rooted in the idea of a "nation", considered as a unity of language, religion, traditional customs etc. ultimately to be attributed to an ethnic group.[4] Later, in the second half of the 19th century, Europe was rather influenced by Positivism as well as Darwinism, which are often presented as a reaction of rational thinking against

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4   Alessandro Manzoni (1785-1873), one of the most influential Italian authors, defined "nation" or "fatherland" (*nazione, patria*) as "*Una d'arme, di lingua, d'altare, / di memorie, di sangue e di cor*" (a unity of army, language, altar, memories, blood, and heart). These verses are drawn from his poem *Marzo 1821*, the date of an important battle of Italian patriotic movements against the Austro-Hungarian Empire, which had occupied the North of the Italic peninsula.

Romantic ideas of feelings and subjective interpretations, but still shared the interest in genetic connections. Darwin's *On the origin of species*, published in 1859, postulated a common descent of species through a branching pattern of evolution. In addition to philology, as we have seen in §1, Schleicher (1821-1868) was also deeply influenced by Darwin's theory of evolution (cf. Schleicher 1863). Note that the basic terminology of the family tree (ancestor language, mother / daughter / sister languages, language family, cognate, etc.) is based on metaphors of genetic relations. The same metaphors recur in philology, which speaks about families of manuscripts, genealogy, generation, spurious etc. Latin *spurius*, for example, originally meant "illegitimate" – it was used in legal language to denote the child of an unknown father or a child born from incest (cf. OLD s.v. *spurius*; EM 645). The language of metaphors is based on experiences and ideas that are commonly shared in a speech community.

All this fits in with the pervasive climate of nationalism, that is, the idea that a state must coincide with (what is considered to be) a nation, an idea which was well established in the 19th century. Several movements and wars nurtured by nationalist ideas developed in this period. A long hostility existed between Germany and France, for example, as both wanted to extend their control over continental Europe. After the Franco-Prussian War (1870-1871), the Second French Empire lost Alsace and Lorraine, which were annexed to the North German Confederation led by the king of Prussia. The "young" generations of IE scholars, the Neogrammarians (Leskien, Brugmann, Osthoff, Delbrück, Braune, Behagel, Paul, Sievers, etc.) – also immense scholars – working between the second half of the 19th century and the first decades of the 20th century, lived in this political and social climate. It is understandable that they were more interested in studying genetic inheritance than contact in languages. The interests of linguists, as of any other people, are influenced by the ideas of their time.

We all know how these dangerous nationalist ideas ended up in the subsequent decades and there is no need to dwell further on those dramatic events. Under Nazism, which ruled Germany from 1933 to 1945, the very concept of *Indogermanisch* was associated to ideas of a pure "Aryan" race. Even the writings of early Indo-Europeanists were reinterpreted in the light of *Nationalsozialismus* – note the emphasis on "national" in this term. It is clear that language contact could not be an ideal topic of research at that time. Scholars interested in linguistics therefore continued to stress the indigenous material in a language rather than manifestations of language contact. The latter was considered as a sort of contamination of language. The fact that Ancient Egypt – in Africa – and the Ancient Near East – populated by Semitic people, among others – had

advanced cultures which exerted a strong influence on the Greek world since Mycenaean times (see below) was virtually a taboo under the Nazis. But recall that these ideas circulated well beyond Germany and their allies. France and Great Britain had maintained vast colonial empires for centuries, again justified by ideas of racial superiority. In France, the diplomat Arthur de Gobineau, author of the *Essai sur l'inégalité des races humaines* (1853-1855), asserted the superiority of the Aryan race. In the British Empire, scholars of Sanskrit typically ignored or downplayed the linguistic and cultural contribution of Dravidian and other indigenous languages of India to the development of Indic. It is enough to mention Beames (1872-1879), which remained one of the standard books on New Indic languages at least until Masica (1993). Beames often expressed the argument that the Indo-Aryans were more donors than recipients of linguistic features as they were, in his view, "superior morally as well as physically to the aborigines", p. 10 et passim). The Jewel in the Crown did not obtain its independence until 1947. Again, language contact was hardly compatible with imperialist and racial arguments.

A few words are needed at this point on the Black Athena debate. As is well-known, Bernal (1987; 1991; 2006) considered the reception of Graeco-Roman civilization in Western tradition to be conditioned by racialist ideas, and proposed an alternative model in which certain Afro-Asiatic civilizations, notably Egyptians and Phoenicians, played a much more important role in the development of Greek language and culture. Relying on ancient Greek mythological and literary sources, he hypothesized that the ancient Egyptians and Phoenicians colonized parts of ancient Greece, which, in his view, has to be interpreted as a sort of periphery of the Levant. Moreover, he proposed numerous new explanations for Greek words with no etymology, or with a controversial etymology, which he traces back to Afro-Asiatic expressions. In order to avoid misunderstandings, I wish to state clearly that I do *not* agree with Bernal's linguistic reconstruction. Bernal is sympathetic with the idea of macro-families, such as Nostratic, and consequently does not follow the assumption of regular IE sound laws. In contrast, I do not subscribe to the concept of macro-families and follow the traditional procedures of the Comparative Method. In this, I agree with Jasanoff & Nussbaum (1996), who recall the method of finding correct etymologies, that is, by looking at regular sound changes, rather than superficial resemblance, etc.

However, while we share the same method of linguistic reconstruction, I disagree from Jasanoff & Nussbaum's (1996) paper with regard to a couple

of points.[5] They maintain that Afro-Asiatic borrowings in Ancient Greek are "relatively few in number and – with some exceptions on the Semitic side – late in date" (p. 201). Relying on Masson (1967), a study on Semitic borrowings in Ancient Greek, they assign these terms to the domains of fabrics and items of clothing, commercial terms, vessels, and plants, e.g., Ancient Greek κύμινον n. "cumin", attested since the Mycenaean age (*ku-mi-no, ku-mi-na* in a list of spices in Mycenae). But, in fact, Masson is much more open and cautious on this matter. Besides "sure" borrowings belonging to these semantic domains, she also discusses at length a series of "possible" borrowings, which are semantically much more heterogeneous.

Among these "*mots dont l'origine sémitique est possible*" (Masson 1967: 77 ff), we find the name of certain animals, such as λέων / λῖς m. "lion" (p. 85-87). The former variant, λέων, is attested since Mycenaean (*re-wo-pi*, instr.pl.; *re-wo-te-jo* adj.). It is considered to be a borrowing from Semitic (cf. Akkadian *lābu* "lion", Ugaritic *lb'* "id.", Hebrew *labī'* "id.") or from an unknown Mediterranean language. The rarer variant λῖς has been connected with Hebrew *laīš* "lion", but in this case as well the evidence is not conclusive, and it is possible that we are dealing with a *mot voyageur* of the Mediterranean. Cf. also DELG 635; GEW 113; EDG 854 (for which a "Semitic origin is probable" especially for λέων – note that Beekes is not particularly keen to admit Semitisms). The lion is not native to Europe while it lived in various Near Eastern desertic regions for centuries (in the Near East, the last exemplar of an Asiatic lion was killed in Iraq in 1918). As such, the lion was commonly portrayed in Near Eastern art since antiquity, when it was a symbolic image of the king.

Despite the uncertainties about the ultimate source of Ancient Greek λέων and λῖς (in my view, they are more probably borrowed from an unknown Mediterranean language than from Semitic), what is sure is that these words are *not* IE. Still, some IE scholars have thought the contrary in the past. I briefly

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5   – apart from their "strong" language. They say that Bernal will earn a place "in the crank linguistic literature" (p. 202) together with people who derived, for instance, Hungarian from Sumerian or Vietnamese from Ancient Egyptian. They say there is no methodological difference between works of this kind. I do not think we can compare complete fantasy works like these (mainly written a long time ago, by the way) and somebody who proposes borrowings between ancient Greece and the Ancient Near East – even though Bernal's etymologies are also wrong, in my opinion, at least there is geographic proximity and plenty of evidence of historical contact (see §3). Instead, I think that Bernal will earn a place in intellectual history, as he managed to document via a broad range of historical sources the racial and antisemitic ideas that occupied large portions of Western academia until the end of the Second World War. This is not what he aimed at, but it is still significant, as intellectual history is now an established discipline with its own research tradition.

discuss this case not to revisit the etymology of λέων and λῖς, as both Masson (1967) and all lexica recognize that they are not of IE origin, but rather as an exercise of intellectual history of language contact. According to Thieme (1954: 32-37), λέων is etymologically connected with Vedic *ruváti* "lows" (sound of cattle) and with Homeric Greek βουλυτός m. "evening" (the latter interpreted as "time when the cows come back from the pasture lowing", rather than "time for unyoking oxen" (βου-λυ-τός), as it is commonly thought). Λῖς, instead, is connected by Thieme to Sanskrit *līna-* "lying or resting on, lurking, hiding' as in Kālidāsa's expression *kuñjalīnān … siṃhān* "lions hiding in the underbrush". Clearly, all this is pure fantasy. But we may better understand the ideological ground behind this hypothesis if we know that it comes from a study, entitled *Die Heimat der indogermanischen Gemeinsprache*, where the author posits the original homeland of the Indo-Europeans in Northeastern Europe by means of lexical examples such as the name of the salmon (now obsolete for this argument). If then we know that Paul Thieme (1905-2001) was working in Germany during the Third Reich (he also served in the German army during the Second World War), then the picture is much clearer. With this, I do *not* want to imply that Thieme, one of the greatest Indologists, was sympathetic towards Nazism. On the contrary, we have evidence that he was *hostile* to the Nazis. For example, in his study *Fremdling im Veda*, published in 1938, Thieme studied the derivation chain of Vedic *arí-* "foreigner; enemy", *aryá-* "related to the foreigner; kind, favorable", and *árya-*, the latter being a common endoethnonym of the Indians of IE origin, opposed to *dásyu-* or *dāsá-*). Although his interests rely rather on the morphology of these forms, he also explains that *árya-* is to be interpreted in the sense of "hospitable" (*zu den Gastlichen gehörig, wirtlich*, p. 145), protector of foreigners. He argues that the meaning "lord" as well as the ethnic sense are only secondarily derived from a denotation of a master that is generous to his guests. This argument was dangerous at that time and yet corrected the Nazi's abuse of the word "*Arier*". Thieme later defected during the Cold War from the German Democratic Republic to West Germany (where he became Professor of IE studies at the University of Frankfurt), then moved to the US etc. Still, as everybody else, he reflected the interests of his own time.

My point is therefore that, when we study problems of language contact in the ancient IE languages, we must be very cautious because most authors of our sources lived in periods when language contact, as well as cultural contact, was refused or downplayed for ideological reasons related to racial and nationalist arguments – not necessarily their own personal ideas, but certainly ones that were widespread both in society and in academia. The relationship between linguistics and history is not limited to language change,

as in historical linguistics, but also concerns the history of ideas – intellectual history. Ideas affect research interests and the interpretation of data. We have also to pay attention to the fact that etymological dictionaries and the secondary literature in general often repeat former sources without further elaborating the argument. For example, (apart from the Pre-Greek argument, see below), EDG is often a translated copy of GEW – which is understandable, as unfortunately Beekes died before having the time to complete his work.

It is also possible (albeit not certain) that the list of early Semitisms in Ancient Greek has to be enlarged with respect to what is commonly assumed to include certain theonyms. One finds insights on this in the works of Burkert, a great scholar of Greek religion and literature who had additionally been trained in IE linguistics and also studied Akkadian. Burkert (2009: 36-37) suggests that the name Τηθύς, -ύος f. "Tethys", denoting the wife of Oceanus and the mother-god of the river-gods and Oceanides, may be a borrowing from a variant of the name of the Akkadian deity Tiamat, which is also written as *Tiamtu*, *Tâmtu*, *Tawatu* etc. This is not argued just on the base of sound similarity, but rather because the Homeric passage at issue (Hom. *Il.* 14,200-201) has precise analogies in the *Enūma Eliš*, one of the most important creation myths of the Babylonian tradition. In the Iliad, Hera says to Aphrodite: εἶμι γὰρ ὀψομένη πολυφόρβου πείρατα γαίης, / Ὠκεανόν τε θεῶν γένεσιν καὶ μητέρα Τηθύν "For I am going to see the boundaries of the all-nurturing earth, and Oceanus, the origin of the gods, and mother Tethys". At the beginning of the *Enūma Eliš* epic, we read: "when on high no words was used for heaven / nor below was firm ground called by name, / *Primeval Apsu was their progenitor*, (Akkadian *apsûm-(ma) rēštû zārûšun*) / *Mother Tiamat was she who bore them all* (*mummu tiāmtu mu'allidat gimrīšun*)".[6] As Burkert (2009) observes, the similar formulation (Ὠκεανός / Apsu are described as progenitors, and Τηθύς / Tiamtu as mothers) suggests that the concepts of these gods are related. In the Akkadian theogony, Tiamtu plays an important role; for example, she is engaged in the decisive battle against Marduk (cf. Jacobsen 1968). Of Tethys, instead, we have no further information – note that we are speaking about Τηθύς "Tethys", and not about Θέτις "Thetis", the mother of Achilles (although some overlaps between these two marine goddesses is plausible).[7] In Homer, Tethys is mentioned only in this incidental passage, within the story of the Διὸς ἀπάτη, as Hera has

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6   Cf. https://www.ebl.lmu.de/corpus/L/1/2/SB/I
7   Thetis, in her turn, has been approached to Šiduri, the alewife in the Epic of Gilgamesh, in a scene in *Il.* 24, 120 ff. Here she tries to comfort his son Achilles, who is mourning Patroclus' death, and says that he should instead enjoy the pleasures of life. Similarly, as Gilgamesh is grieving over the death of Enkidu, Šiduri encourages him to search

to find an excuse to obtain Aphrodite's girdle in order to seduce Zeus. It is therefore more probable that the representation of this Greek goddess derives from the Akkadian one rather than the other way round. The name of Aphrodite herself is possibly borrowed from Semitic, although not directly from the name of her mythological Northwest Semitic correspondence Aštoret / Astarte (the relationship with ἀφρός "foam" is secondary by folk etymology), cf. GEW 196-197; EDG 179. This is because the cult of the goddess of love, sexuality, and fertility, as well as war and power, is certainly of Mesopotamian origin (cf. Sumerian Inanna, Akkadian Ištar, etc.), and not IE. An oriental origin is also probable for Adonis, who in Greek mythology is consistently associated with Aphrodite. On the one hand, from the content point of view, the cult of Aphrodite and Adonis may be a continuation, adapted to the Greek pantheon, of the ancient Sumerian couple of Inanna and Dumuzid, which had been variously replicated in other religions of the ancient Near East, as in the Semitic figures of Baal and Tammuz (cf. West 1997: 57). On the other hand, from the formal point of view, the name of Ἄδωνις has been usually explained as a borrowing from the Canaanite form 'ādōn, which means "lord" (cf. DELG 21; GEW 22; EDG 23).[8]

The right track to identify new possible loanwords, in my view, is to search appropriate functional correspondences in mythology and literature. That is, 1) when a Greek word is without a plausible IE etymology (this is the *conditio sine qua non* to start the research), and 2) this word has a similar form and meaning with respect to a word of an ancient Semitic language (as we are dealing with different language families, sound laws do not help in this case), then 3) we should search for *similar contexts* in which the forms at issue appear. Words are not transmitted in isolation, but rather in a context, and therefore may maintain their connotations after being borrowed (as the association of Tethys with water). This implies interdisciplinary connections between IE linguistics and ancient literatures, religions, and cultures. A proviso in the use of the term "similar" is needed. As we have seen, the Comparative Method is based on regular correspondence and not on superficial similarity. We have therefore to ascertain that the rendition of a certain foreign phoneme is consistent with that of other borrowings presenting the same phoneme (although the same foreign

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love and pleasure (cf. Sironi & Viano 2015). See below for further parallels between Gilgamesh and the Homeric poems.

8   The claim of Paul Kretschmer (1916) that Ἄδωνις (which he reconstructs as originally aspirated) is IE and etymologically connected to ἀδεῖν, ἀνδάνω "to please" is minoritarian (e.g., DELG s.v. Ἄδωνις does not even take it into consideration) and currently obsolete (cf. discussion in Marcovich 1996). P. Kretschmer (1866-1956), incidentally, is usually reticent to admit Semitisms.

phoneme may be rendered in different ways in different periods in which it enters the target language. According to whether the borrowing is more or less ancient, its phonetic structure will also be more or less integrated in the phonology of the borrowing language). The hypothesis of a Semitic borrowing becomes more plausible when the form has a triconsonantal and disyllabic root, as this is the typical root structure in Semitic, while in IE the typical root structure is biconsonantal and monosyllabic (CvC).[9]

But the matter is much more complicated, as we have to consider different kinds of borrowing. Borrowing is not just a simple transfer of lexical material from a source language A to a target language B. Sometimes, the integration of an originally foreign source may bear some analogy to other lexemes of the target language. For example, Ancient Greek ἀδάμας, -αντος m., attested as a common name meaning "hardest metal, steel" since Hesiod (later also "diamond" or "fixed, unalterable"), is often considered, especially for semantic reasons, to be originally "a loanword that was adapted by folk etymology" to δάμνημι (EDG 19; cf. also GEW 19; Ayil 2024: §18 s.v. חַלָּמִישׁ – ḥallāmīš). A possible comparison has been suggested in this sense with Akkadian *adamu* "valuable stone" (Hebrew), but this is not certain (DELG 18 considers ἀδάμας a native term). Thus, when we do etymologies, we often move in the realm of possibility, rather than of certainty, as regular sound laws may interfere with analogy, as the Neogrammarians had already stated. Interferences are even more complex to detect when we deal with calques, or semantic loanwords, i.e., when the phonetic material is indigenous but the semantic pattern is influenced by the meaning of a foreign source. Being possible does not mean being wrong, and various degrees of probability exist, which must be judged case by case.

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9   PIE roots with three or more consonants usually present consonant nexus distributed in one syllable (CCvC or CvCC). So-called dysillabic roots, such as Ancient Greek γενε- in γένεσις f. "origin", derive from PIE roots with a final laryngeal, in this case *ǵenh₁- "generate". Since laryngeals were originally consonants, these roots were originally monosyllabic with a complex coda. In Semitic, by contrast, the typical root has three radical slots in which three or four consonants are inserted. Most roots present one consonant in each radical slot (C-C-C). A few roots have four consonants and put one consonant in the first and third slot and a cluster of two consonants in the second slot (C-CC-C). Thus, the radical pattern in PIE and in Semitic differ, although both language families also attest minor alternative root patterns.

3. Ancient Greek in its contact context

3.1. Mediterranean substrates

Greek borrowings from the East are not only from Semitic, of course –
borrowings from Semitic are simply more interesting because in such cases we
can often make textual parallels. Some Semitic languages, such as Akkadian
(Eastern Semitic), Ugaritic, Biblical Hebrew, and Aramaic (all three belonging to
Northwest Semitic), had great literary traditions which were widely influential
in the ancient Near East. Akkadian, in particular, is attested from the middle of
the 3rd millennium BC until the 1st century AD (although in the last centuries it
was only used for liturgical or academic purposes). By contrast, other linguistic
sources are not attested and often not even identifiable. Still, it is especially to
these unknown Mediterranean substrate languages that Ancient Greek owes the
largest part of its non-inherited vocabulary. Greek forms provided with suffixes
such as -νθος (e.g., ὄλυνθος m. "edible fruit of the wild fig") and -(σ)σος (e.g.,
κυπάρισσος f. "cypress") are commonly related to a non-specified Anatolian
language (cf. Meillet 1948: 65 et passim). Forms such as Greek μίνθη f. "mint"
and Latin *menta* "id.", or Greek ῥόδον n. "rose", Latin *rosa* f. "id.", Persian *gul*
"id." (< *wṛdi-), the latter borrowed into Armenian *ward*, are too similar to
be due to chance but cannot be related to any regular sound correspondence
between these languages. There are plenty of these forms, especially among
names of plants, animals, and concrete instruments, as well as toponyms, which
the Greeks had found in their migratory path through the Balkans to the Aegean.

   García Ramón (2011) observes that we have to assume more than one
substrate languages, and identifies three of them, that is, a heterogeneous Med-
iterranean substrate language, a Minoan substrate language, and an Anatolian
substrate language (Hittite or Luwian). In the latter case, borrowings can also
proceed in the other direction, that is, from Greek to Anatolian, or can represent
independent developments of previous sources used in the area. Beekes (2014)
calls one of these non-attested Mediterranean substrate languages "Pre-Greek".
According to Beekes, a word deprived of a PIE etymology probably has a
Pre-Greek origin 1) when it presents an anomalous phono-morphology from
an IE point of view (marked consonant clusters such as κχ, e.g., Βάκχος, or τθ,
e.g., Ἀτθίς, -ίδος, and rare suffixes such as -αμβ-, -ανδ-, -ανθ-, -αγγ-, -ινδ-, -ινθ-,
-ιγγ-, -υμβ-, -υνδ-, -υγγ-), or 2) when the root presents an anomalous alternance
with other words, an alternance which is not found in inherited PIE words.
The most recurrent patterns are π / ππ (e.g., πόλεμος / πτόλεμος "war"), ξ / σσ
(e.g., Ὀδυσσεύς (also Ὀλυττευς) / Οὐλίξης, Οὐλιξεύς (further borrowed through
Western Greek dialects into Lat. *Ulixes*), ττ / σσ (e.g., θάλασσα / θάλαττα "sea"
(cf. also δαλάγχαν· θάλασσαν Hesychius.), σ(σ) / στ (e.g., φαῦσιγξ / φαῦστιγξ

"blister"), plosive / zero (e.g., κάνδαρος / ἄνραξ "charcoal") etc. Along these lines, Beekes (2014) reconstructs the phonology and the morphology of Pre-Greek.

On the other hand, it may seem that Beekes (2010; 2014) connects words with different places and manners of articulation, as well as with zero, when it is convenient, as some forms have been explained differently in the literature and may also receive an IE etymology. Eg. ὀφθαλμός "eye" (originally Pre-Greek according to Beekes 2014: 100-101) is commonly derived from the PIE root *h_3ek^w- "see, behold", similarly to Latin *oculus* "eye" and Vedic *ákṣi-* "id.", whose radical labiovelar is differently simplified in Ancient Greek, sometimes with irregular results (e.g., Boeotic ὄκταλλος "eye"), for taboo reasons related to the fear of the evil eye (cf. DELG 811-813; NIL 370-383). Moreover, not all alternations indicated by Beekes are clearly developed from the same form, especially when isolated glosses are put together with other more frequently attested forms with disparate meanings. E.g., μάργος "mad" and Hesychius' glosses such as μαρικᾶς· κίναιδος "catamite" and ἄβαρκνα· λιμός "hunger, famine" (cf. Beekes 2010: 905) may also be etymologically separate. (Cf. also Colvin 2016 for a critical assessment of Beekes' hypotheses). More study is needed to elucidate the complex substrate vocabulary of Ancient Greek.

3.2. Eastern influences on Minoan and Mycenaean civilizations

While the linguistic non-PIE influence on Greek vocabulary mainly comes from non-attested Mediterranean languages, from the cultural point of view the massive influence of the ancient Near East is undeniable since the beginning of Greek civilization. Without going in details, I limit myself to recall here some of the most salient manifestations of this influence in art and material culture, as they have been reconstructed from archaeological findings and texts. Firstly, when the speakers of the IE variant that would become Greek descended into the Greek peninsula and the surrounding area of the Aegean, at the end of the 3rd millennium (ca. 2100 BC), they encountered a more advanced civilization, the Minoans, centred in Crete, which was at the crossroads of an intense commercial and cultural exchange with other palace societies of the Bronze Age. In Ancient Egypt, Mesopotamia, Anatolia, and the Levant, we also have in this period various centralized organizations where the palace, dominated by an absolute monarch, is the head of political, administrative, and economic powers. The monumental architecture symbolically represents the importance of the palace for the community. Artistic motifs are also shared among these civilizations. The bull, for example, often appears in Minoan paintings, and is the object of the story of the Minotaur and of several ancient Near Eastern myths and cults,