

Reconstructing Syntactic Variation in Proto-Indo-European*

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Abstract

This paper discusses the problem of linguistic reconstruction in the Indo-European languages with particular attention to syntax. While many scholars consider syntactic reconstruction as being in principle impossible, other scholars simply apply to syntax the same tenets of the Comparative Method and of Internal Reconstruction, which were originally used in Indo-European studies for reconstructing phonology and morphology. Accordingly, it is assumed that synchronically anomalous syntactic structures are more ancient than productive syntactic constructions; the former are considered as being residues of an early stage of Proto-Indo-European, where they were also more regular and took part in a consistent syntactic system. Various hypotheses of Proto-Indo-European as a syntactically consistent language, which in the last years have witnessed resurgence, are here discussed and criticized. We argue that syntactic consistency is nowhere attested in the Indo-European languages, which in their earliest records rather document an amazing structural variation. Accordingly, we recon-

* Abbreviations: A = agent; AN = adjective-noun; ABL = ablative; Av. = Avestan; ACC = accusative; AOR = aorist; ART = article; CAUS = causative; CM = comparative method; DAT = dative; F = feminine; GEN = genitive; GN = genitive-noun; Gr. = Ancient Greek; Hitt. = Hittite; IF = infinitive; IND = indicative; INSTR = instrumental; IE = Indo-European; IPV = imperative; IR = internal reconstruction; Lat. = Latin; M = masculine; MED = medium; N = neuter; NA = noun-adjective; NG = noun-genitive; NOM = nominative; NPost = noun-postposition; NPT = non-past tense; O = object; PIE = Proto-Indo-European; PL = PL; POSS = possessive; PreN = preposition-noun; PRET = preterit; PRS = present; PTC = participle; REFL = reflexive; RP = relative pronoun; SG = singular; PL = plural; Skr. = Sanskrit; SOV = subject-object-verb; StComp = standard-comparative; SVO = subject-verb-object; Toch. = Tocharian; VSO = verb-subject-object.

** I express my gratitude to the editor, Joseph Eska, and two anonymous reviewers of *Indo-European Linguistics* for their comments on this paper.

struct Proto-Indo-European as an inconsistent syntactic system in the domains of word order, agreement, configurationality, and alignment, and we consider inconsistency and structural variation to be an original condition of languages. Moreover, we make some proposals for the appropriate use of typology in linguistic reconstruction, with some examples of what can or cannot be reconstructed in syntax.

Keywords

comparative method – internal reconstruction – syntax – Indo-European

1 Introduction

A basic principle of linguistic reconstruction is that synchronically anomalous forms represent the relics of an older linguistic stage and that these forms, therefore, are more revealing for a comparativist, as an often-quoted passage of Meillet nicely formulates:

La grammaire comparée doit se faire en utilisant les anomalies—c'est-à-dire les survivances—bien plus que les formes régulières. Les formes qui, à date historique, sont normales sont celles qui ont subi le plus de réfections. Au contraire, les formes fortes et, plus encore, les formes anormales portent témoignage d'états de langue plus lointains; donc plus une forme est anormale, plus il y a chance qu'elle soit une survivance de l'époque de communauté.

MEILLET 1931:194

This principle has also had the more or less tacitly assumed consequence that synchronically anomalous forms were “normal” in older stages, and that the historical linguist must reconstruct an original linguistic stage in which the later diverse and idiosyncratic forms are rather inserted into a net of interlocking regularities within a homogenous system. On the basis of synchronically aberrant structures such as the *nominativus pendens* or impersonal verbs, for example, it has been suggested that Proto-Indo-European (PIE) was originally a consistent topic-prominent language (Lehmann 1976) or a consistent active-stative language (Bauer 2000). Even in recent times, as we will see below, regularity has been considered as synonymous with simplicity, and reconstruction has been performed as a *reduction* of the attested variety. Inconsistent states may well have been acknowledged, but have been viewed as exceptions typical

of languages in transition, which are therefore quite promptly resolved, or of language contact (cf. Dryer 1995).

The problem is that these consistent linguistic stages are *nowhere* attested in the Indo-European (IE) domain. Rather, the more we analyze earlier texts, the more variation and inconsistency we find. At this point, it is perhaps appropriate to revise these traditional assumptions about linguistic reconstruction and language change, at least in regard to certain linguistic domains such as syntax. Our claim is that syntactic anomalies are a manifestation of syntactic variation, which is the *natural* condition for a language. Heterogeneous syntactic structures may spontaneously emerge and be recreated anew, and they also have a lively function synchronically.

In this paper, we will first see in which context the anomaly principle of Meillet was postulated, that is, with regard to phonology and morphology (§ 2). The use of several quotations in this section is justified precisely by the purpose of establishing the original meaning of this principle, because it is often the case that a scientific observation, which is validly used to explain certain historical facts, is later generalized and extended to other facts, for which, instead, it is not suitable. This may also have happened to the anomaly principle. In § 3 we will see how this principle was applied to syntactic change and syntactic reconstruction, and which difficulties it may encounter in this domain. A revision of this principle will be suggested in § 4 as far as syntax is concerned, whereby synchronically heterogeneous or complex syntactic structures have never been homogeneous or simpler. At that point, we will also propose some guidelines for the appropriate use of Internal Reconstruction (IR) and of the Comparative Method (CM) in the case of syntactic variation. Section § 5 summarizes our argument.

2 The Anomaly Principle in Phonology and in Morphology

Meillet (1931) formulated the anomaly principle while comparing thematic and athematic stems in various early IE languages. He expressed the (nowadays commonly accepted) observation that thematic stems are more recent than athematic stems on the basis of two considerations. First, thematic stems have different morphological formations in the various IE languages, even if they are drawn from the same root: Sanskrit *pácāmi* “I cook” contrasts with Ancient Greek *péssō* (⟨ **pék^w:jō*), Latin *vertō* “I turn” contrasts with Lithuanian *verciù*. Instead, athematic structures morphologically agree to a larger extent in the IE domain: the type of Latin root nouns such as *lūx* “light”, *vōx* “voice”, *nix* “snow” is amply represented. Second, thematic stems become increasingly frequent

in the history of all IE languages, while athematic stems, with time, either disappear or are restructured in analogy to thematic stems. The verb *phérō* “I bring” has a thematic conjugation in Classical Greek (2SG *phéreis*, 3SG *phérei*, etc.), whereas Homeric Greek still attests the athematic form *phér-te* for the 2PL of the imperative; this form corresponds to the imperative *fer-te* of Latin, where this verb also better retains its athematic inflection. We may argue that the separation of root and ending by means of the thematic vowel represented a convenient morphological device to prevent the formation of consonant clusters and therefore to maintain the different morphemes as more easily distinguishable.

While the old athematic type can be explained by the specific historical facts restored by reconstruction, the extension of thematic forms is considered by Meillet as being an instance of analogy, which occurred in the various IE languages independently of one another. To wit: “*toutes les formes régulières de la langue peuvent être qualifiées d’analogiques; car elles sont faites sur des modèles existants, et c’est en vertu du système grammatical de la langue qu’elles sont recréées, chaque fois qu’on en a besoin*” (1931:130). This parallel development, which is traditionally known as Sapir’s (1921) drift, was also illustrated by Meillet in reference to various phenomena attested in ancient and modern IE languages, for example the gradual reduction of the inherited inflection and the establishment of a fixed word order, as well as the increase of function words (*mots accessoires*) such as prepositions, conjunctions and articles.

Neogrammarians treated analogy in opposition to the regularity of sound change: analogy explained the forms in which the effects of sound change were not evident. Meillet (1931:131) treated analogy in opposition to grammaticalization, which implies consideration of the specific diachronic route of a form, although inheritance and parallel convergence are often difficult to disentangle. In any case, analogical developments were not used for reconstruction (“*les concordances qui reconnaissent des causes générales, valables pour l’ensemble des langues, sont dénuées de valeur probante pour le comparatiste historien*”, 1931:23). Instead, historical linguistics must address language specific facts, and the more specific these facts are, the more successful the reconstruction (“*plus sont singuliers les faits dont on constate entre deux langues la concordance, et plus grande est la force probante de la concordance. Les formes anormales sont donc celles qui sont les plus propres à établir une ‘langue commune’*”, 1925:27). For example, the assignment of the same grammatical gender expressed by the same morphemes to nouns of inanimate referents for which this category is not semantically motivated, such as French *veste neuve* and Latin *vestis nova*, may be evidence of the fact that the compared structures are cognate. An anomaly

is just the extreme situation for a linguistic specificity, which is the basis for reliable reconstruction.

The reason why an anomaly, rather than a regular and analogical form, is a clue for reconstruction lies in the principle of the arbitrariness of the linguistic sign, which Meillet (1925:2 ff.) received from his teacher De Saussure. In addition to analogical parallels, other reasons of formal correspondence that may prevent reconstruction and, therefore, are excluded from the CM are identified in chance, borrowing and natural similarity (or iconicity), so that “*a genetic argument is thus a negative argument, or an argument by elimination, what in classical logic is termed a disjunctive syllogism. One rules out all but one of the logically possible accounts of relations of similarity, so that only inheritance from a putative common ancestor remains*” (Harrison 2003:215; cf. also Aikhenvald & Dixon 2001b: 1–4; Fortson 2010:3).

It is comprehensible that both Neogrammarians and European Structuralists were barely interested in chance and in borrowing among the non-genetic arguments of reconstruction. Chance has only a limited effect on linguistic similarities—only 5%–6% of the lexicon of two compared languages according to Campbell (2003:275); therefore, it suffices to take into account a substantial number of structures to ascertain whether we are dealing with chance, as in the case of Persian *bad*, having the same meaning as English *bad*, or not. Even borrowing, which may be massive if the compared languages have been in close contact, usually does not affect the identification of the language’s genuine grammatical organization.¹ Why neither Neogrammarians nor Structuralists devoted enough attention to natural or iconic explanations of structural similarity is, however, apparently less understandable. A reason for this may be that in their view iconicity was limited to phenomena of phonosymbolism

1 Actually, Thomason & Kaufmann (1988) have shown that intensive contact may also profoundly affect the grammatical apparatus of a language to the point of making inherited and borrowed material hard to distinguish (cf. also Thomason 2001; Matras 2009; Bakker & Matras 2013). Thus, while scholars of IE studies traditionally prefer internal to external explanations of language change and resort to the latter only when no internal motivation is available, and when an external contact can be clearly demonstrated by non-linguistic evidence (cf. Meillet 1921: 74–75; Lass 1997: 209), in recent years internal and external explanations are often considered in conjunction, rather than separated. Heine & Kuteva’s (2003; 2005) *contact-induced grammaticalization* implies that both external contact and internally motivated grammaticalization may be mutually reinforcing mechanisms of language change and bring about the same linguistic phenomenon. I agree with such complex explanations and with a revaluation of contact as a mechanism of grammatical (and not just lexical) change. This is indeed compatible with our reconstruction of syntactic diversity, as we will see in §4.

or onomatopoeia, which have a limited impact on language, and whose study was deemed as unscientific (*“les tentatives qui ont été faites pour expliquer par des propriétés de la nature des sons le sens des mots n’ont jamais abouti à aucun succès”*, Meillet 1931:21).

A more important reason, however, is that iconicity may be considered as being to a great extent pertinent to the domain of syntax, which has a basically compositional character, whereby the meaning of a (non-idiomatic) sentence is tantamount to the meanings of the componential words and phrases. Typical iconic properties of syntactic constructions may be seen, for example, in Behagel’s (1909) laws: according to his first law, conceptually related words are also syntactically placed adjacent; further types of syntactic iconicity have been identified by Peirce (cf. Hartshorne & Weiss 1931–1958) and later by Haiman (1985a; 1985b). Owing to the fact that clauses are not transmitted in the same way as phonemes or phonetically comparable morphemes and lexemes, syntax was used to a lesser extent than phonology and morphology for the reconstruction of PIE (cf. Meillet 1925:22), and even in more recent times, many historical linguists have continued to consider it impossible to reconstruct syntactic structures (cf. Jeffers 1976:7–9; Watkins 1976; Lightfoot 1979:155 ff.; 2002a; 2002b; Winter 1984; Rankin 2003; Pires & Thomason 2008:50 ff.; von Mengden 2008). Thus, the anomaly principle, which in its original formulation represents a basic tool for IR and for the CM, could *not* be applied to syntax to begin with.

3 The Anomaly Principle in Syntax

3.1 *Debate on the Possibilities of Syntactic Reconstruction*

The later extension of the CM and of IR to the domain of syntax represents an attempt to include syntax in the methodologies of linguistic reconstruction, which is certainly to be viewed as progress in historical linguistics. The limited use of syntax for reconstruction is justified only if reconstruction is strictly considered as the establishment of genetic relatedness between two or more languages. For this purpose, the phonetic correspondences of cognate morphemes and words according to the CM are also nowadays preferred to syntax, which does not allow comparison among cognate sentences (cf. Harrison 2003; *contra* Longobardi & Guardiano 2009). Syntactic reconstruction, however, may well be much more feasible *after* the languages at issue have been established as being genetically related through the traditional CM. As a matter of fact, although the groundbreaking works of Delbrück (1871; 1877; 1878; 1879; 1888; 1893–1900), Grimm (1870–1898), Miklosich (1874), Speyer (1886; 1896), Hirt (1921–1937), Brugmann (1925), Wackernagel (1926–1928), Schwyzer

(1950), Hofmann and Szantyr (1965), etc. have substantially a synchronic orientation, they also present some hypotheses of syntactic reconstruction, because it had already been independently demonstrated that the investigated languages are part of the same linguistic family.

In the last years, some scholars have observed that syntactic reconstruction is achievable once abstract syntactic units, rather than concrete lexical items, are taken into account. From a functional-typological perspective, Harris & Campbell (1995) argue that sentences of genetically related languages may be compared in their general “pattern” even though their componential words are not etymologically cognate (“*it is not necessary that every word in the sentence [...] be cognate. In syntax, a pattern can often be established without the use of cognate words*”, Harris 2008:86; cf. also Campbell & Harris 2002); we will show some examples of reconstructed syntactic patterns in the following sections. From a generative point of view, Walkden (2013) observes that, just as phonemes may be distinguished on the basis of different phonetic features such as \pm coronal, \pm voiced, \pm continuant, etc., in the same way syntactic structures may be analysed and compared in terms of different syntactic primitives such as tense, case, number, etc. in the sense of Minimalism. These proposals may therefore be deemed as promising advances in the understanding of the mechanisms of syntactic change and of the principles of syntactic reconstruction.

Both Harris & Campbell (1995) and Walkden (2013), however, acknowledge that syntactic reconstruction implies additional difficulties compared to phonological and morphological reconstruction, and I completely agree with them. This also urges more caution in applying to syntax the very same panoply of principles of the CM and of IR. In the following sections, among the several elements that need to be considered for syntactic reconstruction, I will focus on *one* argument, that is, the anomaly principle described above, which from the second half of the twentieth century until the present has been periodically used or misused under different guises in syntactic research. The association of this principle with (some interpretations of) typological findings has brought about the hypothesis of an original syntactic consistency, which actually was implied neither by Meillet (1925) nor by Greenberg (1966). The assumption of the original syntactic consistency, simplicity and regularity of PIE underlies the four patterns discussed in the next sections: word order (§ 3.2.1), agreement (§ 3.2.2), configurationality (§ 3.3.1) and alignment (§ 3.3.2). Not all these reconstructions are equally represented in recent times: while the hypotheses of syntactic non-configurationality and of an active-stative alignment for PIE are at the forefront of the contemporary debate on diachronic syntax, the views of PIE as a consistent SOV language or topic prominent language go back to the seven-

ties in their original formulations. Still, it may be useful to take a comprehensive look at these reconstructions firstly because they all instantiate—of course to a different extent among various scholars and research traditions—the same basic anomaly principle. Secondly, SOV and topic prominence continue to be assigned to PIE at an informal level also in recent literature, so it may be useful to precisely specify in which terms we may still speak of these phenomena.

3.2 *Early Reconstructions of a PIE Consistent Syntactic System*

3.2.1 PIE as a SOV Language

After the above-mentioned syntactic studies of Neogrammarians and early Structuralists, the first systematic attempt to reconstruct the syntax of PIE was that of W. Lehmann (1974), who combined the methodologies of generative-transformational syntax with Greenberg's (1966) typological findings. Lehmann's claim was that PIE was a consistent SOV language in its earliest stages, with all the accompanying word order correlates such as GN, AN, NPost, und StComp, in the same way as Turkish or Japanese (cf. also Vennemann 1974; Adams 1976; Hawkins 1979; 1983:134; Bauer 1995:188). His reconstruction is largely based on Delbrück's (1888:16) study of Vedic prose, according to which Vedic usually presents postpositions (1), the verb at the end of the clause (2), and qualifiers such as the genitive (3) and the adjective in front of qualified elements. Lehmann (1974:30ff.), from whom the following examples (1)–(3) are drawn, extended such observations to Hittite also, which at Delbrück's times had been not yet deciphered, and projected them into the proto-language.

- (1) *yád imāṃl lokān áti caturtham ásti*
 what these worlds beyond fourth it.is
 "What is fourth beyond these (three) worlds"
- (2) *vísah kṣatríyāya balím haranti*
 villagers to.prince tax they.pay
 "The villagers pay tax to the prince"
- (3) *devānam hótā*
 of.the.gods priest
 "Priest of the gods"

The main problem with this consistency argument is that the early IE languages, as is well known, do not agree with each other in the placement of the major constituents, so that the CM does not allow one single order to be easily reconstructed: while SOV is dominant in Indo-Iranian, Anatolian, Germanic

and Italic, VSO prevails in Celtic, and SVO is the unmarked order in the central domain of IE comprising Classical Greek,² Classical Armenian, Albanian, Slavic and Baltic (cf. Fortson 2010:156–158). Moreover, none of the attested IE languages displays a fixed word order for a given constituent. The fronted position of the verb, for example, occurs at least as a marked variant in virtually all early IE languages, and therefore must be also reconstructed for PIE, as Watkins (1976) rightly pointed out. Owing to this, at almost the same time as Lehmann (1974), alternative word orders such as VSO (Miller 1975) and SVO (Friedrich 1975) were also reconstructed for PIE, by giving more weight to different languages or to different syntactic structures of a language.

These problems may be solved if we assume that PIE, like many other languages, was probably not a consistent SOV language. Prepositions, for example, largely prevail over postpositions in the whole IE domain, and it is precisely for this reason that Miller (1975) and Friedrich (1975) hypothesized for PIE VSO and SVO, since VSO is regularly associated with prepositions rather than postpositions, and SVO is also the most prone to showing cross-categorical inconsistencies. On the other hand, postpositions marginally appear in prepositional languages also, as in the case of Latin, where forms such as *mecum* “with me” and *tecum* “with you” are attested. If we follow the anomaly principle of IR, whereby residual patterns are also the oldest patterns, Proto-Latin, Proto-Germanic or PIE must be originally assigned postpositions *and* VSO, which is also marginal with respect to SOV. Instead, if we follow the majority principle, usually practiced in the CM, according to which one should reconstruct the patterns that are attested by most languages, then SOV has to be reconstructed *together with* prepositions. In any case, the resulting reconstruction is that of a language where the unmarked order of major constituents and that of adpositions are *inconsistent* with each other.³

2 The basic word order of Homeric Greek is more controversial than that of Classical Greek: while Friedrich (1975) assigns a basic SVO to both stages, arguments for Homeric Greek as a SOV language have been presented by Taylor (1994).

3 One could argue that the order of major constituents and that of adpositions represent different phenomena, since a language endowed with both prepositions and postpositions usually has only one option for each adposition, while languages with different major constituent orders such as SVO and VSO, such as Greek or Spanish, will distribute them in a meaningful way to indicate information structure. This difference, however, is much less clear in the earliest stages of the IE languages, where adpositions may still retain the syntactic independence of their adverbial sources and therefore are capable, especially in Indo-Iranian and Homeric Greek, of occupying alternative positions with respect to their nominal complement (cf. Hettrich 2007). The same possibility of alternative word orders according to semantic or prag-

It seems relevant to stress this point since, although the reconstruction of PIE as a consistent SOV language has been abandoned in mainstream IE studies (cf. Hock 1991: 618 ff.; Hale 2007), the attractiveness of early holistic typologies of PIE lies behind resurgences of the reconstruction of a consistent PIE SOV word order. Even an authoritative source such as Beekes (2011:97) recently asserts that “the oldest IE languages indicate the presence of a word order wherein the object was placed before the verb”, and that “this word order is closely linked with other word order rules. Thus, the adjective [...] precedes the noun”. Similarly, Bauer (1995) saves the PIE word order consistency by locating it in an early and undocumented diachronic stage.

3.2.2 PIE as a Topic Prominent Language

W. Lehmann (1976) also launched the reconstruction of PIE as a consistent topic prominent language, in the wake of Li & Thompson’s (1976) distinction between “topic prominent” and “subject prominent” languages. Li & Thompson (1976) identify topic prominence in Sino-Tibetan languages, where the topic rather than the subject is the reference point for sentential organization. Accordingly, the topic noun phrase is established first as a general framework to interpret the subsequent clause, consisting of subject and predicate, as in Lahu *h3 chi tê pê? ô dà? já* “This field (*h3 chi tê pê?*), the rice (*ô*) is very good” (p. 462).

Li & Thompson’s (1976) taxonomy was synchronically intended, but it also had some diachronic implications, in that a change from topic prominence to subject prominence has been observed (cf. Givón 1976; 1983). As a matter of fact, the topic prominence of the Sino-Tibetan languages is reminiscent of certain phenomena of *casus pendens* identified in the early IE languages since Havers (1926), whereby a noun phrase is introduced, usually—but not only—in the nominative, without having any syntactic function in the clause. Justus (1976) observes that structures of *casus pendens* are quite productive in Hittite, especially in relative constructions, as in (4). In this case, the whole relative construction, rather than the only head-noun, is topicalized in front of the main clause, in which it is resumed by the demonstrative pronoun *apedanda*. A more literal translation of (4) would be “the goods which I brought back from the campaign, with these I had (the temples) inlaid” (on the topical

matic functions was proper to further minor constituents such as NPs with adjectives and with genitives (Devine & Stephens 2006). On the other hand, one cannot simply not reconstruct the order of adpositions in late PIE on the basis of their adverbial origins, since, as Hewson & Bubenik (2006:1) observe, some PPs were already established in the ancient IE languages and in PIE at least in its late stages (cf. also Haug 2009).

function of preposed relative constructions with internal head-noun; cf. also Ch. Lehmann 1984:123 ff.). Patterns similar to (4) are identified in Vedic by Lehmann (1976), who also establishes that a relationship between the change from topic prominence to subject prominence independently occurred in the history of the various IE languages and the change from SOV to SVO.

- (4) KASKAL-*za* *ku-it* *a-aš-šu* *ú-tah-h[u-un]*
 campaign-ABL RP: ACC.N.SG good(N): ACC.SG bring: PRET.INDISG
a-pé-e-da-an-da *ha-liš-ši-ya-nu-un*
 this: INSTR.N.SG inlaid: CAUS.PRET.INDISG
 “I had (the temples) inlaid with the goods which I brought back from the campaign.”

CTH 1; from Justus 1976:233

The assumption that PIE is a consistent topic prominent language has not encountered such fierce criticism as in the case of reconstruction of a consistent SOV word order for PIE. Rather, it is usually accepted without discussion for both PIE and various early IE languages where phenomena of topic prominence may appear. For example, in Fischer (2004:207) and in Hewson & Bubenik (2006:288) the label of topic prominence without further specifications is assigned to the early Germanic languages (cf. also Maslova & Bernini 2006). This undisputed endorsement may make the reconstruction of consistent topic prominence even more risky than the assignment of word order consistency for PIE, since evidence exists against the concept of topic prominence, either loosely or specifically interpreted.

Loosely, topic prominence may be also applied to the phenomenon of dislocation, which presents a NP outside the argument structure of the clause, as in English *Your keys, I lost them yesterday somewhere*; as such, topic prominence may probably be found in all languages, at least in spoken or informal varieties. This is in agreement with the assumption that only the topic—and not the subject—is universal (cf. Hagège 1978; Martinet 1985; Lazard 1994; Kibrik 1997; LaPolla 2006). Italian, for example, is a subject prominent language in Li & Thompson’s (1976) sense, and still abounds in topicalized constructions in its spoken varieties. Here we report some clauses from the Tuscan dialect of Italian, where topicalizations are so common that they are not limited to NPs (5), but may also involve verbs (6) and adjectives (7).⁴

4 More properly, while structures with anaphorically resumed NPs such as (5) are usually called “left-dislocations”, the term “topicalization” should be reserved to structures without pronom-

- (5) *La tua amica l'ho vista ieri.*
 the your friend her I.have seen yesterday
 “Your friend, I saw her yesterday.”
- (6) *Mangiare mangia poco.*
 eat: IF eat: PRS.IND3SG a.little
 “As far as eating is concerned, she eats little.”
- (7) *Bella è bella.*
 beautiful: F.SG is beautiful: F.SG
 “As for being beautiful, she is beautiful.”

Topicalized verbs and adjectives as in (6) and (7) are not only absent in other modern IE languages such as German or English, as can be seen from the (quite unnatural) periphrases used in the translations, but they are also unattested in Latin, from which the Tuscan dialect derives.⁵ Thus, in this case we have an *increase* in topic prominence from Latin to Tuscan, contrary to the diachronic

inal resumptive (cf. Sportiche et al. 2014: 415). Here, however, we discuss both topicalization and left-dislocation together as instances of a construction in which a NP occurs at the beginning of the clause, in a position other than that expected according to its syntactic function. Moreover, while dislocated NPs with a resumptive typically represent a discourse topic, structures with no resumptive pronoun such as *La tua amica ho visto ieri* regularly have a contrastive and focalizing function in Italian. According to Kiss (1988), they represent a +contrastive identificational focus, for which the label “topicalization” seems therefore not to be inadequate. Interestingly, in Tuscan only NPs may be either with or without resumptive, while adjectives and verbs only have the structure without resumptive available, as in (6) and (7). This is probably because pronominal resumptives were originally anaphoric devices denoting a certain discourse referent, and a referential function is more evident in NPs than in adjectival or verbal expressions. A further constraint of topicalized adjectives and verbs may be seen in the fact that they only allow the repetition of the same lexemes used in the clausal predicates.

- 5 Of course, the absence of a construction in the closed corpora of dead languages does not imply per se that the construction actually did not exist in these languages, and admittedly *argumenta e silentio* have to be handled with extreme care. However, we may reasonably exclude topicalized adjectives and topicalized verbs from the grammar of the ancient IE languages, and consequently of PIE, owing to the fact that the available corpora, which for some IE languages are very large and rich in different genres, often reflect an oral register, as can be seen in Vedic hymns, Homeric poems or Nordic sagas, and there is in principle no reason why a language should attest topicalized nouns and not topicalized verbs or adjectives, which belong to the same spoken communicative mode (“pragmatic mode” in Givón’s 1979:223 terms).

trend suggested by Lehmann (1976). This suggests that, when establishing a grammatical category such as topic prominence, not only must it be found in certain languages, as in the early IE languages, but it must *not* be found in others, at least as a productive variant. Since topic prominence emerges virtually in all languages, it cannot be specific enough for PIE.

Alternatively, if topic prominence is to be strictly intended in the same way as in Li & Thompson's (1976) description of Sino-Tibetan languages, it cannot be appropriately ascribed to the early IE languages and to PIE. In Sino-Tibetan languages, the verb may either not agree with any NP, as in the Lahu example above, or agree with a non-nominative NP that has a topical function, as in the following clause from Belhare (8).

(8) Belhare (Sino-Tibetan)

cia *a-niûa* *tiu-t-u-ŋ*
 tea.NOM 1SG.POSS-mind.NOM like-NPT-3[SG]O-1SG.A
 "I like this tea."

BICKEL 2004:93

Here the nominative is assigned to the NP *cia* "tea", which has a function of stimulus, but the verb agrees both with the stimulus (-*u*-) and with the oblique NP that expresses the experiencer and therefore is higher in topicality (-*ŋ*). This construction is very different from that found in IE. In IE, we have either verbal agreement with the experiencer, as in English *I like tea*, or verbal agreement with the stimulus, as in German *Tee schmeckt mir*, but in any case the verb *always* agrees with the nominative NP and not with the oblique.

Owing to its established verbal agreement in all IE languages since their earliest records, the subject may be considered as being a grammaticalized syntactic function also in PIE as far as we can reconstruct; we will come back to this point in §3.3.2. This is supported by the fact that the coding of semantic roles by an alignment system is a genetically stable feature (Bickel 1999), while word order is more prone to change and to being influenced by contact factors (Nichols 2003:304–305). Accordingly, topicalized constructions such as the *casus pendens* must have always been syntactically anomalous in PIE *besides* regular subject-predicate sentences.

3.3 *Recent Reconstructions of PIE Consistent Syntactic Systems*

3.3.1 PIE as a Non-Configurational Language

The denial of a consistent SOV type for PIE, as well as the acceptance that PIE had scarcely regulated anaphoric patterns, has led to the opposite hypothesis that PIE lacked most syntactic configurations, and especially an established

VP. Non-configurationality, first identified in Warlpiri (Hale 1983), is fundamentally characterized by discontinuous phrases and by the use of null object anaphora (cf. Jelinek 1984; Baker 2001). Hyperbaton (9) may be considered as being the extreme case of word order freedom, and null objects (10) represent an instance of free anaphoric devices that are significantly influenced by considerations of topicality.

- Avestan
 (9) *vayhēuš* *xratūm* *manahō*
 good: GEN.N.SG wisdom: ACC thought(N):GEN.SG
 “Wisdom of the good thought”
 Y. 28

- Classical Armenian
 (10) *ew cnaw* *z-ordi-n* *iwr*
 and bear: AOR.IND.MED3SG z-SON(M): ACC.SG-ART REFL: GEN.SG
z-andranik, *ew pateac’* *–i i xanjarowrs ew*
 z-firstborn(M): ACC.M.SG and wrap: AOR.IND3SG in cloth: ACC.PL and
ed *z-na* *i msowr*
 lay: AOR.IND3SG z-him: ACC in manger: ACC.SG
 “And she bore her firstborn son, and wrapped (him) in cloths and laid him
 in the manger.”
 Luke 2.7

In the Avestan example in (9), the adjective *vayhēuš* “good” is separated from the noun it modifies (*manahō* “thought”). In the Classical Armenian example in (10), the direct object is omitted from the second of three conjuncts, where the Ancient Greek original presents the pronoun *autón* “him” in this context. As an instance of syntactic difference between the translated Armenian text and the Greek original, this is one of the rare cases in which a syntactic construction of the translation—here null object anaphora—*can* be considered to be also a genuine pattern of the language, while in the case of syntactic equivalence there is always the possibility of a calque. Since both hyperbaton and null objects are often found in the early IE languages, some scholars consider PIE as being a typical non-configurational language and suggested a diachronic change towards configurationality in the later stage of the IE languages (cf. Faarlund 1990; Sigurðsson 1993; Rögnvaldsson 1995; Devine & Stephens 1999; Hewson & Bubenik 2006; Teffeteller, forthcoming).

In addition to hyperbaton and to null objects, non-configurational languages are usually assigned a cluster of further morpho-syntactic properties such

as dislocations, lack of agreement between verb and subject, incorporation, adverbs instead of prepositions, lack of the article, parataxis instead of hypotaxis, a widespread use of asyndeton, and floating quantifiers; this cluster is therefore also reconstructed for PIE (cf. Devine & Stephens 1999:142 ff.). Dislocations have already been discussed in § 3.2.2, so I will not linger further on them. As in the case of reconstruction of topic prominence for PIE, however, also when considering reconstruction of PIE as a non-configurational language, we must be aware that certain features are so common in languages that they cannot be held as evidence for any language type. This is the case, for example, of the lack of the article: a specific form of the definite article, formally distinguished from the demonstrative pronoun and obligatory at least in some contexts, is a peculiarity of Standard Average European (Dryer 2005). Secondly, other non-configurational features can in no way be assumed for PIE. This concerns incorporation, that is, the combination between verb and object to form a new verb, as can be seen occasionally in English (*to babysit*) and extensively in Mohawk, for example (cf. Mithun 1986); incorporated constructions are alien to the early IE language, even to Classical Sanskrit, which at most exploits the resources of composition. Moreover, the earliest stage of PIE that we may reconstruct had already developed a number of configurations: when reading any (prose) text in any old IE language, it is evident that instances of hyperbaton and of null objects are far less frequent than contiguous phrases and pronominal objects. All this points against the reconstruction of PIE as a typical non-configurational language.

3.3.2 PIE as an Active-Stative Language

The hypothesis of an originally active-stative alignment is currently the most popular type of syntactic reconstruction for PIE (cf. Klimov 1974; Schmidt 1977; 1979; Gamkrelidze & Ivanov 1984; Gamkrelidze 1994; W. Lehmann 1989a; 1989b; 1993; 2002; Drinka 1999; Bauer 2000; Rovai 2007; Fabrizio 2011), and also illustrates more clearly how the anomaly principle of IR has been used to reach a putative syntactic consistency. In the following, I will especially refer to Bauer (2000), where this idea is systematically pursued with reference to different syntactic constructions.

Bauer (2000) claims that in active-stative languages, particularly frequent in North America, considerations of agentivity, animacy, movement or stativity are usually grammatically more relevant than syntactic factors of transitivity, which prevail instead in accusative and in ergative alignments. Active-stative languages have a simple nominal morphology but a very complicated verbal morphology, whereby verbs denoting activities have a different inflection from verbs denoting states. Active verbs may only select nouns of animate refer-

ents as their subject, while stative verbs are normally defective and represent weather predicates, experience predicates and possessive predicates. There is no verb “have”, whose meaning is expressed by the verb “be” with an oblique NP for the possessor. There is a grammaticalized difference between alienable and inalienable possession, related to that between movement and state, and inclusive pronominal forms are also distinguished from exclusive correspondents. The category of aspect prevails over that of tense. The category of adjective is poorly represented; notions that are encoded by adjectives in modern IE languages are actually verbs from a formal point of view in active-stative languages.

Some of these structural properties have been traditionally acknowledged also for the early IE languages. In the nominal system, the influence of semantic considerations of animacy and movement on lexical taxonomies was already noticed by Meillet (1921), according to whom different nouns may be attested in various early IE languages depending on whether their referent is represented as a living or an inanimate entity. Sometimes we have completely different lexemes for the two representations: “water” is an inanimate concrete substance when the form **wed-* is used (Skr. *udán-*, Hitt. *watar-*, Gr. *húdōr*, Lat. *unda*, Engl. *water*, NIL 706–715), while it is meant as an animate and often deified natural force when denoted by the form **h₂ep-* (Skr. *ápah*, Av. *apō*, Toch. A, B *āp-*, vgl. NIL 311–317). More frequently, the two representations are expressed by the same basic lexeme with different affixes or different gender markers: nouns denoting trees are usually feminine, as Lat. *mālus* “apple tree”, because trees are fertile and bring fruit, while nouns of fruits are regularly neuter (Lat. *mālum* “apple”). Sometimes both forms are maintained in the same language. This occurs especially in Vedic, whose eulogist texts represent natural elements in the double aspect of personified deities and of inanimate objects used for the sacrifice; “night”, for example, is animate and often personified in *rātri-* and inanimate in *kṣáp-* in Vedic.⁶ More usually, however, a language maintains only one of the original doublets, as the relevance of animacy diminishes; for “fire”, for example, Ancient Greek has *pūr* and Latin has *ignis*, without any trace of a distinction in terms of animacy; the comparison with Vedic *agní-*, which is

6 Ritual practices may also be relevant for the distinction between animate and inanimate. Accordingly, syntactic analysis should be supported by textual exegesis in this regard. Cultural and syntactic factors, however, are not incompatible with each other; on the contrary, a language may grammaticalize a semantic distinction that is particularly relevant in the experiential domain of its speakers. On the complex relationship between syntax and culture, see the papers of “ethnosyntax” in Enfield (2002).

cognate with the Latin form and may also refer to a deity, demonstrates that these lexemes were also once sensitive to an (in)animate interpretation (cf. Buck 1949:12 ff.; Lazzeroni 2002a; 2002b).

Even stronger similarities between active-stative languages and early IE languages have been identified in the literature with regard to the verbal system. Firstly, different forms are found in the early IE languages for a predicate according to whether it denotes a state or an event (cf. Gotō 1997). The verb “to be”, for example, is **h₁es* (LIV 241–242) when meant as static existence, and **b^hweh₂* (LIV 98–101) in the dynamic sense of “becoming”, although for most verbs the opposition has been lost. Secondly, some predicates denoting weather (11), experience (12) and modality (13), and therefore expressing a low level of agentivity, are encoded in the early IE languages by impersonal forms or by non-canonical structures, whereby the semantically most prominent argument of the clause is marked by an oblique case rather than by the nominative.

Lithuanian

(11) *sniega*

snow: PRS.IND3SG

“It snows.”

(12) *man šalta*

me: DAT be.cold: PRS.IND3SG

“I am cold.”

(13) *man reikia*

me: DAT must: PRS.IND3SG

“I must.”

According to Bauer (2000), syntactic features such as impersonal verbs, as well as the *mihi-est* structure of possession and absolute constructions are at odds with the traditional reconstruction of an accusative language in the sense of Delbrück (1900), and are to be better seen as residues of an earlier active-stative alignment. In order to make this PIE alignment more consistent, the advocates of the active-stative hypothesis have extended the correspondences between the early IE languages and active-stative languages to clusivity and (in)alienability. According to Gamkrelidze & Ivanov (1984), the fact that the pronominal form **we-* denotes the first person plural in some languages (Hitt. *wes*, Skr. *vayám*, Goth. *weis*) and the second person plural in others (Skr. *vas*, Lat. *vōs*, Slav. *vy*) is to be interpreted as a sign of an originally inclusive function; instead, the form **mes/men* is only attested for the first person, as in Skr. *-mas*, Lat. *-mus*,

Gr. *-men*, and therefore must have had an exclusive meaning. In the same vein, the fact that Ancient Greek qualifies nouns of kinship or body parts with the adjective *philos* is according to Rosén (1959) a manifestation of the function of inalienability. All this reconstruction is in more or less strong versions usually endorsed, to the point that Hewson & Bubenik assert that “it is now generally recognized that early PIE was an active language” (2006:277).

In my opinion, however, the reconstruction of a consistent active-stative alignment is quite problematic, and the reason is the same as in the hypothesis of an original topic prominence and of an original non-configurationality for PIE. On the one hand, some grammatical features shared by typical active-stative languages and by the early IE languages also occur in other language families and therefore are not specific enough for the active-stative alignment. The prevalence of aspect over tense, for example, also appears in Semitic, which has an accusative alignment since its earliest reconstructable stages (cf. Haselbach 2013:125 ff.). The absence of the verb “have” may be observed in most languages of the world, as this predicate is a feature of the cross-linguistically idiosyncratic Standard Average European (Haspelmath 2001a). The animate representation of natural forces is also quite widespread in many “exotic” languages (Croft 2003:128 ff.). On the other hand, some features that often appear in the active-stative type, such as clusivity and alienability, cannot be plausibly reconstructed for PIE: no early IE language grammaticalizes these distinctions, and the fact the some structures are occasionally favored with alienable or inalienable possession is rather a matter of pragmatics. In the same way, while active-stative languages have a weakly developed case system, PIE is ascribed an articulated nominal morphology with eight reconstructed cases, which cannot always go back to originally independent particles, as Lehmann (2002) assumes instead. The formation of adjectives may well have been less developed in the earliest stages of PIE, and perhaps for this reason no proper category of adjectives was identified by Greco-Roman or Indian grammarians. Adjectives, however, are in IE morphologically more similar to nouns than to verbs, unlike in most active-stative languages of North America.

Beyond the particular traits that active-stative languages may or may not have in common with reconstructed PIE, the basic problem of the hypothesis of an original PIE active-stative alignment resides in the attempt (in my opinion methodologically wrong) to deduce from a certain trait, in this case alignment, the reconstruction of a cluster of properties that *may* be associated with this trait in some languages, but may also not be. The active-stative alignment implies *one* characteristic, that is, a split morpho-syntactic behavior of intransitive verbs, whereby the subject of some intransitive verbs receives the same marker as the subject of transitive verbs, while other intransitive verbs

have their subject marked as the object of transitive verbs; the former are active, the latter are stative (cf. Mithun 1999:213 ff.). The patterning of a verb as active or stative may depend on factors such as control or telicity, which play a different role in different languages; it does not depend on animacy or movement, let alone on alienability and clusivity. The latter are just more or less frequent correlates—not defining properties—of them. Thus, the identification of different verbal lexemes according to movement or stativity in various early IE languages, or of different nominal lexemes according to their animate or inanimate referents, may well suggest the reconstruction of such distinctions in PIE, but it does not authorize the reconstruction of a PIE active-stative alignment.

At this point, we may wonder how patterns of non-canonical subject marking such as Latin *me pudet* “I am ashamed” or *mihi placet* “it pleases me, it seems good” may be evaluated for a syntactic reconstruction.⁷ Such formations are attested in all early IE languages, albeit not to the same extent. They are still quite frequent in Icelandic (cf. Barðdal 2001) and in Irish (Noonan 2004), while they are residual in Vedic (Hock 1990) and in Ancient Greek (Conti 2010), for

7 It must be remarked that non-canonically marked forms such as *me pudet* and *mihi placet* have a different argument structure and therefore are not necessarily to be set on the same plane. *Me pudet* is impersonal, whereby the verb is fixed in the third person singular and has only one argument, which is coded by an oblique. Instead, *mihi placet* is personally built and presents a bivalent predicate, which agrees with the subject denoting the stimulus (*hoc mihi placet* vs. *haec mihi placent*). Thus, a language could have in principle the one and not the other construction; Hittite, for example, is according to Luraghi (2010b) poor in impersonal constructions but relatively richer in personal constructions with a dative experiencer. Such syntactic difference, however, does not depend on the grammatical case of the experiencer: although personal constructions preferably select dative experiencers rather than accusative experiencers, the latter are also found, as in Latin *me delectat / me delectant* “I like it / them”; in the same way, although impersonal predicates prefer accusative experiencers to dative experiencers, we can also have mono-argumental predicates with a dative, as in German *mir ist kalt* “I’m cold”. Moreover, the same experience predicate may be construed as personal in a language and as impersonal in another: in the German clause *mir tut der Kopf weh* “My head aches”, the predicate *weh tun* “ache” agrees with the nominative stimulus *Kopf* “head”, while the correspondent Lithuanian clause *man skauda galvą* has no nominative NP and no verb-subject agreement, since both the experiencer (*man*) and the stimulus (*galvą*) are coded by oblique cases, dative and accusative, respectively. Thus, while from a formal point of view predicates such as *me pudet* must be distinguished by predicates such as *mihi placet*, from a functional perspective this distinction is blurred, since cross-linguistically, as Onishi (2001) observes, non-canonically marked structures select similar predicates; as such, they may also be handled together, as in this paper.

example. Even English, which among the IE languages has most developed a canonical nominative marking for the subject, was rich in oblique experiencers in its stage of Old English (van der Gaaf 1904; Allen 1995), and in general the diachronic change goes more commonly from oblique experiencers to nominative experiencers than the other way round, as illustrated in Haspelmath (2001b) and Onishi (2001).⁸ This seems to be evidence of an ancient formation of oblique experiencers in Proto-Germanic and in PIE (cf. Barðdal 2009; Eythórsson & Barðdal 2005). This, however, does not mean that in the proto-language predicates with oblique subjects had to be regularly opposed to the conjugation of dynamic verbs according to a consistent active-stative alignment. In my opinion, non-canonical subject marking has always been a *minor* pattern in PIE, which in some languages such as Old Norse and Old Irish may have been also extended to new predicates. Extension of patterns of oblique experiencers may be observed also in modern varieties of IE languages, especially in the dialects. The following example is drawn from Tuscan (14).

- (14) *Mi garba quel vestito.*
 to.me like: PRS.IND3SG that dress
 “I like that dress.”

Non-canonical subject marking is regular with the verb *garbare* in (14), the Tuscan correspondent of Italian *piacere* “to like”. While, however, Italian *piacere* is directly inherited in its form from Latin *placēre*, the Tuscan denominal verb *garbare*, based on the substantive *garbo* “politeness, gentleness”, is a lexical innovation, which etymological dictionaries relate to Arabic *qālip* “model” (Calabrian *gālipu*, cf. DEI, DELI, s.v.).⁹ Thus, in no way the non-canonically

8 Rarer developments of increasing oblique experiencers are usually ascribed to analogy or to contact factors. Analogical processes have been identified behind the extension of the dative, at the expense of the accusative, in Modern Icelandic (cf. Barðdal 2011); most Germanic languages, however, show the same decline of non-canonical marking as in English. In the history of Indic, a change occurs between Early Vedic, where oblique experiencers occur only rarely, to the stage of the Middle and Neo-Indian languages, in which the “dative construction”, in Masica’s (1976:159 ff.) terms, become a characteristic feature of India as a linguistic area. This change is traditionally explained by the contact with Dravidian, where oblique experiencers have been always common since its earliest documents. On the debated issue of the relevance of Dravidian contact to explain Indic argument marking, see the opposite stances of Hock (1975; 1984) and of Thomason & Kaufmann (1988:139 ff.).

9 Despite the continuity of their verbal morphology and of their syntactic pattern with an

marked Tuscan structure *mi garba* may be considered as being a residue of an originally active-stative alignment of Pre-Romance or PIE. Rather, this structure may be explained by an association with a set of other non-canonically marked predicates such as *mi dispiace* “I am sorry”, *mi rincresce* “id.”, *mi duole* “it hurts me”, *mi fa pena* “I pity”, Old Italian *mi aggrada* “I like”, which have arisen in different periods, as well as in different registers, from Latin to Italian—a clearly accusative language. Although synchronically marginal, these predicates have a clearly defined semantic nucleus, concerning scarcely transitive situations of affection or judgment, especially predicates of “likes/dislike” and predicates of negative experience (cf. Viti 2014: § 3.5.3). As such, they are able even to attract other verbs that express the same function. The same process may have occurred from PIE to its daughter languages, without PIE having an active-stative alignment.

The already grammaticalized syntactic status of the subject in PIE may be seen not only in the fact, observed above in § 3.2.2, that in the simple clause the verb always agrees with the nominative in IE, unlike in other languages such as Belhare (8). It may also be seen in the domain of the complex sentence, where Keenan’s (1976) behavioral subject properties such as raising, reflexivization, control infinitives, and ellipsis in coordination are optional. That is, such constructions *may* also refer to a non-nominative NP, which therefore behaves like a subject from a purely syntactic point of view, but they may also not do so, as observed by Conti (2010:259 ff.) for Ancient Greek and by Luraghi (2010b: 261) for Hittite. Moreover, these complex constructions often do not offer sufficient comparative evidence: infinitives, for example, which are usually employed to assess the subject status of the controlling NP, were still verbal nouns in PIE; they could well govern nominal complements (originally in the genitive, as can be seen in Old Irish), but not clausal complements. The grammaticalized status of the subject in PIE is consistent with the reconstruction of a possible passive function for the middle voice, postulated by Watkins (1976:321) and more recently refined by Luraghi (2013): the subject of a middle verb is inflected in

oblique experiencer, Latin *placere* and Italian *piacere* do not have the same meaning. In Latin, *mihī placet* means “it seems good to me, I am of opinion, I decide”, and often appears in fixed religious or juridical structures such as *senatui placere ut* “it is decided by the senate that”, *si dis placet* “if it seems proper to the gods”, while Italian *mi piace* is the generalized expression for “I like”. Tuscan *mi garba* is also not exactly equivalent to Standard Italian *mi piace*, but rather may select different types of stimulus: in most Tuscan varieties, it would not be used for food, for which *mi piace* is still preferred, according to the same lexical taxonomy of German *es schmeckt mir* referring to tasting vs. *es gefällt mir* for all other pleasant sensations.

the nominative, which is precisely the expected case for the patient in a passive clause—this without implying that PIE had passive constructions, as we will see below.

4 Original Syntactic Diversity and Search for Original Functions

The hypotheses that PIE was a typical SOV language, a typical topic prominent language, a typical non-configurational language or a typical active-stative language is also undermined by the fact that the very assumption of consistency is dying out in typology. Dryer (1988), for example, demonstrated that the position of the adjective has no relation with the major constituent order of a language and cannot be a reliable predictor also for the word order of other phrasal units. Accordingly, holistic typologies have been currently superseded by partial typologies, which describe a language as the unequal combination of different linguistic types (cf. Ramat 1986; Comrie 2001:26). This especially holds true for non-configurationality, which turned out to be more heterogeneous than initially suggested even in classic examples of non-configurational languages such as Mohawk or Jiwarli (Pensalfini 2004). It would be therefore surprising from a typological point of view if PIE had developed along consistent linguistic lines. It is necessary to underline this point, however, since holistic reconstructions are still nowadays propounded in IE studies under the different guise of ascribing different syntactic patterns to different internally consistent diachronic stages of PIE, as in Bauer's (2000) and Lehmann's (2002) reconstruction of an active-stative alignment for *Pre*-PIE. The same methodology is followed for linguistic reconstruction in the domain of phonology and morphology, as in Beekes (1985:156 ff.; 2011:177), where a synchronically irregular interaction of accent and vowel gradation is simplified by positing an early phase of PIE in which the *e*-grade was regularly stressed and the zero grade was regularly unstressed. Now it is true, of course, that the PIE language reconstructed by the CM or by IR is not a single language in time: rather, every reconstruction may refer to different periods of the proto-language, as Meillet (1931) already recognized by assigning thematic and athematic stems to different stages of PIE. However, this does not imply that such different periods were also characterized by a regular distribution of patterns, which ultimately can be neither proved nor falsified.

Alternatively, it may be more appropriate to reconstruct PIE as a language characterized by diverse syntactic patterns of *both* accusative alignment *and* active-stative alignment, both topic prominence and subject prominence, both configurational and non-configurational features, as well by various word order

arrangements—but not to the same extent. Just as it has been stated that SOV prevailed but did not eliminate other word orders such as the initial position of the verb in PIE (Watkins 1976; Ringe & Eska 2013:212 ff.), in the same way we should hypothesize that in PIE, as far as we can reconstruct, the accusative alignment has always largely prevailed over minor active-stative-like structures such as Latin *me pudet*, and that subject prominence has always largely prevailed without ousting certain topic-prominent-like constructions such as the *casus pendens*. This reconstruction of varied and unequally represented syntactic types for PIE may find support in morphology, where agglutinating, isolating or fusional types are commonly considered as being idealizations (cf. Croft 2003:45–48), which in the actual mold of a synchronic system may involve more or less numerous sets of constructions.

The rationale for having different syntactic patterns in the same synchronic stage of an attested or reconstructed language is that they presumably expressed different *functions*—and this is actually the difference between the justified reconstruction of more than one form on the one hand and “over-reconstruction” on the other. Thus, the assignment of diverse types of word order, agreement and alignment to PIE is not the ultimate step in reconstruction, since the function of these different constructions needs to be determined as precisely as possible, that is, beyond the purely referential level to encompass different semantic or pragmatic values. Structural competition implies non-synonymy, and also in this case Meillet’s (1931:11) teaching may be instructive, according to which “*si une catégorie peut durer longtemps sans avoir un sens, elle ne se crée pas sans que ce soit pour exprimer un sens défini*”. A specific function may be especially reconstructed for marginal structures, while the unmarked pattern is by definition multifunctional. As we have seen above, non-canonically marked subjects are especially used for situations of low transitivity. The initial position of the verb may have expressed textual discontinuity, as suggested by Luraghi (1995).¹⁰

10 Alternatively, Dressler (1969) argues that the initial position of the verb is prevalently found in cases of discursive continuity in the early IE languages. Of course, the function of an initial verb depends to a large extent on the language and on the text at issue, and the fact that (on the basis of different materials) both continuity and discontinuity have been suggested for initial verbs demonstrates how variously represented syntactic patterns are in the early IE languages, and how variously they may be interpreted. Something of these interpretations, however, may depend on the mother language of the analyst: it is perhaps not a chance that the initial verbs of the early IE languages are seen as markers of continuity by Dressler, since German uses initial verbs precisely in cases of textual

At this point, we may better understand the reason why the CM and IR traditionally proceed by reducing the attested variety, that is, because linguistic reconstruction has always given priority to form with respect to meaning. This attitude was explicitly shown by Benveniste (1935) in his *Origines*, a cornerstone of IE studies (“*l’essentiel étant le problème de la structure, nous négligerons en principe les questions de ‘valeur’, d’aspect, etc.*”, p. 148), but is still basically pursued in most handbooks of IE linguistics (cf. Tichy 2009; Fortson 2010; Meier-Brügger 2010; Beekes 2011), which devote much more attention to sound change than to semantic change—a felicitous exception being Clackson (2007:187 ff.), where a reconstruction of PIE lexical semantics is suggested in line with recent research in this field. If we focus on form, structural reduction is expected, since there is in principle no reason to have more than one form for (what seems to be) the same function. If, however, the functional side is also taken into proper consideration, seeming isofunctional forms can be detected to have more or less subtle differences in meaning or in usage, which must not be reduced for economy’s sake.

At the time of Neogrammarians and of early Structuralists, the position of giving priority to phonetic form could be comprehensible, since phoneme inventories are inherently smaller and permit more limited combinations than lexeme inventories, so that sound change is by its very nature more regular than semantic change, and therefore can be also more precisely described and explained, as in Paul (1920:49 ff.). Accordingly, the first studies of semantics were just tantamount to—formidable—taxonomies of various changes of meaning such as broadening vs. narrowing, metaphor vs. metonymy, amelioration vs. pejoration, which were presented on the same level without the possibility of drawing some generalizations as to synchronic frequency or diachronic directionality (cf. Darmesteter 1887; Bréal 1897; Ullmann 1973; Lyons 1977). Nowadays, however, much more is known about the organization of concepts and the directionality of semantic change, which usually proceeds from concrete to abstract meanings rather than the other way round, as already implied by Meillet’s (1912) grammaticalization. A development of increasing abstraction has been demonstrated by Lakoff & Johnson (1980) in regard to the development of metaphorical expressions, for example. A similar situation holds true for metonymy according to Traugott & Dasher (2001), who even argue for regularity in semantic change to be seen in an increasing “subjectification”, that

continuity (cf. Lühr 2007). Instead, Romance languages display initial verbs in contexts of discontinuity and of theticity (Sasse 1987), and this may also have partly influenced the interpretation of Luraghi (1995).

is, in the tendency for linguistic structures to express the attitude and perspective of the speaker or writer. In the research tradition of cognitive linguistics, concepts are also assigned a structure that is not indiscriminately variable across languages, but rather may be represented by quite coherent scalar categories with a prototype and fuzzy borders (cf. Lakoff 1987; Taylor 1989; 2002; Croft & Cruse 2004); semantic change usually affects the borders of a category first and its prototype later. Typological studies make use of semantic maps, which constrain possible distributional patterns of linguistic categories (Croft 2003:133–142).

Thus, although change of meaning still remains more elusive and controversial than change of form (cf. Ringe & Eska 2013:254), recent progress in the field of lexical semantics, as well as of discourse pragmatics, where functional competition is often explored in depth, may support a reconstruction of *multiple* syntactic patterns in the proto-language that are equally primary and cannot be reduced to unity. This point has been systematically pursued, with reference to numerous syntactic domains, especially in the framework of Construction Grammar (cf. Hoffmann & Trousdale 2013). This may also have a profound impact on the basic assumptions of the CM and of IR, which goes well beyond reconstructing syntax, and is fully in line with Joseph's (2013) hypothesis of multiple sources and multiple causes for language change also in the domain of historical phonology, historical morphology, and etymology:

Recognizing multiplicity plays a role as well in historical investigation. For instance, from a methodological standpoint, identifying multiple sources is often good historical linguistic practice, even though doing so runs contrary to analysts' inclinations towards neat and elegant solutions that satisfy the injunction of Occam's Razor (*entia non sunt multiplicanda praeter necessitatem* "entities [in a solution] are not to be multiplied beyond necessity"). That is, if multiple causal pressures on some part of a language system can be recognized, then rather than having to simply choose one, arbitrarily, as the single cause explaining why a change happened as it did, we can perhaps come closer to a true understanding of the developments in question by considering multiple causes acting in concert or even independently.

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A consideration of function may also be helpful to hypothesize the *absence* of a syntactic pattern in the proto-language—with the usual proviso required by negative evidence. Traditionally, a category is assumed as lacking in PIE if it happens to be expressed by means of monoglottic strategies in the early IE lan-

guages. For example, a passive conjugation is usually not reconstructed for PIE because its forms in the early IE languages do not agree with each other. Latin and Old Irish use the deponent conjugation for this purpose, Ancient Greek uses a suffix *-(th)ē-* in the aorist and *-(th)ēs-* in the future, Sanskrit a suffix *-ya-* in the present and a special ending *-i* in the third person singular of the aorist, etc. Again, such purely formal approach is, in my opinion, not satisfactory, since structures are subject to change and to decay, so that the absence of a common or largely shared structure in the attested languages does not mean per se that the corresponding category was absent in the proto-language. As Meillet (1931:163) observed, if we were to reconstruct the inventory of Latin subordinating conjunctions on the basis of subordinators attested in the Romance languages, we would have practically nothing to reconstruct. The form *cum*, for example, can be considered as being the universal subordinator in Latin, owing to the fact that it may subsume most subordinating functions (temporal, causal, concessive, etc.) and may appear in contexts more specifically represented by other conjunctions such as *quod*, *quia* or *quamquam*. Still, neither *cum* nor *quod*, *quia* nor *quamquam* have been continued in the Romance languages. This caveat especially concerns structures that are not so frequently used in discourse and therefore have also less chance to entrench in grammar. Subordination is more marked than coordination in discourse, and it is unsurprising that the early IE languages usually do not agree in their subordinating constructions. This, however, holds true also for the passive, which in an accusative language is naturally less frequent than the active voice. The fact that the early IE languages do not agree in their passive structures cannot be used therefore as an argument for the absence of the passive in PIE. Even worse is the typological argument, as in Lehmann (1974), according to whom PIE did not have a passive since this voice is usually lacking in SOV languages, as PIE is supposed to have been.

At this point, it may seem impossible to argue for the absence of a syntactic pattern in reconstructed languages. I think, however, that a syntactic pattern, intended as a pairing of form and meaning as in Harris & Campbell (1995), can be presumably excluded from PIE if function is given appropriate consideration. That is, if the semantic or pragmatic function typically expressed by a certain morpho-syntactic pattern A cross-linguistically is regularly expressed by means of an *alternative* morpho-syntactic pattern B in the attested languages at issue, then we may with good reason exclude pattern A from the proto-language. The pragmatic function of the passive, that is, the topicalization of the patient or the demotion of the agent (cf. Abraham & Leisiö 2006), was represented—in addition to the middle voice—by word order in the ancient IE languages, and particularly by means of object fronting, as in the Vedic example in (15).

- (15) *údu tyám jātavedasaṃ devám vahanti*
 up PTC that Jātavedas: ACC god(M): ACC.SG bring: PRS.IND.3PL
ketávaḥ
 ray(M): NOM.PL
 “The rays bring up the god Jātavedas.”

RV 1.50.1

Here the object is the name of a god (*Jātavedas*, lit. “knowing (or known by) all created beings”, that is, the god Agni), while the subject denoted “rays or flames” (*ketávaḥ*). The noun of the referent that ranks higher on Silverstein’s (1976) Animacy Hierarchy and is contextually more topical is also syntactically preposed.¹¹ The use of preposed objects for topicalized patients has been reduced or lost in most modern IE languages, but has been quite faithfully maintained in the Slavic languages:

While passives are possible in Slavonic languages, they tend not to be particularly idiomatic, especially in spoken registers, and are usually much more heavily restricted than in English, with, for instance, no possibility of a literal translation of *Kolja was given a book by Tanja*. In functional terms, the equivalent of English *Tanja was seen by Kolja* in a Slavonic language is not a passive, but rather an active sentence with the object preposed, such as Russian Таню (ACC) видел Коля (NOM) / *Tanju* (ACC) *videl Kolja* (NOM). To a large extent, the functional equivalent of English rules that change grammatical relations is the possibility of word-order permutations in Slavonic languages.

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11 The fact that topicalization of the patient could be expressed by object fronting does not imply that this was the only function of a movement to the left of the clause, since any NP with any semantic function, as well as adverbs and even verbs, could be topicalized and fronted in the early IE languages. It is important, however, to distinguish movement to the left, which is a directly observable syntactic phenomenon, and which may be also motivated by other functions such as focus or contrast, from topicalization. The latter is a pragmatic operation that may be only established by taking into account anaphoric strategies of the global discourse—otherwise one would have a circular argumentation whereby a constituent is placed at the left when topicalized and, at the same time, it is topicalized when moved to the left. In (15), for example, the NP *jātavedas-* may be considered topicalized because the whole hymn is about its referent Agni.

The functional complementarity between passive and word order in the Slavic languages may support the exclusion of an authentic passive structure from PIE. In general, when a possible form-meaning correspondence in the ancient languages finds parallels in modern languages, for which the judgment of native speakers is available, the reconstruction is also more probable. Rather than in the normalization of inconsistent states, typology may be of help to explain residual states by means of those languages where the corresponding structures are not residual and still show their function transparently. The search for this original function, which is more transparent in synchronically anomalous forms that have not undergone the extension of their unmarked competing structures, is the reading I prefer to see behind Meillet's (1931) anomaly principle.

5 Conclusions

In this paper we have discussed various problems related to linguistic reconstruction implied by the traditional CM and by IR in the field of diachronic syntax. We have seen that the anomaly principle, whereby synchronically irregular forms must be considered as being a residue of an older more regular stage, was originally formulated only for those linguistic domains that can be used for reconstructing a genetic relationship among languages, that is, phonology and morphology; in these cases it works most of the times (§ 2). Later, however, the anomaly principle was also applied to syntax (§ 3), with the assumption that synchronically irregular forms were originally simpler and capable of taking part in an internally consistent system. Accordingly, hypotheses were formulated considering PIE, or early stages of it, a typical SOV language, a typical topic-prominent language, a typical non-configurational language or a typical active-stative language. Such ideas of syntactic consistency are periodically re-propounded under various guises and have also recently had resurgence.

We have seen that these reconstructions are not reliable in that they entail a cluster of morpho-syntactic properties that in some cases can in no way be reconstructed for PIE on the basis of the attested daughter languages (for example incorporation, clusivity, and alienability), and in some other cases hold true for most languages of the world and therefore are not specific enough for PIE (for example topicalizations, lack of a verb "have", and non-canonically marked predicates). More generally, we have argued against this kind of correlate fallacy. The observation of a morpho-syntactic trait X in a series of genetically related languages allows the reconstruction of X in their proto-

language, but not of Y or Z that in some other languages may be associated to X. The latter practice is a misuse of typology in syntactic reconstruction.

On the contrary, this alleged syntactic consistency is not found in the data, whereby the more we analyze the early texts of the IE languages, the more syntactic variation we find in word order, argument coding or anaphoric strategies. This suggests that the older stage of PIE was neither more consistent nor simpler than that of the attested languages, and that syntactic variation, as far as it can be reconstructed, must be posited *ab origine* for languages. Crucially, as different and often inconsistent syntactic patterns are found to compete in the attested languages, such structural co-occurrence can be hypothesized also for the proto-language—and for the same stage of it—unless we have independent evidence that the reconstructed structures belong to different diachronic layers.

Once we have reconstructed syntactic alternates, we must also explain their competition by identifying a semantic or pragmatic function behind them (§ 4). A functional motivation often appears in the early stages of a construction, or in synchronically anomalous structures to which unmarked patterns have not been extended. Such original functions may be often identified by looking at modern languages, also outside the IE domain. This may be an appropriate use of typology in historical linguistics, since typological generalizations usually proceed from function to form (cf. Croft 2003:13–19).

In this, we have advocated a reconstruction of *Late* PIE, which may be better reached by the devices of the CM, than of *Early* PIE. The latter is actually more popular at the present stand of diachronic syntax, but it may only be reconstructed by an (often-forced) application of IR, which in principle proceeds by reducing alternate forms and implies original homogeneousness. Accordingly, IR seems to be scarcely suitable to represent syntactic change, owing to the fact that syntax inherently implies the creation of continuously new and diverse clauses and constructions.

Although our criticism to the anomaly principle only concerns its use in diachronic syntax, we may argue—but leave for further research—that the traditional tools of the CM and of IR may also have weak points in the domain of phonology and morphology. As a matter of fact, the assumption of a homogeneous linguistic source implied by the CM and especially by IR may be at odds with irreducible phono-morphological alternates, as in the case of vowel gradation. Of course, our intention is not to refute the principles of the CM and of IR, which currently still represent the most validated strategies of reconstruction in historical linguistics (cf. Baldi 1990; Polomé & Winter 1992; Watkins 2001). We only mean that, as in all other scientific methods, they may have

flaws in certain domains; consequently, the analyst needs to be more cautious and to also use further pieces of evidence external to them. These limits may be comprehended by considering that the CM and IR are not definite practices established once and for all, but rather the product of a long intellectual development from the pioneering studies of Bopp (1816) and Rask (1818) to the *Grundriss* of Brugmann & Delbrück (1886–1916), which also includes a number of debates inside Indo-European studies, for example, between advocates of the tree model (Schleicher 1861) and of the wave model (Schmidt 1872), or between an organicist and a historical view of the language, which also received some stark criticism (cf. Schuchardt 1885). Moreover, the CM and IR reflect the scientific atmosphere of their time, where historical linguistics had a special relationship with philology: it is well known that Schleicher's *Stammbaum* was influenced by the establishment of the codices of a manuscript (cf. Hoenigswald 1963; Fox 1995). Instead, language change is today more often related to social sciences. Thus, the need for a (partial) revision of the method may be seen in the context of the already revised position of historical linguistics and language change. In social sciences, variation is the norm rather than the exception. Owing to its intrinsic creative capacity, syntax—rather than being irrelevant to linguistic reconstruction, as often assumed—may be even a challenge to investigate an original structural variation, with its implications of functional competition, in other more traditional domains of linguistic reconstruction.

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