An approach to syntactic reconstruction

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The paper is primarily devoted to a methodological discussion. There are two different types of inquiries into diachronic syntax and, more generally, grammar: *stage reconstruction* and *etymological reconstruction*. The aim of the first type is to reconstruct and compare diachronic stages within a particular functional domain, while the second type focuses on the etymology or the origin of a particular grammatical category. It is the second type of inquiry that is the topic of this paper. I argue for a methodology based on the Historical-Comparative Method that should ensure a higher degree of reconstructional probability and exclude factors other than inheritance that might also be potentially responsible for correlations across related languages. On this approach, the construction under investigation must be individualized against its respective typological background: creating lists of morphological, lexical (input), syntactic and semantic properties – a procedure that I refer to as *profiling* (notion borrowed from Cognitive Linguistics). The general principle here is that correlations of typologically quirky properties increase the degree of probability of any reconstruction. An obvious typological quirk is the morphological profile of a construction, since the phonetic realization of morphological markers and their combinations is purely accidental and is not subject to typological universals. The morphological inventory of the construction must be reconstructible in the proto-language on the basis of the Historical-Comparative Method. The ability to reconstruct the morphological inventory also excludes language contact as a potential source for correlations. Other typologically idiosyncratic properties – if reconstructible – may also increase the degree of reconstruction probability. To illustrate how this method may be applied, I focus on the development of the independent partitive genitive from Proto-Indo-European into Baltic and Russian and, finally, into North Russian dialects. On the basis of this method I show that this category is inherited from Proto-Indo-European. I examine the syntactic profiles of this category at different stages and account for changes.

Keywords: profiling; syntactic reconstruction; partitive genitive; non-canonical agreement

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1. Introduction

The general question of whether syntactic patterns can be reconstructed at all has been addressed in a number of studies (*inter alia*, Jeffers 1976; Harris & Campbell 1995: 347ff; Campbell & Harris 2002; Lightfoot 2002; Pintzuk et al. 2000). Syntactic reconstruction has been carried out successfully by a number of researchers, most prominently Wackernagel (1892) with Wackernagel's law, but also in the domain of word order and other phenomena (Delbrück 1893[1900], 1888; Brugmann 1925; Ivanov 1965; Lehmann 1974). Moreover, the application of the Comparative Method in syntactic reconstruction has been positively discussed by a number of researchers (most prominently Harris & Campbell 1995: 347ff; Campbell & Harris 2002).[1]

The aim of the present paper is twofold: first, I tackle methodological issues in grammatical reconstruction: What is good practice for reconstructing grammatical categories, including syntactic ones, into a proto-language? How can the etymological relationship of two constructions in different genetically related languages be singled out as *the* factor responsible for the correlations against the background of other factors such as areality, language contact and universal or frequently recurrent diachronic principles (Section 2)? The second point is more specific but, at the same time, also illustrative of the first one, namely, I trace the (morpho)syntactic changes that the independent partitive genitive has undergone from Proto-Indo-European (henceforth PIE) to Baltic and Russian/North Russian (Section 3 and Section 4). The discussion will be rather theory-neutral, although I will invoke some concepts from Cognitive Linguistics such as *category profiling*.

2. General considerations: Prerequisites for reconstructing grammatical and syntactic categories

2.1 Defining stage reconstruction and etymological reconstruction

In general, the aim of (syntactic) reconstruction is to uncover the grammar of a proto-language and its development. Yet, there are two possible types of reconstruction inquires that could be pursued. One is what I will refer to as *stage reconstruction* and the other is *etymological reconstruction*. With *stage reconstruction*, I refer to statements

1. In my view, a lot of criticism of the Comparative Method (in syntactic reconstruction) is due to two reasons: (i) it does not comprise just one particular method but rather a whole array of, in part, diverse tools which is why it is (ii) particularly difficult to provide an overarching theoretical description for it. Indeed, some critique is due to an oversimplification of this method.

detailing the preceding stages of a language like: *construction X has replaced construction Y in the course of the language's history*. To give an example, consider the following transitive construction in Hindi with ergative alignment in the perfective past:

(1) *Andar jākar **gopāl-ne** **citṭī** **likhī*** (Hindi)
inside go.CONV Gopal-ERG letter write.PST.PFV.F
'Going inside, Gopal wrote a letter.' (Masica 1991: 342)

Mutatis mutandis, the same construction in Sanskrit has the following shape:

(2) ***Gopal-aś** **citti-ṃ** **a-lekhī-t*** (Sanskrit)
Gopala-NOM.SG thought-ACC.SG PST-scratch.PST.PFV-3SG[2]
'Gopala wrote [lit. scratched] [his] thought.' [Constructed example]

The Old Indo-Aryan predecessor of Hindi was just a slight dialectal variant of Sanskrit, so it is legitimate to assume that these two constructions are correspondences in the sense of Harris & Campbell (1995: 347–53). That is, it is natural to assume that the Hindi construction in (1) is the functional and semantic successor of the Sanskrit construction in (2). However, and crucially, there is no etymological relationship whatsoever between these two constructions (except for the lexical items used in the examples). The Hindi ergative pattern descends from a resultative periphrasis with the resultative participle in Sanskrit *-ta-*/*-na-* and an optional copula verb 'to be' (√*as*/*bhū*). While the Sanskrit construction in (2) is the old transitive construction of Indo-Aryan, the resultative construction in (3) is the source of the transitive construction of Hindi in (1), see, *inter alia*, Trask (1979); Bynon (2005):

(3) *m-ayā brāhmaṇ-o dṛṣ-ṭa-ḥ* (Sanskrit)
I-INS brahman-NOM.SG.M see-PRTC.PST.PASS/RESULT-NOM.SG.M
'The brahman has been seen by me.' (adopted from Burrow 1965: 354)

Interestingly, this Sanskrit construction is not even an obvious *correspondence* to the construction in (1) but it is nevertheless its *etymological predecessor* (except for the agent case-marking), whereas the pattern in (2) is its *functional predecessor*.

It is an interesting and legitimate task to look for the functional predecessors of a particular construction in order, for example, to find out whether the particular alignment type has been inherited in the language or is a recent innovation. Thus, the comparison of the construction exemplified in (1) and the construction exemplified in (2) reveals that the ergative alignment of New Indo-Aryan is not inherited from Old Indo-Aryan. However, one has to bear in mind that such a reconstruction would not necessarily involve the development of etymologically one and the same construction gradually mutating through time. Therefore, finding the functional predecessor

2. Traditionally referred to as *aorist*.

of (1), namely the Sanskrit transitive construction illustrated in (2), is a task for *stage reconstruction*, whereas finding its etymological predecessor, namely of *mutatis mutandis* (3), is a task of *etymological* (*syntactic*) *reconstruction*. The latter describes and reconstructs different permutations and establishes the source of the construction in question. In this kind of historical inquiry, the etymological relationship between various stages of the construction in question is a necessary precondition *sine qua non*, whereas the functional relationship plays only a marginal role. Indeed, there is virtually no functional relationship between the transitive past-perfective, (syntactically) basic construction in (1) and the resultative, present-tense related and syntactically inverted construction in (3). This is not to exclude the possibility of the functional predecessor in some instances also revealing itself to be the etymological predecessor. Crucially, the functional and etymological predecessors should be kept apart in terms of a null hypothesis.

Furthermore, etymological reconstruction and stage reconstruction require different procedures for finding comparanda (*correspondences* in Harris & Campbell 1995; *equation sets* in Harris 2008:74) across related languages. While stage reconstruction needs comparanda that are based not only on structural correlations, but primarily also on correlations in meaning and function, the latter correlations are not decisive for etymological reconstruction as we have seen in the examples above. In the first place, etymological reconstruction requires comparanda with reconstructible and arguably common morphology, even if the meanings and functions are less comparable as in the case of (1) and (3). In this sense, the approach that is offered here requires not only the comparison of "form", but also of "substance" in Winter's terms (1984).

2.2 The Historical Comparative Method and syntactic reconstruction

More generally, it seems that etymological syntactic reconstruction without any reference to the morphology involved (if the respective language makes use of morphology, of course), makes as much sense as (etymological) morphological reconstruction without any reference to phonological reconstruction. One can hardly identify the PIE *-s-* aorist suffix in, say, Ancient Greek and Slavic, if the phonological development from the PIE sound **-s-* to Slavic *-x-* in certain contexts had not been identified. It is thus natural that the morphological reconstruction builds upon the phonological/phonetic reconstruction, exactly as the etymological syntactic reconstruction should draw on the morphological reconstruction. The prerequisite of having a good understanding of the morphology of a particular language for the syntactic analysis of that language is also valid for synchronically-oriented inquiries. Naturally following from this is the fact that the genetic relationships of languages cannot be established either on the basis of syntactic or even morphological reconstruction; this should be done beforehand by means of phonetic/phonological and lexical reconstruction. This dependency of

syntactic reconstruction on morphological and phonological reconstruction is the main difference between syntactic and phonetic/phonological reconstruction, not necessarily the degree of complexity or lack of exceptions as is sometimes claimed.

Thus, not only syntactic, but also phonetic/phonological changes often allow a number of exceptions and may also be heavily constrained, e.g. by various segmental and suprasegmental features or exhibit structurally distinct correspondences (phoneme *vs.* (allo)phone) in related languages. Therefore, the change of *a* to *o* in some Eastern Latvian dialects only takes place in the stressed syllable and only if the following syllables do not contain a palatalized consonant or a palatal vowel (Seržant 2005: 51ff) and is, additionally, subject to morphological (positional) constraints in other dialects (e.g. restriction to the root morpheme only). Furthermore, sound change may also be subject to analogy, morphological or even syntactic constraints. As such, the intervocalic spirantization (and subsequent loss) of PIE **-s-* in Ancient Greek did not occur in a particular, morphologically restricted context of the aorist suffix *-s-* which has remained unchanged in the relevant phonological environment.

Morpheme boundaries are well-known to constrain sound change. Thus, *sandhi*-rules of Sanskrit are the result of various sound changes at the word-form boundary (assimilations with the onset of the following word). Crucially, they are differently constrained and have somewhat distinct outcomes in the purely morphological process of compounding words (*word-internal sandhi*) as opposed to the syntactic level of word combinations in a clause (*sentence sandhi*). Therefore, they do not apply if the word boundary coincides with the clause or sentence boundary which is clearly a syntactic constraint on the sound change. It seems that a number of alleged differences between phonological and syntactic reconstruction are sometimes due to an oversimplified description of sound change. In turn, the Comparative Method by itself is consistent with various constraints on sound change as mentioned above, even though there is a tendency in the literature to play down its strength (cf. von Mengden 2008: 102–3). The lack of data is often interpreted as the failure of the method.

At the same time, I acknowledge the difference between syntactic patterns, on the one hand, and phonemes and morphemes on the other, as reminiscent of the type *vs.* token distinction, respectively.[3] However, this difference is not really new within the Historical-Comparative Method, and patterns or types have been abundantly and successfully reconstructed with this method. To give an example, there are basically two major morphological patterns describing how a particular verb may have formed

3. Note that the reconstructed *phonemes* and *morphemes* may also be viewed as rather relating to types (patterns) than to tokens (utterances), if they involve a non-trivial system of allophones or allomorphs.

its tense-aspect-mood formations in PIE: (i) either it forms the *present tense* and the *imperfect* just by adding the respective set of number-person inflectional endings to its base (*root-present*), or (ii) it adds a suffix/infix/reduplication to its base and then the respective inflection (*derived present*). These two classes then also determine the way all other tense-aspect-mood formations are formed. The type (i) requires the PIE suffix *-*s*- to form the perfective past (*aorist*) and present *injunctive*, while the type (ii) employs the bare base with the inflectional endings (*root aorist*). The way the mood formations (subjunctive, optative and imperative) are morphologically formed also depends on these two classes (cf. LIV^2: 14–21). This is summarized in the table below:

Table 1. Morphological patterns for TAM formations in PIE (Abl – the morpheme that is subject to ablaut)

	Type (i) (***root present***)	**Type (ii)** (***root aorist***)	**Mood**	**Inflection**
present	*base*$_{Abl}$	*base* + *suffix*$_{Abl}$/*infix*$_{Abl}$/*reduplication*		
imperfect	*base*$_{Abl}$	*base* + *suffix*$_{Abl}$/*infix*$_{Abl}$/*reduplication*	+ mood suffix$_{Abl}$	+ inflection
aorist	*base*$_{Abl}$ + *-*s*-	*base*$_{Abl}$		

Table 1 represents a rather simplified picture. If a particular word form has more than one morpheme that is exposed to ablaut, then specific rules will apply to determine which morpheme will have the zero grade (no vowel), *e*-grade, *o*-grade or the lengthened *ē*-grade; there are additional categories that draw on this pattern. Crucially for our context, this major morphological pattern is a pure reconstruction and none of the ancient (and even more modern) IE languages fully attests this pattern, which is subject to a lot of analogical leveling and remodeling in each case. There is some discussion as to what kind of system may have preceded this pattern in terms of internal reconstruction (cf. Jasanoff 2003). Nevertheless, there is general agreement that a pattern similar to this one with all its ablaut rules should be reconstructed into what is called Late-PIE (cf. LIV^2).

2.3 Etymological reconstruction

The most important question in etymological reconstruction is one of continuity or inheritance. Correlations across languages need not *per se* be due to common inheritance but may rather represent typologically unmarked or dominant features motivated by more general or cognitive principles of language processing. This especially concerns the reconstruction of functional categories and syntactic structures. That is to say, the extent to which a feature is cross-linguistically common has to be taken into

account in order to exclude correlations driven solely by typological unmarkedness. An essential principle within the field of (syntactic) reconstruction is that the null hypothesis is always the non-relatedness of two correlating structures, while the burden of proof lies with the proponents of an etymological relationship here.

This type of reconstruction is not just an extrapolation of the synchronic state into a proto-stage but rather a detailed analysis of how the category of concern has changed in a certain period of time not only on the surface (e.g. case assignments), but also with regard to other properties such as the combinatory potential. To give an example, the Transitive or Nominative-Accusative Construction of PIE is continued by the Transitive Construction of Baltic and/or East Slavic in terms of its semantic core. There are, however, certain differences with regard to the range of possible lexical input, possibly constrained by Tsunoda's scale (Tsunoda 1985: 388). To give an example, the PIE Transitive Construction could not express possession. In contrast, the Transitive Construction of both Baltic with the Lithuanian verb *turėti* 'to have' and the Russian verb *imet'* 'to have' does allow this. A distributional divergence in selectional restrictions is often indicative of a functional divergence (cf., *inter alia*, Kibrik 1992). That is to say, the Transitive Construction of PIE was semantically and functionally somewhat different from its correlate in Baltic and Russian.

While reconstructing grammatical categories – also in the domain of syntax – one rather deals with clusters of properties that mutate through time: certain properties may persist while others may drastically change or get lost and new ones can be acquired. To give an example on the basis of the Historical-Comparative Method, we know that the PIE category *present* is often continued by *subjunctive* and not by *present* in both Tocharian dialects. That is to say, the Tocharian verb formations that etymologically correspond to Proto-Indo-European present stem formations often turn out to be subjunctives in this language (cf. Hackstein 2004). Consequently, one cannot speak about the same category in terms of its function and semantics. However, there is quite a considerable overlap with regard to several properties, most prominently, but not exclusively, morphological ones: the Tocharian subjunctive contains a number of verbal stem formations that belonged to the category of *present* in PIE. Furthermore, the Tocharian subjunctive is used to encode present tense with no modal flavor if used in subordinate clauses. Analogically, this issue has also been raised specifically with respect to syntactic reconstruction. Thus, *inter alia*, Fischer (2007: 18) emphasizes that superficially similar constructions may in fact have quite divergent underlying syntactic structures at different developmental stages. As a matter of fact, Faarlund (2001) criticizes the application of the subject definition extrapolated from Modern Icelandic to the data in Old Norse as, for example, in Barðdal (1999, 2000). The set of syntactic subject properties of Modern Icelandic turns out to be rather different from that of Old Norse; in fact, it is smaller and a number of properties that are unique to subjects in Modern Icelandic are not in Old Norse (Faarlund 2001).

2.4 Individualizing. Creating profiles

I suggest that, for an historical analysis, a grammatical category has to be treated as a list or as a cluster of properties, and each of these properties has to be subjected to historical analysis on its own. Different types of properties flow into the respective profiles: *the lexical profile, the semantic profile, the morphological profile* and *the syntactic profile.* Profiles of the category can be established in the course of synchronic analyses at every particular stage where data are available. The *morphological profile* encompasses the morphology involved from every slot of the construction; the *lexical profile* is based on the lexical input restrictions for that category, the *syntactic profile* contains the list of syntactic properties and, finally, the *semantic profile* lists the properties related to the meaning of the category. In the second turn, the reconstruction of the morphological and lexical profiles into a proto-stage can be carried out by means of the Historical-Comparative Method.

This approach allows for an independent exploration of the permutations that each of these profiles undergoes through time, including amendments, i.e. reconstructions. This mutual independency of the profiles is important, since it is well-known that different types of properties need not undergo the same degree of change over the course of time. Thus, there have not been so many innovations with the morphological profile of the Transitive construction in Lithuanian since PIE: Lithuanian quite accurately preserves the nominative and accusative case morphology of PIE as well as the personal verb endings of the former active voice of PIE. However, there are differences as to the lexical profile: some verbs have been added such as *turėti* 'to have', whereas others have been excluded, such as *ieškoti* 'to look for' (with NOM-GEN) going back to PIE *h_2*eys-* 'to look for', cf. Skt. *iccháti* 'he is looking for' LIV^2 (260), which have been used with the Transitive construction (NOM-ACC) in earlier stages, cf. Graßmann (1873: 223).

The idea of treating a particular construction as one unit of reconstruction and not as the result of a derivational process is very much inspired by Construction Grammar (Goldberg 1995), or even Radical Construction Grammar (Croft 2001) in which all properties are integratively listed for the whole construction. The idea of establishing profiles of a particular category in general is not new. For example, Janda & Lyashevskaja (2011), and Janda and Eckhoff (2013) following Divjak & Gries (2006) and Gries & Divjak (2009) establish *grammatical or behavioral profiles* of the perfective and imperfective verbs in Russian and Old Church Slavic in order to statistically determine whether there is indeed something like a complementary distribution among these aspectual pairs across different cross-cutting categories such as *imperative, present tense, past tense,* etc. The main idea of profiles is to individualize a particular construction or a grammatical category. This seems to be useful not only for synchronic studies such as those just mentioned, but, in my view, also for diachronic studies. Note that I employ a slightly different design of the profiles in this paper.

2.5 Probability of a reconstruction. The morphological profile

Any kind of diachronic investigation faces a certain *degree of probability* (cf. Dressler 1971). The degree of probability is dependent on the number of idiosyncratic properties that can be shown to be inherited from the respective proto-language on the basis of the Historical-Comparative Method (Ivanov 1965: 185). From this it follows that the most important prerequisite for the reconstruction of a syntactic category is that its *morphological profile* can *mutatis mutandis* be reconstructed into the proto-language on the basis of the Historical-Comparative Method because the phonological make-up of morphological devices generally represents the typologically most idiosyncratic facet of a category (here I draw primarily on Ivanov 1965: 185ff; Campbell 1990; Harris & Campbell 1995: 358–60; Harris 2008: 86ff). The phonological shape of the morphological items (*schemas* in terms of Haspelmath & Sims 2010: 46ff) is typically a pure historical accident. Hence, this kind of correlations across related languages represent the strongest evidence in favor of inheritance. Of course, if there are morphological correlations due to the material borrowing in the respective languages, the Historical-Comparative Method – if applied correctly – will be able to rule them out as borrowings.

The morphological profile must be as exhaustive as possible. Thus, it must not only include the inflectional morphology of the constituents (e.g. the case or agreement markers), but also the derivational one (if applicable). Since, in syntactic reconstruction, one deals with structures containing different units which may be individualized in terms of their morphological properties, it is crucial to integrate the morphological shape of all units of the structure under investigation into one profile. Failure to do this may void a particular reconstruction of the proof and considerably decrease the degree of probability.

To give an example, Barðdal et al. (2012) reconstruct what they refer to as a *dative-subject-construction* into PIE and scrutinize its historical semantics. Unfortunately, they do not touch upon the issue of whether the morphological properties of this construction can be reconstructed into PIE, that is, whether there is a common reconstructible morphological profile across the ancient Indo-European languages (henceforth: IE) for the *dative-subject-construction*. Dative case-marking is indeed etymologically cognate across the languages treated (Old Norse, Latin, Ancient Greek, Old Russian and Old Lithuanian) and, to this extent, the morphology involved supports the reconstruction of *dative-subject-construction.* However, the reconstruction of the common dative case is not sufficient for the reconstruction of the whole morphological profile involved. For instance, there is a problem with the verbs listed in Barðdal et al. (2012: 541–547) that are supposed to continue the PIE *dative-subject-construction* in the languages under investigation. The application of the Historical-Comparative Method reveals that there are no two cognate stem formations in the whole list. Only in some rare cases can a few cognate PIE roots be found. However, this fact does not seem to be indicative of

anything since roots themselves do not represent input for a particular construction. This is especially true for a language like PIE which had a great variety of denominal and deverbal derivational means that considerably altered the argument structure and syntactic valence. The vast majority of the verbs listed in Barðdal et al. (2012: 519–521) historically – not necessarily on the synchronic level – represent verbs derived by different morphological means. Crucially, most of them are denominal in their origin. To illustrate this, the predicate meaning 'be of shame' is taken as an example (transliteration and translation is original): "*elenchos einai* (Ancient Greek), *vera skömm að* (Old Norse), *gėda būti* (Old Lithuanian), *ljutě* (Old Russian), *pudor esse* (Latin)" (Barðdal et al. 2012: 520). While the Ancient Greek, Latin and Lithuanian syntagmata consist of a noun 'shame' and a lexical verb 'to be, to exist',[4] the Old Norse correlate involves an additional preposition *að* not found in Ancient Greek or Lithuanian. The Old Russian form *ljutě*, in turn, is an adverb meaning 'shameful, embarrassing' in its second meaning, often used in exclamations comparable to English 'shame on me!' (Sreznevskij 1893–1912: II.97–98). Thus, not only are all lexical parts of the predicate etymologically unrelated, but the very morphological patterns involved are also so different from language to language that there is no way of reconstructing a common, morphological schema for the predicate here. Latin and Ancient Greek nouns involve the *-s*-suffix (belonging to the so-called athematic **s*–declension of PIE), Lithuanian has an old *-ā* (PIE **-eh$_2$*) stem, while Old Russian *ljutě* has the suffix *-ě* (historically **oi/ai*) – a dedicated suffix to derive adverbs in this language. The following table summarizes this:

Table 2. Morphological properties of the alleged predicate 'to be of shame'

	Old Norse	Old Russian	Old Lithuanian	Ancient Greek	Latin
PIE root			*no cognates*		
Morphological marking of the lexical part of the predicate	preposition	adverb derivation	noun derivation	noun derivation	noun derivation
Phonological realization	*að* < PIE ***h$_2$ed*** (?)	*ě* < PIE ****oi***	*a* < PIE ***eh$_2$***	*s* < PIE ****s***	*s* < PIE ****s***

The different derivations used here are not cognate and cannot maintain any common, inherited pattern together. This is even more true of other predicates mentioned in Barðdal et al. (2012: 520), cf. the class of *be sufficient/suffice* verbs (transliteration

4. Lithuanian *gėda* 'shame' being in the nominative form is not compatible with an infinitive such as *būti* 'to be, to exist'.

and translation is original): "*duga* (Old Norse), *satis esse* (Latin), *exarkein* (Ancient Greek), *kakti* (Old Lithuanian) and *dovɔlati* (Old Russian)". Within this group, there are both verbs such as Old Lithuanian *kakti*, Old Russian *dovɔlěti* (*dovɔlati* is a derived imperfective from the latter), and Ancient Greek *exarkeîn* as well as compound expressions such as Latin *satis esse* involving the adverb *satis* 'enough' and the verb *esse* 'to be, to exist'. The stimulus argument is marked by the genitive in some languages (Old Lithuanian) and the nominative in others (Ancient Greek or Old Russian). The authors not only fail to take into account that various lexical derivations from one and the same verb may have distinct argument structures and, hence, case assignments from the very beginning, but they also disregard the fact that different parts of speech (such as verbs *vs.* adverbs *vs.* nouns) – if constituting part of a complex predicate – often trigger distinct case frames crosslinguistically even if they belong to the same word family. These and similar problems are found with most of the other predicates listed in Barðdal et al. (2012: 519–521). To summarize, the morphological profile of the alleged *dative-subject construction* reconstructible into PIE may look as follows:

Table 3. Alleged morphological profile of the dative-subject-construction, PIE reconstruction

Morphological Profile of the *dative-subject-construction* in PIE		
Experiencer	**Predicate**	**Stimulus**
SG: **-ei* PL: **(o)bʰos/*-(o)mos*	*no reconstructible pattern*	*no reconstructible pattern*

Assumedly, the main motivation to reconstruct the *dative-subject construction* into PIE is its semantic profiles. The semantic profiles indeed seem to strikingly overlap between the languages under investigation to such an extent that Barðdal et al. (2012) are forced to assume that there have been almost no changes in the semantic space covered by this construction, while for the most part, the semantic profile has been preserved in all the languages they discuss. Given, however, that exactly the same functions (different kinds of experiencer events) cross-linguistically are typically coded non-canonically and very often with datives (cf., Gupta & Tuladhar 1980; Bossong 1998; Haspelmath 2001; Verhoeven 2010 as well as the collection of papers in Aikhenvald et al. (eds), 2001 and Bhaskararao & Subbarao (eds) 2004, to mention few), one is rather tempted to adhere to the null hypothesis here, opting for a typologically frequent development instead of inheritance.

Finally, one would expect a comparison of the respective syntactic profiles of the *dative-subject-constructions* in the languages under investigation as well as an attempt

to reconstruct such a profile into the proto-language, if the claim that the *dative-subject-construction* is a grammatical unit of PIE is to be upheld.[5]

Generally, the principle of typological individualization for etymological reconstruction holds true for the syntactic and semantic profiles as well. The difference with the morphological profile here is that the latter is already typologically idiosyncratic by virtue of its phonological realization, whereas the former have to be explored for typologically quirky properties in order to individualize the reconstructed pattern against the typological background and thus claim sufficient probability. If correlations across related languages comprise such typological quirks, then the probability of inheritance increases as long as the morphological profiles do not contradict this (Ivanov 1965: 185). Note that the requirement for typological idiosyncrasy in the reconstructed pattern does not hold true for *stage reconstruction*.

To conclude, an exhaustive and reconstructible morphological profile plays the primary role in determining the etymological relationship of a (syntactic) category across related languages or different stages of the same language as being typologically the most idiosyncratic and, hence, the best individualizing feature of any grammatical unit. A reconstructible, common, morphological profile excludes correlations that are not due to inheritance but are rather motivated by language contact or typologically frequent and dominant features.

In the case of simultaneous material borrowing and, consequently, pattern borrowing, the application of the Historical-Comparative Method to the morphological profile will reveal that such a correlation is not inherited. To give an example, the Estonian predicative *vaja* 'to need' takes an adessive-partitive case frame for the experiencer and the stimulus, respectively. Its Latvian correlate *vajag* 'to need' takes a similar case frame with dative-nominative/genitive. Note that Estonian – which lacks a dedicated dative case – employs the adessive case in a quite similar manner to the Latvian dative. The same is true of the partitive case in Estonian and the (older) genitive for the stimulus argument in Latvian because the genitive is due to its partitive function here. Yet, there is no doubt that this construction is not due to common inheritance because these two languages are not genetically related (Indo-European Latvian and Finnic Estonian). However, crucially, if we were not to know

5. It seems that the subject analysis of the dative constituents is assumed in Barðdal et al. (2012). While Modern Icelandic supports such an analysis, it is arguable as to whether it can be upheld for other languages as well (cf. Faarlund 2001 on Old Norse). Cf. Fischer (2007: 18): "Another danger inherent in the comparison of syntactic structures […] is that there is a natural tendency to interpret an older construction very much from the point of view of the modern system […]. This happens especially when the form of the construction has remained more or less the same."

this, correlations in the semantic and syntactic profiles might lead us to the assumption that this pattern *is* inherited:

(4) *Mul* (*on*) *vaja* *raha* (Estonian)
I.ADESS be.3SG need.PREDICATIVE money.PART.SG
'I need money.'

(5) *Man vajag naudas* (Latvian)
I.DAT need.3 money.GEN.SG
'I need money.'

The syntactic, semantic and even lexical (the same predicative *vaja*-) profiles will reveal correlations that *per se* could have been potentially due to inheritance. It is exactly the morphological profile that will immediately show that this pattern cannot be inherited, because there is no reconstructible morphology here. Thus, the syntactic, semantic and lexical profiles are more conducive to correlations motivated by reasons other than inheritance, whereas the morphological profile, if coherently analyzed with the aid of the Historical-Comparative Method, is the strongest evidence in favor of an etymological relation. Hence, the following ranking of profiles represents their relevance for determining etymologically cognate categories across related languages (most crucial on the left):

(6) *morphological profile* > *lexical profile* > *syntactic profile* > *semantic profile*

This ranking is not supposed to imply that the different profiles may not be related implicationally in the sense of autonomous modules of grammar.

To summarize, only if a set of typologically idiosyncratic properties is found that recurs across the oldest attested language layers of a family (that cannot be sufficiently motivated internally or via language contact in every particular language) is it legitimate to claim the etymological relationship between the respective categories. Once the etymological relationship has been established, it is justified to proceed with the reconstruction of the functional and/or syntactic permutations that the respective proto-category/cluster may have undergone.

2.6 Functional inheritance

Studies may be found in the literature where, implicitly or explicitly, *functional or semantic inheritance* concomitant to no etymological correspondence in morphology is assumed, i.e. there is no distinction between stage reconstruction and etymological reconstruction in my terms. Most notably, it is often assumed that the Romance reflexive periphrasis has inherited functions of the Proto-Romance inflectional middle voice (such as Latin middle voice). The latter involves a set of dedicated verbal endings (e.g. 3SG. *-tur*) that are not etymologically related to the reflexive particle Latin *sē,*

sibi, etc. that is used in the modern Romance languages to encode different kinds of middle voice functions. More radically, it seems that there is no such a thing as functional inheritance. The creation of new grammatical markers is never just a process of replacement but rather a complex process of different kinds of functional, syntactic, lexical and morphological shifts that are unlikely to fit exactly into an existing category just by replacing its original encoding strategy. It is much more tenable for these shifts to bring new semantic, syntactic, lexical and morphological (e.g. morphotactic) connotations into the respective category. Indeed, it is a well-known fact that different grammaticalization sources/paths may have different implications on the semantic and syntactic make-up of one and the same target category (Bybee et al. 1994: 9, passim, cf. also Wiemer 2011 on different sources for passives). In other words, it is more likely to assume that a system of two different categories (the reflexive middle in Late Latin and the old Latin middle in *-tur*) with some degree of functional and semantic overlap has been simplified in favor of just one category (*scil.* the reflexive middle).

Moreover, as one might observe from the case study presented in the next section and from reconstruction of grammatical categories, the semantic profile very rarely retains its original make-up without undergoing some change. This is an important point because, on the other hand, it is quite typical for borrowed patterns to have quite considerable correlations in semantics and possibly in syntax. Similarly, typologically dominant and frequent patterns also tend to have considerable correlations in the semantic and syntactic profiles, as is the case with dative experiencers discussed above. In turn, inherited categories tend to show considerable deviations with respect to semantics and syntax.

3. The case study of the Independent Partitive Genitive: Profiling

In the present paper, I investigate the morphosyntactic changes that the Independent Partitive Genitive (henceforth: IPG) has undergone from PIE to Baltic and East Slavic, applying the approach outlined in the preceding section. The independent partitive genitive is a genitive case that is not straightforwardly governed by any explicit constituent. Thus, the verb *išgerti* 'to drink up' in Lithuanian normally takes the accusative object:

(7) *Šiandien išgėr-ia-u tiktai **al-ų*** (Lithuanian)
today drink.up-PST-1SG only beer-ACC.SG
'Today I drank up only (the) beer.'

(8) *Šiandien išgėr-ia-u tiktai **statin-ę** al-aus* (Lithuanian)
today drink.up-PST-1SG only jar-ACC.SG beer-GEN.SG
'Today I drank up only a jar of beer.'

However, the accusative object may also be overridden by the partitive genitive:

(9) *Šiandien išgėr-ia-u tiktai **al-aus*** (Lithuanian)
today drink.up-PST-1SG only beer-GEN.SG
'Today I drank only beer.'

Unlike (8), the genitive *alaus* in (9) is not directly dependent on any constituent of the sentence. It has various functions such as weak quantification, indefiniteness, narrow-scope and some others (see below).

In what follows, I will establish the morphological profile of the IPG in the relevant languages.

3.1 Morphological profile

This category is coded by means of case, namely, the genitive case. Indeed, the genitive endings employed in the relevant languages are etymologically related. The genitive endings in Baltic and East Slavic etymologically continue the PIE genitive ending in SG. *-(*e*)/(*o*)*s vs.* PL. *-*om/ōm* except for the singular of the *o*-stems which is Baltic and Slavic *-*ād*. The latter ending continues the PIE ablative ending thereby showing the merger of the former ablative with the genitive in Baltic and Slavic. However, the ablative case – as it is reconstructed – was already syncretic in PIE: except for the *o*-stems, all other NP types such as consonantal stems, -*u*(h_2)-, *i*(h_2)- or -*eh*$_2$-stems did not distinguish between ablative and genitive in the singular whatsoever. Thus, the difference between Baltic/Slavic declension and PIE declension is that the former has abandoned the morphological difference between ablative and genitive throughout the singular, while the latter still distinguishes these cases for one specific NP type, namely, the *o*-stems.

With regard to the morphology involved in the predicate, the verbs that allow for the IPG, e.g. in the subject position, are basic, primary or non-derived verbs. The PIE verb form *h_1*es-ti* [be-PRS.3SG] 'is', therefore, is attested with the IPG subject in the ancient Indo-European languages (cf. Sanskrit *asti,* Ancient Greek *esti,* Old Lithuanian *esti*) and in Russian *est'* 'idem'. There are a number of verbs that are reconstructible for PIE which take the object marked by the IPG in their non-derived (primary) formation, cf. Delbrück (1893: 314). This is summarized in Table 4 below.

3.2 Lexical profile

Furthermore, it is also possible to reconstruct – at least partially – the lexical profile of the IPG. Thus, some lexemes can be reconstructed, e.g. PIE **u̯éd-ōr* (NOM.SG.) vs. **ud-*(*e*)*n-és* (GEN.SG.) 'water' (cf. genitive singular: Ancient Greek *hýda-tos*, Ved. Sanskrit *ud-*(*a*)*n-ás,* Lith. *vand-eñ-s*, Latv. *ūd-en-s,* Russ. *vod-y*). It is important here that lexemes be taken *sensu stricto* not just as cognate root bases with distinct derivational

Table 4. Morphological profile of the IPG

	Morphological profile of the IPG	
	PIE as reconstructed on the basis of the ancient IE languages such as Ancient Greek or Sanskrit	**Baltic and Slavic**
Morphological category of the verb	basic, historically non-derived form	basic, historically non-derived form
Morphological category of the NP	case	case
Phonological string	SG. *-(*e*)/(*o*)*s* PL. *-*om*/*ōm*	SG. *-(*e*)/(*o*)*s* & SG. *-*ād* < ablative PL. *-*om*/*ōm*

morphology because different morphological derivations, especially with verbs, may be linked to distinct syntactic patterns, e.g. causatives *vs.* simplices or denominal *vs.* deverbal predicates are known to trigger distinct syntactic patterns. Moreover, several verb classes that take the IPG object can be reconstructed into PIE. To give some examples, cf. Sanskrit √*śrū* 'to hear' and Ancient Greek *klý-ō* 'to hear' (both PIE **ḱl*(*e*)*w*- 'to hear', cf. LIV^2: 334), Ancient Greek *pí*-(*n*)*ō* 'to drink' and Slavic *pi-ti* 'to drink', Sanskrit *pí-ba-ti* 'drinks' (both PIE **peh*$_3$(*y*)- 'to drink') and many other verbs cf. Delbrück (1893: 314).

I agree with, *inter alia*, Harris (2008: 88) that, in reconstructing syntax, particular utterances are not reconstructed and, hence, there is no requirement regarding the ability to reconstruct particular lexemes that may have formed the input of the pattern in question. However, in terms of the degree of probability, it seems that the lexical profile is not fully redundant, and in some cases it can increase or decrease the probability of the reconstruction offered. To give an example, consider the ambitious attempt to claim the PIE inheritance of various oblique subject constructions found in some Indo-European languages such as Modern Icelandic in, *inter alia*, Barðdal & Eythórsson (2003), Barðdal & Eythórsson (2012) or Barðdal et al. (2012). A challenge that has not been extensively addressed by these authors is the lack of any potential input verb that could be successfully reconstructed with all its derivational morphology into PIE on the basis of wide evidence including archaic Indo-European languages outside the Germanic family. Barðdal and Smitherman (2013) provide impressive figures to counter this but do not provide even one example.[6]

6. Thus, they write that "189 PIE roots that co-occur with an oblique subject have been found across at least two subbranches of Indo-European", "Approximately 85 PIE roots are found

One potential example that has been mentioned already in Bauer (2000: 146) is Ancient Greek *dokeî moi* (lit. 'seems me.DAT') 'it seems to me' and Latin *decet me* (lit. 'becomes me.ACC') 'I should/it is appropriate for me'. The semantic differences may be due to slightly distinct developments in both Indo-European branches as suggested in Barðdal & Smitherman (2013). However, in addition to differences in syntax (DAT in Ancient Greek and ACC in Latin), there are crucial morphological differences. While both verbs indeed contain the same PIE base **dek̑-* 'to receive, perceive' (LIV^2: 109–10), they are formed by completely different morphological and functional categories: Latin *decet* is historically-morphologically **dek̑-$h_1$yé/ó-* containing the PIE deagentivizing suffix **-eh_1-/*-$h_1$yé/ó-* (LIV^2: 110) that entails the lack of agentive entailments (such as control) on the subject referent (cf., *inter alia*, Seržant 2011); in turn, the Ancient Greek form contains the PIE causative/iterative morphology **dok̑-éyé/ó-* (LIV^2: 110). It is obvious that a deagentivizing derivation and a causative/iterative derivation can hardly be considered as one and the same verb/lexeme not only in terms of semantics, but also, and crucially, in terms of argument structure and argument realization and, hence, syntactic patterns that are available for these derivations.

3.3 Semantic profile

Table 5 below provides an overview of the semantic profile of the IPG (Seržant 2015: 401–3), i.e. the list of the functional properties attested in at least one of the languages and, hence, properties that have to be checked regarding their inheritance.

The semantic profile – as can be observed from the table – exhibits a number of particular changes in the partitive genitive. In what follows, I will very briefly discuss some semantic and functional changes that have occurred in the IPG from PIE into Baltic and East Slavic (on the basis of North Russian, Russian and Lithuanian). For a full discussion, the reader is referred to Seržant (2014a, 2014b, 2015). Of course, certain semantic properties may have an effect on the syntactic properties in some frameworks such as property 1, but I will not go into the syntactic part of this.

Property 1 implies that the IPG gradually starts to not or not only quantify the referent of its host NP, but also, in several cases, the whole proposition. Originally and in the ancient Indo-European languages, the IPG only quantifies the referent of the embedded NP/DP, the exception being lexical verb classes that naturally allow for the quantificational properties of the object NP and the VP to be shared, namely, the incremental-theme verbs such as *to eat* or *to drink*. In North Russian or Baltic,

across at least three subbranches of Indo-European", and "29 PIE roots are found across four or more subbranches of Indo-European" (Barðdal & Smitherman 2013). However, given the lack of any example and the fact that they accept Bauer's example (Bauer 2000: 146) discussed immediately below, one may cast doubt on how accurately they take the notion of cognate lexemes.

Table 5. Semantic profile of the IPG

	IPG's semantic profile		
		PIE as reconstructed on the basis of the ancient IE languages such as Ancient Greek or Sanskrit	**Baltic and Slavic**
1	*Quantifies over the host constituent or over the whole clause*	constituent	constituent & clause
2	*Sensitive to adverbs quantifying the situation* (*VP*)	no	yes
3	*Sensitive to verb-prefixal quantifiers*	–	yes
4	*Invoking the meaning of a temporality* ('for some period of time') *with transfer verbs*	no	yes
5	*'One' as a possible value of the implicit* (*head*) *Quantifier*	yes	no
6	*Combination with verb negation*	rarely (only in emphatic function)	frequent (Lithuanian, Old Russian – obligatory)
7	*Interaction with aspectuality*	no	yes
8	*Decreased referentiality*	yes	yes
9	*Discursive backgroundedness*	yes	yes
10	*Gradual loss of the partitive function; prevalence of the pseudo-partitive function*	no	yes
11	*Partitivity constraint*	(mostly) obeyed	(mostly) not obeyed
12	*Partial loss of the DOM/partial merger of ACC and IP*(*g*) *-> rise of the grammatical animacy*	no	yes

however, the IPG additionally acquires the ability to quantify whole VPs of certain non-incremental-theme verbs, while having no quantificational effect on its host NP:

(10) *Ja otvorju* ***dverej*** (North Russian, Pinežskij r.)
I open.PFV.FUT.1SG door.GEN.PL
(i) 'I will somewhat open the door.' (from Malyševa 2008: 237)[7]
(ii) *'I will open some doors.'

7. Note that *dveri* 'door' is an old *plurale-tantum*.

Note that the host NP *dverej* lit. 'of the door(s)' is not quantified in this example by the IPG; only the whole proposition is quantified here. Examples like this are not attested in any of the ancient IE languages.

As to property 6, the genitive under negation, originating from the partitive genitive (Kuryłowicz 1971), has been generalized in both Baltic and East Slavic as the only option for marking direct objects in a clause with a negated predicate. However, later developments in less conservative languages such as Modern Russian and Latvian somewhat blur this. In these languages, the accusative has been introduced in analogy to the affirmative clauses.

The *partitivity constraint* (property 11) entails that the superset of a true partitive has to refer to sets that are identifiable by both the speaker and the hearer (first formulated in Jackendorf 1977, see also, *inter alia*, de Hoop 1997, 2003; Ionin et al. 2006 for further references). Thus, crosslinguistically, the supersets of true partitives are temporally established, discursively retrievable sets not denoting natural kinds or non-specific indefinites. The *partitivity constraint* is much less frequently obeyed in Baltic and Slavic than in, say, Ancient Greek. I am aware of only one example in Ancient Greek that has an indefinite, non-specific superset (courtesy of P.O. Sandin *apud* Seržant 2012a: 120), and some few examples embedding definite kinds instead of definite supersets, cf. the example below:

About birds in the winter time: (Ancient Greek)

(11) *phōloũsi d' oudèn diakekriménōs kaì*
lurk.PRS.3.PL PRT no distinguished.ADV and
tōn gampsōnýchōn
the.GEN.PL crooked-taloned.GEN.PL
kaì tōn euthuōnýchōn
and the.GEN.PL wide-taloned.GEN.PL
'Those with the crooked and those with straight talons, indistinguishably, hide.' (and do not fly away) (Arist. Hist. Anim. 600a)

In this example, the superset is replaced by the reference to the definite kind expressions *the crooked-taloned ones* and *the wide-taloned ones* which also constitutes a violation of the partitivity constraint because a kind expression does not provide a superset from which a subset (a part) can be extracted. The IPG patterns here with NPs that have a quantifier, the correct interpretation being 'some/several/a number of the kind of birds with *crooked talons*' and not the true partitive '*some birds from the identifiable set of the birds with crooked talons*'. This meaning has been labeled *pseudo-partitivity* in Silkirk (1977). It is this meaning that is most frequently found in the IPG in Baltic and Russian (property 10). The development from true partitivity into pseudo-partitivity cross-linguistically is a very frequent one. It can be described as a development from *something from a set* (*of things*) into *something from a particular sort*

(*of things*). It crucially involves the metaphor in which a kind of things is represented by the set with all things that belong to that kind.

In turn, property 5 is true only of the IPG in the ancient languages but not of Baltic/Russian (Seržant 2012a: 123):

(12) *Adrēstoio* *egēme* *thygaterōn*
Adrastos.GEN.SG marry.AOR.3SG daughter.GEN.PL
'He married a daughter of Adrastos.' (Hom. Il. 14.121, from Kühner & Gerth 1955[1897]: 345)

Example (12) cannot be literally translated into either Baltic or Russian/North Russian with the IPG, because the latter can no longer have the value of 'one' in these languages. It became more restricted in these languages and, hence, less arbitrary.

In Seržant (2015), I discuss other functional properties in detail. In summary, adverbs and verbal prefixes quantifying the event (such as *a lot, somewhat*) do not trigger the IPG in the ancient IE languages, but they do so in Baltic (property 3) and Russian/North Russian (property 2 and 3). At the same time, properties 8 and 9, namely, the property of the IPG to discursively demote the referent of the NP into the background is characteristic of the IPG in both ancient languages (Seržant 2012a) as well as in Baltic and Russian.

3.4 Syntactic profile

The following table provides the syntactic profile of the IPG:

Table 6. Syntactic profile of the IPG

Syntactic Profile of the IPG			
		PIE **as reconstructed on the basis of the ancient IE languages such as Ancient Greek or Avestan**	**Baltic and Russian**
1	*Selection restrictions on NPs marked by the IPG*	yes	yes
2	*Selection restrictions on verbs with subject IPG*	mostly intransitive & non-agentive	only intransitive & non-agentive
3	*Verbal agreement with subject IPG*	semantic agreement	no agreement
4	*Coordination with otherwise case-marked NPs*	structural and lexical	structural
5	*Positional restrictions*	structural, lexical & non-argumental	structural

3.4.1 *Selection restrictions on the NP (property 1)*

There are selection restrictions placed on which NP types may be marked by the IPG (property 1): semantic singulars – i.e. to the exclusion of mass nouns, collectives, etc. – cannot be marked by the IPG, since requiring the NP's referent to be a set or a kind from which a (sub)set can be extracted. This restriction is motivated by system-external reasons, namely the logics of the subset and superset relations. This is why this restriction has been preserved quite neatly in Baltic and Russian, although exceptions can be found in both. These exceptions are found in those cases where the original function of the IPG of extracting a (sub)set has been completely lost, namely, in the context of negation (13), with intensional verbs or with verbs of transfer on the temporal-transfer interpretation (14) and quantification over the VP and not over the host NP (cf. the semantic property 1 above):

(13) *Ja bolʹše* ***ne*** *videl tut* ***etoj ženščiny*** (Russian)
I.NOM more NEG see.PST.M.SG here this.F.GEN.SG woman.GEN.SG
'I haven't seen this woman here again.'

(14) *Defki, ja u vas voz'mu malen'kovo* (North Russian)
girls PRON.1SG at you take.PFV.FUT.1SG small.GEN.SG
kipetil'nic'ku*, cjaj skipecju*
boiler.GEN.**SG** tee.ACC boil.PFV.FUT.1SG
'Girls, I will take your water kettle [**for a while**], I am going to boil tea water'. (Malyševa 2008: 235)

Whereas these exceptions exist in Baltic and Russian, ancient languages allow for no exceptions and the NP marked by the IPG must be either plural or a mass noun.

3.4.2 *Selection restrictions on the verb* (*property 2*)

As regards property 2, the IPG may be used in the subject slot of any non-agentive, intransitive verb in the ancient IE languages. Thus, Ancient Greek additionally attests agentive intransitives such as *fōléō* 'to lurk', cf. ex. (11) above, with the IPG subjects, and even one example with a non-prototypical transitive *agonízō* 'to venture' (in this context), cf. ex. (18) below. This property is, in turn, different in Baltic or Russian and its dialects. The latter only allow the subject IPG with a few, non-agentive intransitives, mostly with existential verbs such as *būti* 'to be' in Lithuanian or *byt'* 'to be' in Russian dialects. Standard Russian basically does not allow for IPG subjects at all, except for with the verbs *ubyt'* 'to decrease', and *pribyt'* 'to increase' (as well as with mass noun IPG subjects such as *voda* 'water'). The set of intransitive verbs that allow their subjects to be marked by the IPG is obviously greater in the ancient languages and, hence, in PIE and is more restricted in Russian but also, to a lesser degree, in Lithuanian.

3.4.3 *Semantic agreement* (*property 3*)

In advance of the following discussion, I will argue that there is a development from (i) the semantic agreement in PIE and ancient IE languages into (ii) no agreement in Baltic and Russian and, finally, (iii) into occasional formal or *ad formam* agreement in some North Russian dialects:

(i) Following Corbett (2006: 155), I refer to semantic agreement in those cases where the target (here: the verb) renders the logical feature values and not those overtly coded on the controller (the subject NP) as has been argued in Conti (2010). Consider the following table:

Table 7. Semantic agreement with the subject IPG

	Semantic Agreement	
The logical value (subset value) of the subject NP	**singular** '[**one**] of the friends'	**plural** '[**any/some**] of the friends'
The formal value of the subject NP	**plural** 'of the friends'	**plural** 'of the friends'
Verb form	**singular**	**plural**

To illustrate the way that semantic agreement works in a live language, I provide examples from Garifuna (Awakan, South-American) where the partitive expression formed by means of the ablative-like postposition *-dagiya* triggers semantic agreement on the verb along the gender, number (cf. Barchas-Lichetnstein 2012) and person values of the logical referent (the subset):

(15) *Éibagua-tiyan wá-dagiya.* (Garifuna)
run-T3**PL** P1**PL**-from
'[**Some**] of us ran.' (from Barchas-Lichtenstein 2012: 189)

In (15), the subset value is plural 'some', triggering the third person plural verb form. Note that the verb always takes the third person and not, for example, the first person, as *wá-dagiya* 'from us' might suggest. This is to be expected as, logically, the subset 'some of us' is always the third person, in which 'some' can only have the third person value. Therefore, contrary to Barchas-Lichtenstein (2012) and Seržant (2012b), I assume that there is also semantic agreement in person, but due to pragmatics it is just always in the third person.

In (16), in turn, the verb is singular because *báalu* 'balls' as an inanimate is grammatically an inherent singular. Note, however, the agreement in gender:

(16) *Brídubi-ti l-idagiya báalu.* (Garifuna)
be.beautiful-T3**SG.M** P3**M**-from ball
'Some of the balls are beautiful.' (from Barchas-Lichtenstein 2012: 189)

The semantic agreement with the IPG found in Garifuna and the ancient IE languages such as Ancient Greek represent a typologically rare case in which the target (the verb) provides more information about the controller than the controller itself (cf. Corbett 2006: 171–2) because the controller fails to provide the information on number and person here.

The semantic agreement pattern found in Garifuna works similar to the ancient Indo-European languages and, assumedly, in Proto-Indo-European (Seržant 2012b: 190):

(17) *Sigãn epḗ(i)nes':* (Ancient Greek)
Be silent!
hōs ep' exódō(i) klýō tōn
as at exit hear.PRS.1.SG the.GEN.**PL**
éndothen chōroũntos
inside.ADV go.PRTC.PRS.ACT.GEN.**SG**
'Be silent! I hear as (if) [one] of them inside is coming out at the exit'
(S. El. 1322–3)

In this example, the verb *klýō* 'I hear' governs the genitive case which is assigned to the present active participle *chōroũntos* 'the going, coming out [one]' that, in turn, predicates a complement clause of which *tōn éndothen* 'of the [ones] inside' encodes the embedded subject, i.e. the logical subject of the participle. Syntactically, this is a *raising-to-object* or an *object-control* construction superficially comparable with the English *raising-to-object* construction in *I hear him approaching,* in which the logical subject of the participle is controlled by the object of the matrix verb *hear*.[8] Crucially, while the formal number of the logical embedded subject *tōn éndothen* 'of the [ones] inside' is plural, the participle unequivocally exhibits a singular form. This is because the subset of *the ones inside* that is implied by the speaker only has one member '[one] of the ones inside', triggering the singular form on the participle. The next example illustrates the semantic agreement with a finite verb:

(18) *oudè gàr lúkos oudè* ***tôn*** ***állōn*** ***thēríōn***
neither PRT wolf.NOM.SG nor the.**GEN.PL** other.**GEN.PL** animal.**GEN.PL**

8. Here, one can object that the participle *chōroũntos* is, in fact, the head of the partitive genitive plural *tōn éndothen*. This would imply nominalization of the participle. The nominalization of the participle here would require a definite article (thus: **toũ chōroũntos* '*the* going [one]'); without the article, the construction seems rather odd in Ancient Greek on the nominal analysis of the participle. This is also why there were different amendments suggested (against the attestation of the mss.!), cf. Nachmanson (1942: 17). Apart from that, semantic considerations speak against the nominal interpretation of the participle (cf. Seržant 2012b).

agōnísaito *àn* *outhéna* *kalòn* *kíndunon*
contend.AOR.OPT.3**SG** PRT none.ACC.SG honourable.ACC.SG risk.ACC.SG
(Ancient Greek)

'Because neither a wolf nor **any other animal** (lit. nor **[one] of the other animals**) would take an honourable hazard.' (Arist. Pol. 1338b.31)[9]

In this example, the verb has the singular form because the subset that the IPG *tôn állōn thēríōn* 'of the other animals' invokes contains only one arbitrary member '**anyone** of the other animals'. The following example is parallel to this (Seržant 2012b: 190–191):

(19) *ēn* *dè* ***toútōn*** ***tōn*** ***stathmōn*** *hoùs* *pánu*
be.IMPF.3**SG** but such.GEN.PL the.GEN.PL stop.GEN.PL which very
makroùs *élaunen,* *hopóte* *è̀* *pròs* *hýdōr*
long go.IMPF.3.SG whenever or to water
boúloito *diatelésai* *è̀* *pròs* *chilón*
wanted to reach or to fresh fodder
'And there was **[one] of these stages** which [he] (scil. Cyrus) made very long, whenever he wanted to reach water or fresh fodder.' (X. Anab. 1.5.7)

The verb *ēn* 'was' is singular-marked while the superset of the IPG is plural 'these stages', because the speaker implies only one stage of those stages.

The following example equally attests the singular value of the IPG *thnētôn* 'of the mortals' that is indicated by the singular of the indefinite relative pronoun *hóstis* (note that this pronouns must be considered as subject of the relative clause and cannot be the subject of the existential clause):

(20) *toûton* *d'* *epeípercheîras* *êlthen* *eisemás* *ouk*
this.ACC.SG PRT if hand.ACC.PL come.AOR.3SG to mine.ACC.PL NEG
ésti *thnētôn* *hóstis* *exairḗsetai*
be.3SG mortal.GEN.PLR ELAT.INDEF.NOM.SG rescue.FUT.3G
'(As to) this one, since he has fallen into my hands, there is no mortal (lit. there does not exist anyone of mortals), who would rescue (him).' (Eur. Her. 976-7)

Now, when the subset implied by the speaker is not *one* but *some* or *any,* then the verb form shows plural agreement, cf. (11) repeated here as (21) for convenience:

About birds in the winter time: (Ancient Greek)

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9. This is how this text is given in the manuscripts (see the critical apparatus in Ross ed. 1957:257 who himself suggests the emendation *oud' ouden* 'not none.NOM'). Note that several philological editions here amend some overt head to make the IPG *tôn állōn thēríōn* 'of the other animals' dependent on the tradition of the manuscripts (see Nachmanson 1942 for criticism of this philological practice).

(21) *phōloũsi d' oudèn diakekriménōs kaì tōn*
lurk.PRS.3.**PL** PRT no distinguished.ADV and the.GEN.**PL**
gampsōnýchōn kaì tōn euthuōnýchōn
crooked-taloned.GEN.**PL** and the.GEN.**PL** wide-taloned.GEN.**PL**
'Those with the crooked and those with straight talons, indistinguishably, hide.' (and do not fly away) (Arist. Hist. Anim. 600a)

(22) *Eisì dè kaì tôn perì fúsin* (Ancient Greek)
be.PRS.3PL PRT and the.GEN.PL about nature
'There are [some] of the nature philosophers …' (Arist. Hist. Anim. 513a)

The ability to control verbal agreement is found not only in Ancient Greek, but also in other ancient Indo-European languages such as Vedic (although with just two exs.) and Avestan (exs. from Dahl 2010):

(23) *ákāri vām ándhaso* (Vedic)
make.AOR.PASS.3**SG** you.DU.DAT soma.juice.GEN.**SG**
'[Some] soma-juice has been prepared for you two' (RV VI 63.3)

(24) *yaṯ hē stārąm bayō.dātanąm* (Avestan)
so.that he.DAT stars.GEN.**PL** set.up.by.gods.GEN.**PL**
aibi raocaiiāṇte
round shine.PRS.3**PL**
'So that stars, set up by the gods, shine around for him' (Vendīdād 19.23)

(ii) with regard to Baltic and East Slavic, the main change that distinguishes the IPG of Baltic and East Slavic in the subject position from its precursor in the ancient IE languages, is that it loses the access to verb agreement here. This results in a lack of agreement with the subject IPG, and the verb consistently shows third singular neuter form in Russian or the non-agreeing form in Lithuanian throughout:

(25) *Gostej ponajexalo* (Russian)
guests.GEN.**PL** arrived.PST.3**SG.N**
'There came (quite some) guests/*one of the guests.'

(26) *Jei po kelių valandų ar net sekančią dieną po to* (Lithuanian)
if some hours or even during the next day after
kai buvo valgyta grybų
as be.PST.3 eat.PRTC.PST.**N-AGR** mushroom.GEN.**PL**
atsirado pykinimas
appear.PST.3 nausea.NOM.SG
'If, after some hours or even during the next day after [you] have consumed mushrooms, you get nausea …'[10]

10. http://www.apsinuodijau.lt/apsinuodijimas-grybais-ar-virskinimo-sutrikimai

The IPG in the subject position triggers default agreement of the third person singular neuter in Russian and the third person non-agreeing form in Lithuanian. This development is not interrelated with the *pro-drop* status of the languages involved. Thus, one might think that the semantic agreement is due to the pronominal function of the verb endings (*pro*-drop) of the ancient IE languages that disambiguate the logical singular *vs.* plural values of the IPG and serve as a sort of semantic head. However, this is hardly the case, because Lithuanian and (restrictedly) Russian are equally *pro*-drop languages, and in such a case one would expect the semantic agreement to be retained by these languages, too. As I argue below in Section 4, this development and the rise of formal agreement in North Russian (immediately below) may rather be accounted for in terms of a gradual loss of the implicit head.

(iii) In the course of further development, formal agreement is occasionally found in some dialects of North Russian (e.g. around Onega lake, henceforth: *NR*). The IPG subjects occasionally trigger agreement on the verb along their formal (and not semantic!) singular *vs.* plural values (Seržant 2014b: 311–313), cf. examples below from Markova (2008: 146–153) who points out the similarity between nominative and the IPG. The fact that the IPG subject NP acquires direct access to verbal agreement can be taken as evidence for the full disappearance of any implicit head of the IPG:

(27) *Tut-to medvedej byvajut, tol'ko malo* (Sujsar', Onega NR)
here-PRT bear.GEN.**PL** occur.3**PL** only few
'There are bears, but only few.'

(28) *A kto rabotal pokrepče, tak* (Sujsar', Onega NR)
But who worked stronger, so
ix byli
they.GEN.**PL** were.3**PL**
'As regards those who worked harder, there were (some) of them.'

(29) *Zdes' vsjakix rastut* (Derevjannoe, Onega NR)
here any-kind.GEN.**PL** grow.3**PL**
'Here grow any kind (of plants).'

(30) *Počti vsex porazjexalis'* (Šun'ga, Onega NR)
almost all.GEN.**PL** emigrated.3**PL**
'Almost everyone has emigrated.'

(31) *Gde vy byli v akkuvacii,* (Kuganavolok, Pudož NR)
where you were in evacuation
tam bylo li trudnosti s xlebom?
there be.PST.3**SG**.N PRT difficulty.GEN.**SG** with bread.INSTR.SG
'Where you were evacuated, were there any difficulties with the bread [supply]?'

(32) *Ranše i černiki bylo* (Pudož NR)
earlier and blueberry.GEN.**SG** be.PST.3**SG**.N
'Formerly, there were also blueberries.'

This formal agreement in number is thus an indication of a major semantic and, subsequently, formal conflation of the nominative and IPG subjects, whereby the latter acquire the agreement property in analogy to the former (cf. *contamination of the IPG with the nominative case* in Markova 2008: 153; see also Seržant 2013: 346–348, 2014b: 311–313). This agreement remains non-canonical because the agreement domain is not among the domains (such as nominative subjects) that allow for agreement in Russian and in Slavic in general. In these languages, any non-nominative marking of the first (subject-like) argument, such as dative or accusative experiencers of one-place verbs, the IPG subjects or genitive subjects under negation, never create the conditions for agreement (Corbett 2006: 194) and consistently show third person singular (neuter).

3.4.4 *Coordination with an otherwise case-marked NP* (*property 4*)

The IPG can be coordinated with any NP irrespective of its case-marking in the ancient IE languages and, hence, in PIE (Seržant 2012b), cf. the coordination with the nominative NP in Example (18) repeated here as (33) for convenience:

(Ancient Greek)

(33) *oudè gàr* ***lúkos*** *oudè* ***tôn*** ***állōn*** ***thēríōn***
neither PRT wolf.NOM.SG nor the.**GEN**.PL other.**GEN**.PL animal.**GEN**.PL
agōnísaito *àn outhéna kalòn kíndunon*
contend.AOR.OPT.3SG PRT none.ACC.SG honourable.ACC.SG risk.ACC.SG
'Because neither a wolf nor any other animal would take an honourable hazard.' (Arist. Pol. 1338b.31)[9]

Moreover, IPG may be coordinated with a dative NP:

(34) *hốst' anamnēsthēnai toiaũta symbebēkóta* (Ancient Greek)
so that remember.INF such happen.PRTC.PRF.ACT.N.PL
ế hautõ(i) ế tõn hautoũ
or himself.**DAT**.SG **or** the.**GEN**.PL himself.**GEN**.SG
'(He was so affected) that he remembers that such (evils) have happened either to himself or to (one) of his (friends).' (Arist. Rhet. 1386a1-2)

This is different in Baltic and Russian. Here, the IPG can only be coordinated with structural NPs (cf. (35)–(37)) while lexically marked NPs do not allow coordination with an IPG NP (cf. (38)):

(35) *Nusipirkau pieno ir bandelę* (Lithuanian)
buy.PST.1SG milk.**GEN**.SG **and** roll.**ACC**.SG
'I bought milk and a roll.'

(36) *Prinesi ovoščej i moloko* (Russian)
bring.IMPV vegetables.**GEN**.PL **and** milk.**NOM**.SG
'Bring vegetables and (the) milk!'

(37) *Atvažiavo mano brolis, tėvai, keli* (Lithuanian)
arrive.PST.3 I.GEN brother.NOM.SG parents.NOM.PL some.NOM.PL
vaikystės draugai ir visokių
childhood.GEN.SG friend.**NOM**.PL **and** various.**GEN**.PL
kitų svečių
other.**GEN**.PL guest.**GEN**.PL
'My brother, parents, some friends from childhood, and various other guests have arrived.'

(38) *Jis padėjo man ir *kitų /ok kitiems* (Lithuanian)
he.NOM help.PST.3 1SG.DAT and *other.GEN.PL /okother.DAT.PL
'He helped me and others.'

Notably, even with structural NPs, the coordination is only restrictedly possible here. Thus, Example (37) is less felicitous if fewer nominative NPs precede the IPG NP, as in (39):

(39) (??) *Atvažiavo mano draugai ir visokių* (Lithuanian)
arrive.PST.3 I.GEN friend.**NOM**.PL **and** various.**GEN**.PL
kitų svečių
other.**GEN**.PL guest.**GEN**.PL
[Intended meaning] 'My friends and various other guests have arrived.'

3.4.5 *No positional restriction* (*property 5*)
There is no restriction placed on the IPG as to which syntactic position in the surface structure it may occupy (cf., *inter alia*, Schwyzer & Debrunner 1950: 101; Kuryłowicz 1964: 186, Bauer 2007: 133–4). Remarkably, the IPG not only overrides structural cases in the ancient Indo-European languages, but also datives (Kuryłowicz 1964: 186), instrumentals and non-argumental accusatives (*accusativus graecus*). The latter refers to an accusative case-marked NP that is not part of the subcategorization frame of the verb encoding the meaning 'in relation/with regard to X' as in the following example:

(40) *Oúte kateágē* ***tēn kephalēn***
neither break.PASS/MID.AOR.3SG **the.ACC.SG head.ACC.SG**
[lit.] 'Neither was he injured on his head.' (Lys. Or.3 14.3)

Note that the verb's morphology explicitly signals semantic and syntactic intransitivity. Moreover, accusative adjuncts of this type are lexically restricted to body parts only. Nevertheless, this accusative case can equally be overridden by the IPG:

(41) *Kateágē* ***tēs*** ***kephalēs*** (Ancient Greek)
break.PASS/MID.AOR.3SG the.GEN.SG head.GEN.SG
[lit.] 'He was broken with regard [to some part] of his head.'
(Ar. Vesp. 1428)

Furthermore, the IPG may also override the accusative case of embedded subjects in the *accusativus cum infinitivo* (AcI) construction (Seržant 2012b):

(42) *éphasan … kai epimignýnai* ***sphõn*** *te* (Ancient Greek)
say.AOR.3PL and mix.INF they.GEN.PL and
pròs ekeínous kaì ***ekeínōn*** *pròs heautoús*
to these and these.GEN.PL to themselves
'They said that some of them [scil. Carduchians] did have dealings with these ones [scil. people of the plain] and [some] of these ones did have dealings with the former ones.' (X. Anab. 3.5.16) (adopted from Goodwin 1997[1894]: 231)

While the IPG was syntactically quite unconstrained in the ancient IE languages and, hence, assumedly in PIE, this is crucially different in Baltic and Slavic. First, Baltic and East Slavic have considerably restricted the rules for occurrence of the IPG: in these languages, it can override structural cases only, i.e. accusative objects and nominative subjects. Notably, this restriction to structural cases must have only come about quite late, seeing as Old Russian still attests IPG overriding other cases than just structural ones. Thus, the Old Russian verb *vladyčestvovati* 'rule, govern' subcategorizes for objects case-marked by the instrumental case:

(43) *vl(d)č(s)tvovalъ Asourieju i Persidoju* (Old Russian)
govern.PST.M.SG Assyria.**INS**.SG and Persia.**INS**.SG
i ***pročixъ*** ***stranъ*** ***souštixъ*** *na vъstočě*
and other.**GEN**.PL country.**GEN**.PL be.PRTC.PRS.ACT.**GEN**.PL on East
'He governed Assyria and Persia and [some] other countries in the East' (Georgios Monachos' Chronicle, quoted from Krys'ko 2004: 188)

The IPG-marked object *pročixъ stranъ souštixъ* 'of other existing countries' in (43) replaces the expected instrumental case, which could be overridden by the IPG in the Old Russian period. Examples such as (43) are ungrammatical in modern Russian.

4. Morphosyntactic changes

In the previous section, I have provided the syntactic, semantic, lexical and morphological profiles of the IPG for two different stages: for Baltic and Russian as well as for the proto-stage reconstructed on the basis of the ancient IE languages. Reconstructed correlations between the morphological and lexical profiles of the ancient IE languages

and Baltic and Russian, as well as some typologically rather idiosyncratic correlations in the syntactic profiles such as the ability to coordinate with otherwise case-marked NPs (syntactic property 4), provide a relatively high probability for the assumption of the etymological relationship between the IPG of Baltic and Russian and the IPG of PIE (the latter, in turn, reconstructed on the basis of the ancient IE languages such as Sanskrit, Avestan and Ancient Greek, cf., *inter alia*, Delbrück 1893). This is a necessary prerequisite for the reconstruction of the syntactic changes that the IPG has undergone in its development from the PIE pattern into Baltic and Russian.

After arguing for the etymological relationship between the IPG in Baltic/Russian and the IPG in the ancient IE languages/PIE, I have primarily focused on the changes that the syntactic properties of the IPG have undergone in the course of time from PIE to Baltic and Russian. Although it may superficially seem as though this category remained unchanged in Baltic and Russian, from the data presented in subsection 3.4 above, it is obvious that a number of changes in the syntactic profile of this category have to be postulated.

To account for the syntactic properties of the IPG in the ancient IE languages, I have argued that the IPG in these languages may be analyzed as a syntactically dependent partitive genitive. It is governed by an implicit pronoun with indefinite reference that has bearings on the morphosyntax in the clause, and for which I am using the term *pro* as just a label with no further theoretical implications (Seržant 2012b). There are several reasons to assume an implicit head. First, a semantic reason: the assumption of an implicit head establishes a link between the dependent and the independent partitive genitive. While the former is syntactically governed by an explicit head, e.g. by a measure or quantifier phrase that provides information on the quantity of the subset extracted from the superset referred to by the NP, the syntactically independent partitive genitive equally provides a subset from the superset referred to by the NP. The only difference between the dependent and independent partitive genitive on this account then is the implicitness of the quantifier with the IPG *vs.* its explicitness with the dependent partitive genitive. The meaning of *pro* is one of an inherently indefinite pronoun with arbitrary reference (not anaphoric) including the values 'one', 'some' and 'infinitely', cf. the following examples from Ancient Greek:

(44) *kaì en chṓra*(*i*) *épipton* ***hekatérōn*** (Ancient Greek)
and in land.DAT.SG fall.IMPF.3PL each.**GEN**.PL
'and in that place [some] **of each** [group] died.' (X. Hell. 4.2.20)

(45) *kaì apéthanon* ***autôn*** *en ekeínḗ*(*i*) *tḗ*(*i*) (Ancient Greek)
and die.AOR.3PL they.**GEN**.PL in that.DAT.SG the.DAT.SG
hēméra(*i*) ***perì*** ***triakosíous***
day.DAT.SG around three.hundred
'and on that day, **around three hundred of them** died.' (X. Hell. 4.6.11)

(46) *kaì* *apéthanón* ***tines*** ***autôn*** (Ancient Greek)
and die.AOR.3PL some.NOM.PL they.GEN.PL
'and **some of them** died.' (X. Hell. 6.5.13)

It is only the subject NP in (44) that lacks an overt measure phrase, while the partitive genitive NPs *autôn* 'of them' in (45) and (46) are headed by overt measure and quantifier phrases. The semantic parallelism between the independent partitive genitive in (44) and the dependent one in (46) has even led many classical philologists to amend an indefinite pronoun in cases like (44) in their text editions against the attestation of the more conservative manuscripts (cf. Nachmanson 1942). From a semantic point of view, it makes sense, therefore, to assume a covert quantifier in (44).

Secondly (property 5 above), it should be recalled that there has been no restriction for the IPG in the ancient IE languages determining which syntactic position it could occur in and which case it could override (cf. Kuryłowicz 1964: 186, Conti & Luraghi 2010; Seržant 2012b). This quirky behavior of the IPG may be explained by assuming that it is the implicit head *pro* – equally to an explicit head – that assumes case and, hence, can occur anywhere simply depending on which case it has been covertly assigned. This is another, structural link to the dependent partitive genitive, since the dependent partitive genitive is not restricted positionally anyway.

Thirdly (property 3 above), this implicit pronoun, which may be interpreted as singular or plural, becomes visible by virtue of its ability to be the controller in the subject position triggering verbal agreement. It is the number and person value of this implicit head that is copied on the verb, see the discussion of the *semantic agreement* (property 3) above in subsection 3.4.3.

Finally (property 4 above), while coordinated NPs have to show case concord in the ancient Indo-European languages, the IPG is the only exception to this rule. Again, there is no restriction for the IPG regarding coordination: it can be coordinated with any case-marked NP (see subsection 3.4.4 above). The assumption of an implicit head that assumes case would fix this irregularity. At this juncture, this implicit pronoun has the same case as the overt NPs it coordinates with.

Concerning the syntactic profile of Baltic and East Slavic, the main changes that distinguish the IPG here from its precursor in PIE concern the properties of this implicit pronoun: although implicit, it had considerable bearings on the morphosyntax in the ancient IE languages with regard to agreement, coordination and lack of syntactic restrictions. In Baltic and Russian, it has lost most of its properties and has become, so to say, much less visible. The only property that it has still partially retained from the ancient times into Baltic and Russian is the weak ability to coordinate with accusatives and, partly, nominatives. One might describe this change as a change from *pro* into something that is even less visible in the morphosyntax and something which has no bearings on the indexation. The IPG subject of Baltic and Russian triggers the default third singular neuter/non-agreeing form throughout. Note that there is some

degree of parallel between the implicit PRO in infinitival and converbial clauses and the implicit head of the IPG in Baltic and Russian (if such a head is to be assumed at all): both occur in structural positions only, both cannot be assigned case, and both constitute subjects of non-agreeing verb forms (the analysis of the third singular neuter form found in Russian and the non-agreeing default form of Lithuanian as non-agreeing/defective verb forms is likely). At the same time, there are considerable differences. One such difference is that *PRO* is typically used for those cases where the argument is not filled at all, while with the IPG there is indirectly an argument there (Y. Testelets, p.c.). I thus emphasize that I use both *pro* and *PRO* in order to have suitable labels for the distinctions that have occurred to the zero head of the IPG over the course of time, but it is not my intention to invoke a formalist-theoretical account.

The erosion of the implicit head observable in the morphosyntax is indeed accompanied by the respective semantic development from a true partitive expression invoking at least two participants, namely, the subset and the superset, into a predominantly pseudo-partitive expression invoking only one quantified participant. Furthermore, the value of 'one' is no longer available here, which makes the third person singular form even less justified (semantic property 5, subsection 3.3). The pseudo-partitive expression, in turn, does not invoke two referents but rather only one, and this referent is already formally marked as plural (with count nouns).

Finally, the occasional formal agreement along the formal number of the NP found in some North Russian subdialects makes the assumption of an implicit head completely unmotivated, because the formally marked number values of the IPG NP acquire direct access to the verb here and can be copied by the latter. In sum, the following gradual loss of the head position can be observed:

Table 8. The development of the syntactic properties

Dependent partitive genitive	**IPG of PIE/ancient IE lgs.**	**IPG of Baltic/ Russian**	**IPG of some North Russian subdialects**
explicit head	*"pro"*	*"PRO"*	–
→			

5. Conclusions

In the methodological section, I have suggested that etymological reconstruction is only legitimate once correlations in typologically idiosyncratic properties across the constructions under investigation have been established that are not due to external influence and that thereby guarantee etymological relationship. In the case of the IPG,

the justification for reconstructing the *category/properties cluster* of the IPG into PIE is the etymological relationship of the respective morphological profiles of Baltic, Russian/North Russian and ancient IE languages (such as Ancient Greek or Vedic Sanskrit). I have claimed that morphological profiles are typologically most idiosyncratic and, hence, *the* individualizing properties of a construction. Certain properties from other profiles may also be relevant for individualizing a particular construction or a category and – if quirky and correlating across the relevant related languages – they may also be used for establishing etymological relationships of a category.

On a more general level, reconstruction or diachronic descriptions may be viewed as synchronic descriptions representing stages that languages pass through in their infinite evolution, stages that a language can enter and exit from (cf. Croft 2003: 234–5). Thus, in principal, it is legitimate to make claims about changes that do not *per se* involve etymological relationships, e.g. if a language undergoes alignment changes. I have called this type of historical inquiry *stage reconstruction*. It often seems that *stage reconstruction* can only be made once enough knowledge about the grammar of a particular proto-language using the method adhered to in this paper has been gathered. Therefore, this method can show whether a particular alignment pattern may be reconstructed into the proto-language or not, while the historical-comparative analysis of the functional and syntactic profiles will show how this alignment pattern emerged.

The aim of the methodological discussion here is not to claim that the method offered is the only possible way of performing etymological syntactic reconstruction. Moreover, this method is obviously not applicable to constructions that neither involve morphology, nor exhibit some syntactic or semantic quirks that can be used to increase the probability of such a reconstruction, e.g. notoriously, changes in word order patterns, or, more generally, constructions of isolating languages.

In the second part of the paper (Section 3 and 4), I have attempted to show that the syntactic properties of the IPG were quite different in the ancient IE languages (and, hence, in PIE) than in later attested languages such as Baltic and Russian/North Russian. I have claimed that the changes in the morphosyntax of the IPG may be coherently described by assuming an implicit head governing the partitive genitive at the oldest stage. The presence of this implicit head allowed the IPG to behave in a relatively unconstrained manner syntactically: it could be coordinated with otherwise case-marked constituents, it could occur in any position – structural, lexical or non-argumental. More generally, it patterned to a large extent with the headed partitive genitive, to begin with. The implicit head was endowed with more content in the ancient languages and consequently, *mutatis mutandis*, in PIE. At a later stage, in Baltic and Russian, this implicit head lost most of its content and concomitantly its bearing upon the morphosyntax. Finally, in some North Russian subdialects the IPG marked subject NP occasionally became the direct controller of the verbal agreement. I take

the latter as evidence of the complete loss of any kind of implicit head. I have described this change as a transition from a "pro_{arb}" ("inflected" for number and case and controlling the indexation) to "PRO_{arb}" (with no bearings on indexation, case, number, etc.) and, finally, to nothing.

I have not taken into account the external causes that may have guided such a loss (see Seržant 2015). Suffice it to say, however, that it appears to be quite striking that the whole process of loss of the implicit head has, in the end, a convergence effect in that the morphosyntactic properties of the Proto-Indo-European IPG are found to adhere to those found in the Finnic languages. This story is, however, more complex and simple reasoning in terms of contact-induced loss does not provide a proper account here.

In this paper, I have not discussed the changes that the semantic and lexical profiles have undergone, although these changes are quite considerable. For an overview the reader is referred to Table 5 above and Seržant (2015).

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Abbreviations

ACC – accusative, ACT – active, ADESS – adessive, ADJ – adjective, ADV – adverb, AOR – aorist, CONV – converb, DAT – dative, ERG – ergative, F – feminine, GEN – genitive, IMPF – imperfect, INF – infinitive, M – masculine, N-AGR – non-agreeing, NEG – negation; N – neuter, NOM – nominative, OPT – optative, PART – partitive, PASS – passive, PFV – perfective, PL – plural, PRON – pronoun, PRT – particle, PRTC – participle, PRS – present, PST – past, RESULT – resultative, SG – singular.

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