

## PROTO-INDO-EUROPEAN ERGATIVITY... STILL TO BE DISCUSSED

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### ABSTRACT

Since Uhlenbeck's seminal article ("Agens und Patiens im Kasussystem der indogermanischen Sprachen", 1901) many scholars have accepted the hypothesis of an ergative case in Proto-Indo-European (PIE) given the light it could shed on obscure facts discovered by the comparatist school inside the IE family. The Soviet linguistic school has been particularly active on ergativity in relation with their interests for living languages of the Caucasus and for ancient languages of the Middle East. More recent works on ergativity have shifted the focus to Australian languages. When the theory of language universals took ergativity into consideration, scholars began to seek an explanation of the so-called "split ergativity" in relation with Silverstein's animacy hierarchy. A sequel of this was that the kind of split ergativity demonstrated by PIE seemed contrary to the accepted universals and, consequently, discarded. This paper challenges the way language universals have been used to refute the PIE ergativity hypothesis. Indeed, the influence of the animacy hierarchy is known to be effective in many languages, but more as a tendency than as an absolute universal. Also, PIE is not a fully-fledged language, but rather a field of experimentation. I also present the viewpoint that PIE could have had no split at all, but solely a semantic impossibility to use inanimate noun phrases in an agent role, which seemed backed up by similar "embarrassments" in modern languages and by the so-called "Hittite ergative".

KEYWORDS: Proto-Indo-European; ergativity; typology; Silverstein's hierarchy.

### 0. Introduction

The way in which Proto-Indo-European (PIE) marks the opposition between agent and patient, as well as some other peculiarities of this reconstructed language, led scholars to suspect an ergative origin of PIE. This hypothesis has been in favour for nearly one century, but as of 1980 it has been refuted on the basis of typological argumentation. This paper will first remind the reader of the different strategies of role marking, among which we find ergativity, and of the PIE facts which can be related to ergativity. It will then present the arguments of the refutation and challenge this argumentation.

## 1. Ergativity

Let us begin with a reminder on ergativity in order to present the terminology that will be used throughout this paper. If we consider a transitive verb like *beat*, it has two main arguments: an *agent* (A for short) which controls the action, and a *patient* (P for short) which undergoes the action, is submitted to it. If we now turn our attention to intransitive verbs, they have only one main argument which we will represent by S (initial of *subject*)<sup>1</sup>.

So we now have three roles and we have potentially one specific form or marking for each of them. If this is the case in a given language, we say that it belongs to the *tripartite type*. If all three forms coincide, we have the *neuter type*. And if only two forms are available, it is clear that two roles share the same form. If S=A, we say that the language belongs to the nominative-accusative type (*accusative type* for short), and if S=P it belongs to the absolutive-ergative type (*ergative type* for short). We can illustrate this by contrasting three sentences in two different type languages, i.e. the ergative Basque and the accusative Esperanto:

Basque	Esperanto	Translation
Gizona etorri da	La viro venis	The man (S) came
Gizonak gozokia jan du	La viro manĝis la kukon	The man (A) ate the cookie
Nik gizona ikusi dut	Mi vidis la viron	I saw the man (P)

We can see that we have in Basque *gizona* ‘the man’ for S and P role and *gizonak* for A role, whereas in Esperanto we have *viro* for S and A role and *viron* for P role.

## 2. Importance to distinguish between A and P

In fact, there is a third possible system where A=P would oppose to S, but it seems that no existing languages follow it. The reason could be that distinguishing A from P is so important. Indeed we see that, both in ergative and accusative languages, A and P roles have different forms. For example, hearing a sentence like *Piotr beats Paweł*, we want to know who beats whom, and if the word order (in English) or some other marking (in other languages) did not help, we would be in trouble. On the contrary, we usually would not have trouble understanding *Piotr beats the carpet*, even if the language provided no formal means to distinguish A and P.

We can say that the importance of a formal distinction between A and P is conditioned by the “animateness” (animacy) or “personalness” of the involved arguments. It is well known that Slavic languages, despite the phonetic attrition of Indo-European (IE) nominative and accusative endings, have restored an opposition between A and P

<sup>1</sup> How can we compare the semantics of S with that of A and P? In fact it is dubious and depends a lot on the verb itself. In a sentence like *she climbed on the table*, there is no doubt that this S controls the action, exactly like an agent A. On the contrary, in *John fell down on the slippery curb*, poor John is rather a patient P.

roles for substantives with animate referents (Hjelmslev 1971). However it is necessary to remember that word order (constituent order) and semantics are useful to help distinguish those two roles and, even in languages which generally use a specific marking, there may exist areas where the distinction is blurred: e.g. in classical IE languages neuter nouns and nouns in dual number show no such distinction at all.

### 3. Role marking

With regard to the way of marking the role of a noun phrase (NP), in addition to word order which is often relevant, many languages have specific means like declension, use of adpositions and also verb cross-referencing. In ergative and accusative systems, there is a common term (respectively S=A or S=P) and a second term (respectively P or A), and, in languages with case marking, usually only the second term is marked, as we saw above for Basque and Esperanto.

Contrary to such languages, which are very simple and economical in their marking, and could be qualified “ideal” in this respect, many languages show subtle conditioning of role marking with respect to other traits. In Polish, for example, which is an accusative language, marking for the P role may be conditioned by gender, animacy or personalness. We have e.g. *stół jest tu* ‘a table is here’ and *ja widzę stół* ‘I see a table’ with the same form for S=A and P. But the word *student* ‘student’, belonging to the same gender as *stół*, behaves differently: *student jest tu* and *ja widzę student-a*, with a specific marker for the P role. Spanish, another accusative language, marks with the *a* preposition the P role noun phrases with personal referents: *veo una mesa* ‘I see a table’, but *veo a un estudiante* ‘I see a student’. Turkish, another accusative language, conditions P role marking not on the basis of animacy but of definiteness: e.g. *masa görüyorum* ‘I see a table/tables’, but *masa-yı görüyorum* ‘I see the table’, and this is even more interesting since Turkish has no systematic way of marking definiteness. Let me also cite the case of Ido, a planned language derived from Esperanto, which uses the P role marker *-n* only when the concerned noun phrase is placed before the noun phrase performing the A role: *il me vidis* or *il vidis me* ‘he saw me’, but *me-n il vidis* ‘it’s me he saw’. One could mention here a tremendous number of languages where object marking is conditioned by definiteness, animacy or some other trait. Interested readers should refer to a study by Bossong (1998) which is unfortunately limited to languages from Europe.

Not surprisingly, marking specificities of this kind is not limited to accusative languages. Dixon (2002: 59) reports that in some Austronesian and Australian ergative languages marking of an A role NP is triggered only if its role cannot be inferred from any other grammatical or semantic information in the sentence. According to Meščaninov (1967: 155), the Caucasian language Batsbi always perform A role marking, but a specific class of substantives with personal referents uses a suffix *-s* differing from that of the rest of substantives.

If we turn our attention to ancient IE languages, like Latin, ancient Greek or Sanskrit, we can see another way to deviate from the “ideal” model: we do have zero marking for the nominative in some declension paradigms (e.g. *rosa* ~ *rosa-m* ‘rose’), but in others, nominative seems to be marked as well as accusative (e.g. *lupu-s* ~ *lupu-m* ‘wolf’, *ovi-s* ~ *ove-m* ‘ewe’, *princep-s* ~ *princip-em* ‘chief’), sometimes with the bare stem still appearing in compounds or in the vocative case (cf. Sanskrit nom. *aśva-s*, acc. *aśva-m*, versus voc. *aśva* ‘horse’). The Australian language Arrernte (also spelled Aranda), though it is ergative, has also the specificity of marking P role noun phrases, but only when their referents are personal (Katznelson 1947b: 45).

#### 4. Split ergativity

Going further in the study of deviations with regard to the “ideal” model, we now turn our attention to languages which exhibit a certain type for some A role noun phrases, and another type for others, like e.g. the Australian language Dyirbal which performs accusatively for personal pronouns of first and second persons and ergatively for all other NPs (Dixon 2002: 86). This kind of deviation is called *split ergativity*.<sup>2</sup>

The criteria for the split or, in other words, for partial ergativity, are not so numerous. Several languages show an ergative or accusative construction depending on the time or aspect of the verb (e.g. Georgian and some modern Indo-Iranian languages). Other make it depend on the word nature of the agent: substantive or pronoun (e.g. Sumerian), or on the animacy or personalness of the agent. The two last criteria may be fused in one, viz. in the semantics of the A noun phrase compared to a conventional animacy scale (Silverstein’s hierarchy) which ranks substantives and personal pronouns from the most to the less animate. Let me cite in full the text describing this hierarchy in The Universals Archive (#217):

This hierarchy expresses the semantic naturalness for a lexically specified noun phrase to function as agent of a true transitive verb and inversely the naturalness of functioning as patient of such. The NPs at the top of the hierarchy manifest nominative-accusative case marking, while those at the bottom manifest ergative-absolutive case-marking.

As usual, this Archive provides a standardized wording which is surprisingly stronger, asserting what we could call in mathematical terms the monotony of the marking function with respect to the animacy order relation:

<sup>2</sup> In fact all languages which exhibit some kind of ergativity are classified under the ergative type, and this is the reason why we speak about split ergativity and not split accusativity. Regarding the A role, the ergative-accusative split is the commonest, but one could extend the notion of split to the P role and to other types. We will see later that some authors term the classical IE system a split accusative-neuter type.

IF one of the elements of the hierarchy takes ergative case-marking, THEN all units to its right also take ergative case-marking as well; and IF one of the units takes accusative case-marking, THEN all units to its left also take accusative case-marking.

## 5. IE facts and PIE ergative hypothesis

Now that we presented ergativity and split ergativity we can go back to our core subject: ergativity of PIE. We saw above that animacy has often a role to play in role marking, and as it is the case in Slavic languages, is then combined with gender. So let us begin by reminding that in classical IE languages we find a tripartite gender opposition (masculine, feminine and neuter), which has been reduced or eliminated in many modern IE languages, but still remains in Slavic and some Germanic languages.

However, following Meillet (1931: 6) and the majority of Indo-Europeanists, I assume that the differentiation between masculine and feminine occurred relatively late in the history of IE and that the primary opposition was between animate gender (later masculine and feminine) and inanimate (later neuter), as was still the case in Hittite.<sup>3</sup>

In addition to this, Indo-European shows some peculiarities with regard to the ideal model of an accusative language, for example, as already said, the striking nominative marker *-s* for animate substantives, but also the formal identity of nominative and accusative of inanimates, which, in the sonant and consonant paradigms gives a bare (endingless) stem reminding us of the absolutive case of ergative languages (cf. *mare*, *genu*, *caput* in Latin).

As the first one, Uhlenbeck (1901) tried to explain those peculiarities by an ergative stage in Proto-Indo-European, and his hypothesis has been considerably developed by subsequent scholars, in particular by Vaillant (1936) who saw that the hypothesis could also give clarification of pronominal suppletion (e.g. *ego* ~ *me* in Latin) and of the existence of two different conjugation paradigms (thematic/athematic in Greek, Sanskrit and Old Slavic, or *-hi/-mi* in Hittite). The ergative hypothesis was also favourably appraised by Soviet scholars in their attempts to explore genetic relations or cross contaminations between IE and Caucasian languages, even after the fall of the Marrist school (cf. a refutation of stadiality by Kuryłowicz 1946), e.g. in post-Marr works of Savčenko and Tronskij (1967). More recently, Kortlandt (1983) summarizes the view-

<sup>3</sup> Justifying this viewpoint would lead us far outside the framework of this article. To get a survey of the different attempts made to find leftovers of a feminine gender in Hittite, refer to Ledo-Lemos (2003: 41–94). I also put aside all possible controversies about assessing if the animate-inanimate opposition has a semantic basis or is purely grammatical: it seems obvious to me that most ancient IE neuter substantives have inanimate referents and that the animate substantives with an inanimate referent can be explained in one way or in another. The semanticity of gender assignment is very low in modern IE languages, but it was not necessarily the case in earlier stages of Proto-Indo-European, where gender was probably not an established category yet, and it is still not the case in languages of other families. For a comparison between gender assignment in Algonquian and in IE refer to Kilarski (2007).

points of Uhlenbeck, Pedersen and Vaillant, and on this basis incorporates in the system aspect relations and the active/middle diathesis in order to reconstruct the PIE verbal syntax and to position it in a wider Indo-Uralic perspective.

Since I cannot present here all the details of the theories of the mentioned scholars, I will content myself with a summary of their main points, as I see them, that is to say:

- In its early stage PIE had an opposition between ergative (-s suffix) and absolutive case (zero suffix).
- Inanimate substantives were semantically barred from playing the A role, because this role necessitates capacity to intentionally control the action; so inanimates had only absolutive case, corresponding to their S and P functions.
- The accusative marker -m arrived later, possibly in animates first, and then extended to thematic inanimates; the absolutive case of animates remained only in vocative, in some compounds and probably also in some archaic uses (Savčenko 1967: 75–80).
- The ergative marker -s is akin to the posterior ablative-genitive ending, and the -m marker could have had an allative meaning, which is coherent with a possible nominal origin of the transitive clause (X beats Y < beating from X to Y).
- At some stage the -s marker spread to intransitive subjects (S role) and the system switched to an accusative type.

## 6. Challenging the ergative hypothesis

The ergative hypothesis has long been accepted as such, but recently some scholars began to directly criticise it. I can mention Francisco Villar, University of Salamanca, Spain, and Alan Rumsey, Australia. I had no possibility to consult the originals of Villar's papers on the subject, but I am confident that the report of them which is done in Rumsey (1987), Ledo-Lemos (2003), Sánchez-Lafuente Andrés (2006), Bauer (2000) and Filimonova (2005) is reliable enough. I will here focus on the arguments set forth by Rumsey.

One important argument is that, contrary to what is currently assumed to explain why neuter NPs have no ergative case, it is false to say that inanimates cannot be agents. Let me quote Bauer (2000: 46):

The assumed correlation between “animate” and “agent” and between “inanimate” and “non-agent” may not have a factual basis. [...] On the basis of cross-linguistic evidence, Villar has demonstrated that inanimates in ergative languages “do appear in the ergative” (1984: 178).

A second important argument is that if PIE had an ergative type, the absence of ergative case for neuter NPs should be interpreted as a split in the system, with the split point

positioned between animate and inanimate substantives. Indeed the “ergativists” usually consider that personal pronouns had an ergative case (based on the anomaly of forms like Greek *εγώ*, Latin *ego*, Sanskrit *aham*, Hittite *uk*, versus the rest of the paradigm). The PIE language would then have had an ergative type for personal pronouns and animate substantives, but an accusative type, or rather a neuter type, only for inanimate substantives at the bottom of Silverstein’s hierarchy. And yet this is completely contradictory to the above mentioned universal: in a split ergative language everything lower in animacy than the split point should abide to the ergative system, but what we get for PIE is exactly the reverse!

Also, following the neo-grammarians school, Rumsey (1987: 298) makes the important assumption that PIE is a language like any other and thus should be typologically plausible. The contradiction between the ergative hypothesis and one of the language universals leads him to conclude that the hypothesis cannot stand.<sup>4</sup>

In fact many scholars subscribe to this analysis. In addition to the ones mentioned above, let me name Dixon (2002: 3): “There have been various suggestions, of different kinds, that proto-Indo-European had ergative characteristics; none stands up under detailed scrutiny”, but he adds no argument of his own and refers to Rumsey (1987). Lehmann, who formerly supported the hypothesis, writes (Lehmann 1974: §5.2): “Evidence for that assumption is inadequate”. But once this hypothesis has been destroyed, one has to find something else. According to Villar the split is accusative-neuter. Other scholars tend to favour the hypothesis whereby PIE was an active language, i.e. a language where S=P or S=A according to the semantics of the verb.<sup>5</sup>

## 7. How universal is a universal?

Maybe before we question the adequacy of using a universal as an argument in this kind of discussion, we should ask ourselves if PIE is really a language. And I am afraid that the answer must be negative. Though much progress has been made in Indo-European studies during the twentieth century, I still believe in the validity of Meillet’s view (1937: 47) that:

Ce que fournit la méthode de la grammaire comparée n’est pas la restitution de l’indo-européen, tel qu’il a été parlé: c’est un système défini de correspon-

<sup>4</sup> Rumsey (1987: 299) compares his reasoning to Jakobson’s dismissal of the PIE three-series stop system (voiced, voiceless, voiced aspirate) on the basis that no language with such three series lacks the fourth one: voiceless aspirate.

<sup>5</sup> About active languages, cf Dixon (2002: 70) who uses a different terminology. The concept of active languages stem from the works of Klimov, Gamkrelidze and Ivanov. Bauer supports this hypothesis in relation with her conviction that transitivity was not a salient feature of PIE, though both accusative and ergative languages deeply rely on transitivity (Bauer 2000: 59–60). For a sketch about the specificities of active languages and an active stage in early PIE refer to Lehmann (1995: 213).

dances entre les langues historiquement attestées. Tout ce qui est exposé dans cet ouvrage, sous quelque forme que ce soit, doit être entendu en ce sens, même dans les passages où, pour abrégé, l'indo-européen est posé comme connu.

In my opinion, PIE is rather a formal construct and a laboratory tool than a fully-fledged language. It is enough to read Szemerényi (1999) to get a taste of the thousands of detail points on which the scholars' opinion differs, and this is nothing abnormal. It is everyone's goal to describe PIE as a real language and try to achieve maximum internal coherence, but it is probably too strict to demand that PIE would obey all known language universals. Besides, if it was such a language, it should definitely be included in the language sample on which the universality of a given property is assessed.

Now we can turn to the notion of language universal itself. I believe that the presentation of it given by Comrie (1989) is cautious and well-balanced. As every scientist knows, when one wants to assert a scientific law, the biggest difficulty resides in finding the proof. This is particularly the case with language universals stating something like: for every human language  $X$ ,  $P(X)$  is true. Do we know all human languages, present, past and future, and all their transient stages? Certainly not. The meaning of such an absolute universal may be only:

For every language  $X$  of our well constructed sample,  $P(X)$  is true, and we have no knowledge yet of a language  $Y$  outside our sample for which  $P(Y)$  would be false.

Besides, Comrie (1989: 20) does not say anything quite different:

It is virtually impossible in many instances to distinguish empirically between absolute universals and strong tendencies. The fact that a universal at present appears to be absolute may reflect one of two possibilities: either the universal is absolute, or we happen not yet to have discovered the exceptions to it (and those exceptions may not even be represented among the class of languages currently available to us).

He also emphasizes the importance of using a good language sample.

In all those respects one should also hold in mind that it is possible to construct a brand new planned language, or modify an existing language, in such a way as to result in breaking an established universal. What would then be the consequence for the language? Probably null as long as the language can be learnt. Referring to Jakobson's statement above, I see no impossibility for a language with only three stop series to be learnt and spoken. Possibly in the long term, if the language became the mother tongue of a human group, the violating feature could be eliminated, but as a transient feature it surely does no harm.

Given all those caveats, it does not seem quite adequate to use a language universal as an argument to oppose a hypothesis, in particular relating to PIE.



## 8. Exceptions to Silverstein's hierarchy

As I had occasion to say earlier, there seem to exist a lot of typological exceptions with respect to the ideal system, in particular in ergative languages: optional ergative marking, accusative marking conditioned by personalness, animacy-conditioned split... But Silverstein's hierarchy itself (and the related universal) shows exceptions, as reported by Filimonova (2005).

- Some languages obey the rule but have their own hierarchy: e.g. in Gumbaynggir, kin terms are higher in the hierarchy than 3rd person pronouns; in Diyari, feminine nouns are higher than masculine.
- Silverstein takes into account only NP marking, but ergativity may be expressed also through verbal cross-referencing and, according to Bickel (cited by Filimonova 2005: 83), the latter would be at odds with Silverstein's scale.
- In the some Indo-Aryan languages one can notice extension of ergative to S function; also, personal pronouns are in an ergative system, but other NP in an accusative system (the reverse of Silverstein's scale).
- In Nganasan (a Samoyedic language), substantives follow an accusative type and pronouns a neuter one.
- In Arrernte there are two splits: one between first person's pronoun (ergative) and other personal pronouns (nominative), and then the ergative system comes back for nouns (also noticed by Dixon 2002: 90).

For all that it would be interesting to see how Silverstein's principle would behave if we enlarged the hierarchy with all the correlative pronouns (*someone/something, who/what, this, no one, none, all...*). It is known that many languages show an opposition personal/non-personal for those pronouns and they obviously deserve to be incorporated in the hierarchy in the same capacity as the personal pronouns.

Clearly, one cannot claim that Silverstein's principle, as it was expressed above, is an absolute universal. This is probably the reason why Rumsey (1987: 314) chose to use a narrower version of it which he words as follows:

No language with ergative case marking for personal pronouns and animate nouns lacks ergative marking for inanimate nouns.

In this form, this is an implicational universal of the form "IF ergative case marking for personal pronouns and animate nouns, THEN ergative case marking for inanimate nouns as well". Indeed, due to the clever narrowing, all the limitations shown above fall. An implicational universal like this one forbids one possibility (ergative marking for pronouns and animates, no ergative marking for inanimates), but allows three possibilities: (1) no ergative marking at all (= non-ergative language), (2) ergative marking only for the inanimates, (3) ergative marking for all NPs. Possibility (1) is met by many

languages, but it is not an interesting application field for the universal. Possibility (2), according to Rumsey himself (1987: 311), is met by Mangarayi, Eastern Pomo, Arrernte and Hittite only, with serious doubts on my side about Arrernte (as said below), and reservations about Hittite, to which we will come back later. Possibility (3) is met by all ergative languages showing no animacy-conditioned split, but again this category is rather scarce, because most of ergative languages show such a split, either inside the personal pronouns, or between pronouns and nouns.

So my appreciation would be that the implicational universal put forth by Rumsey is a cleverly tailored restriction of Silverstein's principle, but its validity domain is quite narrower and this considerably weakens its validity in the present discussion.

#### 9. What about the alleged impossibility for inanimates to take on A role?

As we already saw, Rumsey, after Villar, simply dismisses it but shows no precise example. His main argument is that according to Silverstein's hierarchy the inanimates are the ones that most require agentive marking and that several languages are ergative only for inanimate nouns. Let us note in passing his assertion that this would be the case also for Arrernte, which my literature (Katznelson 1947b: 46) tends to refute.

It is amazing that many scholars seem to follow him on this topic (Ledo-Lemos, Sánchez-Lafuente Andrés, Bauer, Filimonova...) though earlier scholars manifested a similar certainty to the contrary. For example, Tchekhoff (1978: 233–234) asserts that Classical Georgian and Tongan manifest such an impossibility for inanimates to take on A roles. Regarding Basque she says that according to one informant it is impossible to use the word *knife* as an agent, but a second informant, younger, does not see impossibility. Tchekhoff leaves the question open: dialect or generation difference, influence of Spanish? Regarding Cherkess she makes it clear that only some inanimates may appear as agents (*thunder, knife...*). As regards the Avar language, where ergative and instrumental have the same form and may be distinguished in the same sentence only by word order, she asserts that an inanimate in that case is perceived as an instrument. Nonetheless she generally admits the possibility for an inanimate to be used as an agent, but metaphorically.

This striking discrepancy between scholars prompted me to revisit the problem, as Rumsey did, but with a different conclusion.

Uhlenbeck (1901) first noticed: "The neuter nouns in general refer to inanimate things, to which a transitive action could hardly be attributed". Vaillant (1936) agreed, but he drew attention to the possibility of saying *bread nourishes man* in Basque with an ergative form of *bread* (*bread-ERG feeds man*). He explains it either by a personification, or according to the view that the ergative construction had a passive origin, so the meaning of an inanimate in ergative case was rather that of an instrumental case (*man is-fed bread-INST*, 'by means of bread'), than of an agentive case ('by the action

of bread'). This explanation is not satisfactory because in modern Basque instrumental and ergative are distinct cases, but this opens a window to a more general debate.

Indeed in many languages the ergative case is closely related to an oblique case with concrete meaning (instrumental, ablative or locative): e.g. Basque: ERG *-k*, ABL *-tik*; Arrernte (Katznelson 1947a: 37; Savčenko 1967: 83): ERG *-la*, INSTR/LOC *-la*, *-lela*; Batsbi (Meščaninov 1967: 155): ERG/INSTR *-v* (except for some nouns of the personal gender which have ERG *-s*). In languages where ergative equals instrumental, or is genetically related to it, it is nearly meaningless to dispute if inanimate agents are possible or not, or at least the discussion should be firmly based on verb diathesis arguments.

Now what can be said in languages where ergative is related to another concrete oblique case? First let me state that I assume here that the nominal origin of the verb, or at least of the ergative construct, is a rather solid hypothesis. Evidence must probably be looked for outside the IE family and Katznelson (1947b: 44) show interesting facts for this in the Arrernte language where predicative nouns obviously derived from nouns or pronouns mean action without differentiation of transitivity: e.g. *erama* 'seeing, being in sight' from *era* 'he (visible)'. Given this hypothesis, a clause like *the arrow killed the bear* should be interpreted as "killing towards the bear by means of an arrow" or "bear killing by means of an arrow". In languages where ergative equals ablative or locative, using an inanimate agent may cause misinterpretation. In *the man killed the bear* i.e. "from/in the man there was killing towards the bear", it is clear that the concrete oblique case shows that the intention to kill came *from* the man, or lied *in* him. On the contrary if we look at *the tree killed the bear*, even in English we have to add something like "when it fell" to make it clear, and if we use a similar gloss "from/in the tree there was killing towards the bear", there is a risk of misunderstanding. Since there is no volitional agent involved and no intention to kill, preferably the concrete meaning of the oblique case will resurface: the killing occurred at the tree, or somewhere "from" it (at a distance from it).

#### 10. Embarrassments in semantic-syntactic relations

Dixon's material (2002: 23) about syntactically and semantically based marking provides interesting views for the question we just tackled. In languages with syntactically based marking one departs from a prototypical verb meaning (e.g. *he hit me with a stick*: volitional agent, patient, instrument) and one can sometimes extend the structure to non-prototypical uses where the arguments are not of the same kind as in the prototypical meaning: e.g. in *the falling branch hit me*, the verb's subject is no more a volitional agent.

On the contrary, in languages with semantically based marking (like Manipuri, a Tibeto-Burman language), the marking expresses the real semantics of the argument: if something is marked as a controller of an action (an agent) it cannot be someone who

did the action unintentionally and all the more so an inanimate thing. So the idea that in some languages there could exist an impossibility to use inanimates as agents is not typologically absurd.

But even in languages with syntactically based marking, there exist some impossibilities or “embarrassments” in using certain types of words in certain syntactic roles. E.g. Dyirbal has no ergative case for demonstratives (Dixon 2002: 152). As a result, the language has to use an antipassive construction, i.e. a diathesis specific of some ergative languages whereby A is changed to S. Very similarly, Russian shows reluctance to use inanimate agents and prefers using impersonal or middle diathesis to show the inanimate like an instrument of some unexpressed agent: e.g. *Таню убило молнией* (literally: Tanya-ACC killed-3P-NT lightning-INSTR: ‘it killed Tanya by means of lightning’), with a subjectless verb, sounds better than *молния убила Таню* ‘lightning killed Tanya’ (Comrie 1989: 79); *утёсы омываются морем* (rocks-NOM bathe-themselves sea-INSTR), with a reflexive verb, sounds better than *море омывает утёсы* ‘the sea bathes the rocks’ (Seriot).

Even French, which shows no discomfort in using an inanimate as the agent of an active voice verb, sometimes uses a different form for the agent complement in a passive sentence, depending on the fact if it is animate or inanimate: e.g. *un homme l’a suivi dans la rue*, and in passive *il a été suivi par un homme dans la rue* ‘he was followed by a man in the street’, but *un film suit le journal télévisé*, and in passive *le journal est suivi d’un film* ‘the news report is followed by a movie’. It is interesting to note that prepositions *par* and *de* can both introduce agent and instrument complements (though *de* is very rare in the latter function), but the most prototypical preposition for instrument, i.e. *avec* ‘with’, cannot be used at all for an agent.

To finish this point I would like to cite related facts from Esperanto. In this language, inanimates may be agents of an active or passive verb without any problem, but contrary to French or English the language is cautious in distinguishing in passive between agent (introduced by preposition *de* or prepositional phrase *fare de*) and instrument (introduced by preposition *per*) of a potential human agent. In the phrase *naĝbaseno kovrita (fare) de mi* ‘swimming pool covered by me’, the agent is “me” and the preposition is *de* (or *fare de* which possibly stresses the intentionality of the action). Now in *ŝtuparo kovrita per tapiŝo* ‘stairs covered by/with a carpet’, we use an instrument construction because the carpet clearly was an instrument of some unspoken agents, though in active voice it is quite possible to say *la tapiŝo bele kovras la ŝtuparon* ‘the carpet neatly covers the stairs’. Now in autumn, we could find that *la ŝtuparo estas kovrita de folioj* ‘the stairs is covered by leaves’ and here the leaves, though inanimate, are considered agents, because no other more volitional agent can be found who could have used them like instruments (a kind of last-resort agent so to say).

I believe this section makes it clear that semantic-syntactic “embarrassments” are a reality in many languages and that, especially in relation with inanimate agents, they have at their disposal different workarounds. The remedies revolve around impersonal or middle diathesis and in the transformation of the inanimate non-volitional agent into

an instrument of an unspoken volitional agent. It is quite plausible that PIE could use the same remedies.

## 11. The Hittite “ergative”

As set forth by Laroche (1962), in Hittite, neuter substantives could not be used in the A function in their nominative form. When such a substantive had to be used in this function, it took a special suffix (*-anza* (*-ants*) in singular, *-antes* in plural) which turned it into an animate noun (as proved by agreement). Many scholars agree on the fact that this special derivative is probably not a real ergative case.

In my opinion this Hittite fact constitutes an indirect proof of the original impossibility to use inanimates in A function. We saw in the previous section that this impossibility is quite normal in languages with semantically based marking. Other languages avoid the impossibility by using the inanimate term in another function (instrument of an impersonal or middle verb). Hittite has found another means to express the same thing: it promotes the inanimate noun to an animate derivative with the same meaning.

Rumsey is of course well aware of this feature of Hittite and somehow uses it against the PIE ergative hypothesis (Rumsey 1987: 311) by exhibiting Hittite as an example of language with the same split point as PIE but fully obeying Silverstein’s principle. This may be true, if we accept the true ergative nature of this feature, but what we see in it is rather a confirmation of the semantic-syntactic embarrassment posed by inanimate agents and a novel remedy to solve it.

## 12. Conclusion

I believe that the refutation of the PIE ergativity hypothesis by Villar and Rumsey is inconclusive, in part because of the inadequacy of using a language universal as an argument in such a question, especially regarding a reconstructed language like PIE and a universal which has been tailored to expel all the known exceptions to Silverstein’s principle.

But the main flaw might be the assumption that if it is ergative, PIE must be of a split type. If we discard this split and consider that the neuter behaviour of neuter nouns is really motivated by a semantic-syntactic embarrassment shown in other languages, and confirmed by the Hittite ergative, it becomes clear that the whole refutation falls apart.

Now we cannot predict if the ergative hypothesis still has something new to bring to our understanding of PIE facts. Possibly the dreams about connecting IE, Caucasian, Semitic and Uralic languages which once drove the ergativists are now obsolete, but it is not a reason to prematurely close this thrilling episode of IE studies.

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