#### "OVS" – A misnomer for SVO languages with ergative alignment

#### Abstract

Contrary to the classifications in the literature, OVS languages, construed as languages with an [O[VS]] clause structure, do not exist. Virtually all languages filed as "OVS" in typological surveys turn out to be SVO languages with ergative alignment that have been misclassified due to inadequately chosen diagnostics for "S" and "O". For the same reason, it has been falsely maintained that ergative SVO languages do not exist. What does not exist is [Erg [V Abs]] languages. Modulo alignment, this is the equivalent of likewise inexistent [Acc [V Nom]] languages. It will be shown that an empirically adequate concept of 'grammatical subject' avoids the drawbacks of such misconceptions and incurs welcome fringe benefits. It will, for instance, become patent why – modulo alignment – passive and antipassive are identical grammatical functions.

#### 1. How (not) to do comparative grammar research

There is an ongoing debate on how to study linguistic diversity. Levinson and Evans (2010: 2733) make out a great divide between what they call C- versus D-linguists, viz. Chomskyan vs. diversity-driven. Understandably, they find fault with the dogmatic approach of C-linguists, since they "draw on a very small subset of the data, presume [...] that the structural analysis of one language can be imported directly into the analysis of another, presume an innate set of principles exclusive to language" and "consequently are interested in internal, structure-based explanations, which often seem circular to outsiders" [Levinson and Evans (2010: 2734)]. D-theories, on the other hand, are "more surfacy (and thus more falsifiable)" and they use "only minimal formalism". "D-linguists prefer Boasian 'methodological relativism' – first analyse a language in its own terms, then compare" [Levinson and Evans (2010: 2733)].

The diagnosis is appropriate but the cure is not better than the disease. "*In its own terms*" is a carte blanche. Philosophy of science tells us that every scientific observation is theory-laden.<sup>1</sup> A grammar is a theory of the described language, even if it is formulated in terms of a "Basic Linguistic Theory" since even commonsensical approaches lead astray, as will be shown.

Languages can and in fact must be compared with respect to their structures and categories but only after it has been ensured that like is compared with like. This is exactly *not* what we do if we analyse them "in their own terms". What is a like term is determined by a theory. Davis et al. (2014: e180) suggest the following maxim. "*A scientific approach to the study of linguistic diversity must be empirically grounded in theoretically informed, hypothesis-driven fieldwork on individual languages.*" This is a scientific road to success.

"*Empirically grounded*" and "*theoretically informed*" (without dogmatic subserviency) are the key concepts. C-linguists tend to sacrifice empirical grounding for doctrinaire subservience to cross-linguistically poorly founded axioms. D-linguists tend to forgo theoretically informed grammatical analyses. Why are they reluctant to apply formal categories? One reason seems

<sup>&</sup>lt;sup>1</sup> See "theory ladenness of observation", Brewer & Lambert (2001). "Dryer (2006) refutes the myth that people who write grammars work without a theory and emphasises that there is no such thing as atheoretical or theory-neutral description. According to Gil (2001: 126), it is an illusion to believe that description can be separated from theory and to engage in the former without the latter." (Nikolaeva 2015: 2041).

to be the idea that observation and description could be done in a theory-neutral way, while formal categories are often model-dependent.

Dryer (2006: 210) envisages a return to traditional grammatical concepts: "While the typological work of the 1970's freely supplemented traditional grammar with notions required to describe many non-European languages, such as ergativity, an example of the link to traditional grammar was the bringing back to central stage of the notions of subject and object."

Another motive of reluctance is the "Boasian methodological relativism" that D-linguists are said to endorse. Davis et. als. (2014: e185) complain that "Haspelmath (2010: 663), for example, claims that 'descriptive formal categories cannot be equated across languages because the criteria for category-assignment are different from language to language', and Croft (2013: 216) propounds that 'there are no grammatical categories independent of constructions, since each construction defines its own distribution'. But their premise is wrong."

A third reason for the aversive response to formal concepts and categories seems to lie in their grammatically cross-linked properties which make them difficult to assess for a given language without detailed information. A "*more surfacy*" approach is technically easier to handle since content is easy to grasp while structures are hard to assess. Syntactically, however, forms and their structures matter more than their semantic content. Grammars define structures, and structures constrain the form of the presentation of content rather than the other way round. Haspelmath (2014: 495) contradicts:

The basic principle is [...] that languages can be readily compared only with respect to meanings and sounds/gestures, but not with respect to their categories, because only meanings and sounds, but not categories, are universal. Thus, instead of saying that English has SVO order, while Japanese has SOV order, we must say that English has agent-action-patient order, while Japanese has agent-patient-action order.

Regrettably, instead of insisting on the inevitability of providing structurally sound definitions as the basis of any comparative grammar research, he decidedly suggests sticking to Greenberg's *preliminary-shortcut* approach,<sup>2</sup> citing only the first sentence of the quote below. Greenberg himself has been very clear on his recourse to easily applicable criteria for the identification of the subject of a clause and he was well aware of his provisional strategy being just a time-saving shortcut:

I fully realize that in identifying such phenomena in languages of differing structure, one is basically employing semantic criteria. There are very probably formal similarities which permit us to equate such phenomena in different languages. However, to have concentrated on this task, important in itself, would have, because of its arduousness, prevented me from going forward to those specific hypotheses. Greenberg (1963:74)

As a provisional strategy, it has been a practicable option but not a sustainable one. Sixty years after, we are in a position to concentrate "*on this task, important in itself*" and we have the means to do so. What matters is not "readily" but "empirically adequately." There is a direct parallel to comparative biology.

<sup>&</sup>lt;sup>2</sup> Queixalós and Gildea (2010: 8) are explicit in this respect: "So for now we adopt the theoretically problematic but heuristically useful practice of relying on intuitive-impressionistic identifications of A and P."

Although cross-species differences may be at least as diverse as cross-linguistic differences, biology nevertheless compares *homologically* rather than *analogously*. Analogous structures are seen as the result of (convergent) evolution. Not everything that has fins and lives in water is a fish. There are aquatic mammals that merely look like fish. Biologists compare and identify the corresponding anatomy in the fins of whales, the flippers of seals, the wings of bats, and the claws of cats, but they do not equate the anatomy of the wings of a butterfly with the wings of a bat, falcon or fly. Identical functions do not presuppose identical structures and identical structures may have non-identical ecological functions. Comparative linguistics is bound to fail when it takes the identity of communicative functions or content as the tertium comparationis. What one ends up with is a catalogue of *accidentally* analogous properties.

It is the grammatical system and not the respective communicative functions<sup>3</sup> that determines the categorizations and structures (see Haider 2021a: 110; 2021b: 109-113). The time has not yet come for this view to be shared by contemporary schools of linguistics. Right here, we have arrived at the core issue of this paper. If languages are compared "*only with respect to meaning*", the outcome is likely to end up in a confusing maze of patterns, since syntax – the result of cognitively evolutionary grammaticalization (Haider 2021a,b) – overrules semantic distinctions cross-linguistically. It will be shown that a suitably formal approach in terms of syntactic categories<sup>4</sup> rather than semantic content will cut confusion and lead to a more clearcut picture of major cross-linguistically (in)variant properties.

#### 2. Grammatical subject – a concept that is relative to the alignment type

The focus of this paper is the empirically adequate account of the concept "grammatical subject" as the key concept for categorising languages in word-order typologies. Although functionalist typologists and Minimalist generativists more often than not disagree, they meet on one point at least, which ironically turns out to be mistaken. This point is the *lexico-semantic* identification of the core argument that is to serve as grammatical subject. For both schools, the prototypical subject is the phrase that represents the agent argument of a transitive agentive verb in a 'simple' finite clause.

Typologists and field linguists customarily identify the core arguments of the main verb of a minimal transitive clause by content,<sup>5</sup> that is, as instantiating agent and patient roles, respectively. In the majority of languages, namely languages with a nom-acc alignment system, a strict *agent-V-patient* order corresponds to a *subject-verb-object* structure. However, when languages with *patient-verb-agent* serialization are classified as "OVS", the alignment system must not be neglected or else a language with ergative alignment will be inevitably misclassified. In such languages, contrary to a widely held view, the agent noun phrase (= ergative NP) is *not* the syntactic subject. The syntactic subject is the noun phrase with the properties of a

<sup>&</sup>lt;sup>3</sup> As for functionalist accounts, Mayr (1982: 464) emphasizes that Darwin explicitly disqualifies any appeal to function (viz. utility or final causes) in the quest for valid explanations: "*As Darwin rightly said 'Nothing can be more hopeless than to attempt to explain the similarity of pattern in members of the same class, by utility or by the doctrine of final causes'.*"

<sup>&</sup>lt;sup>4</sup> "I maintain that a level of formal structure has to be taken into account if we are to understand something of how speakers build their utterances and how listeners process them." Queixalós (2010: 261).

<sup>&</sup>lt;sup>5</sup> "The terms subject and object are used here in a rather informal semantic sense, to denote the more agent-like and more patient-like elements respectively. Their use here can be defined in terms of the notions S, A, and P, where the S is the single argument in an intransitive clause, the A is the more agent-like argument in a transitive clause, and the P is the more patient-like argument in a transitive clause." (Dryer 2013, Ch. 81, Sect.1).

syntactic subject, and this is the phrase with absolutive case, that is, the "patient" argument. Hence, in brief, an ergative language with strict patient-verb-agent order is not OVS but SVX, modulo ergative alignment. This will be demonstrated and documented in detail below.

On the surface, the generativist stance is different, but basically it converges with the functionalist-typological conception. The candidate for what is taken to be the *phrase-structurally* universal subject function is the top-ranked argument in the argument structure, which, for agentive verbs, is the agent argument. Many generativists even hold that this argument is not linked to the lexical verbal head<sup>6</sup> but receives its thematic relation from an empty entity referred to as "little v."

As a consequence of their concept of grammatical subject, linguists of both schools are united in their (mistaken) claim that "ergative SVO languages" do not exist. Typologists [Siewierska (1996)] and historical linguists [Trask (1979)] put it on the list of properties of ergative languages while generativists [Mahajan (1997), Lahne (2008), Taraldsen (2017), Roberts (2021)] are eager to derive it within their axiomatic theories.

For these authors, "no ergative SVO" means that there are no languages with an [Erg [V Abs]] clause structure. However, this is *not* the clause structure of an ergative [S[VO]] language (see below and Sect. 4). On the other hand, it is almost trivially true that [Erg [V Abs]] languages are inexistent; there are no [Acc [V Nom]] languages either. A non-subject in the structural subject position of an [S[VO]] clause structure and a subject in a VP-internal position is no admissible canonical base structure of clauses in any language.<sup>7</sup>

Those who think the absence of [Erg [V Abs]] needs attention identify ergative case with subject case and absolutive with object case, which is empirically and theoretically inappropriate, as will be shown. Siewierska & Bakkers' classification of subjects across alignment systems is a rare exception in this respect: "We find case marking (typically Nominative or Absolutive for Subjects; Accusative and Ergative for Objects) and agreement marking on the verb (typically, the marker varies for Person, Number and Gender features of the Subject constituent)." Siewierska & Bakkers (2007: 292)

Ergative SVO languages *do* exist and they are attested, but incognito. Languages that have uncontroversially been classified as (ergative) OVS languages, in fact, have to be re-classified as "SVO" languages. The preverbal, non-agentive noun phrase is not the syntactic object. It is the syntactic subject of an abs-erg-language. The subtle point is not so much the linguistic description of a particular language but the subsequent typological interpretation, that is, the step from "agent" or "patient" to "subject" and "object", respectively.

Dixon (2010, vol. 2: 119) and other field linguists have tried to circumvent the problem of formally defining and identifying the grammatical subject. In descriptions, "S" is reserved for referring to the single argument of a finite intransitive clause. For the arguments of a minimal

<sup>&</sup>lt;sup>6</sup> When checked cross-linguistically, this assumption turns out to entirely rest on extrapolations from English (and languages similar to it) and does not pass empirical testing. (Haider 2020).

<sup>&</sup>lt;sup>7</sup> The research literature is necessarily silent on the issue because of misclassified "OVS" languages. As will turn out, the absence of [O[VS]] is a typological issue, too. A plausible explanation seems to be the following. The structural positioning is *congruent* with grammatical dependency relations. The dependent item (see dependent object case in Section 2.1) is c-commanded by the superordinate item; hence the subject c-commands the object in the base configuration which it would not in an [O[VS]] base structure.

transitive clause, the terms "A" (agent) and "O" (object) are used. "A" is a *content-based* category, viz. agent, while "O" is not so much seen as the *formal* syntactic category "object" but as the noun phrase that represents the logical argument of the verb that is the direct object (in a nom-acc language). This is a dreadful mix-up. Word order typologies consequently take an "O"-V-A order as input information and without further ado interpret it as a sufficient indication of the Greenbergian OVS type.

What should be done, however, is to use strict patient-V-agent order information as input, check the alignment system, and then interpret it, based on syntactic criteria, either as SVO in an abserg language or, as OVS if in a nom-acc language. Dixon characterizes ergative alignment as follows: "*The term 'ergativity' will be used in the standard way, for referring to S and O being* [grammatically]<sub>HH</sub> *treated in the same way, and differently from A. 'Ergative' is then used in relation to A, the marked member of such an opposition, and 'absolutive' in relation to S and O, the unmarked term.*" Dixon (1994: 22).

Although he does not explicitly generalize the term 'subject' across alignment systems here,<sup>8</sup> it follows: If S and O are "*treated in the same way*" in ergative systems, and S is the subject of a finite clause, then "O" will inevitably qualify as the subject of a transitive clause in an ergative system.<sup>9</sup> Astonishingly, Dixon (2010, vol. 2: 119) chooses the following formulation: Cross-linguistically, "*there are two recurrent patterns – S marked like A and S marked like O.*"

This inverts the relevant tertium comparationis. A and O should be compared with S as the *subject* of an intransitive, finite clause, and not the other way round. In nom-acc systems, the A-argument is marked like S, namely by nominative, while in abs-erg systems, the P-argument is marked like S, namely by absolutive. In each case, these arguments are marked like/as the subject of a finite clause. Hence, a clause with strict O-V-A order and ergative alignment is a clause structure of the SVO type in Greenbergian terminology.

In other words, there is no justification for classifying an *ergative* language as "OVS" whenever its obligatory serialization pattern in simple clauses with non-pronominal noun phrases happens to be patient-V-agent. This, however, is exactly what happens in typological surveys, as for instance in WALS (Dryer & Haspelmath 2013) and others. Päri, for instance, is listed as "OVS" (feature 100A) and "ergative" (feature 81A) in WALS, although in an earlier publication, Dryer (2007: 70) himself has explicitly qualified such a classification as "somewhat misleading."<sup>10</sup>

Upon closer inspection it will turn out that in most typological surveys, P-V-A is counted as "OVS" without taking into consideration the particular alignment system of the given language, which is almost always ergative. If type-assigned correctly, these languages have to be registered as SVO languages with ergative alignment. Dixon (1994: 50) explicitly notes that for

<sup>&</sup>lt;sup>8</sup> He is outspoken in other places: "*A*, *S*, and *O* are the basic relations. As a secondary step, *A* and *S* are grouped together as 'subject'." (Dixon 2010: 76). "Subject is simply the association of *S*, the only core argument of an intransitive clause, and *A*, that core argument in a transitive clause which could initiate or control the activity." (Dixon 2010: 229).

<sup>&</sup>lt;sup>9</sup> It depends on the grammar of a given language whether the argument marked with ergative case behaves like a dependent structural case or an oblique case. In the former case, it will surface as absolutive in the anti-passive construction (which, in fact is the passive construction of an ergative alignment system, since it signals the syntactic elimination of the original subject argument).

<sup>&</sup>lt;sup>10</sup> In Dryer (2007: 70), when referring to Päri, he draws attention to the very problem: "Characterizing such languages as OVS is somewhat misleading in that the word order really follows an ergative pattern Abs-V-(Erg)."

"languages with syntactic function shown by constituent order" SV/OVA is a sign of ergativity.

The common opinion is explicated in an on-line encyclopaedia<sup>11</sup> as follows: "Ergative-absolutive languages, sometimes called ergative languages" as "languages where the subject of an intransitive verb and the object of a transitive verb behave the same way in a sentence." Evidently, this description is worded in the categories of languages with nom-acc alignment. The argument of the verb that is "the object of a transitive verb" is an object only in a nominativeaccusative setting. In an absolutive-ergative system it is the *subject* of the clause. Contrary to Levinson & Evans' plea – first analyse a language in its own terms, then compare" – these languages have been continuously viewed through the lens of biased<sup>12</sup> observers, in the observer's own terms.

An unbiased and empirically adequate rendering is this: In the vast majority of languages, one of the two arguments of a transitive verb, A or B, is aligned with the syntactic subject function and the other one with the grammatical object function. Consequently, this opens a system space with at least two options. In one, argument A is linked with the subject function, in the other, argument B is the subject. In each system, the remaining argument is linked to the object function. If A is the *agent* argument of an agentive verb linked as subject, the alignment system is called *nom-acc*. If B is the *non-agent* argument of an agentive verb linked as subject, the alignment is called *abs-erg*.<sup>13</sup> Here is an example:

(1) Derbyshire & Pullum (1979: 8) on Macushi:

máin z-ai-pón-tə-bə Joe-za Osenégu-pə message sent Joe-SM Osenegu-by Joe sent the message by Osenegu.

SM = "subject" marker

Macushi is one of four candidates for OVS in Siewierska's (1996) sample. However, what Derbyshire & Pullum called "SM" is not a marker of the subject but of the agent argument. In terms of alignment, this is an *ergative marker*. WALS (Dryer & Haspelmath 2013) follows Abbott (1991) and classifies Macushi as an ergative language, which is uncontested among typologists. So, Macushi is not OVS but Abs-V-Erg, which is SVO.

The "syntactic subject" must be identified formally since it is the (*morpho-*)syntactically privileged noun phrase, linked to an argument slot of the finite verbal predicate. "Privileged" is a concept that is relative to the grammatical means available in a given language, as Keenan (1976) demonstrated, with a cross-linguistically assembled pool of family resemblances of roughly thirty grammatical features of subjects. Mel'čuk suggests the following definition:<sup>14</sup> "*The SyntSubj is the most privileged Synt-actant of the syntactic predicate* ( $\approx$  *Main Verb) in L; what exactly are syntactic privileges in L has to be indicated by a specific list of SyntSubj privileges elaborated for L.*" Mel'čuk (2014: 179)

The central identifying features of the privileged status of a grammatical subject become particularly clear in languages with case and agreement, as will be explained in more detail

<sup>&</sup>lt;sup>11</sup> Wikipedia on "Ergative-absolutive language".

<sup>&</sup>lt;sup>12</sup> In Queixalós (2010: 276) perception, ergativity is treated as an abnormity: "Current paradigms – notably built on European languages – are at odds with grammatical systems which seem to suffer from a sort of schizophrenic disease – an object that looks like a subject and so on."

<sup>&</sup>lt;sup>13</sup> There is even room for instantiating both, viz. one for full noun phrases and one for pronouns. This is known as a split ergative system.

<sup>&</sup>lt;sup>14</sup> I am grateful to Martin Haspelmath for making me aware of Igor Mel'čuk's definition.

in the following section. First, the case of the direct object is dependent on the case of the subject. Second, in languages with subject-verb agreement, the subject obligatorily agrees with the finite verb, and third, the absence of the canonical subject argument is morphologically signalled, also known as passive and anti-passive, respectively.

It is important to realize that "grammatical subject" is not a language universal. If a language with grammatical morphology for nouns or verbs does not show the relevant properties then "grammatical subject" is not defined in the grammar of such a language. That there are such languages is by now well-known, too. In Comrie's (2005) classification, these languages are listed under the label "tripartite" alignment or under "active/stative" alignment; cf. Mithun (1991) and (2008) for exemplary details. In these languages, an indispensable feature of *grammatical* subjects is missing, namely the dependency between subject and object marking and the grammatical management of subject omission (see the following section).

Another caveat is in order here. Whenever properties of putative subjects of languages whose grammar does not instantiate *grammatical* subjects are raised against definitions of *grammatical* subjects, they could be mistaken as counterevidence. However, such properties are not counterevidence; they are irrelevant evidence for the characterization of *grammatical* subjects, as will be clarified in the following section.

#### 2.1. Dependent case, markers for subject elimination, and obligatory agreement

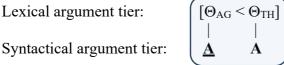
Dependent case and the obligatory morphological signalling of a grammatically eliminated subject candidate are two sides of the same coin. Whenever the assignment of object case is dependent on the prior assignment of subject case, elimination of the subject triggers the object's "promotion" to subject case. In other words, the structural case of the object is morphologically (or positionally) realized as subject case. In Haider (1985b: 30) the "basic dependency in the case system" holds in the realization of structural case on the object. It is dependent on the realization of the structural case on the object case. This is easy to observe in languages with morphological case such as German, see (2), but also in English, with positionally coded subjects and objects.

(2)	a. wenn jemand <i>den Stein</i> wegrollt		
	if somebody <i>the</i> Acc. <i>stone</i> away-rolls		
	b. wenn <i>der/*den Stein</i> wegrollt	[unaccusative]	
	if the <sub>Nom./*Acc</sub> stone away-rolls		
	c. wenn <i>der/*den</i> Stein weggerollt wird	[passive]	
	if the <sub>Nom./*Acc</sub> stone away-rolled is		
	d. wenn jemand <i>den</i> Stein wegrollen lässt	[causative]	
	if somebody the Acc. stone away-roll lets		
	'if someone lets/makes the stone roll away' / 'if someone has the stone rolled away'		

<sup>&</sup>lt;sup>15</sup> The ambiguity reflects the alternative argument-structure formats of the verb, viz. unaccusative or transitive, with eliminated subject argument (Haider 2001).

An essential part of a case dependency system<sup>16</sup> is the parametric choice of the *dependent* argument in the lexical argument structure. There are two possibilities and each one has found its implementation, cross-linguistically (Haider 1993: 123). In one option (viz. nom-acc), the candidate for the dependent case is the lower argument in the argument structure (3), namely A. In the other option (viz. abs-erg), it is the more predictable argument, which is the higher-ranked one (4b), viz. <u>A</u>.

Lexical argument tier: (3)



(prototypical agentive transitive verb)

Under Nom-Acc alignment (4a), the privileged argument is A, that is, the argument associated with the agent. In an Abs-Erg alignment, A, which is associated with the P-argument, is the privileged argument. In so-called split systems, which are infrequent and diachronically unstable, both options are implemented simultaneously, typically one for pronouns and the other for non-pronominal arguments. Analogous splits are known for agreement system.

Nom-Acc alignment (4) a. A with dependent case =b.  $\underline{\mathbf{A}}$  with dependent case = | Abs-Erg alignment

In (4a), the phrase with nominative is the grammatical subject, equipped with all privileges of grammatical subjects, while in the alignment (4b), the grammatically privileged (see below) core argument is the phrase with absolutive. It is a collateral property that in (4a) the privileged argument is the agent argument of the argument structure, while in (4b) it is the patient/undergoer argument.<sup>17</sup>

There are two immediate consequences, namely for 'promotion to subject' and the mandatory realizing of the subject argument. Promotion-to-subject is triggered by the elimination of the default subject argument. In a nom-acc system, this corresponds to an Acc-to-Nom switch; correspondingly, in an ergative system, Erg is 'promoted' to Abs. Note, importantly, that in no ergative language, Abs is 'promoted' to Erg, which would be expected if ergative were the subject case and absolutive the case of the object.

The obligatory switch from dependent case to subject case blocks the optional omission of the subject argument since it would be irrecoverably masked by object-to-subject promotion, as exemplified in (5a,b), with the resultant, unavailable reading. Objects can be omitted, see (5c,d), but subjects cannot.<sup>18</sup> (5a,b) are ungrammatical under the structure indicated.

(5) a.\*She<sub>i</sub> left e<sub>i</sub>

'(someone) left her'

<sup>&</sup>lt;sup>16</sup> Case dependency properties have been worked out in Marantz (1984, 1991) and Haider (1985a: 73; 1985b: 13, 30; 1993: 124; 2000: 31), and later by Baker (2015).

<sup>&</sup>lt;sup>17</sup> Queixalós (2010: 276) formulates it as follows: "An ergative pattern is one in which core arguments of a basic divalent construction display a mapping between their semantic roles and their morphosyntactic properties so that the patient formally outranks the agent."

<sup>&</sup>lt;sup>18</sup> Please be aware that omission of an argument must not be confused with null pronouns. The omitted argument is interpreted by existential closure, a null pronoun (aka pro-drop) is interpreted referentially. In the following example (i), the objects of 'forget' and 'forgive' are omitted. The subject, however, cannot be omitted (ii.).

i. But Beijing never forgets and certainly does not forgive.

ii.\*But never forgets anything and certainly does not forgive anyone anything.

b.\*She explained e<sub>i</sub> everything.

'(someone) explained her everything'

- c. The president is calling (sb).
- d. The gown does not suit (sb.).

In ergative languages, the same conditions apply, modulo alignment. So, the ergative phrase may be optionally missing,<sup>19</sup> but the absolutive is obligatory.

(6)	a.	na'e tamate'i ('e 'tevita) 'a koliate.	Tongan (Churchward 1953: 68).
		has killed (ERG-David) ABS-Goliath	
	'David killed Goliath' [without Erg: 'Sb. killed David' = David has been killed]		
b. (		(Unai-k) pakete-a-k bidal-i ditu.	Basque (Fernández & Berro 2022: 1050)
		(Unai-ERG) package-det-pl[abs] send-pfv have.3plAbs[3erg]	
'Unai has sent the packages.'			
	[without Erg: 'Sb. has sent the packages' = 'The packages have been sent']		

In sum, the overarching generalization is this. The argument with the dependent case may be omitted optionally. The parent argument must not be omitted. In one type of alignment, this is the nominative phrase, in the other type it is the absolutive phrase.

An analogous relation holds for head-marking systems, that is, agreement relations. If a language has object-verb agreement, it also has subject verb agreement. The obligatory target of agreement is either the nominative or the absolutive, respectively, which are the subjects. Note once more that a mixed type is not excluded. Case assignment may display one way of alignment in (4), while agreement may be governed in the other way, which, once more is an unstable grammatical constellation

## 2.2 Subject as the grammatically privileged core argument

Subject privileges<sup>20</sup> manifest themselves in every grammatical dimension, such as morphosyntax or clause structure, or even in prosodic phonology, as Yu (2021) has shown for the tonal marking of absolutive in Samoan. In languages that provide a unique structural subject *position*, the subject is phrase-structurally privileged, and this is directly reflected in word order patterns. In genuinely [S[VO]] languages, that is, languages with a structurally defined preverbal subject position, this position is reserved for the subject while objects follow the verb.

The following eight properties listed in (7) are widely acknowledged as typical manifestations of the grammatically privileged status of grammatical subjects in the pertinent literature.

<sup>&</sup>lt;sup>19</sup> The missing-argument variable is interpreted in the same way as a missing object of a transitive verb is interpreted in Nom-Acc languages, namely as bound under existential closure.

<sup>&</sup>lt;sup>20</sup> Van Valin (2005: 99) uses the concept 'privileged' differently and applies it in a construction-specific way: *"Privileged syntactic arguments are construction-specific, while grammatical relations like subject are not.*"

(7)	Grammatical privileges of grammatical subjects	Nom-Acc	Abs-Erg
a.	indispensability	Nom	Abs
b.	omission obligatorily signalled		Abs
c.	superordinate structural case in case languages	Nom	Abs
d.	target of a promoted NP with dependent case	Nom	Abs
e.	agreement with the finite verb in languages with agreement	Nom	Abs
f.	not lexicalized in infinitival clauses	Nom	Abs
g.	pro-dropped in null-subject languages	Nom	Abs
h.	top accessibility in languages with accessibility restrictions	Nom	Abs

It is hardly possible to overlook that absolutive and nominative pattern alike. Nominative and absolutive are mandatory, accusative and ergative arguments are optional for many verbs. Subjects unlike objects, must not be omitted, see (7a), unless signalled morpho-syntactically, see (7b). Such signals are known as "passive" in Nom-Acc languages and as "anti-passive" in ergative languages, which, in reality, is what passive is in nom-acc languages, namely a means of syntactically eliminating the argument that would otherwise surface as subject. Dixon (1994: 146), and Dixon & Aikhenvald (2000: 9) characterize antipassive as follows:

(8)a. The *antipassive* construction is formally explicitly marked.

- b. *Antipassive* forms a derived intransitive<sup>21</sup> from a transitive verb.
- c. The otherwise *ergative*-marked NP becomes S (viz. subject).
- d. The otherwise *absolutive*-marked NP goes into a peripheral function and can be omitted.

The four properties characterize the grammar of subject elimination. Modulo alignment, they translate one-by-one into Passive, see (9). In an abs-erg system, the so-called antipassive is what passive is in a nom-acc system. Antipassive and Passive do not deserve to be terminolog-ically separated.<sup>22</sup> They are instantiations of the *very same* thing, namely the signal of the omission of the default subject argument in different alignment systems.

- (9)a. The *passive* construction is formally explicitly marked.
  - b. Passive forms a derived unaccusative from a transitive verb.
  - c. The otherwise accusative-marked NP becomes S (viz. subject).
  - d. The otherwise nominative-marked NP goes into a peripheral function and can be omitted.

In each alignment system, a dependency relation holds between the assignment of the superordinate case, see (7c), assigned to the argument that serves as subject, and the dependent case, assigned to the direct-object. In languages with structurally assigned cases, accusative as object case is assigned only in the presence of the subject case, and ergative is assigned in the presence of an absolutive (Haider 2000). If the primary subject candidate is syntactically unavailable, subject case is passed on and assigned to the object, see (7d). The consequence is the familiar acc-to-nom (= object-to-subject) switch or the ergative-to-absolutive (= non-subject-to-subject)

<sup>&</sup>lt;sup>21</sup> The appropriate term for the derived antipassive form of the verb is not 'intransitive' but *unergative*, since the ergative-marked argument of the active construction switches case and surfaces as absolutive, as stated in (8c).

<sup>&</sup>lt;sup>22</sup> "Antipassive is the exact opposite of the passive in terms of case change." Primus (1995: 1090).

switch, respectively, in passive/antipassive. This is the situation in grammars that define a grammatical subject.<sup>23</sup>

Polinsky (2013) and (2017a: 310), describes passive and antipassive in the traditional way of focusing on a circumstantial property, namely "*In the passive, the suppressed or demoted argument is the agent-like argument, in the antipassive, the patient-like argument*" and in (2017: 310), as clause "*with a transitive predicate whose logical object is demoted to a non-core argument or non-argument*".

This is both misleading and missing an essential generalization. The syntactically relevant property is *not* the specific thematic role of the demoted argument or its logical argument content. Grammatically relevant is the *syntactic* role, and this role is the grammatical function of a subject. Whenever in a finite clause, the argument of the verb that would otherwise surface as a syntactic subject, viz. as *nominative* or *absolutive*, respectively, is syntactically omitted, this must be morpho-syntactically formally marked. The naming of the semantic role of the suppressed subject is redundant since it is determined by the alignment system in interaction with the lexical argument structure. "Object demotion" is a misleading concept. It provokes the question why antipassive and passive are in complementary distribution. No object is demoted; they are promoted, either acc-to-nom or erg-to-abs.

The missed cross-linguistically valid generalization is this. Ergative and accusative as dependent cases behave alike. When the candidate for the superordinate case – nominative or absolutive – is eliminated, the object with structural case switches into the superordinate case. The NP with dependent case is 'promoted'. The promotees are accusative and ergative, respectively, but crucially not the absolutive as an alleged object.

Relation changing is asymmetric. There is no language that 'demotes' a subject to the object function whenever the object has been eliminated. In other words, no language turns a nominative into an accusative when the candidate for accusative is absent, and by the same token, no abs-erg language would replace an absolutive by an ergative case when the candidate for the ergative case is absent. The dependency works in the opposite direction, and it is perfectly captured once absolutive is recognized as the case of the subject. Note that this is a syntactic property. The usage of the term "morphological ergativity" falsely insinuates that this is a property of morphology. It is a core issue of syntactic alignment that is reflected in grammatical morphology.

Subject-verb agreement, see (7e), is a morpho-syntactic common place. The finite verb agrees with the subject, and there is no language in which an object agrees with the finite verb but a subject does not. The only exception would be an ill-defined ergative language.<sup>24</sup> In the rare cases in which the finite verb agrees with the ergative but not with the absolutive, this is a language with a split. In such a language, the privileged argument for case alignment is A, see (4b), while <u>A</u> is the privileged argument for cross-referencing by agreement.

<sup>&</sup>lt;sup>23</sup> It crucially does not hold in grammars that do not define a grammatical subject, such as tripartite or stativeactive systems, in Comrie's (2005) terminology.

<sup>&</sup>lt;sup>24</sup> ChatGPT is a locus of conventional wisdom. It names Basque as an 'exception' to the generalization, referring to object agreement with the absolutive. However, Basque is an ergative language. Agreement with absolutive is subject agreement.

As for non-finite constructions, see (7f), what is the subject in a finite clause as (10a) is the null-subject of a *sentential* infinitival constructions as (10b).<sup>25</sup> The examples contain an adjunct phrase with an anaphor ("one after the other") that copies the case of the antecedent. In the case of the infinitival null subject, its case is nominative (10b). For details, please consult Haider (2010: 309-311).

- (10) a. Man hat die Teilnehmer<sup>i</sup> gebeten, [dass *sie*<sup>i</sup> (einer<sup>i</sup><sub>Nom</sub> nach dem anderen) aufstehen]
  one has the participants asked that they (one after the other) stand-up
  - b. Man hat die Teilnehmer<sup>i</sup> gebeten, [0<sup>i</sup> (einer<sup>i</sup><sub>Nom</sub> nach dem anderen) aufzustehen] one has the participants asked (one after the other) to-stand-up

In ergative languages, absolutive case is not licensed in nonfinite clauses, as for example in Dyirbal, Seediq, or Sama Southern (Deal 2015). For objects, such a restriction would be unheard of (cf. Aldridge 2008). As potential counterevidence, Polinsky (2017b: 17) notes that "many ergative languages, including Inuit, have the absolutive freely available in non-finite clauses" and that "the so-called contemporative form of the verb in Inuit/Inuktitut is character-ized by agreement with the absolutive but not the ergative."

The second part of the quote is the key to the first. The very same constellation is found in Nom-Acc languages, too. Portuguese is the Nom-Acc counterpart of Inuit, with nominative occurring in the so-called inflected-infinitive construction, cf. Madeira & Fiéis (2020). Another example is Hungarian (Tóth 2020). In each case, *agreement* licenses the assignment of subject case. The typical infinitival clause without a lexical subject is a clause *without* subject-verb agreement. Lack of agreement is the blocking factor.

In pro-drop languages, see (7g), the case of the null-subject pronoun is nominative (in the nomacc setting) or absolutive (in the abs-erg setting). Examples of the latter come, for instance, from Basque or Hindi. The literature on ergative pro-drop is deficient, though. the optional presence/absence of the ergative (with an interpretation of existential closure) tends to be mistaken as a case of pro-drop, which it is not. It is necessary to clearly differentiate between the genuine *referential* pro-drop of the absolutive and the free omission of an ergative as a dependently cased argument (with indefinite existential interpretation).

A clear indicator of a subject function, see (7h), is Keenan & Comrie's (1977, 1979) accessibility hierarchy. No languages are known in which the subject is generally inaccessible for relative clause formation, but there are many languages in which *only* the subject is accessible. As will be argued in the following section, in ergative languages, the absolutive argument is always accessible, but there are quite a few languages in which the ergative argument (as object) is inaccessible. Evidently, the absolutive is not the case of the object. It is the case of the grammatical subject.

# 2.3 On the alleged disparity of morphological and syntactic ergativity

The established but dispensable distinction between morphological and syntactic ergativity is conceptually and empirically infelicitous. First, it is but an auxiliary assumption needed for

<sup>&</sup>lt;sup>25</sup> Exceptions only go in one direction: If, as for example in Icelandic, a non-nominative argument may serve as null subject form in the infinitival clause in a given language, the argument that would be the nominative candidate in the finite clause is always a grammatical alternative. In no language, the null-form is restricted to nonsubject arguments.

compensating the misidentification of subject and object in ergative languages and for explaining away counterevidence. Second, it is based on a questionable interpretation of data. For Polinsky et al. (2012: 69). "Ergative languages have posed challenges to the AH in that many of them exhibit syntactic ergativity: In many of them, the absolutive arguments (intransitive subject and transitive object) relativize with a gap, but the ergative DP does not." This is not an effect of "syntactic ergativity" but merely the backlash of the misidentification of the grammatical subject. If absolutive were acknowledged as subject case, the problem would immediately disappear. Eventually, the terminological differentiation (morphological vs. syntactical) is misleading. Morpho-syntactically reflected syntactic relations are as much part of syntax as wordorder based properties.

For Dixon (2010a: 229), the alignment system – viz. nominative-accusative vs. absolutive-ergative – does not make a difference since "even in ergative languages, S and A share a number of properties – as addressee in imperative constructions, as controller of reflexive, and so on". In his opinion, the agent argument is the subject, no matter whether the case system is a nomacc or an abs-erg system. The argumentation of the Generative school is more technical but equally problematic. Here is a pertinent statement of Polinsky & als. (2012: 268), who refers to ten papers, "[...] the ergative DP has all the criterial properties of a subject: it is the addressee of an imperative, it binds the absolutive but cannot be bound by it, it participates in control and raising, and often it has preferential properties in the control of cross-clausal anaphora".

First, the properties itemized by Dixon and by Polinsky (et al.) are certainly not "all the criterial properties of a subject". In fact, the relevant criterial properties are missing, see (7). What should have been noted instead is that an *agent* as the top-ranked argument in the lexical argument structure may – irrespective of its grammatical function – be associated with certain properties. Second, the enumerated "criterial properties" do not uniquely identify the syntactic subject of a clause, as the following discussion will demonstrate.

#### 2.3.1 Binding of reflexives

A nom-acc language such as German is sufficient for demonstrating that the binding of reflexives is an unreliable criterion for diagnosing subjecthood; see Schäfer (2012), Haider (2013: 86). In German, which is cross-linguistically no isolate in this respect, the subject is not the unique antecedent of reflexives. Antecedents of a reflexive may also be c-commanding objects (11a) as well as 'demoted' subjects (11b) in form of a PP, and, crucially, the reflexive may even relate to an implicit and syntactically absent argument (11c,d). This is counterevidence for Dixon's claim<sup>26</sup> that the A argument is always "fully stated" in contexts with reflexives or reciprocals.

(11)a. Du musst diese Zahl<sup>i</sup> mehrmals mit *sich*<sup>i</sup> multiplizieren.<sup>27</sup> you must this numberacc several-times with itself multiply<sup>28</sup>

<sup>&</sup>lt;sup>26</sup> In Generative grammar, the very same claim is formulated as an obligatory-antecedent requirement for reflexives and reciprocals: "An anaphor must have a binder which is in the anaphor's binding domain. The binding domain of a DP  $\alpha$  is the smallest TP containing  $\alpha$ , if  $\alpha$  is the subject of a tensed TP, otherwise, the smallest TP containing *α and a DP which c-commands α.* "<u>http://web.mit.edu/norvin/www/24.902/binding.html</u> [29.6.2022] <sup>27</sup> <u>https://www.youtube.com/watch?v=gUQqWfvqef0</u>

<sup>&</sup>lt;sup>28</sup> English is parallel in this respect: "To square a number means to multiply it by itself."

- b. Taufriten wurden [von jedem<sup>i</sup>] für *sich*<sup>i</sup> allein vorgenommen.<sup>29</sup> baptising-rites were by everyone *for himself/herself* alone undertaken
- c. Es wird zu wenig *mit einander* geredet.<sup>30</sup> EXPL is too little *to each-other* talked

(intrans. passive)

d. Im Bewerbungsgespräch wird zu wenig auf *sich* aufmerksam gemacht.<sup>31</sup> (intrans. passive) in-the job-interview is too little to *oneself* attention drawn

What these data illustrate does not substantiate the claim that the antecedent relation of a reflexive *uniquely identifies* the syntactic subject of a transitive verb. What the data do imply is that the notion 'syntactic subject' must be kept distinct from the notion top-ranked argument in the lexical argument structure of a transitive verb. It is true that the agent argument of a transitive verb will always surface as the syntactic subject in a finite active declarative clause with nom-acc alignment. It is not true, however, that the 'controller of a reflexive' is always the subject, neither in nom-acc languages nor in abs-erg languages. On the other hand, a reflexive agent bound by the non-agent argument of a transitive verb may be deviant<sup>32</sup> although its binding relation is structurally well-formed. So, the binding of reflexives combines syntactic as well as lexico-semantic conditions.

With respect to the discussion of the proper conception of 'subject' in languages with abs-erg alignment, Manning (1996a, 1996b) has argued in detail that in general, binding data are no reliable indicator of syntactic subjecthood of ergative noun phrases since the construal process operates on the one hand on the information provided by the lexical argument structure (w.r.t. the selection of the binder) and on the other hand on the syntactic structure (w.r.t. to c-command of the binder). "We have to accept that binding in such languages is again not defined on surface phrase structure or grammatical relations, but rather on a level of argument structure or perhaps thematic relations." Manning (1996b: 6).

Before, Williams (1987) has argued along the same line, based on data from English.<sup>33</sup> Müller, St. (2021, chapter 20) argues that binding properties are a mix of aspects of thematic and configurational properties. If an absolutive does not anaphorically bind an ergative reflexive, as Polinsky et al. (2012: 268) emphasize, this is not only an asymmetry in terms of syntactic structure but crucially also one in terms of argument structure. The latter asymmetry is as relevant as the former.

## 2.3.2 Imperatives

What would an imperative mean that addresses the *non-agentive* argument of an agentive transitive verb, that is, an absolutive subject? It is unreasonable to expect speakers of an ergative language to use the equivalent of (12a) instead of (12b). We do not direct our requests to objects such as "subject relations". We address a *communicating* participant. If the grammar of an ergative language would indeed require to relate the imperative to the absolutive, it would almost

<sup>&</sup>lt;sup>29</sup> https://de.wikipedia.org/wiki/Taufe

<sup>&</sup>lt;sup>30</sup> https://kurier.at/politik/inland/live-kurz-und-kogler-geben-statements-ab/401763894

<sup>&</sup>lt;sup>31</sup> https://docplayer.org/5868059-Schwierigkeiten-mit-dem-einstieg-in-den-arbeitsmarkt.html

<sup>&</sup>lt;sup>32</sup> The 14 billion *Word Web Corpus* does not contain a single token of "*was photographed by himself*" or "*was shot by himself*".

<sup>&</sup>lt;sup>33</sup> As for Generative Grammar, Truswell (2014: 236) summarizes: "*After fifty years of binding-theoretic research, and over thirty years after Chomsky (1981), we are still far from a definitive binding theory.*"

always fail to relate it to the listener. So, an imperative request would have to address a nonagentive argument, as in (12a), rather than the communicating addressee in (12b). One can be sure that the historical development of grammars would have led to grammars that provide the option (12b) rather than (12a), irrespective of the alignment system.

- (12) a. (Dear subject relation, I want you to) be the target of a re-consideration event!
  - b. (Dear listener, I want you to) reconsider the subject relation!

The *imperative* is a verbal form belonging to the mood system and a given grammar determines which argument of the verb is interpreted as the addressee. In both types of alignment, it is the *agent* argument. Grammars do not systematically impede pragmatics. Imperatives with non-agentive subjects are odd also in nom-acc languages, for pragmatic reasons<sup>34</sup> and are understood metaphorically if directed to inanimate participants. Again, the lens of the observers is biased towards their "basic linguistic" nom-acc point of view.

#### 2.3 Control interpretation and raising

A *control interpretation* is no *cross-linguistically* valid criterion for the exclusive subjecthood of agent noun phrases, neither in nom-acc nor in abs-erg languages. Agent-to-Agent is a frequent control constellation, but we know from nom-acc languages such as Icelandic that even an oblique argument in a structural subject position may represent the controlled null-subject (Thráinsson 2007: 420). Furthermore, it is known that in an abs-erg language such as Basque, both absolutive and ergative may serve as controllers or controlees (Arrieta et al. 1986: 31). So, the translational counterparts of English control constructions are not (always) clausal. Clause union with verbal clusters may produce the same result, and in this case, there is no PRO-subject involved (see Haider 2010, ch. 7.5) and hence no subject involved.

Raising is no reliable criterion either. In many languages, as for instance in German (Haider 2010: 298-308), the construction that corresponds to an English raising construction is a clause union construction, without any process of subject-to-subject raising. Here is an illustration with two *subjectless* clause, see (13a,b). Such clauses do not exist in SVO languages like English, since in this type of languages, the preverbal subject position must not be left empty. Hence, a so-called German 'raising' construction is technically not a subject-to-subject raising construction. It is safe to expect the same for various ergative languages.

(13)a. Dem User scheint geholfen worden zu sein.<sup>35</sup>

the user<sub>Dat</sub> seems helped been to be

('The user seems to have been helped')

b. Überhaupt scheint in der Sache nicht ganz redlich *gehandelt worden zu sein.*<sup>36</sup> generally, seems in this matter not quite honestly dealt been to have

('In-general, the matter does not seem to have been dealt with quite honestly')

Finally, if binding partially operates on information provided by the argument structure, this

<sup>&</sup>lt;sup>34</sup> i. #Last for an hour! ii. #Cost five Euros! iii. #Owe 3 bucks! iv. #Be unknown!

<sup>&</sup>lt;sup>35</sup> https://www.lima-city.de/thread/fast-einen-tag-nur-404

<sup>&</sup>lt;sup>6</sup> https://books.google.at/books?id=qHg-AAAAYAAJ&q=%22gehandelt+worden+zu+sein%22&dq=%22gehandelt+worden+zu+sein%22&hl=de&sa=X&ved=2ahUKEwiPwcGpmMH6AhVshv0HHaCkCgs4FBDoAXoECAwQAg

information is available also for cross-clausal anaphora. So, in all, the criteria typically invoked for regarding the ergative noun phrase as the *syntactic* subject are not compelling. They are not exclusively associated with the function of a syntactic subject.

# 3. "OVS" languages are SVO with ergative alignment

The lengthy overture of the preceding sections is necessary for preparing an adequate ground for this section, which will succinctly demonstrate that virtually all of the hitherto undisputed candidates for the category "OVS language" are Abs-V-Erg languages. The syntactic subject of an ergative language is the *non-agentive* argument, that is, the so-called patient-argument. Hence in (syntactic) reality, an ergative "OVS" language is an SVO language with Abs-Erg-alignment. What is the source of the present misperception? The source is the non-structural characterization of grammatical functions, namely the equivocation of a lexico-semantic stereotype, viz. agenthood, with "syntactic subject".

In a recent survey, Hammarström (2016: 25) calculated the constituent orders of 5252 languages partitioned into 366 language families. His count yields 40 OVS languages (out of 5252), belonging to three languages families (out of 424). The corresponding percentages are 0,7% of the total number of languages and 0,8% of the total number of language families.

Greenberg (1963: 76) describes OVS as one of the types that "*do not occur at all or, at least are excessively rare*", and this has proven correct, contrary to positions held in the typological literature. Greenberg's (1963) original sample of thirty languages contained only two languages classified as OVS, with VOS as alternative word order, namely Siuslaw and Coos (s. Greenberg's Appendix II). Both languages are ergative; see Mithun (2005), Frachtenberg (1913: 128, 154).

Dixon (1994: 50-52) itemizes the following ergative languages as instances of SV/OVA, that is, *ergative* "OVS" languages: Kuikúro, Macushi,<sup>37</sup> Maxakalí, Päri, and Nadëb. Further confirmation can be found on Kuikúro in Franchetto (1990, 2010), on Macushi in Abbott and Foster (2007) and in Carson (1982), on Maxakalí in Popovich (1986), on Päri in Andersen (1988), and on Nadëb in Martins & Martins (1999).

Dixon also refers to a second pattern, namely VS/AVO, and illustrates it with Huastec and Paumarí. Huastec is described as an SVO language by Edmonson (1988). It is a Mayan language which Edmonson (1988: 116, 570) describes as an ergative language, with the basic order A-V-O-IO. Her crucial sample, however, consists of exactly *five* sentences with a structure in which *both* arguments of a transitive verb are present as full noun phrases. "*Sixteen clauses have a variant order (O TV, TV A, etc.*)" (Edmonson 1988: 568). Since Mayan languages are predominantly V-initial (England 1991), the Huastec data does not provide convincing evidence for a *basic* OVS structure.

Paumarí has been characterized as split-ergative language by Chapman & Derbyshire (1991: 267, 271) with ergative-absolutive for full noun phrases and nom-acc alignment for pronominal arguments and only the immediately preverbal noun phrase is case-marked. Chapman & Derbyshire (1991: 164, 250) assign "SVO" as basic word order to Paumarí. This deserves a

<sup>&</sup>lt;sup>37</sup> Dixon (1994:138) classifies Macushi as ergative. Dixon (2010, vol.1: 73) criticizes Ethnologue: "Macushi [...] is given as OVS, despite the excellent grammar of this language specifying that the 'basic orders' are OVA (although AOV also occurs frequently) and SV."

comment, since in an *ergative* setting, "AVO" would *structurally* be OVS. On the other hand, the language has a passive construction, but no antipassive. Zwart & Lindenbergh (2021: 30) argue that when case is coded (viz. only in the preverbal position, S, A, and O are coded differently, which is a tripartite system. It does not qualify as an ergative language and consequently not as an [O[VS]] language.

In a study on word order type and alignment, Siewierska (1996) lists four languages as "OVS" out of a sample of 237 languages, namely Macushi and Päri, as in Dixon's sample, plus Hixkaryána, and Southern Barasano. For the latter, Jones & Jones (1991) presented a syntax monograph that has been reviewed by Dryer (1994). He criticises their type assignment<sup>38</sup> and concludes: "*It is possible that it is best treated as indeterminately SOV/OVS, a word order type that appears to be quite common in the Amazon basin.* (Dryer 1994: 63). Hixkaryána will be discussed together with the following set of languages.

In WALS<sup>39</sup> (Dryer & Haspelmath 2013), the following languages are listed as "OVS". Four of them are plainly ergative, namely Kuikúro, Macushi, Päri, and Tuvaluan.<sup>40</sup> Four are caseless (i.e. 'neutral' alignment) but with ergative properties: Asurini, Selknam,<sup>41</sup> Tiriyo,<sup>42</sup> Ungarinjin.<sup>43</sup> According to Primus (1995:1089), "*The Tupi-Guarani languages Asurini and Oiampi have ergative marking in dependent clauses.*"

Four potential candidates of OVS languages have to be discussed in detail further, namely Kxoe, Cubeo, Urarina,<sup>44</sup> and Hixkaryána. For Kxoe, Fehn's (2015: 214) grammar of Ts'ixa (Kalahari Kxoe) is very explicit: "*There are three patterns available for transitive clauses: AOV, AVO and OAV, with the latter occurring less frequently than the other two. Although the dominant word order of the Khoe languages is thought to be AOV (cf. Heine 1976, Güldemann 2014), AVO is just as frequent.*" The type-assignment in WALS exclusively follows Köhler (1981).<sup>45</sup> In sum, Kxoe does not seem to qualify as a reliable testimony of OVS. So, we are left with Cubeo, Urarina, and Hixkaryána.

<sup>&</sup>lt;sup>38</sup> "A count of all examples in the grammar shows both SV and VS order common, with SV slightly more common, though numbers of examples cited in a grammar is a poor source of data. [...] If we interpret the notion of an OVS language as referring to clauses with a noun object and a noun subject (the standard usage in word order typology), it is not clear that Barasano qualifies." (Dryer 1994: 63).

<sup>&</sup>lt;sup>39</sup> In the introduction to chapter 82 of WALS, Dryer (2013) writes: "There are also languages [...] in which the order can be described as Absolutive-Verb-Ergative: these languages are shown as OVS on Map 81A and as SV on this map. In fact, three of the six OVS languages shown on Map 81A are of this type: Päri (Nilotic; Sudan; Andersen 1988), Mangarrayi (Mangarrayi; northern Australia; Merlan 1982) and Ungarinjin (Wororan; northwestern Australia; Rumsey 1982)."

<sup>&</sup>lt;sup>40</sup> Besnier 1986: 245: "Despite the word-order freedom exhibited by Tuvalan, there is a basic order, and this order is verb initial." Besnier (2000: xxiv): "Case marking follows an ergative-absolutive pattern".

<sup>&</sup>lt;sup>41</sup> "Selk'nam seems to be an ergative language as to word order and verbal marking. Nevertheless, case marking is still an issue that remains to be debated, since the data now available is not sufficient to determine the typological nature of the language, which appears to have been an S marking/A-O unmarked language till the beginning of the twentieth century." Rojas-Berscia (2014: 23).

<sup>&</sup>lt;sup>42</sup> Rill (2017: 430): "In the end, Tiriyó verb agreement is best analyzed as ergative in alignment."

<sup>&</sup>lt;sup>43</sup> Rumsey (1982:145) summarizes the "ordering norms": S precedes V, O precedes V, while A follows. This is exactly the order one expects to find if a language is an SVO language with ergative alignment.

<sup>&</sup>lt;sup>44</sup> A text count based on 445 main clauses sampled from seven texts produced the following frequencies:<sup>44</sup> 3% OVA and 4% AOV orders (Olawsky 2006: 653; 2007: 45). 93% are clauses with null-subjects and/or null-objects. For dependent clauses, Olawsky (2006: 658) reports 0,3% VA and 0,8% AV orders.

<sup>&</sup>lt;sup>45</sup> Köhler's reliability has been questioned: "*He himself reduced the richness of Khwe cultural and linguistic expressions in his documentation by increasingly limiting field methods.*" (Boden 2018: 142).

As for Cubeo, according to the typological platform SAILS [South American Indigenous Language Structures, Muysken et al. (2016)], "*the patterns in the order of frequency in the data* [are]<sub>HH</sub>: *OVS, SVO, VSO, SOV, and (least common) VOS* (M&M 1999:142)." WALS, which refers to the same source, namely Morse & Maxwell (1999), lists Cubeo as a nom-acc OVS language<sup>46</sup> that is generally head-final (postpositions, Gen-N, V-neg) and of the nominativeaccusative type, with passive. This is crucial information for the analysis discussed below, since these properties are also shared by Hixkaryána and Urarina.

The essential issue to be settled for the three languages is this: Are these languages head-initial or head-final? If their VP is head-final, [OV] is likely to be a constituent. If they are head-initial, [VA] is a constituent preceded by O. The latter case would make them [O[VA]] languages, with "O" being the structurally highest argument in the clause. What are the relevant facts?

Cubeo, Urarina, Hixkaryna, are post-positional as well as Gen-N. According to Dryer (2007: 69) "the fact that the characteristics in other languages pattern with the order of object and verb would lead us to expect both OVS and OSV languages to pattern with SOV languages. In so far as we have evidence, this prediction seems to be true. For example, Hixkaryana is post-positional and GN." The same is true for Urarina. In addition, as Kalin (2014: 1096) emphasizes, the adjective phrase is head-final, too. Olawsky (2006: 667-668) provides information on the V+Aux order of Urarina, an order that is completely absent in V-initial languages. Finally, Olawsky (2006: 662) notes that in negated sentences, AOV is an unmarked order, that is, A is not focussed. "In a transitive clause, constituent order can be AOV as the result of negation." Taken together, these grammatical features are good indicators for a head-final organization of the verb phrase in the three languages.

The cumulative evidence for a head-final VP has lead Kalin (2014) to the conclusion, that Hixkaryana is an [[OV]S] language, with the VP<sup>47</sup> in a secondary, that is, fronted position.<sup>48</sup> This would support Derbyshire's (1981) conjecture that the OVS clause structure is the result of the loss of ergative case marking in the Carib languages. An [[OV]...S...] structure is the likely outcome when in an Abs-V-Erg system, case distinctions are lost and the alignment system is reinterpreted as nom-acc, while the word order is preserved. The result is a nom-acc system, with OVS order, at the price of a complication in clause structure by VP fronting. However, if the analysis of Kalin (2014) turns out to be robust enough, then we see a rare constellation of clause structure with a preposed head-final predicate phrase in these three languages.

Strong indirect support for such an analysis comes from Queixalós (2010: 241, 254). He argues that the clause structure of Katukina-Kanamari is basically [[O V] S], and shows in great detail that this structure remains constant under *alternative alignments*. The frequent clause type is [[Erg V] Abs] and a less frequent one is [[Acc V] Nom]. Note that the arguments of the verb change places in the two clause types, but the structure of the clauses remains constant in terms

<sup>&</sup>lt;sup>46</sup> Ethnologue classifies this language as SOV. Wals follows the misleading maxim of classifying a language according to the most frequent pattern.

 <sup>&</sup>lt;sup>47</sup> "Transitive clauses have a tightly bound OV verb phrase constituent that is usually followed by the subject NP. Des had actually said so in a dense 1961 paper I had not seen (IJAL 27, 125-142), packed with obscure formulae." (Geoffrey Pullum, Obituary: Desmond Derbyshire, Linguist List 19.1, Jan 03 2008).

<sup>&</sup>lt;sup>48</sup> The same analysis, modulo head-initial V, is the standard structure of Malagasy, a head-initial language with VOS order. Its clause structure is taken to be [[V O] S], that is, with a clause-initial VP. (Paul 1999, Pearson 2001). Keenan & Manorohanta (2004: 178) formulate it as follows:  $S = [[Pred V^{\circ}(\Theta) + (X)] + DP]$ .

of the formal grammatical functions, namely [[O V] S]. In the traditional terminology, one clause type would wrongly be classified as ergative "SVO", and the other also wrongly as accusative "OVS".

All in all, no language is known whose clause structure would be an instance of [O [VS]], which would be the structure of a genuine *structural* OVS language. There is no compelling evidence for a basic [O[VS]] clause structure.

As for ergative languages, the traditional "OVS" classification means Absolutive-V-Ergative order, and this is *subject-verb-object* order under ergative alignment. It is a consequence of the above discussion that the *structural* identification of grammatical relations is an indispensable basis for cross-linguistic comparisons of clause structures.

## 4. On an alleged ergative-SVO lacuna

The above considerations have implications for syntactic typology in general and for the grammatical appraisal of ergative languages in particular. Siewierkska (1996) identifies and summarizes the following positions arrived at in the literature, all based on the Greenbergian, viz. semantic, definition of subject and object. In her study, she notes that there is "*an association between ergative alignment and non-SVO order*" and "*an association between ergative alignment and object-before-subject order*" (Siewierska 1996: 149). Within Generative Grammar, Mahajan (1997) has claimed that ergative languages may be SOV or VSO, but not SVO, and others followed him and construed ergative-V-absolutive as SVO.

Given the fact that SVO is one of the two major word-order types, its absence in languages with abs-erg alignment would indeed call for an explanation. However, there is no such lacuna. If the misleading semantic identification of "subject" is duly replaced by morpho-syntactic criteria of subject identification, the cross-linguistically attested patterns turn out as expected. Ergative alignment is found in each major type, namely SOV, SVO, and VSO. What is absent is a language with [[O[V S] architecture, and [[Erg [V Abs] would be an instance of it.

The explanation for the apparent "*association between ergative alignment and non-SVO order*" should be evident by now. It is a merely terminological misunderstanding. Ergative languages with "SVO-order" exist, erroneously labelled as OVS. Siewierska's *second* point, the "*association with object-before-subject order*" of ergative languages, is the well-known prevalent pattern of subject-before-object. Nominative before accusative is the common serialization in Nominative-Accusative languages, and grammatically, absolutive precedes ergative. Subjects precede objects. In languages with variable word order, information structuring takes advantage of the grammatically permitted variability and ergative-before-absolutive may be a frequent variant.

On the other hand, *ergative* languages classified as "SVO" in the traditional terminology would structurally be *OVS* language, with ergative-V-absolutive order. Structural [O[VS]] languages, however, are inexistent, under abs-erg alignment as well as under nom-acc alignment. This is what Siewierska (1996) has found out (without being aware of it).

In sum, ergative languages pattern just like Nom-Acc-languages, modulo alignment, with SOV and SVO as the most frequent word-order types. The allegedly inexistent "ergative SVO" languages do exist, in the form of ergative languages misidentified as OVS languages. The alleged

"object-subject" order of ergative languages is in fact the cross-linguistically pervasive subjectobject order, modulo ergative alignment. Hence, there is no reason for being surprised that an ergative "SVO" language (in traditional terminology), which structurally would be an [O[VS]] language, has not been detected and with great likelihood, does not exist at all.<sup>49</sup>

# 5. Conclusion

The *structural* identification of grammatical functions is the necessary, appropriate, and indispensable basis for cross-linguistic comparisons.

The lexico-semantic classification of grammatical relations tends to lead astray. It rests on a hidden but wrong premise, namely, the premise that, universally, for verbs with an agent and a patient argument, the agent argument is the subject of a 'plain clause'.<sup>50</sup> This is only true for Nom-Acc-languages, but crucially not for languages with ergative alignment. The equivocation of agent with subject works for Nom-Acc languages, but not for Abs-Erg languages. In these languages, the non-agentive argument of a transitive verb is the grammatical subject. So, whenever one compares Agent-V-Patient patterns cross-linguistically, one compares the *subject* of Nom-Acc systems with a non-subject of Abs-Erg systems. It is not astonishing at all that the elements of such an ill-defined sample of "subjects" do not share relevant *grammatical* properties. If compared properly, that is, structurally, several puzzles disappear immediately. In a nutshell:

- 'Grammatical Subject' is *relative* to the alignment system of a language.
- The grammatical subject under *ergative* alignment is the *absolutive* noun phrase; the grammatical subject under *nom-acc* alignment is the *nominative* noun phrase.
- [Abs [V erg]] is not OVS but SVO. By the same token, an [Erg V abs] language is not SVO, but [OVS].
- Virtually all OVS languages (in the traditional terminology) listed in the typological literature are SVO languages with ergative alignment. [O[VS]] languages do not exist. What exists are rare cases of languages with an [[OV]S] clause structure, as ergative and also as nom-acc languages.
- Passive and Antipassive are instances of the same grammatical device, modulo alignment, signalling the grammatical omission of the default subject argument.
- Ergative languages do not demote objects (see the traditional characterization of antipassive); they promote objects to subjects (i.e. ergative to absolutive), just like nom-acc languages do with accusative-to-nominative, in passive and 'antipassive', respectively.

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**Data availability statement:** The data that the conclusions are based on are taken from published research literature, with the respective references indicated.

<sup>&</sup>lt;sup>49</sup> This is exactly what Greenberg (1963:76) had foreseen: "*The three which do not occur at all, or at least are excessively rare, are VOS, OSV, and OVS.*" He is right. These are no base-order types. The orders can be achieved only by reordering base orders (unless "O" is the misinterpreted subject of an ergative language).

<sup>&</sup>lt;sup>50</sup> 'Plain clause' should be understood as a simple, finite (present tense) declarative clause that is not passivized, is no middle construction and no outcome of a relation changing device.

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#### **Review + reply** (p.t.o.)

#### REPLY TO THE REVIEWER

I am grateful for the time and energy that the reviewer invested. I know from my own experience that rejection is a difficult decision that requires special attention and care. It can also happen that in the end you realize that you are biased or in a competitive relationship.

Several months ago, I submitted the paper to a journal focusing on typology. Now I am informed is has been rejected – and after further inquiry – on the basis of a single (!) review. As this is unusual, it can only mean that the weight of the review was felt to be enough to rebuff the paper. So, I share it with my readers in a kind of semi-open peer review process.

If I were to rate the review, I would classify it as "revise & resubmit" (see my rejoinders below), but I am biased. In my view, it shows why typologists are happy with their self-restriction to what I consider to be an inadequate syntactic basis and do not wish to be disturbed by syntacticians. If that's the case, then so be it.

The editor of the journal informed me that copyright could be infringed if I reproduced the entire report. I therefore stick to the usual conventions and only quote all the relevant parts, in black. My comments are in blue. The screen-shot of the whole review at the end of the paper shows the portions of quoted material in red.

"The author's goal is to convince typologists that there are no "OVS" languages and that languages claimed to belong to this type in the literature should be reclassified as "ergative SVO" languages. I must confess that I do not see the real point of this endeavour, which appears to me to be of a purely terminological nature. What would typology and linguistic theory gain if a number of languages were reclassified as SVO? The information that in the basic word order of these languages semantic patients tend to precede semantic agents, a phenomenon which is quite infrequent cross-linguistically and hence non-trivial and requiring an explanation, would simply be lost."

The aim of the paper is correctly stated. The reviewer's confession as well as the subsequent question, however, is disarming. It seems as if a typologist values the apparent exoticism of a language higher than syntactic stringency. Would the benefit for typology perhaps only be obvious to a syntactician, although no information is lost at all, but insights are gained? The empirically justified re-classifying of "OVS" as "SVO *under ergative alignment*", first of all, fully conserves the information that the order P-V-A exists as a canonical order, but corrects the syntactic misclassification as "OVS". Cross-linguistically, P-V-A only occurs<sup>51</sup> if P is coded as *syntactic subject*, that is, under *ergative* alignment. This is the insight. Moreover, there is an explanation for the "*quite infrequent*" "non-trivial phenomenon", but only if it is correctly identified as an ergative [S [V O]] clause structure. The typologically incorrect classification as OVS conceals the information that nom-acc languages of the [O[VS]] type do not exist, which is also an insight.

As for "quite infrequent", let's make a rough probability estimate for ergative [S[VO]]. Tomlin (1986) estimates that 42% of the world's languages are SVO languages, that is, languages for which S-V-O is a frequent order in simple declarative clauses. Let us keep in mind that this

<sup>&</sup>lt;sup>51</sup> As a basic clause structure, that is, [P [V A]]. The sequence is not excluded in a secondary structure, as discussed in the paper, namely [[P V ]<sub>VP</sub> A].

figure not only covers genuine, rigid [S[VO]] languages but also any flexible-word-order language.<sup>52</sup> Let's make a conservative guess and assume that 20% are rigid [S[VO]], that is, languages like English, with a strict VO order. Dixon (1994: 2) estimates that roughly a quarter of all languages are ergative. So, ceteris paribus, we expect 0.42\*0.25 (= 10.5%) ergative SVO languages. Typologists claim that such languages have not been found. On the other hand, they insist that there is a not negligible number of presently "known" ergative OVS languages although the odds for a language to be ergative *and* OVS is virtually zero. The explanation for the "cross-linguistically quite infrequent phenomenon" is that [O[VS]] languages are inexistent and that the candidates for ergative & OVS are – in reality – ergative SVO languages.

As a syntactician, it is fascinating for me to learn that for a typologist, the syntactically correct identification of subject versus object "appears *to me to be of a purely terminological nature*". **Seriously!?** To me, this is not a matter of terminology. It's about clearing up a mess and replacing it with order in an understanding way, not about terminology.

It is uncontested that under the traditional descriptions and even under Generativist ones, all ergative languages are claimed to be *verb-peripheral*, i.e. SOV or VSO, or freely ordered. The position defended in the paper shows that the apparently missing SVO type is not missing at all. Abs-V-Erg languages, misclassified as OVS, are ergative SVO languages. This is not a matter of terminology. It is a matter of the descriptive and explanatory adequacy of a grammar.

The terms "subject" and "object" are notoriously fuzzy, but one would certainly fail the exam of any course in elementary syntax if one habitually confused subjects and objects and declared this to be "of a purely terminological nature". The claim that the noun phrase identified as ergative – by flagging and/or indexing – is the syntactic subject of a clause is definitely not a matter of terminology. It is a syntactic claim. It claims that this very phrase syntactically behaves in the way known from syntactic subjects in other languages. It doesn't matter how you name this property, but you have to name it *the same way* in other languages, too, in order to correctly identify the referent for the term in every other language. This is exactly what you fail to do when you consider an absolutive as a syntactic object case on the basis of the lexical semantics of the verb. The following table juxtaposes a dozen properties that turn out as correct if the absolutive is acknowledged as what it is, namely the subject case.

Evidently, subject vs. object is not a question of terminology, but one of the empirical appropriateness of the grammatical attributions. This is what one fails to achieve if one regards an absolutive as an object relation merely on the basis the lexical semantics, i.e. "P" or "O", of the arguments of a verb. Subject as the privileged grammatical relation is sensitive to alignment. It is nominative and absolutive, respectively.

	A dozen grammatical privileges of subjects	Nom-Acc	Abs-Erg
1.	indispensability of the subject argument	Nom	Abs
2.	omission obligatorily signalled	Nom	Abs

 <sup>&</sup>lt;sup>52</sup> "Where a language is shown on one of the word order maps as having a particular order as the dominant order in the language, this means that it is either the only order possible or the order that is more frequently used." (Dryer 2013).

3.	superordinate structural case in case languages	Nom	Abs
4.	target of a promoted NP with dependent case	Nom	Abs
5.	agreement with the finite verb in languages with agreement	Nom	Abs
6.	pro-dropped in null-subject languages	Nom	Abs
7.	top accessibility in languages with accessibility restrictions	Nom	Abs
8.	"S" in the [S[VO]] type	Nom	Abs
9.	target of object-to-subject advancement	Nom	Abs
10.	subject as top of an accessibility hierarchy	Nom	Abs
11.	default case (unmarked)	nom	Abs
12.	"O" in the grammatically barred *[O[VS]] structure	Acc	Erg

"Given that the number of "OSV" [sic] (rather, PVA) languages is still quite small, the fact that there are very few verb-medial ergative languages would remain, contrary to the author's statistically ill-informed claim in section 4. The author should still explain why "Abs-V-Erg" languages are so rare as compared to "Nom-V-Acc" languages, or at least not downplay this fact. The claim on p. 19:54-55 that "ergative languages pattern just like Nom-Acc-languages, modulo alignment, with SOV and SVO as the most frequent word-order types" is not substantiated by empirical evidence and is simply false (the author can check WALS for this). The author likewise fails to convince the reader about his (I'll use the masculine pronouns, since the author actually discloses his anonymity) more general methodological claim that "The structural identification of grammatical functions is the necessary, appropriate, and indispensable basis for cross-linguistic comparisons" (p. 20) — rather to the contrary, the way he tries to "structurally identify" grammatical functions in his paper shows exactly what kind of argumentation should be avoided in typological studies."

If it were a *significant* fact at all that the *number* of "Abs-V-Ergative languages", understood as ergative languages with an [Abs [V Erg]] clause structure, is smaller than the number of [Nom [V Acc]] languages, it would not be difficult to explain. First, the number of ergative languages is significantly smaller than the number of nom-acc languages (see Dixon's estimate above). Second, the number of nom-acc languages with a strict [S[VO]] clause structure is only a subset of what typologists count as SVO languages. So, it is trivial that the number of [Abs [V Erg]] is much smaller than the number of [Nom [V Acc]] languages.

If the argument is to be taken seriously, then the reviewer has tripped him/her/self up. Typologists should be worried by the fact that virtually all alleged OVS languages are ergative. Given the fact that there are three times as many nom-acc languages, there should be three times as many Acc-V-Nom languages. This is patently wrong, however. I can't see that typologists have come up with any idea of an appropriate explanation. In fact, they have not even recognized this as a problem.

"The author's argumentation is not based on an in-depth empirical analysis of any particular language or a set of languages. The author's point would have looked more attractive and convincing if he had presented consistent and systematic data from at least two languages, one nominativeaccusative and another ergative-absolutive "OVS", showing that their morphosyntactic patterns are indeed a mirror image of each other. Nothing of this kind is given in the paper, apart from some random examples from German (obviously the author's native language) and three (!)random examples from a number of ergative languages, just one of which is apparently OVS. Section 3, which is supposed to be the central one for the author's argumentation, does not contain a single (!) linguistic example; instead, it is basically a review of the literature, often secondary, recast in the author's preferred terminology, and, given total absence of real empirical evidence, entirely unconvincing. The author simply fails to support his major claims by carefully analysed empirical data, which, in my view, completely invalidates his claims."

# The reviewer's advice above is stunning: Do present "systematic data from at least two languages, one nominative-accusative and another ergative-absolutive 'OVS' "showing that their morphosyntactic patterns are indeed a mirror image of each other!"

First, I'm afraid, I haven't managed to reach the reviewer's comprehension threshold. In the paper, I claim that [O [VS]] languages do not exist, under neither form of alignment, that is \*[Erg [V Abs] and \*[Acc [V Nom]] as canonical clause structures. I did not claim that there is any 'mirror image' relation, whatever this would mean. What I claim is that the (morpho-)*syntactically* relevant properties of absolutive nominals are the properties of syntactic subjects and are in *syntactic parallel* to the properties of nom-subjects in nom-acc languages. Had I proceeded in the way the reviewer suggests, I fear, I would have been blamed that I am naively basing a "bold" broad claim on the comparison of merely two languages. Sorry, dear reviewer! Let me instead refer you to Lady Macbeth (Act 1, Scene 7): "*Things without all remedy should be without regard*."

Could it have escaped the reviewer that the criticized third section of the paper is what scientists call a *meta-analysis*? Typologists typically refer to a handful of OVS languages (plus a few example sentences; see the papers and chapters referenced in the paper) in their overviews; I, however, tried to assemble a list that is as complete as possible and to double-check the typological sources for information on their alignment mode. I am a syntactician and, with respect to the basics of the respective languages, I rely on what typologist have found out and published. What I can contribute myself is the syntactic background and my syntactic conclusions. Would the reviewer have been happier if I had provided a "single (!)" example for each language? What would have been the benefit for the reader? The paper refers to 33 languages (homage to Greenberg), each language with at least one bibliographic reference. Should I have given 33 monovalent sentences and 33 transitive sentences instead? The gain would have been zero, with three pages of paper wasted, but apparently, it would have greatly impressed the reviewer.

"The author's argumentation strikes me as convoluted and driven by his wish to push through his dogmatic assumptions. I don't understand the logic behind paragraphs 4 and 5 on p. 4 (starting with "For these authors"); the author should explain how he gets from case-marking to phrase structures, and why "it is almost trivially true that [Erg [V Abs]] languages are inexistent"; for me, this statement is not at all self-evident. Footnote 7 does not make things clearer, since it appeals to further undefined (probably, wrongly taken as self-explanatory or obvious) notions such as 'grammatical dependency' or 'c-command'."

I agree that, at this point of the discussion in the paper, the correspondence of [Erg [V Abs]] and [Acc [V Nom]] might not be self-evident to potential readers of the journal, but the readers are explicitly directed to sections to come. As for the linguistic facts, however, the absence of

# [Erg [V Abs]] as a *rigid* canonical order (corresponding to *rigid* SVO under nom-acc) is another lacuna and counterevidence for the "erg = subject" hypothesis.

"On p. 4: 46-49 the author writes "The subtle point is not so much the linguistic description of a particular language but the subsequent typological interpretation, that is, the step from "agent" or "patient" to "subject" and "object", respectively." true, but why at all make such a step? On p. 5:12-14 the author writes "What should be done, however, is to use strict patient-V-agent order information as input, check the alignment system, and then interpret it, based on syntactic criteria, either as SVO in an abs-erg language or, as OVS if in a nom-acc language" – but why should this be done at all and why the generalisations gained by doing so are more interesting/valuable/insightful than the generalisations based on semantic roles? The passage on p. 7:20-26 remains absolutely cryptic."

At this point, I'm afraid I have to capitulate. But I am grateful for the insight into the typological attitude that the reviewer gives me: Readers are not expected to be bothered with syntactically based correlations and their explanations.

With all due respect, I'm not willing to argue at this level. If the reviewer believes that the sentence structure of a language is sufficiently characterized by assigning the terms "agent", "patient" and "peripheral argument" to words before considering their linear order, then I, as a syntactician, must give up. The generalisations listed in table (7) in the paper and the table at the beginning of this reply section are generalisations that syntacticians consider as "interest-ing/valuable/insightful" and that cannot be captured adequately in terms of the semantics of core arguments, as argued in the paper.

However, I agree that the few lines about case dependencies on p.7 are not sufficient to arrive at an understanding if a minimal background in case assignment generalizations cannot be presupposed on the readers' side.

"How, again, do considerations of word order and case-alignment translate into phrase-structural representations which are so crucial for the author? — even though he does not explain why they are so crucial."

There must have been a misunderstanding here. The paper does not contain any phrase structural representation. The only indispensable specification of phrase structure is the specification of SVO as [S[VO]]. This applies to languages like English, with a phrase-initial verb position and a preceding, *obligatory* subject position. The main issue of the argumentation in the paper is independent of phrase structure since it only deals with the grammatical subject function across languages. What matters is that only in [S[VO]] languages, there is a *structurally* defined subject position. In VSO and SOV language, the subject is not identified by a unique structural configuration because there is no unique structural configuration to be reserved for the subject. Maybe the reviewer expects phrase-structural representations because I am a syntactician, but I have to disappoint her/him. (My professional specialisation is known to the reviewer because I had posted the paper before submission and s/he admits to have noticed that).

"The author seems to adhere to an outdated "holistic" view of grammatical relations as primitive notions, which has been shown to be empirically wrong and conceptually untenable by a huge body of literature. It has been recognised in typology since at least the advent of the works on "split-ergativity" in late 1970-ies that different constructions and grammatical mechanisms can show distinct alignments in the same language. This recognition has led to a reconsideration of the typological approach to grammatical relations, see e.g. Bickel (2010) and Witzlack-Makarevich & Bickel (2019). Under such a view, Dixon's "S is treated in the same way as O" can only be understood as relative to a particular grammatical construction or type of marking, morphological case being only one of them, and it is no way self-evident why morphological case should be privileged. Therefore, contrary to the author's misinterpretation of Dixon on p. 5:23-26, it does **not** follow that "If S and O are "treated in the same way" in ergative systems, and S is the subject of a finite clause, then "O" will inevitably qualify as the subject of a transitive clause in an ergative system". Likewise, it does not follow, contrary to the author's claim immediately below, that if in an ergative-absolutive system O/P is marked like S, then O-V-A equals SVO. The view whereby "subject" and "object" are defined solely by their case-marking is overly simplistic and outdated, and likewise is the more nuanced view expanded by the author on pp. 6-7 and in section 2.2. Put differently, if the terms "subject" and "object" are to have their own independent meaning in grammatical theory, reducing them in a simplistic way to straightforward patterns of case-marking deprives these terms of any real validity."

As for "holistic view", I have never been attracted by case grammars in the Fillmore-style. As a syntactician, I am aware that 'subject' and 'object' are theoretical concepts and therefore theory dependent. I am also aware of the fact that grammars characterize 'subjects' in a variety of ways, including case (flagging), agreement (indexing), a combination of both, or only structurally ('neutral'), and that pronominals or agreement relations may pattern differently in and across languages.

The only common basis of understanding that I presuppose is that grammars define *grammatical functions* in a clause that we refer to as "subject" and "object". On this basis, I claim that the equivocation of the agentive core arguments with "grammatical subject of a sentence" is inappropriate. It is contradicted by too many grammatical facts. On the other hand, the identification of absolutive as case/agreement of a grammatical subject covers relevant facts of abserg languages **in parallel** to nom-acc languages.

The interpretation of Dixon's alleged inconsistency is not an empirical issue but a matter of logics: If every item with class-A properties is an element of class B, and if the elements of class C have class-A properties (= are treated like A), then every element of C is also an element of class B. This is a logical truth. Let A be the subject-properties of intransitive clauses in a given langue, B be the properties of grammatical subjects in the given language, and C be the core arguments that share the grammatically relevant properties of A-elements that make them a subset of B, then you are bound to arrive at the conclusion I arrived at on p. 5.

As a syntactician, one would obviously argue inconsistently if one claimed on the one hand that "S" is a *grammatical subject*, and that, on the other hand, the argument of a transitive sentence with the very same morpho-syntactic properties is the *grammatical object* of the sentence. Log-ical facts are not negotiable. If typologists like to do this, then of course they are free to do so, but they are acting neither logically consistent nor empirically justified.

"Likewise, it is not the case, contrary to what the author takes pain to argue, that nom-acc and erg-abs alignments are simply mirror-images of each other. E.g. with respect to omission of arguments, the author claims on p. 9:9-11 that "In ergative languages, the same conditions apply,

modulo alignment. So, the ergative phrase may be optionally missing, but that absolutive is obligatory. obligatory." But this is no more than a hypothesis that needs to be tested empirically, and by no means a proven "universal". In section 2.2 the author seems to assume that the eight properties "of the grammatically privileged status of grammatical subjects " (p. 9:47-48), first, apply to alleged grammatical subjects in a consistent way and, second, that absolutives behave in the same way as nominatives, but this assumption is again but a hypothesis subject to empirical test, and this test is, and this test is missing."

If the reviewer had known of a counterexample, s/he would certainly not have withheld it, I presume. The information assembled in table (7) in the paper is information extracted from the typological research literature. Ergative 'subjects' are "dispensable", in Keenans sense,<sup>53</sup> as for instance noted by Churchward (1953: 68) on Tongan, Dixon (2010:168) on Dyirbal, Keenan (1976: 313) on Tongan, Eskimo, and Tibetan, or Laka (1996:13) on Basque. As for absolutives, I did not find any pertinent information. It seems that typologists have not yet asked themselves why an "absolutive object" cannot be omitted as freely as an "accusative object". Ultra posse nemo obligatur.

"Further, the author's statement on p. 10:14-18 that "antipassive in ergative languages ... in reality is what passive is in nom acc languages" is wrong. The author ignores the recent typological literature on antipassives (Janic 2013; Heaton 2017; Janic &Witzlack Makarevich 2021), from which it clearly follows that, first, antipassives are found in nominative accusative languages (just as passives are found in ergative absolutive languages) and, second, that there only very few languages where antipassives serve purely syntactic functions parallel to those of passives in nom acc languages. Therefore, antipassive and passive, contrary to what the author claims on p. 10:28-29, do deserve to be terminologically separated " and are not instantiations of the very same thing Moreover, as shown by Arkadiev & Letuchiy (2021), in the ergatively aligned Circassian languages the antipassive actually patterns in a nominative accusative fashion, being crucially not limited to transitive clauses and the omission of the privileged absolutive argument, but rather targeting the semantic role of an affected participant patient. Therefore, it is, in the author's own words (p. 11:7), "both misleading and missing an essential generalization " to claim that "The naming of the semantic role of the suppressed subject is redundant since it is determined by the alignment system in interaction with the lexical argument structure" (11:13-16).

Here we are right at a core issue. Functionalist typologists perceive passive and antipassive as grammatical backgrounding procedures for actors and undergoers, respectively. It seems to be of little interest to them that speakers of ergative languages are apparently outstandingly eager to background undergoers, while speakers of accusative languages are busily eliminating actors. What an anthropological schisma! Why are functionalist typologists not interested in the cause of this truly 'mysterious' segregation (in order to find out that it is apparent only)?

<sup>&</sup>lt;sup>53</sup> "Dispensable" means that a core argument may be omitted. Semantically, the argument is then interpreted by existential closure, that is, as indefinite and unspecific. "*He won*" means that there is something that he won, and in Churchward's example (6a) in the paper the omitted argument is interpreted by existential closure, too: There is someone who killed Goliath. The dropping of dispensable arguments (ergative in abs-erg, and accusative in nom-acc) must not be confused with the dropping of pronominal arguments ("pro-drop"). They are interpreted as *definite* and *specific* in reference. Non-subjects are in principle dispensable. This applies to ergative and accusative.

The unspectacular syntactic answer is this: Their grammars do exactly the same. They provide means for morpho-syntactically signalling that the primary candidate for the subject role is eliminated. This happens to be the actor argument under nom-alignment and the undergoer under absalignment. The cross-linguistic typological confusion is merely the result of a terminological confusion caused by the semantically based definition of passive and antipassive. Silverstein (1976: 140), the namesake of this terminology, was fully aware of the syntactic parallels. He discusses passive and notes that "*Ergative systems have an analogous construction, here termed as antipassive, which has all the properties of the passive, as Kurylowicz, again saw.*"

Only later was his insight trivialized and oversimplified. Passive was short-sightedly declared as an agent backgrounder and antipassive as a patient backgrounder. On the surface, this seems to be a harmless change of the perspective, but as a *syntactic* characterization it is as wrong as it can be since it fails to generalize across alignment modes. From then on, the sighting of anti-passives grad-ually became similar to UFO sightings. Whenever an undergoer seems to be morpho-syntactically eliminated, someone comes and claims it as an instance of anti-passive. Let me give (you) an example (note: dispensable object).

In German, the combination of the particle "zu" with a subclass of transitive verbs has the effect of detransitivising the verb by blocking the undergoer. Here is the example (s. Haider 2004:86):

- i. zu-beißen, zu-buttern, zu-hauen, zu-hören, zu-greifen, zu-schlagen, zu-schnappen, ....
  - bite, butter, hit, hear, grab, strike, snap,
- ii. Der Hund wird niemanden<sub>Acc</sub> beißen the dog will nobody bite
- iii. Der Hund wird (\*niemanden) zubeißen the dog will (nobody) "zu"-bite

As Witzlack-Makarevich (2019: 23) emphasizes "*The antipassive alternation is often lexically specified and is rather limited in terms of verbs it can occur with (Polinsky 2017)*." So, from a typologist's point of view, I would be entitled to file this phenomenon under a German antipassive-phenomenon, but as a syntactician I would justly be ridiculed. If there are typologists who behave as if everything that has fins is a fish, this is merely an ill-founded concept of taxonomy but cannot be used as an argument.

I can live with justified criticism, but I can do without uncharitable rhetoric: Let me emphasize once more that my claim, that merely resuscitates insights of Silverstein (1976) and Kuryłowicz, is completely independent of the alleged existence of so-called antipassive-like phenomena in non-ergative languages. If "it clearly follows that [...] antipassives are found in nominative accusative languages" then this does not concern what I have written. Here is once more the definition of antipassive by respected typologists, Dixon & Aikhenvald (2000: 9), from p.10 of the paper:

- (8) a. The antipassive construction is formally explicitly marked.
  - b. Antipassive forms a derived intransitive from a transitive verb.
  - c. The otherwise ergative-marked NP becomes S (viz. subject).
  - d. The otherwise absolutive-marked NP goes into a peripheral function and can be omitted.

This is the exact counterpart of passive – which nobody can reasonably deny – modulo alignment, with absolutive as subject case. Please have a look on (9) on p. 10, once more.

"With respect to what the author calls "verb agreement", things are again much more complex and varied than he presents on p. 9:27-34 and further on p. 11:40-47 . First, as is well known (see e.g. WALS), verbal head marking systems tend to be aligned in a nominative accusative fashion even in languages with ergative absolutive case marking; such systems clearly contradict the author's claim that " If a language has object verb agreement, it also has subject verb agreement ", if "object verb agreement" in languages with ergative case marking is understood as agreement with Erg , and the author s statement on p. 9:33-34 that such systems are "an unstable grammatical constellation" is completely unfounded and simply wrong . Second, there are nominative accusative languages which show object agreement but no subject agreement , e.g. Kawaiisu (Uto Aztecan)."

That things are complicated no linguist would deny. There are splits of many kinds. The alignment mode may be split between pronouns and lexical noun phrases, and there occur splits between the alignment mode of flagging and that of indexing. But this does not mean that 'subject' and 'object' are *formally* undefinable. But what is the relation to the claim in the paper? I merely insist that absolutive is the grammatical subject and that NPs identified as absolutive behave like subjects are expected to behave, and that, therefore, ergative "OVS" languages are in reality ergative SVO languages. The paper does not pretend to be an encyclopaedia of alignment.

As for the Kawaiisu language, the reviewer does not reveal the informant<sup>54</sup> for this language. Zigmond et al. don't seem to agree (excerpt from WALS), however:

10	2A	Both the A and P	Verbal Person Marking	Zigmond et al.
		arguments		1990-1991: 87

"Finally, the author's bold statement on p. 3 that "Comparative linguistics is bound to fail when it takes the identity of communicative functions or content as the tertium comparationis" is incorrect and stems from prejudice and misunderstanding (if not conscious misinterpretation). The analogy between homology-based comparison in biology and linguistic typology is a misguided one, because homologous structures in living organisms are believed to have a common evolutionary ancestor, whereas no common historical sources are ever postulated, assumed or even considered for linguistic structures that are compared in typological research. The only truly legitimate linguistic analogy to homology in biology should come from historical-comparative linguistics, i.e. continuants of a common proto-language etymon in daughter languages. Therefore, what the author calls "a catalogue of accidentally analogous properties" is exactly what typologists are consciously looking for, i.e. different formal means that languages develop - from different sources and via different pathways - for the expression of common functions. This is a fully legitimate endeavour, just as legitimate as comparison on non-homologous but still functionally analogous features of living organisms in order to establish how similar needs and environmental pressures trigger evolutionary distinct responses in dissimilar organisms. Needless to say, the author's methodological stance ("The structural identification of grammatical functions is the necessary,

<sup>&</sup>lt;sup>54</sup> Language with more than one native speaker but fewer than ten.

appropriate, and indispensable basis for cross-linguistic comparisons", p. 20) is also bound to produce "a catalogue of accidentally analogous properties", rather than anything comparable to homology-based properties discovered in biology."

I am grateful for this great statement on maxims of typological research. I cannot refrain from being blunt. What the reviewer reveals to me – "a catalogue of accidentally analogous properties" is exactly what typologists are consciously looking for" – is an understanding of scientific working that has been already rejected by Ch. Darwin:<sup>55</sup>

"About 30 years ago there was much talk that Geologists ought only to observe & not theorise; & I well remember some one saying, that at this rate a man might as well go into a gravel-pit & count the pebbles & describe their colours. How odd it is that every one should not see that all observation must be for or against some view, if it is to be of any service."

In view of such an attitude, it is not surprising that the reviewer has no idea of homologous comparability of grammatical relations. The homologous approach is structural and it compares structures across languages, rather than communicative functions.<sup>56</sup> The supposedly direct explanatory power of the communicative functions is negligible (see the remark on so-called 'backgrounding' across different alignment systems above). 'Subject' is a structural notion once it is defined in terms of the formal properties a grammar provides for characterizing a distinguished argument. Accessibility (in Keenan & Comrie's notion) is a structural notion, too. In quite a few languages with restricted accessibility, only absolutive arguments are accessible, but ergative ones are not. This is in complete parallel to nominative arguments in nom-acc languages. For Polinsky et al. (2012: 69) it is an enigma, and enigmatic it is as long as one regards ergatives as subjects.

It is easy to go on with examples: In functionalist typology, the Scandinavian *s*-passive would be just a facet of agent-backgrounding. In fact, it is an outcome of a middle construction and understandable only in this context (homologous comparison). Similarly, the Romance counterpart of it (cf. *si* passivante, *si* impersonale) is communicatively equivalent to the standard passive with a participle and an auxiliary. For functionalist typologist these are all backgrounding options for the A argument of a transitive verb and go into the same basket, by analogy. The mess this methodology produces is "a catalogue of accidentally analogous properties".

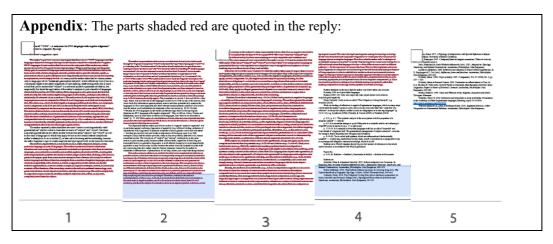
"Needless to say" that the reviewer cannot know what "the author's own methodological stance is bound to produce". But here is the link for finding it out: Lingbuzz (https://ling.auf.net/lingbuzz/\_search?q=Haider). It is a documentation of what it means "that all observation must be for or against some view, if it is to be of any service" and that a typologist must think outside the box. Then it would become evident that biologists have developed the necessary theories to deal with what appears to be a maze of variations in a field of constantly changing systems. And biologists despise analogous comparisons ('by utility'), for principled reasons: "As Darwin rightly said 'Nothing can be more hopeless than to attempt to explain the similarity of pattern in members of the same class, by utility or by the doctrine of final causes'." Mayr (1982: 464).

<sup>&</sup>lt;sup>55</sup> Letter to Henry Fawcett from September 18, 1861.

<sup>&</sup>lt;sup>56</sup> "The most important and widespread biological debate around the time of Darwin was not evolution versus creation, but biological functionalism versus structuralism." (Amundson 1998:153).

I can understand if typologists do not consult the *Nature* journal regularly, but it would be useful for them:

"The evolution of languages closely resembles the evolution of haploid organisms. This similarity has been recently exploited (Gray R. D. and Atkinson Q. D., (2003 Nature 426: 435); Gray R. D. and Jordan F. M. (2000. Nature 405: 1052) to construct language trees." Evolution presupposes variation and diversity, but neuro-cognitive selection shapes grammars. They develop like cognitive viruses (i.e. like haploid organisms in the organic realm of nature), see Haider (2021a,b). I understand that there is still a long way to go before joining forces for a scientific approach to linguistic diversity must be empirically grounded in THEORETICALLY INFORMED, HYPOTHESIS-DRIVEN[emphasis mine]HH fieldwork on individual languages." Davis et al. (2014: e180).



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