SUBJECTS ACROSS ALIGNMENT SYSTEMS

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Abstract

An empirically adequate concept of 'subject' is the key for solving a series of self-inflicted problems in the comparative syntax of ergative languages. Word order typology and Generative Grammar share a misconception. Both schools misidentify syntactic subjects in ergative languages. As a consequence, it appears as if a major word order type, namely SVO, were missing in the group of ergative languages. In reality, what is missing is a proper conception of syntactic subject. It will be shown that SVO is a well attested type for ergative languages, but the respective languages have been misclassified as "OVS". In reality, genuine OVS languages are inexistent, in both alignment types. Candidate languages for this type have been misclassified, for the very same reason.

1. Background – The cross-linguistic un-isotropy of subjects

In linguistics, 'subject' is as omnipresent as elusive a concept, easy to confound, and testing to capture adequately. Presently, it is more often than not construed in a way that leads typologists as well as theoretical linguists astray. A demonstration case is the claim that one of the major word order types, namely SVO, is absent in the group of languages with absolutive-ergative alignment. Both, typological as well as theoretical linguists, make this out as a problem. Generative linguists are eager to model and solve it. However, the putative problem is a pseudoproblem and its source is an inadequate concept of "syntactic subject". The missing pattern – an [Erg [V Abs]] clause structure – is nothing else than the ergative counterpart of the cross-linguistic absence of an [Acc [V Nom]] clause structure in Nom-Acc systems, the only difference being that nobody cares to worry about the absence of languages representing the later.

The confound is not only an issue in typology but also in Generative syntax. This shows in a recently revived discussion (Taraldsen 2017, Roberts 2021) on the alleged non-existence of *ergative SVO* languages. Both, in syntactic typology, see Trask (1979) and Siewierska (1996), as well as in Generative grammar, see Mahajan (1997) and Lahne (2008), the combination of ergative alignment plus SVO has been declared to be inexistent. According to Mahajan (1997: 38), "*verb medial (SVO) languages are never ergative*." Siewierska (1996: 149) emphasizes that there is "*an association between ergative alignment and non-SVO order*" and "*an association between ergative alignment and object-before-subject order*".

The "SVO" structure deemed to be barred is characterized as *S_{Erg}-V-O_{ABS}. It will be argued that the syntactically correct structural analysis of the *missing* Erg-V-Abs word order pattern is O_{Erg}-V-S_{Abs} rather than S_{Erg}-V-O_{ABS}. The latter is a misanalysis. Under the former analysis, the absence of such a word order pattern is straightforward. That [O[VS]] languages do not exist has been noted already by Greenberg (1963: 76), who described OVS as one of the types that "do not occur at all or, at least are excessively rare". If the linearization pattern is made precise structurally, there is consensus that [O[VS]] is no attested clause structure, if O is understood as a VP-external *syntactic* object and S as VP-internal *syntactic* subject, respectively.

Contrary to the widely entertained view, ergative "SVO" languages are well-attested. They have been misclassified as OVS because of the syntactically unsubstantiated cross-linguistic identification of the *agent* noun phrase of an agentive transitive verbs as the *syntactic* subject. In consequence, languages with an absolutive-V-ergative serialization are catalogued as OVS languages. As will be shown, an abs-V-ergative order is syntactically an SVO order in a language with ergative alignment. Furthermore, virtually all so-called OVS language are ergative languages (see section 4).

It is amusing to read that 'ergative' is a confusing term for lexicographers, too. Collins English Dictionary¹ explicates "ergative" as an adjective with different readings in American and British English. The reading labelled American English is the reading used in typology. The alleged British English reading is a misunderstanding. What it describes is not ergative case but the typological understanding of absolutive case.

- "Ergative (American English): pertaining to a type of language that has an ergative case or in which the *direct object* of a transitive verb has the same form as the *subject* of an intransitive verb."
- "Ergative (British English): denoting a case of nouns in certain languages, for example, Inuktitut or Basque, marking a noun used interchangeably as either the *direct object* of a transitive verb or the subject of an intransitive verb"

Bakker & Siewierska (2007: 141) emphasize that "Subject is both one of the most controversial notions in linguistics and the one most often taken for granted". A consensual, empirically adequate and precise definition is wanting. In the vast majority of natural languages, the noun phrase representing the argument of a monovalent verb and one of the arguments of a transitive verb are morpho-syntactically 'treated alike'. This is the syntactic subject. In linguistics, this ubiquitously used term is typically handled paradigmatically, that is, it is exemplified by reference to samples of languages or to collections of characteristic properties, such as Keenan's (1976) collection.

It seems that those who strive for a *universal, cross-linguistically easily applicable* definition of 'syntactic subject' are chasing a phantom since they are after a *theory-neutral* definition for a term that is *theory-dependent*, for the following reason. 'Subject' is a grammatical function regulated by the interaction of at least five grammatical factors, namely the lexical argument structure of argument-taking lexemes, the case system, the agreement system, the structural organization of clauses, and the alignment system. Since these components are cross-linguistically variant, the characterization of 'subject' is cross-linguistically variant, too. Consequently, an *easily applicable*, cross-linguistically *uniform* (= invariant) and *empirically adequate* set of properties that could be easily ascertained by just superficial inspection of simple sentences is principally out of reach. The task may seem to be relatively easy as long as 'cross-linguistic' does not cross alignment systems. If it does, the characterization typically revolves around the question of what is the subject of a clause with a transitive verb in languages with ergative alignment.

Some linguists (including the author) insist that the subject of a transitive verb in a finite clause is the noun phrase with the same case, agreement, and other syntactically relevant properties as

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¹ https://www.collinsdictionary.com/dictionary/english/ergative [Sept. 25, 2022].

the single noun phrase of a finite clause with a monovalent verb. Today, this seems to be a minority position. It has been presented already by Schmerling (1979) and Trechsel (1982). More recently, Bakker & Siewierska (2007: 292) have made a clear statement: "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)."

In contrast, the majority of typologists and field linguists typically assume that the *subject* of an agentive transitive verb is the noun phrase that denotes the *agent*, irrespective of the alignment system.

"A, S, and O are the basic relations. As a secondary step, A and S are grouped together as 'subject'." (Dixon 2010a: 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." (2010a: 229).

Misapprehensions are guaranteed when *semantic*, *lexical*, and *syntactic* categories are intermingled. The term "A" (for agent argument) is a lexico-*semantic* category taken from the *lexical* argument structure, while O refers to the *syntactic* category of the so-called direct object in the syntactic representation. In alignment typology, the symbol "O" for the theme argument of a transitive verb is an infelicitous terminology. It is misleading since its interpretation has been imported from European languages, notably Latin, with a nominative-accusative system. "O" for "object" refers to the argument that is the default object. In combination with the "A is Subject" terminology, this impedes the insight that in languages with abs-ergative alignment the syntactic subject is the 'other' argument, viz. the *non-agentive* core argument of the two arguments of an agentive transitive verbs, and the A-argument surfaces as structural or lexically-cased object of the verb (see Table 1 in sect. 3).

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 absolutive-ergative system. This standpoint is astounding since it contradicts Dixon's own characterization of ergative alignment in Dixon (1994: 22):

"The term 'ergativity' will be used in the standard way, for referring to S and O being [gram-matically]_{HH} 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."

This characterization implies that under ergative alignment, the *subject* of a transitive clause is the *absolutive* noun phrase. This conclusion is inevitable if S and O are "*treated in the same way*" in ergative systems, and S is the subject of a finite clause. Consequently, the "O"-argument will qualify as the syntactic *subject* of a transitive clause in an ergative system. Dixon (2010b: 119), however, insists on a 'headstand' construal of the relation: "*There are two recurrent patterns – S marked like A and S marked like O.*" This inverts the relevant relation since S is the target of comparison and not O. S is the *subject* of the simple, intransitive finite clause. Hence, wherever "O" is (morpho)-syntactically treated like S, "O" is the syntactic subject. Nobody

would deny that the promoted O argument in a passive clause or the O-argument of an English middle is the syntactic subject of the clause. The source of the misunderstanding is the choice of "O" (= syntactic object function) instead of "the argument that is mapped on the function of the syntactic object under nom-acc alignment".

Here is a concrete illustration of the criticised misconception. The illustrative commentary on the data points (1) and (2) from Konjo, a Western Malayo-Polynesian variety of Makasar, South Sulawesi, is taken from a randomly chosen publication. Konjo is a VSO language with ergative alignment, with NPs fronted optionally to the clause initial position. Friberg (1996: 141) reports that "either the subject or object can be fronted as topic." The post-verbal relative order of subject and object is variable, as Friberg (1996: 141) notes and "it is quite common for the subject to follow the object, in which case the context clarifies the participants." This explication is meant to apply to (1).

- (1) Naallej tasi'ku meonga. Konjo (Friberg 1996: 141)
 3ERG.take.3ABS bag. 1 POSS cat.DEF
 The cat took my bag.
- (2) Naondangi meonga asua. Konjo 3ERG.chase.3ABS cat.DEF dog.DEF The dog chased the cat.

Again, in her understanding, the agent is the subject. So she comments (2) as follows: "Technically [...] 'the cat' is in subject position, yet everyone knows that dogs chase cats, not vice versa." Why 'technically'? 'The cat' IS the syntactical subject of the clause. It does not matter that in the nom-acc languages that most of us speak, 'the dog' would be the syntactic subject. It is fully sufficient that cross-linguistically, the grammar systematically picks out one of the two arguments of a transitive verb for the syntactical subject function. In nom-acc languages it is the NP linked to the agent slot, in abs-erg languages it is 'the other' argument slot.

Those who defend the thesis "Agent-argument = subject" would typically refer to the fact that both, in nom-acc and abs-erg system, agent noun phrases may have some properties in common across alignment systems. This is the source of the abdicable distinction between "morphological" and "syntactic" ergativity (cf. Deal 2015). Morphological case is a syntactically governed phenomenon, and subject-verb agreement is a syntactically governed phenomenon, too. Morphological means serve syntactic purposes. That in some cases, non-subjects share properties of subjects does not make them subjects. Abs-erg alignment, just like nom-acc alignment, is not restricted to languages with case and agreement morphology (cf. continental North Germanic languages as nom-acc languages without case & agreement morphology on verbs or nouns, or ergative languages with without case morphology). Languages with grammatical morphology merely present a clearer window for studying the syntactic collaterals of alignment systems.

It will be shown below that the few parallels between ergative and nominative noun phrases are parallels in terms of *argument* structure but not in terms of *syntactic* structure. What is taken to be a *subject* property of ergatives is in fact a property of an *argument*-structure category. The ergative and the nominative noun phrases are associated with the same kind of theta role.

Ironically, Generative linguists follow suit and adopt the preference of typologists for a *non-syntactic* characterization of the *core syntactic* category 'subject'. Convinced by Baker (1988, 1997), many Generative grammarians share the assumption that theta-roles, and in particular also the agent role of a transitive verb, are universally associated with *identical structural* positions while typologists take a shortcut and directly identify the agent with the subject function (see Dixon above). In both schools of linguistics, the basic misunderstanding arises from the improper identification of the very *syntactic* relation known as "subject".

The argumentation of the Generative school is more technical than in the typological field but equally problematic. Here is a pertinent statement of Polinsky & als. (2012: 268), who refers to ten other consensual 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". This appraisal matches the typologists' and field linguists' viewpoint:

"In a language where reflexive and/or reciprocal constructions involve a reflexive or reciprocal pronoun (with the transitivity value of the clause remaining unaffected), it is always the A or S argument which is grammatical 'controller'. That is, the A or S argument is fully stated while the reflexive or reciprocal pronoun is placed in O or E or a peripheral function." Dixon (2010b: 118).

In the following section, the criteria Dixon (2010a: 229) and Polinsky et als. (2012: 286) rely on, namely imperatives, reflexives, control and raising, will be examined in more detail.

2. How to identify a syntactic subject

First, the properties itemized by Dixon and by Polinsky et als. are certainly not "all the criterial properties of a subject". In fact, the relevant criterial properties are missing, such as case assignment, subject-verb agreement, indispensability, and object-to-subject promotion (see below). What they should have noted instead is that an agent, irrespective of its grammatical function, may be associated with certain properties. Second, the enumerated "criterial properties" do not uniquely identify the syntactic subject of a clause, as the following discussion is intended to demonstrate.

2.1 Binding of reflexives

A nom-acc language such as German is sufficient for exemplifying that the binding of reflexives is an unreliable criterion for subjecthood; see Schäfer (2012), Haider (2013: 86). In German, which is cross-linguistically not exceptional in this respect, the subject is not the unique antecedent ("controller") of reflexives. Antecedents of a reflexive may also be a c-commanding object (3a) as well as a "by-phrase" (3b), and, crucially, the reflexive may even relate to an implicit and *syntactically* absent argument (3c,d). Contrary to Dixon's claim,² the A argument is not always "fully stated" in contexts with reflexives or reciprocals

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² 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 α is the smallest TP containing α, if α is the subject of a tensed TP, otherwise, the smallest TP containing α and a DP which c-commands α." http://web.mit.edu/norvin/www/24.902/binding.html [29.6.2022]

- (3) a. Du musst diese Zahlⁱ mehrmals mit *sich*ⁱ multiplizieren.³ you must this number_{acc} several-times *with itself* multiply⁴
 - b. Taufriten wurden von jedemⁱ für *sich*ⁱ allein vorgenommen.⁵ baptising-rites were by everyone *for himself/herself* alone undertaken
 - c. Es wird zu wenig *mit einander* geredet.⁶ Expl is too little *to each-other* talked
 - d. Im Bewerbungsgespräch wird zu wenig auf *sich* aufmerksam gemacht.⁷ In-the job-interview is too little to *oneself* attention paid

What these data illustrate does by no means substantiate the claim that the antecedent relation of a reflexive *uniquely identifies* the 'subject of a transitive verb'. The data imply that the notion 'syntactic subject' must be strictly separated from the notion 'default subject candidate' of 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 an active declarative clause in a language 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 as an agent bound by the subject as non-agent is structurally well-formed but deviant.⁸

At least 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 binding data are in general no reliable indicator of syntactic subjecthood of ergative noun phrases since the construal process operates mainly on the information provided by the lexical argument structure and only to a minor extent on the syntactic structure. "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. 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 als. (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 the relevant one.

2.2 Imperatives

What would an imperative mean that addresses the *non-agentive* argument of a transitive verb? Is it reasonable to expect speakers of an ergative language to use the equivalent of (4b) instead of (4a). We do not talk to syntactic "subjects". We speak to a communicating *participant*. If the grammar of an ergative language would indeed require to relate the imperative to the absolutive, it would relate it to a non-participant. In (4a), one would have to address the door rather than the intended addressee, viz. the colleague. One can be sure that grammar change would have

³ https://www.youtube.com/watch?v=gUQqWfvqef0

⁴ English is grammatically and notionally identical in this respect: "To square a number means to multiply *it* by *itself*."

⁵ https://de.wikipedia.org/wiki/Taufe

⁶ https://kurier.at/politik/inland/live-kurz-und-kogler-geben-statements-ab/401763894

⁷ https://docplayer.org/5868059-Schwierigkeiten-mit-dem-einstieg-in-den-arbeitsmarkt.html

⁸ The 14 billion *Word Web Corpus* does not contain a single token of "was photographed by himself" or "was shot by himself".

⁹ 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."

led to grammars that provide the option (4b) rather than (4a), irrespective of the subject status of the addressee.

- (4) a. Gift, be accepted by my dear friend, please!
 - b. Dear friend, accept the gift, please!

The *imperative* is a verb form and it is the grammar that determines which argument of the verb is the addressee. In both types of alignment, it is the agent argument. Imperatives with non-agentive verbs are odd, for pragmatic reasons.¹⁰

2.3 Control 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 may represent the controlled null-subject (Thráinsson 2007: 420). Furthermore, we know that in an abs-erg language such as Basque, both absolutive and ergative may serve as controllers or controlees (Arrieta et als. 1986: 31). So, the translational counterparts of English control constructions are no reliable criterion. Moreover, in many languages, embedded infinitival 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).

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 subject raising. Here is an illustration with *subjectless* clauses. 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 no subject raising construction. It is safe to expect the same for ergative languages.

- (5) a. dass nicht rechtzeitig [reagiert worden zu sein scheint] that not in-time [reacted been to be seems]
 - 'There seems not to have been reacted in time"
 - b. dass ihnen_{dat} zu viele Fehler_{nom} [gemacht worden zu sein scheinen]
 that (to) them too many blunders made been to be seem
 ('Too many blunders seem to them to have been made')

Finally, if binding operates on the information provided by the argument structure, this information is available also for cross-clausal anaphora. So, in all, the criteria typically invoked for regarding the ergative noun phrase as the *syntactical* subject are not compelling.

3. 'Subject' across alignment systems

Syntactic functions such as subject and (direct) object are formal relations. If they appear to be *constrained* by semantic, pragmatic, or prosodic factors, this is a misapprehension. It simply means that a given, syntactically well-formed option may not be appropriate for a particular

¹⁰ i. #Last for one hour! ii. #Dauere eine Stunde! [German; = (i)] ii. #Don'be identical with yourself!

semantic, pragmatic, or prosodic constellation. It is not ruled out *syntactically*, however.¹¹ The fact that in a *nom-acc* language, in a finite, declarative, active sentence, the agent role of a verb never surfaces as an object of the verb is not a semantically controlled property. It is a reflex of a purely formal relation, namely the following: In nom-acc alignment system, the *top-ranked*, ¹² structurally case-marked argument of the argument structure of a verb will be the candidate for the subject function. Since the agent role is top ranked, it is the candidate for the subject function in nom-acc systems. In abs-erg alignment systems, on the other hand, the candidate is the *lower-ranked* argument with structural case. In each of these alternative ways of subject selection, the other structurally cased argument receives the dependent case, that is, accusative or ergative, respectively (see Table 1).

Table 1: A-structure of a transitive verb with structural case	
Lexical argument tier:	$\Theta_{ m AG} < \Theta_{ m TH}$
Syntactic argument tier:	<u>A</u> A
Nom-Acc alignment:	A with dependent case
Abs-Erg alignment:	A with dependent case

The dependent case is the case of the direct object. The dependency relation of accusative licensing on nominative licensing has been formulated first in Haider (1985a: 72; 1985b: 13; 2000: 31) and later by Marantz (1991) and Baker (2015). The dependent structural case can only be assigned when the ,independent' structural case is realized too. Otherwise the candidate for the dependent case surfaces with the independent case (cf. 'promotion' = case shift in passive and antipassive). In nom-acc systems, nominative is independent and accusative dependent; in abs-erg-systems, absolutive is independent and ergative dependent.¹³

The prototypical example of the effect of dependent case assignment is passive and anti-passive, with the switch from accusative or ergative in the active construction to nominative or absolutive, respectively, in the (anti)-passive construction. In general, the *syntactic* subject is the morpho-syntactically *privileged* noun phrase aligned with an argument slot of the finite verbal predicate. The content of '*privileged*' is to a certain extent relative to the given language, as Keenan (1976) showed, with a cross-linguistically assembled pool of roughly thirty grammatical qualities. Mel'čuk (2014: 179) proposes the following definition:¹⁴

"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."

Subject privileges¹⁵ show in morpho-syntax, as for instance the agreement relation of the finite

¹¹ Remember Chomsky's locus classicus "colorless green ideas".

¹² Ranking follows from the decomposition structure (Wunderlich 2012: 327). Here is the structure of an agentive predicate: $\lambda y \lambda x \lambda e [ACT(x) \& [BECOME[STATE(y)]]] (e)$, with (x) as the highest nominal argument variable.

¹³ In split-ergative languages, both dependency relations may be operative simultaneously, one for nominal case and one for pronouns.

¹⁴ I am grateful to Martin Haspelmath for making me aware of Igor Mel'čuk's definition.

¹⁵ Van Valin (2005: 99) suggests a different concept of privileged that is applied in a construction-specific way: "Privileged syntactic arguments are construction-specific, while grammatical relations like subject are not."

verb in languages with subject-verb agreement. In languages that provide a unique structural subject position, the subject is *structurally* privileged, and this is reflected in word order patterns. In genuine [S[VO]] languages, the preverbal position is reserved for the subject while objects follow the verb. Privileges are concurrent with restrictions. One of these restrictions is what Keenan (1976: 313) calls "indispensability".

3.1 Subjects are "indispensable"

Subjects, unlike objects, must not be omitted. ¹⁶ Omission of the default subject argument must be grammatically signalled. This is known as "passive" in Nom-Acc languages, and in direct grammatical correspondence, as "anti-passive" in ergative languages. In fact, passive and anti-passive are means of syntactically neutralising the argument that would otherwise surface as subject. The relevant aspect is not "valency change" but grammatical suppression of the default candidate for the *subject* relation, which cannot be omitted freely. Valency change is the effect.

In the majority of languages, the fundamental linking relation that links phrases to the lexically specified argument slots of a head item (verb, noun, adjective) is coded morpho-syntactically. What we see are first of all systems that provide some redundancy in the coding of the linking relation as a means of a guaranteeing a robust signal-to-noise ratio. Typically, this is established by morphological marking on the argument phrase (e.g. case) as well as on the head element that provides the argument slots, which is typically the verb. Second, in a cognitively economic agreement system, the verb comes with agreement morphology in *every* ('finite') sentence. So, preferably, there is a phrase in every sentence the finite verb agrees with. This is the syntactic subject. Taken together, this amounts to a sufficiently tight cross-referencing system by head marking as well as dependent marking, which does not rule out, of course, that some languages employ only dependent marking and others only head marking, cf. Nichols (1986).

Third, economic case systems provide structural cases that are not tied to a particular thematic structure and therefore do not vary from verb to verb. The two structural cases – subject case and object case – are in a dependency relation. The object case is assigned only in the presence of the subject case. Otherwise subject case is assigned to the object candidate (see unaccusative verbs or passive). As a consequence, subjects are not, and cannot be, dropped freely since the object would receive the subject case. This kind of "indispensability", Keenan (1976: 313) identifies as one of the primary properties of a syntactic subject. In (6a,c), the objects are optional, but the subject must not be omitted (6bd).

- (6) a. They would never forgive (you) (anything).
 - b.*Never would forgive you anything
 - c. Sie würden (Dir) nie (etwas) verzeihen. German They would(you_{Dat}) never (anything_{Acc}) forgive
 - d.*Nie würden Dir etwas verzeihen.

never would_{pl.} you_{dat} anything forgive (*'Never would forgive you anything')

¹⁶ Subject omission must not be confused with the pronominal null-subject phenomenon. 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 anything to anyone.

¹⁷ What appears to be an instance of subject drop in (i) is an unaccusative verb with its causative variant (ii):

i. The devices have moved.

ii. Someone has moved the devices.

The elimination of the subject argument must be morpho-syntactically signalled. In ergative languages, this is the so-called anti-passive construction, which is the homologue of passive in nom-acc systems, modulo alignment system. Anti-passive and passive are the very same syntactic phenomenon, namely the grammatical way of signalling that the momentary syntactic subject is not the default subject argument.

Keenan (1976: 313) notes that "several ergative languages however do appear to permit unspecified subject deletion. Notably Tongan, Eskimo and Tibetan." Here, it is crucial to bear in mind that his remark refers to the ergative-marked NP. In fact, what Keenan observes is the counterpart of the omission of direct objects in nom-acc languages, as in (6a,c). What he fails to note is the fact that in these languages, it is the absolutive NP that cannot be omitted freely. It can be eliminated only if properly signaled by morpho-syntactic means (7b), with a concomitant switch of ergative to absolutive (i.e. object to subject promotion).

(7) a. Aid opa-n matses pe-e-c.

Matsés

that.one $dog_{\text{-ERG}}$ people.ABS bite-nPST-INDICATIVE

Fleck (2003: 931)

'That dog bites people.'

b. Aid opa pe-an-e-c.

that.one dog.ABS bite-AntPass-Npast-INDICATIVE

'That dog bites' / 'That dog always bites / is biting'

In (7a), the ergative-marked phrase¹⁸ can be freely omitted (Fleck 2003: 838-839). The resulting reading is one with existential closure of the argument slot: There is some x, such that x bites people. This is the counterpart modulo alignment of object drop in nom-acc languages (8b):

(8) a. Dieser Hund beißt niemanden

this dog bites nobody

b. Dieser Hund beißt nicht

this dog bites not

It is strange that in the discussion of the subject properties of ergatives it is usually mentioned that the ergative phrase can be dropped¹⁹, but the 'indispensability' of the absolutive goes unmentioned. However, this is exactly the difference between an object (viz. ergative) and a subject (viz. absolutive), respectively. The argument slot of a dropped ergative is interpreted just like a dropped accusative, namely by existential closure, i.e. there is some x such that V(x).

3.2 Promotion to subject

A most astonishing fact in the debate on subjects of clauses with ergative alignment is a blind spot with respect to object-to-subject promotion: Why is an *absolutive* object *never* promoted to an 'ergative *subject*', if an absolutive NP is an object? It is a conspicuous and undeniable fact that a derived subject is never ergative. This fact could not have been overlooked by systematic studies, but it apparently has. In every nom-acc language, the syntactic elimination of the primary subject, aka passive, triggers the promoting of the structurally-cased object to a derived subject, but there is *no absolutive-to-ergative* promotion in ergative languages. Quite to the

¹⁸ "There are in fact no formal distinctions between Instruments and Ergative participants." Fleck (2003: 831), on Matsés.

¹⁹ cf. Churchward (1953:68) on Tongan, describing clauses consisting of "verbs with object only", that is, consisting of absolutive + verb only. (see Otsuka 2000). Appropriately analysed, this is subject + verb.

contrary, the ergative is promoted to absolutive if the default absolutive is eliminated. This should ring a bell since in *no* nom-acc languages there is a syntactic operation that *demotes* the subject to a *direct object* in a *finite* clause. Why would there be such a demotion in ergative languages? In fact, there is none. In each case, the dependent case is replaced by the subject case. The emerging picture is simple and consistent (Table 2). An absolutive cannot be 'promoted' to ergative because the absolutive is the case of the subject.

Table 2: Promotion to subject (when default subject is eliminated)	
Nom-Acc alignment:	Dependent case is Accusative
Promotion to subject:	Accusative to Nominative
Abs-Erg alignment:	Dependent case is Ergative
Promotion to subject:	Ergative to Absolutive

Any theoretical conviction – typological or Generative – that narrowly associates agenthood with syntactic subjecthood barricades the insight that passive and anti-passive are just the two sides of the same coin, modulo alignment mode. Subjects cannot be simply omitted; they must be grammatically withdrawn. In abs-ergative languages, the subject as the privileged argument is the *lower*-ranked argument of a transitive verb (see Table 1). As a subject, its omission must be grammatically signalled and accomplished. This is called "anti-passive", although it is exactly what passive does in nom-acc languages, namely the syntactic elimination of the would-be subject.

In each case, the primary subject is grammatically neutralized and the argument that would receive the dependent case receives the subject case. It is only the focus on the thematic role of subject and object that has prevented the apprehension of the identity of the two variants of the same grammatical process. The two facts alone – indispensability & promotability – are compelling evidence enough for regarding the absolutive as the case of the syntactic subject rather than the ergative.

3.3 How to grammatically eliminate an otherwise indispensable element

It is a functionalist misstep to conceive of passive as a semantically or pragmatically imbued process (i.e. agent 'backgrounding', patient 'foregrounding'). This is merely an effect but not the grammatical cause. Conversely, the grammatical causality of anti-passive is not the backgrounding of the 'undergoer'. It is the very same process of syntactic neutralization of the default subject argument as in 'passive', with the difference that in an abs-erg-alignment system, the subject happens to be the 'undergoer' argument. Dixon (1994:146), (2010b: 13) and Dixon & Aikhenvald (2000: 9) characterize antipassive as follows (9):

- (9) 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.

As for (9b), the appropriate term for the derived anti-passive verbal form is not "intransitive" but *unergative*, since the ergative-marked argument of the active construction switches case

and surfaces as absolutive, as stated in (9c). This is in direct correspondence to the unaccusative forms as a result of the acc-to-nom switch in the passive of nom-acc languages,²⁰ if the respective alignment systems are systems with structural cases.

Let us replace now "antipassive" by "passive" in (9) and exchange the terms of abs-erg alignment (antipassive, ergative, absolutive) by the corresponding terms of nom-acc alignment (passive, accusative, nominative) and what we get is (10), which is a definition of passive:

- (10) 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.

The fact that a language provides a grammatical device for eliminating the subject, that is, for the elimination of the *nominative* candidate in nom-acc languages and for the elimination of the *absolutive* candidate in abs-ergative languages, shows that nominative and absolutive noun phrases are the respective syntactic subjects.

An ergative noun phrase is not the subject of the clause. It is irrelevant that the very same argument of a verb would be subject in a nom-acc language. Hence, anti-passive is not a construction for removing the alleged syntactic *object*. Analogously, nom-acc languages do not have a systematic anti-passive construction for removing a direct object. On the other hand, a counterpart of passive in ergative languages would be a construction that removes the ergative and promotes the absolutive noun phrase to ergative. All such expectations fail, and they necessarily fail because they are grounded on completely inadequate assumptions of subjecthood.

It is hardly understandable that linguists should not have realized immediately that the grammatical devices for blocking the very argument that otherwise would obligatorily surface as subject are identical across alignment systems. They are identical in the target of the syntactic operation but of course not in the effects of these operations on the semantics and pragmatics of a clause. The identical target is the "would-be syntactical subject". Those, who stare at the lexical semantics of passive and anti-passive are blinded for recognizing a simple and cross-linguistically identical grammatical mechanism that is identical across different case and alignment systems. Such mechanisms are grammatical invariants but they cannot be identified by comparing translational equivalents and subsequent interpretation in the categories of the language of the observer.

3.4 More subject properties

Keenan & Comrie's (1977, 1979) Accessibility Hierarchy (AH) ranks the possible grammatical functions of the argument shared by main and relative clauses in a relative clause construction. In the most restricted case, only subjects can be relativized. The next possibility is subject plus direct object, followed by the indirect object and oblique functions.

Polinsky & als. (2012: 268) acknowledge this and summarize the facts: "Ergative languages have posed challenges to the AH: intransitive subject and transitive object relativize with a gap, but the ergative subject DP does not". In Dixon's (2010b: 320) words "Most notably, a fair

²⁰ "Antipassive is the exact opposite of the passive in terms of case change." Primus (1995: 1090).

number of languages with an ergative orientation allow the CA [= common argument of RC and main clause]_{HH} to be in just S or O (not A) function within the RC."

As Dixon (1994: 169-170) illustrates with data from Dyirbal, the ergative marked argument cannot be relativized. In order to relative the ergative argument, the clause must be passivized (by means of the "anti-passive" suffix -nga), which replaces the ergative case by absolutive case. Another example for such a property is Tongan (Otsuka 2000: 116).

Evidently, what Polinsky et als. formulate is an illicit reversal of the burden of proof. The facts are no "challenge to the AH" at all, but a challenge for those who refuse to realize that "S or O (not A)" is the subject in an ergative language. The AH correctly identifies the syntactically highest ranked grammatical function in the clausal organization of an ergative language and this is the absolutive as subject case.

Another piece of counter-evidence for the subjecthood of ergatives is the fact that 'ergative subjects' may occur in non-finite clauses (see Aldridge 2004, Legate 2002), while in nom-acc languages, nominative subjects do not occur as subjects in infinitival clauses. Here (11) is an example from Basque (Arrieta et als. 1986:30). The controlled item is the noun phase that would surface as absolutive in a finite version of the infinitival construction.

(11) Miren Jonetik ezkutatzen da hark Ø ez enganatzeko Miren_{ABS} Jon_{GEN} hide_{GER} AUX/3SG him_{ERG} to not-trick-out-in-order-to 'Mirenⁱ hides from John^j in order for him^{j/k} not to trick-out herⁱ (= Ø)'

4. Ergative SVO languages

How would typologists typically identify an ergative language as SVO or OVS? First, they would identify the agent noun phrase in minimal transitive clauses and next they would check the "order of meaningful elements". In the terminology section of "*The languages of Amazonia*", Dixon & Aikhenvald (1999: xiv) re-iterate the by-now familiar notation conventions of field linguists, namely A = transitive subject, O = transitive object, and S = intransitive subject, with the following – puzzling but expected – explication of an obvious fact, namely the *uniform* positioning of the *syntactic subject*, here masked by inappropriate terminology:

"There are in fact Amazonian languages where A and S do not occur in the same position, e.g. Kuikúro, of the Carib family, the basic constituent orders are SV and OVA. (Here a single formula – using S to cover both intransitive and transitive subject – could not satisfactorily be employed.)"

Contrary to the claim, there is a "single formula" that covers intransitive and transitive subject in this case, namely the absolutive noun phase precedes the verb in a genuine SVO language, and it is the subject. Kuikúro and many other members of the Carib family are languages with abs-ergative alignment. Hence, S could and should indeed be "satisfactorily employed" for defining the "basic constituent order" of intransitive clauses, viz. *SV*, and transitive ones, viz. *SVO* for the abs-V-ergative pattern, with "S" = absolutive. It is also the field workers' practicability concern²¹ that obscure the fact that the order "Patient-V-Agent" is the syntactic SVO order of

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²¹ 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."

an ergative language, namely "abs-V-erg". In obedience to their maxim of a lexico-semantic characterization of subjects, they are bound to misclassify it as OVS. The misclassification is reiterated by Dryer (2013), although he acknowledges²² the problematic move in the introduction to chapter 82 of WALS:

"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)."

Let me emphasize once more that this way of construing the syntactic notion of "S" as the subject in "SVO "or "OVS" is at the same time non-syntactic and misleading. It pursues what is – mistakenly – understood as the Greenbergian tradition. Greenberg (1963) himself has been very clear about his – preliminary – recourse to easily applicable criteria for the identification of the subject of a clause and he also made clear that the chosen strategy is 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)

In this curious situation – ergative SVO languages filed as ergative OVS languages – claims based on typological surveys are flawed when they claim that ergative SVO languages do not exist. What is meant is that ergative languages with a strict *ergative-V-absolutive* order do no occur, which is true but irrelevant for SVO. What should be looked for instead are *absolutive-V-ergative* orders. Such languages do exist. The absolutive is the morpho-syntactically privileged argument relation of a verb and qualifies as subject, that is, as the "S" in SVO.

As explicated in more detail in Haider (2021), ergative SVO languages are systematically misclassified as OVS languages in typological literature. The cause of this lamentable situation is practicability²³ on the one hand and a caution-guided working maxim of field linguists. According to Levinson and Evans (2010: 2734-2737) "*D-linguists prefer Boasian 'methodological relativism' – first analyze a language in its own terms, then compare*". But what are "its own terms" and what is the tertium comparationis? Philosophy of science tells us that every scientific observation is unavoidably theory-laden.

"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." (Davis et. als. 2014: e185).

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²² Dryer (2007: 70) is aware of the problem when referring to Päri: "Characterizing such languages as OVS is somewhat misleading in that the word order really follows an ergative pattern Abs-V-(Erg)."

²³ For a little studied language, it is much easier to find out the agent of a transitive verb but much more difficult and demanding to ascertain what exactly is the subject function of a given language.

Haspelmath (2014: 495) recommends sticking to Greenberg's preliminary shortcut approach: "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, (Haspelmath 2014: 495). Such a strategy is not promising. What matters is not "readily" but "correctly". Languages can and in fact must be compared "with respect to their categories", but only after having ensured that one is comparing matching categories. This is exactly not what we do if we compare "agent-patient" order and rephrase the findings as subject-object orders. This is not analysing "a language in its own terms" but rather in inappropriate terms.

Davis et als. (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 seems to be self-evident, but unfortunately it isn't shared by the majority of the respective communities. In biology, comparative zoologists would not disclaim comparing species with respect to matching categories.

What follows is a survey²⁴ of languages misclassified as OVS languages in the literature. It will turn out that virtually all of them are ergative SVO languages. In this sample, there is no language that would qualify as [O[VS]]. The vast majority is ergative SVO and the two non-ergative languages are languages with an ergative past that has led to the conservation of a particular word order by means of structural reanalysis (see the discussion of Hixkaryana, below).

Let us start with Greenberg's (1963) original sample of thirty languages. It contained only two languages that he 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).

Dixon (1994: 50-52) itemizes the following ergative languages as instances of SV/OVA, that is, ergative SVO languages: Kuikúro, Macushi,²⁵ Maxakalí, Päri, and Nadëb. Here is further confirmation on Kuikúro by Franchetto (1990, 2010), on Macushi by Abbot (1991), on Maxakalí by Popovich (1986), on Päri by Andersen (1988), and on Nadëb by Martins & Martins (1999). He also refers to a second pattern, namely VS/AVO, and refers to 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. However, since Mayan languages are predominantly V-initial (England 1991), the Huastec data do not serve as compelling evidence for a basic OVS structure.

Paumarí has been characterized as split-ergative by Chapman & Derbyshire (1991: 267, 271) with nom-acc alignment for pronominal arguments. This deserves a comment, since in an *ergative* setting, "AVO" would structurally be OVS. Chapman & Derbyshire (1991: 164, 250) describe "SVO" as the basic word order. The language has a passive construction, but no antipassive. Only the immediately preverbal noun phrase is case-marked. It does not qualify as an ergative language, and AVO therefore means SVO.

In a study on word order type and alignment, Siewierska (1996) lists four languages as "OVS" out of a set of 237 languages, namely Makushi and Päri, as in Dixon's sample, plus Hixkar-

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²⁴ The survey draws on Haider (2021).

²⁵ Dixon (2010a: 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.

yána, and Southern Barasano. For the latter, Jones & Jones (1991) presented a syntax monograph that has been reviewed by Dryer (1994). He points out a crucial weakness²⁶ of their type assignment 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). Hixkaryana will be discussed with the following set of languages.

In WALS (Dryer & Haspelmath 2013), eleven languages are listed as "OVS". Four of them are plainly ergative, namely Kuikúro, Macushi, Päri, and Tuvaluan.²⁷ Four are caseless (i.e. 'neutral' alignment) but show ergative properties: Asurini,²⁸ Selknam,²⁹ Tiriyo,³⁰ Ungarinjin.³¹ The three languages to be discussed further are Kxoe, Urarina, 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). In sum, Kxoe does not seem to qualify as a reliable testimony of OVS.

Urarina, according to Olawsky (2006:1; 146; 654), is classified best as a nominative-accusative language with VS/OVA word order. "The language has a nominative-accusative system but case is marked by constituent order only" (Olawsky 2007: 45). However, "OVA" does not mean that the sentence-initial position is reserved for objects, or that objects, if overtly expressed, must appear in initial position (Olawsky 2006: 660-661). A text count based on 445 main clauses sampled from seven texts produced the following frequencies: 32 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.

The essential issue to be settled for Urarina and for Hixkaryana, too, is this: Are these languages head-initial or head-final? If their VP is head-final, [OV] is 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. This would presuppose ergative alignment. What are the relevant facts?

²⁶ "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. But the frequency of SV examples both in the grammar and in the text examined does suggest that the claim that subjects tend to follow the verb is based on both noun and pronoun subjects rather than just noun subjects. 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).

²⁷ 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".

²⁸ Primus (1995:1089): "The Tupi-Guarani languages Asurini and Oiampi have ergative marking in dependent clauses."

²⁹ "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).

³⁰ Rill (2017: 430): "In the end, Tiriyó verb agreement is best analyzed as ergative in alignment."

³¹ 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.

³² Olawsky (2006:654): "It has to be noted that, in a language with extensive omission of overt NPs, the presence of arguments realised as core NPs is not very frequent"

Both, Urarina and Hixkaryna, are post-positional. 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 postpositional 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 both languages.

The evidence of a head-final VP has lead Kalin (2014) to the conclusion, that Hixkaryana is an [[OV]SX] language, with the VP³³ in a secondary, fronted position. 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 nomacc, while the original 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. The base order is [S[OV]].

In sum, out of a total of 1377 languages in the WALS data base, *a tenth of a percent* show a word order that may justly deserve to be qualified as O-V-S, namely Hixkaryana and Urarina. However, if the analysis of Kalin (2014) turns out to be robust enough, no language is presently known whose clause structure is [O[VS]], which would be the structure of a genuine OVS language, the reason being that languages with such a clause structure do not exist.

5. Conclusions

- 'Subject' is a *theoretical* notion with cross-linguistic validity.
- 'Subject' is a *syntactically* determined, structural concept.
- 'Subject' is *relative* to the alignment system of a language.
- 'Subject' is *not* determined by theta-role, but by alignment.
- The syntactic subject under *ergative* alignment is the *absolutive* noun phrase
- The syntactic subject under *nom-acc* alignment is the *nominative* noun phrase
- Ergative SVO languages exist. They have been misanalysed as OVS.

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³³ "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).

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