Passive-to-ergative vs inverse-to-ergative

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1. Introduction

Among the languages that exhibit overt case marking of verbal arguments, two case marking patterns are most common, namely the accusative and the ergative. These are shown graphically in figure 1 where, following Dixon (1972) and Comrie (1978), S denotes the sole argument of an intransitive clause, A the agentive argument of a transitive clause and P the patient argument of a transitive clause.

insert figure 1

In an accusative case marking system the S and A appear in the nominative case and the P in the accusative. In an ergative system of case marking the S and P take the absolutive case and the A the ergative. Though there are languages in which both the nominative and accusative are overtly marked and also languages in which the nominative is overtly marked while the accusative is not, typically the nominative takes zero marking and the accusative overt marking as in the examples in (1) from Kannada.

Kannada (Sridhaar 1990:159,160)
(1) a. HuDuga-ø o:Diho:da
   boy-nom  run:pp:go:past:3sg:m
   'The boy ran away.'

b. HuDuga-ø vis'ala:kSiya:anna maduveya:danu
   boy:nom Vishalakshi:acc mary:past:3sg:m
   'The boy married Vishalakshi.'

In ergative case marking, on the other hand, it is the ergative which is always overtly marked, while the absolutive is typically zero as in (2) from Watjarri.

Watjarri (Douglas 1981:217,214)
(2) a. Mayu-ø yanatjimanja kurl-tjanu
    child-abs come:pres school-abl
    'The child is coming from school.'

b. Mayu-ng(k)u tjutju-ø pinja
child-erg  dog-abs  hit:past
'The child hit the dog.'

While most linguists recognize that both accusative and ergative case marking may be the result of several different diachronic developments, ergative case marking, as the less common of the two, has excited special interest.\(^2\) Of the sources of ergative case marking that have been proposed in the literature, the one most frequently cited is the passive.\(^3\) And indeed when we compare the case marking of an active ergative clause such as (2b) with the case marking found in a typical passive clause with an overt agent such as (3), the similarity in case marking is quite clear.

Ngārluma (Blake 1977:7,27)
(3) Ma_kula-Ø pilya-n_al_i-na yukuru-la
child-nom bit-pass-past dog-loc/instr
'A child was bitten by a dog.'

As shown schematically in (4), in both the active/ergative (2b) and the passive (3) the patient occurs with zero marking, the agent with overt marking.

(4) a. pass \(\text{Patient}_s\) Agent\(_{obl}\) 
b. erg \(\text{Agent}_{erg}\) \(\text{Patient}_s\)

The overt marking of the agent and zero marking of the patient characteristic of ergative case marking is not only reminiscent of the case marking found in passive clauses but also of that found in certain types of inverse constructions. Inverse constructions are best known from the Algonquian languages in which the direct voice is used if the agent is more topical or ontologically salient than the patient, and the inverse if the patient is more topical or ontologically salient than the agent. Traditionally the more salient or topical participant is called the proximate and the less salient or topical one the obviative. This direct/inverse voice opposition is illustrated in (5) on the basis of Plains Cree.

Plains Cree (Wolfart 1973:25)
(5) a. sekih-ew napew antim-wa
scare-dir man:prox dog-obl
'The man scares the dog.'

b. sekih-ik napew-a antim
scare-inv man-obl dog:prox
'The man scares the dog.'

In Plains Cree and in other Algonquian languages, in clauses with two nominal participants the proximate participant occurs with no morphological marking while the obviative takes a special marker, -(w)a in (5). Thus the nominal marking in the inverse, i.e. zero marking of the patient and obviative marking of the agent is analogous to what we find in ergative constructions as shown in (6).

(6) a. inverse Patientø Agentobv
    b. ergative Agenterg Patientø

Givón (1994a) has recently suggested that the inverse constitutes a more promising source of ergative case marking than the passive, since inverse clauses are functionally more similar to active ergative clauses than are passive clauses. And indeed in terms of Givon's functional pragmatic definitions of the active, inverse and passive, cited in (7), this is so.

(7) Active: The agent is more topical than the patient but the patient retains considerable topicality.
Inverse The patient is more topical than the agent but the agent retains considerable topicality.
Passive The patient is more topical than the agent and the agent is extremely non-topical (suppressed, demoted).

The passive differs from the active more than the inverse does, due to the fact that the agent in the passive, if at all present, is nontopical, while in the inverse it retains considerable topicality.

Though Givón does not deny that some instances of ergative case marking may have evolved from the reanalysis of passive clauses, he contends that the inverse constitutes a necessary stage of any such reanalysis, i.e. that the passive-to-
ergative reanalysis is actually a passive-to-ergative via inverse reanalysis. Needless to say, this follows from the definitions in (7). In order for the passive to become the unmarked active/ergative construction, the passive must begin to be used first with relatively topical agents, and then also with even more topical ones. And once it is thus used it will no longer be a passive but an inverse. If the use of the inverse is then extended from clauses with relatively topical agents to those with topical ones, the reanalysis of the former passive-turned-inverse as an ergative will be complete.

While Givón's definition of the inverse renders the inverse a necessary stage of the passive-to-ergative reanalysis, the inverse is also viewed by Givón as a source of ergative nominal marking independent of the passive. Thus in addition to the historical scenario in (8a), Givón also proposes the historical scenario in (8b).

(8) 

a. passive --> inverse --> ergative  
b. inverse --> ergative

Given that inverse constructions have not as yet been extensively studied, it is by no means clear whether the passive and inverse can be distinguished from each other systematically on structural or even, as Givón contends, on functional grounds. However, assuming that they can, and that both of the scenarios in (11) are possible, is there any way of determining whether the ergative marking in a language originates from a passive turned inverse as opposed to an inverse? In this paper I would like to consider this issue in relation to two types of ergative languages, namely: those exhibiting split ergativity conditioned by the semantics of nominals and those exhibiting ergative verbal agreement. Split ergativity conditioned by the semantics of nominals is viewed by Givón as the clinching argument for the universality of the inverse-to-ergative diachronic pathway. Ergative agreement, on the other hand, is typically considered as suggestive of a passive origin of ergative marking. In what follows I will attempt to establish to what extent the two types of ergative marking may indeed be seen as diagnostic of the two sources of ergative marking, the inverse and the passive respectively. In section 3 I will consider the inverse and passive reanalyses in the context of languages manifesting split ergativity conditioned by the semantics of nominals. In section 4 I will seek to determine whether ergative agreement can be derived from an inverse.
But first let me briefly clarify what sort of passive and inverse constructions will be assumed to be involved in the two diachronic sources of ergative marking.

2. Promotional and non-promotional passives and inverse constructions

If there were to be no structural differences between the passive and the inverse, Givón's contention that the inverse constitutes a source of ergative nominal marking independent of the passive would be rendered vacuous, as there would be no means of ever determining whether the ergative marking originates in a passive turned inverse or an inverse. Therefore in order to proceed with the investigation we must find some means of differentiation between the two constructions.

Passive and inverse constructions may be classified along several dimensions but the classification pertinent to our discussion is the distinction between promotional and non-promotional ones. In the former the patient of the corresponding active/direct voice is promoted to subject in the passive/inverse. In the latter there is no such promotion, the patient is not the subject in the passive/inverse. In terms of the subjecthood of the patient the promotional passive is thus indistinguishable from the promotional inverse and the non-promotional passive from the non-promotional inverse.

The two promotional and the two non-promotional constructions do, however, differ from each other in regard to the status of the agent. Whereas the agent in the passive is a syntactic adjunct, the agent in the inverse is a syntactic argument. This is evinced by the obligatoriness of the agent in the inverse as opposed to the passive and by the nature of the verbal agreement marking that the two constructions display. There is no agreement between the verb and the agent in the passive, but agent agreement may occur in the inverse. For reasons which will be specified later such agreement is not always obvious, but we see it clearly in (9) where the verb is marked for the 3rd person plural obviative agent - `they'.

Cree
(9)  Ki- wapam-ikw-ak
   2 - see- inv-3pl
   `They see you (sg).'
The passive is thus a mono-valent, intransitive construction, while the inverse is bivalent and transitive or potentially de-transitivized, but not intransitive.

The above distinction between the passive and the inverse constitutes the only structural difference between the two constructions if we take both the promotional and non-promotional variants of the construction into account. However, if we were to consider only the promotional passive and the non-promotional inverse, the two constructions would also be further differentiated by the subject vs non-subject status of the patient. In the context of a discussion of passive as opposed to inverse source of ergative nominal marking, restricting the passive and the inverse in such a way is not unjustified.

The type of passive assumed to be involved in the passive-to-ergative scenario is the promotional passive and not the non-promotional one. Though the passive-to-ergative reanalysis could produce ergative morphological marking in a language previously lacking case marking, such as Puget Salish, for example, the passive-to-ergative scenario is primarily understood as involving a change from accusative to ergative marking as shown in (10).

(10)  

<table>
<thead>
<tr>
<th></th>
<th>active</th>
<th>passive</th>
<th>ergative</th>
</tr>
</thead>
<tbody>
<tr>
<td>a.</td>
<td>Agent_{nom}</td>
<td>Patient_{acc}</td>
<td>Agent_{obl}</td>
</tr>
<tr>
<td>b.</td>
<td>ergative</td>
<td>Agent_{erg}</td>
<td>Patient_{abs}</td>
</tr>
</tbody>
</table>

Needless to say the change of an overtly marked accusative patient to a zero absolutely marked subject could not be achieved via the non-promotional passive.

While Givón does not actually state that it is the non-promotional rather than the promotional inverse that constitutes a source of ergative nominal marking independent of the passive, the fact that he sees split ergativity as the best evidence bearing out the inverse-to-ergative diachronic pathway strongly suggests that it is the non-promotional inverse that he has in mind. Moreover, the typical Amerindian inverse as found in the Algonquian languages and also in the Athabaskan and Tanoan as well as in Kutenai, Nootka and Shapatin, is a non-promotional inverse. And actually, so far, the only language with a promotional inverse clearly distinct from the passive is Chamorro.

In view of the above, in the ensuing discussion the passive-to-ergative scenario will be taken to involve the
promotional passive and the inverse-to-ergative scenario the non-promotional inverse.

This already allows us to identify one set of circumstances amenable to a passive-to-ergative reanalysis but not to an inverse-to-ergative one, namely the complete accusative-to-ergative change which provides the basic motivation for the passive-to-ergative scenario. Since such a direct accusative-ergative change is impossible for a non-promotional inverse, I will concentrate on more complex inputs and/or outputs.

3. Split-ergativity conditioned by the semantics of nominals

In languages in which split ergativity is conditioned by the semantic features of nominal constituents, as opposed to tense or aspect or main vs subordinate clause or word order, the more ontologically salient constituents manifest accusative marking, the less ontologically salient ones ergative marking. This may be captured in the hierarchy in (11) based on Silverstein (1976).

\begin{align*}
&1 \quad 2 \quad 3 \quad \text{kin} \text{ & human animate inanimate} \\
&\text{personal nouns} \\
&\text{acc} \quad > \quad > \quad > \quad > \quad > \quad > \quad > \quad > \\
&\text{erg} \quad < \quad < \quad < \quad < \quad < \quad < \quad < \quad < \\
\end{align*}

The arrows in (11) indicate the direction of spread of accusative and ergative marking, from left to right in the case of accusative marking and from right to left in the case of ergative. The arrow heads indicate possible cut off points, the most common of which are accusative marking of pronouns and ergative marking of nouns or accusative marking of 1st and 2nd person pronouns and ergative marking of all other constituents.

Givón (1994:33) argues that the use of accusative nominal morphology for highly salient agents and ergative morphology for agents low in saliency makes little synchronic sense for an active transitive clause, but perfect sense for an inverse voice clause. While he is indeed correct, this does not entail that split accusative/ergative marking conditioned by the semantics of nominals necessarily originates from the reanalysis of an inverse as opposed to a passive. The inverse
constitutes a more viable source of split acc/erg marking conditioned by the semantics of nominals than the passive only under a very specific set of conditions, namely: if the accusative marking of the constituents on the left of the hierarchy in (11) is already in existence at the time of the emergence of ergative nominal marking and furthermore if the passive or inverse is used not only with nominal agents and patients but also with pronominal ones or at least a pronominal patient and a nominal agent.

Both of the above assumptions are reasonable ones. Accusative marking, particularly of pronouns, is highly common and languages with case marking of pronouns but not of nouns clearly outnumber those in which the former but not the latter display case marking. As for the use of pronouns in the passive or inverse, note that in most types of texts clauses with two nominal participants are much rarer than those involving a pronoun and a noun or two pronouns. Therefore if the passive or inverse were to be restricted to clauses with two nominal participants, the use of neither the passive nor the inverse would be frequent enough to warrant it being reanalyzed as the basic transitive construction.

Assuming that the pronouns are accusatively marked and that the passive can be used with pronominal subjects, the reanalysis of passive clauses as ergative ones will necessarily destroy the accusative marking, by transforming a P into a S. Accordingly, under the passive-to-ergative scenario, accusative marking in a split accusative/ergative language must be assumed to be a development subsequent to the emergence of ergative marking.

By contrast, in the inverse the P remains a P and therefore an accusatively marked pronominal P in the direct voice will maintain its accusative marking in the inverse. The inverse is thus fully compatible with the prior existence of accusative marking. In fact if there is no pronominal case marking the reanalysis of the inverse as an active ergative will result in ergative marking of nominals and no marking of pronouns, or ergative marking of both nouns and pronouns and not split accusative/ergative marking.

The inverse-to-ergative scenario most directly leading to split accusative/ergative marking would involve a language which already has accusative marking of pronouns, no overt marking of nouns in the direct voice, obviative marking of the agent in the inverse and a direct/inverse voice opposition restricted to clauses with nominal or mixed participants but not to pronominal participants. The reanalysis of inverse
clauses as active ergative clauses in such a language is shown schematically in (12) and (13).

(12) a. direct  N Agent$_{a}$  N Patient$_{a}$

   b. inverse N Agent$_{obv}$  N Patient$_{a}$

   c. ergative  N Agent$_{erg}$  N Patient$_{abs}$

(13) a. direct  Pro Agent$_{nom}$  N Patient$_{a}$

   b. inverse N Agent$_{obv}$  Pro Patient$_{acc}$

   c. split  N Agent$_{erg}$  Pro Patient$_{acc}$

If in the above type of language the direct/inverse opposition were to also include clauses with two pronominal participants, the reanalysis of the inverse as the basic transitive construction would produce ergative marking with nouns and tripartite marking of pronouns, i.e. separate marking for S, A and P as shown schematically in (14).

(14) a. direct  Pro Agent$_{nom}$  Pro Patient$_{acc}$

   b. inverse Pro Agent$_{obv}$  Pro Patient$_{acc}$

   c. ergative  Pro Agent$_{erg}$  Pro Patient$_{acc}$

   d. intransitive Pro$_{nom}$

The tripartite marking of pronouns resulting from the reanalysis of an inverse with two pronominal participants is of particular interest because it provides a strong argument for the inverse source of ergative nominal marking in the languages of Australia. Though Givón cites the Australian languages as prime candidates for the inverse source of ergative nominal marking, he bases his claim on the current accusative/ergative split marking found in many Australian languages. However, according to Dixon (1980) and also Blake (1987), Proto-Australian was not split accusative/ergative but
split tripartite/ergative. The current accusative marking of pronouns therefore postdates rather than predates the emergence of ergative marking. The forms of 1st and 2nd person A and S pronouns bear clear traces of the same ergative marker as has been reconstructed for nouns, namely *lu, which suggests that the accusative marking of pronouns is the result of the ergative marking of A pronouns being extended to the S pronouns. Since the A pronouns, just like the A nouns, once bore ergative marking, and ergative marking of both nouns and pronouns followed by the development of accusative pronominal marking is compatible with both a inverse and a passive source of ergative morphology, the current accusative/ergative split in the languages of Australia does not in itself constitute an argument for the inverse source of the ergative marking. By contrast, the tripartite/ergative split of the proto language does. Given that the passive converts a P into a S, it destroys the accusative marking of the P. Therefore, the emergence of ergative nominal marking in the proto-language via the reanalysis of the passive would have resulted in ergative and not tripartite pronouns. An inverse which does not promote a P to an S, on the other hand, allows for the accusative marking of a pronominal P. Consequently, if the inverse is reanalyzed as the basic transitive construction, both the A and the P will emerge with overt marking, precisely as appears to have been the case in Proto-Australian.

To the best of my knowledge the possibility that the tripartite/ergative split in Proto-Australian may have arisen via the reanalysis of an inverse has not been previously entertained. But clearly the reanalysis of an inverse is a more promising source of the split marking than the reanalysis of a passive.

As suggested by the above discussion, split acc/erg marking conditioned by the semantics of nominals is in principle compatible with both a passive and an inverse source of ergative nominal marking, provided that the accusative marking is subsequent to the emergence of the ergative. However, if the accusative marking predates that of the ergative, the inverse constitutes a much more viable source of ergative nominal marking than the passive.

While the above suggests that the inverse source of ergative nominal marking provides a better account of split ergativity conditioned by the semantics of nominals than the passive source, the restricted set of conditions under which this holds simultaneously counter Givón's contention that the mere existence of such split ergativity constitutes a
clenching argument for the universality of the inverse-to-

ergative diachronic pathway. In the absence of evidence for
the greater antiquity of accusative marking and especially for
the form of the accusative case than the ergative, the two
sources of ergative marking are essentially indistinguishable

from each other.

4. Ergative agreement

Ergative agreement in person, either just with the S and P or
with S and P and also A, is considerably less common cross-

linguistically than ergative nominal marking. This may to a
large extent be attributed to what is considered to be the

normal route for the development of person agreement, i.e. the
reanalysis of unstressed pronouns occurring in topicalized
constructions such as those in (15) or (16).

(15)  a. John, he left ages ago.
b. The boy, he wrecked the car.
c. The car, the boy really wrecked it.

(16)  a. As for you, you should go.
b. As for me, I like the man.
c. As for me, that won't stop me.

Since, as we have seen, in languages with split ergativity
conditioned by the semantics of nominals, the pronouns are

accusatively marked, it follows that when they turn into
agreement markers bound to the verb, the resulting agreement
system will also be accusative.

There is an additional factor which strongly favours
accusative agreement over ergative. In the vast majority of
languages, if not in all, given information is associated with
the A and to a lesser extent with the S, while new information
is associated with the P and oblique constituents. If this is
so, the development of agreement from unstressed pronouns in
topicalizations is most likely to produce agreement with the
most probable topics, i.e. with the A and S rather than P and
S. In other words the agreement which is likely to emerge is
accusative not ergative. If the forms of the A and S pronouns
which constitute the source of the agreement markers are
distinct, i.e. if they pattern ergatively, the resulting
agreement system would be neither accusative nor ergative.
But accusative agreement would emerge if the agreement marker of
the A is extended to the S. According to Harris & Campbell
(1995:249), this is precisely what has happened in the northern dialects of the Daghestanian language Tabasaran. In the southern dialects the former distinction between A and S pronouns is partially preserved in the agreement system, as shown in (17).\(^9\)

**Southern Tabasaran**

(17)  
\begin{align*}
\text{a.} & \quad \text{uzu gak'wler urgura-za} \\
& \text{I firewood:abs burn-1sg(erg)} \\
& \text{`I burn firewood.'}
\end{align*}

\begin{align*}
\text{b.} & \quad \text{uzu urgura-zu} \\
& \text{I burn-1sg(abs)} \\
& \text{`I am on fire.'}
\end{align*}

In the northern dialects, on the other hand, the agreement system is entirely accusative, the agreement marking of the A having been extended to the S, as we see in (18).

**Northern Tabasaran**

(18)  
\begin{align*}
\text{a.} & \quad \text{izu bisnu-za zaq'a (change)} \\
& \text{I catch-1sg bird} \\
& \text{`I caught a bird.'}
\end{align*}

\begin{align*}
\text{b.} & \quad \text{izu t'irxnu-za} \\
& \text{I fly-1sg} \\
& \text{`I flew.'}
\end{align*}

In all, ergative SP agreement is highly unlikely to arise from unstressed pronouns in topicalized constructions such as those in (15) and (16).

Ergative SP agreement is, however, a natural consequence of the passive-to-ergative scenario applied to languages with pre-existing accusative agreement. Since passive clauses are intransitive, the agreement marking in the passive is the same as in active intransitives, i.e. with the S. As a result of the reanalysis of the passive as active ergative, the S is reinterpreted as a P. Consequently, the agreement marker of the former S and now P is the same as that of the intransitive S. While the passive may not be the only source of ergative agreement, ergative agreement clearly cannot arise from a pre-existing accusative agreement system under the inverse-to-ergative scenario. Given that the patient in the inverse is a P not an S, i.e. that the inverse is not intransitive, once the inverse is reanalysed as an active ergative, accusative agreement marking of the P will not be the same as that of the S. And if the agent in the inverse
also manifests agreement, the resulting agreement will be accusative, i.e. the same marker will be used for the A and S. In fact the preservation of accusative agreement as well as accusative pronominal marking, extends the scope of the inverse source of ergative nominal marking to languages with split ergativity involving ergative case and old as opposed to recent accusative agreement marking.

If ergative agreement cannot evolve from the reinterpretation of a direct/inverse voice opposition in a language with a pre-existing accusative agreement system, but can evolve from the reanalysis of an active/passive voice opposition, ergative agreement provides a potentially strong argument for distinguishing the passive from the inverse source of ergative nominal marking. However, before we conclude that this is indeed so, we must yet consider whether the inverse-to-ergative reanalysis could not produce ergative agreement from the type of agreement system that languages with direct/inverse voice oppositions appear to favour.

Though accusative agreement is cross-linguistically the most common type of agreement system, the languages which currently display direct/inverse voice oppositions tend to have either no agreement or hierarchical rather than accusative agreement. Hierarchical agreement is a type of agreement where the participant displaying agreement is determined by the ranking of the participant on the personal hierarchy, not by its grammatical relations or semantic role. For instance, in the Tanoan languages the hierarchy is 1>2>3. In the Algonquian languages it is 2>1>3 as shown by the examples in (19) and (20) from the previously mentioned Plains Cree.

Plains Cree
(19) a. ki-tasam-in
    2-feed-dir
    'You feed me.'

b. ki-tasam-itin
    2-feed-inv
    'I feed you.'

(20) a. ni-tasam-aw
    1-feed-dir
    'I feed him.'

b. ni-tasam-ik
    1-feed-inv
'He feeds me.'

We see that in (19) the prefixal agreement marker *ki-* is the same in both the (a) and the (b) clause, though in the (a) clause the 2nd person is the agent, while in the (b) clause it is the patient. The same holds for the clauses in (20). The agent vs patient status of the agreement prefix is indicated by the suffixal direct vs inverse markers. In clauses with two 3rd person participants such as those given earlier in (5) and repeated for convenience in (21) there is no agreement prefix or alternatively the prefix is zero.

(21)  a. sekih-ew napew antim-wa
     scare-dir man:prox dog-obv
     'The man scares the dog.'

     b. sekih-ik napew-a antim
     scare-inv man-obv dog:prox
     'The man scares the dog.'

Whether the clause is direct or inverse is indicated solely by the direct and inverse markers respectively. (Note that the direct and inverse markers are partially sensitive to person, i.e. for clauses involving only 1st and 2nd person participants, i.e. speech act participants (SAP), the markers are *-in* and *-itin*, while for all other clauses the markers are *-aw/ew* and *-ik*.) In intransitive clauses agreement is indicated by the same set of prefixes as in the direct and inverse: *ni-* for 1st person, *ki* for 2nd and zero for 3rd. E.g.

(22)  a. ni-pimipahta-n
     1-run-dir
     'I run.'

     b. pimoht-ew napew
     walk-dir man
     'The man is walking along.'

If the inverse clauses with nominal participants were to be reinterpreted as ergative with the obviative agent functioning as the transitive subject the inverse marker *-ik* could:

a) disappear;

b) be reanalyzed as a transitivity marker;
c) be reanalyzed as a portmanteau 3rd/3rd A/P (subject and object) agreement marker;
d) be reanalyzed as a A agreement marker.
If it were to be indeed reanalyzed as an agreement marker, irrespective of the actual analysis, the resulting agreement system would be neither accusative nor ergative, since in intransitive clauses a different marker is used, i.e. the direct marker. Significantly, the only way that ergative agreement could emerge is if the inverse marker were to be reanalyzed as a P agreement marker and then this marker were to be extended to intransitive clauses. However, given that in clauses involving mixed participants, i.e. 1st or 2nd person and 3rd person such as (20b), the inverse marker could only be interpreted as an agent or A marker, it could hardly be interpreted as a P marker in clauses with 3rd person participants such as (21b).

In all, ergative agreement marking is highly unlikely to emerge from the type of agreement marking found in Algonquian or Tanoan inverse clauses with two nominal participants or two 3rd person pronominal participants, for the matter.

At first sight the situation looks more promising with respect to ergative agreement if we take clauses with mixed participants (1st or 2nd person plus 3rd person) as in (20b) or (23b).

(23)   a.  ni-sekih-a atim\textsuperscript{10}
       1-scare-dir dog
       'I scare the dog.'

       b.  ni-sekih-iko atim
            1-scare-inv dog
            'The dog scares me.'

Recall that in such inverse clauses the 1st or 2nd person is a patient and the 3rd person an agent. Furthermore, it is always the 1st or 2nd person which is marked by the verbal prefix. Recall also that the same prefix occurs in intransitive clauses. Therefore if inverse clauses with mixed participants were to be reinterpreted as ergative, by analogy with clauses involving 3rd person participants, the agreement prefix would be the same for the P in transitive clauses and the S of intransitives. We would thus have ergative SP agreement for the 1st and 2nd person.

While a reanalysis such as the above could indeed produce ergative agreement, the consequences of the reanalysis are too drastic for it to ever take place. Note that if inverse
clauses with mixed participants are reinterpreted as ergative, the 1st and 2nd person prefixes would be open solely to a patient reading. Therefore, given the absence of free pronouns, the language would have no means of expressing a situation where a 1st or 2nd person agent acts on a 3rd person patient. In other words, it would be impossible to say

(24) a. I hit him. or I hit the dog.
    b. You hit him. or You hit the dog.

since a prefix occurring with a verb would always be interpreted as the P or the S but never as the A. The same, of course, applies to clauses involving only 1st and 2nd person participants. If the direct voice were to be lost, so to speak, and the 2nd person prefix occurring in inverse clauses such as (19b) were to be reanalyzed as a P prefix, a clause with such a prefix could only mean I hit you but not You hit me. Needless to say, no language would tolerate a situation in which it would be impossible to express a 1st or 2nd person acting on a 3rd or a 2nd person acting on a 1st.

We can thus reaffirm our previous conclusion that ergative agreement is unlikely to arise from hierarchical agreement system as manifested currently in the Algonquian and also Tanoan languages and arguably any other language displaying hierarchical agreement in which the agreement markers are not sensitive to grammatical relations or semantic role. If the nominal marking in inverse clauses in such languages is reinterpreted as ergative, the agreement system will either remain hierarchical, change into an accusative one or end up as neither accusative nor ergative by virtue of portmanteau transitive A and P forms in transitive clauses.

Since under the inverse-to-ergative scenario ergative agreement cannot arise from a pre-existing accusative or hierarchical agreement system, but is a natural consequence of a passive-to-ergative reanalysis, ergative agreement emerges as a pretty good diagnostic of the passive source of ergative nominal marking.

5. Conclusion

In this paper I have sought to determine whether the inverse and passive sources of ergative marking may be distinguished from each other. I have attempted to do so by considering to what extent the two types of ergative marking claimed to be associated with each diachronic scenario, i.e. split
ergativity conditioned by the semantics of nominals in the case of the inverse, and ergative agreement in the case of the passive, may be seen as indeed favouring the inverse and the passive respectively. My considerations reveal that while split ergativity conditioned by the semantics of nominals is in principle compatible with both an inverse and a passive source of the ergative marking, ergative agreement is strongly suggestive of the passive source of ergative marking.

I have argued that the reanalysis of the inverse constitutes a more viable source of split acc/erg marking conditioned by the semantics of nominals than the reanalysis of the passive provided the accusative marking and especially the actual form of the accusative case predates that of the emergence of the ergative. But if there is no evidence of the greater antiquity of the accusative case form than that of the ergative, the two potential sources of split acc/erg marking conditioned by the semantics of nominals are essentially indistinguishable from each other.

I have also argued that whereas ergative agreement is a natural consequence of the passive-to-ergative reanalysis applied to a language with a pre-existing accusative agreement system, it is highly unlikely to emerge from the reanalysis of an inverse. This should not be interpreted as implying that languages currently displaying ergative case marking and accusative agreement could have only evolved from the reanalysis of an inverse as opposed to a passive, since the accusative agreement may be subsequent to the emergence of the ergative nominal marking. But it does imply that the reanalysis of an inverse is not a promising source of current ergative agreement.

In the preceding discussion I did not take into account the origins of split ergativity conditioned by tense and aspect. As far as I can see, the inverse is an unlikely source of ergative nominal marking in languages with such split ergativity. In languages with split ergativity determined by tense and aspect, the ergative marking occurs in the perfective or past, the accusative or other marking in the nonperfective or nonpast. In the case of the Indic and Iranian languages this split in case marking has been traced to the reanalysis of the periphrastic passive in the perfective (Anderson 1977:336; Dixon 1994:190). Though we have no historical records for other languages manifesting split ergativity conditioned by the semantics of nominals, the passive constitutes a more viable source of the ergative marking than the inverse, since there is a semantic similarity
between the passive and the perfect but none between the inverse and the perfect.\footnote{11}

If both split ergativity conditioned by tense/aspect and ergative agreement clearly favour the passive source of ergative marking over the inverse, as I have argued, and furthermore split ergativity, be it of nouns vs pronouns or of case vs agreement marking, is in principle compatible with either diachronic scenario, the status of the inverse as a source of ergative marking independent of the passive emerges as somewhat questionable. Nonetheless, it would be premature to disregard such a possibility altogether. As discussed in section 3, a promising instance of ergative nominal marking attributable to the inverse as opposed to the passive-turned-inverse is that of the tripartite/ergative split reconstructed for Proto-Australian. Also promising are languages with ergative nominal marking and hierarchical agreement marking. An ergative/hierarchical split is found among the Sino-Tibetan languages such as Nocte (Das Gupta 1971), Tangut (Ebert 1987), Limbu (van Driem 1987) and Chepang (Caughley 1982) and some traces of nominal ergativity can be discerned among several of the hierarchical agreement marking Carib languages, for instance, Kuikúro, Waiwai and Apalaí (Franchetto 1990). We have seen that the reanalysis of an inverse as an active ergative is not only likely to leave a pre-existing accusative but also a pre-existing hierarchical agreement system in tact, so to speak. This suggests that the presence of hierarchical agreement may be a potential indicator of an inverse origin of ergative nominal marking. In any case, such a possibility is worth investigating.

In sum, while the inverse undoubtedly needs to be taken into account as a potential source of ergative marking, the instances of ergative marking attributable to the reanalysis of an inverse as opposed to a passive-turned-inverse appear to be rather limited.

References


1. The following abbreviations are used in this paper:
abl - ablative; abs - absolutive; acc - accusative; aux - auxiliary; erg - ergative; ind - indicative; instr - instrumental; inv - inverse; m - masculine; nonm - nonmasculine; pp - past participle; perf - perfect; pl - plural; pres - present; sg - singular; 1 - first person; 2 - second person; 3 - third person.

2. The samples of Nichols (1992) and Siewierska (1994) suggest that accusative case marking is about twice as common as ergative, the relevant figures being 61% vs 39% (Nichols) and 53% vs 34% (Siewierska).

3. The other major source of ergative nominal marking typically considered in the literature is the reanalysis of nominalizations in which the agent is expressed by means of a possessive phrase such as the enemy's destruction of the city. Comrie (1978), however, questions whether this is a source of ergative marking independent of the passive since such nominalizations may well have been used as a device for forming passive constructions. Another source of ergative nominal marking suggested more recently by Garett (1990) is that of oblique instrumental NPs in transitive clauses with covert As. This is a highly likely source of split ergativity conditioned by the semantics of nominals. In view of the fact that following discussion will be confined to a consideration of the passive and inverse sources of ergative nominal marking, these other potential sources of ergative marking will not be considered.

4. Givón's functional pragmatic definition of the inverse is somewhat controversial. Note that his definition encompasses OVS clauses in the Slavic languages, for example, in which the patient is typically more topical than the agent, which in turn may retain considerable topicality.
Sands (1996) argues that the basic allomorph of the ergative is actually \*-Dhu and that \*lu is a morphologically conditioned allomorph following nominals which are not common nouns. However, as far as I can see, this does not affect the current argument about the previous ergative marking of A pronouns.

Of the languages with agreement in Siewierska's (1994) sample only 16% display ergative or split ergative agreement. The corresponding figure in the sample of Nichols (1992) is 11%.

Note that agreement with only the A but not the S, though possible, is less likely since intransitive clauses are more common in discourse than transitive. Agreement with only the A would be an instance of ergative agreement, but not of the type generally manifested in languages; languages with ergative agreement tend to display agreement with the S and P and also the A and more rarely agreement only with the S and P. In any case we would expect agreement solely with the A to be extend to the S, as outlined below.

Actually an agreement system in which the form of the A marker differs from that of the S marker but in which there is no agreement with the P may be viewed as accusative since the S and A are grouped together in opposition to the P by virtue of displaying agreement. Note that such a system would not qualify as tripartite since no agreement marking of the P, unlike no P case marking, must be interpreted as absence of agreement rather than as agreement by means of a zero morpheme.

According to Kibrik (1979:75) the southern dialects of Tabasaran actually display active agreement marking, i.e. the S has two types of agreement markers corresponding to the marking of the A and to the P respectively, the latter marker being the same as the original S pronoun. Thus whereas with some verbs the form of the 1st person S agreement marker is \*-zu, as in (17b) with a verb like 'fly' it is \*-za just as in (17a). Thus the extension of A to S marking found in the northern dialects is also partially evinced in the southern dialects.

In Algonquian the third person participant does not take obviative marking in clauses with mixed participants.
Therefore such clauses are not in fact good candidates for reanalysis as ergative. However, in Tanoan languages the obviative marking on overt nominals occurs irrespective of whether only third person participants or both third and non-third are involved.

11. Passives, particularly periphrastic passives built on the auxiliary verb 'be' tend to focus on the state in which the patient is in, while perfects express the state resulting from a previous action. This 'stative' nature of the passive is also partially due to the supression or the demotion of the agent. In inverse clause, on the other hand, the agent is not suppressed. Moreover, the traditional inverse, as found in the Amerindian languages, is never built on a participle.