

Marked nominative systems in Eastern Sudanic and their historical origin

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1. Case marking in Eastern Sudanic

- <1> Cross-linguistically, it is common in languages with case to leave the subject of transitive and intransitive clauses morphologically unmarked, and to mark the corresponding object for (Accusative) case. But as shown by König (2006, 2008), several Afroasiatic as well as Nilo-Saharan languages deviate from this pattern in that they inflect the subject for case, whereas they leave the corresponding object unmarked. Such systems have come to be known as 'Marked Nominative' case systems.
- <2> The main aim of the present contribution is to discuss Marked Nominatives in Nilo-Saharan, more specifically in the Eastern Sudanic branch, from a historical and comparative point of view. The first authors to point towards this typologically interesting phenomenon were probably Tucker & Mpaayei (1955) in their classic contribution on the Eastern Nilotic language Maasai. As shown by these authors (pp. 175-187), post-verbal – but not pre-verbal – subject nouns in transitive and intransitive predications are inflected for case by way of tone in this language. They call this specific form of the noun for subjects following the verb 'Nominative' and identify four major inflectional classes for nouns. The tonal shape of post-verbal subjects can be derived from the so-called 'Accusative' form, which is used (amongst other things) for objects, as shown in (1-2) (Tucker & Mpaayei 1955: 184):
- (1) *é-dól mbártá*
3SG-see horse:ACC
'he sees the horse'
- (2) *é-dól mbártá*
3SG-see horse:NOM
'the horse sees him'
- <3> Similar systems have been found since in other Eastern Nilotic languages as well as in the two other primary branches, Southern and Western Nilotic. Compare, for example, Tucker & Bryan (1966: 467-469) and Creider (1989) for Kalenjin, a Southern Nilotic language. More recently, it has been shown by Andersen (1991, 2002) that Western Nilotic languages like Dinka also inflect post-verbal (as against pre-verbal) subjects for case.
- <4> As argued by Dimmendaal (1983: 66) in his analysis of case in the Eastern Nilotic language Turkana, the term 'Accusative' as a case label should be avoided and be replaced by 'Absolute', as this form of the noun constitutes the unmarked form which is used not only for objects (preceding or following the verb), but also for pre-verbal subjects, for nouns in predicative or non-verbal constructions, as well as for nouns in isolation. In other words, the Absolute case form constitutes the unmarked or default form for nouns. A similar alternation between Absolute and Nominative is found with independent pronouns in Turkana and other Nilotic languages.

<5> More recent research on Western Nilotic languages has shown that there is interesting variation within this branch. Nominative-Absolutive systems occur, for example, in Dinka (Andersen 1991), as pointed out above. Here, post-verbal (but not pre-verbal) subjects in transitive and intransitive clauses are marked for Nominative case by way of tonal inflection of the Absolutive form of the noun (3-4).¹

(3) *báj̄n* *à-tòoc* *d̄j̄ok*
 chief:ABS D-send boy:ABS
 'the chief is sending the boy'

(4) *d̄j̄ok* *à-tòoooc* *báj̄n*
 boy:ABS D-send:NTS chief:NOM
 'the chief is sending the boy'

<6> But in Pãri, which forms a different subgroup within Western Nilotic together with languages like Anywa, Luwo or Shilluk, only subjects of transitive clauses may occur post-verbally and, consequently only these are inflected for case in this syntactic position.

<7> In order to be able to distinguish between transitive and intransitive constructions and their corresponding case-marking strategies, Dixon (1994: 6-18) proposes the following syntactic-semantic primitives: A(gent) for the subject of transitive constructions, and S(ubject) for the subject of intransitive constructions. Within this terminological framework, post-verbal (but not pre-verbal) Agents (A-roles) are marked for case in Pãri. Since S (the subject in intransitive constructions) does not occur post-verbally and is formally unmarked for case, as are Objects (O-roles), the resulting system has ergative properties. Consequently, Pãri has an *Ergative-Absolutive*, rather than a *Nominative-Absolutive* system, whereby again the Absolutive form serves as a default case form for O(bject), pre-verbal A(gent) and pre-verbal S(ubject), for nouns in predicative constructions or nouns in isolation. Some examples from Pãri are shown in (5-10).

(5) *dháagò* *á-yàan* *ùbúrr-ì*
 woman:ABS PERF-insult Ubur-ERG
 'Ubur insulted the woman'

(6) *ùbúr* *á-pùot* *dháag-è`*
 Ubur:ABS PERF-beat woman-ERG
 'the woman beat Ubur'

(7) *dháagò* *á-cúol`-à*
 woman:ABS PERF-call-1SG
 'I called the woman'

(8) *ʔáan* *á-cúol`-ì*
 1SG:ABS PERF-call-2SG
 'you called me'

¹ Andersen (2002) uses the term Oblique case rather than Nominative case, for the form of post-verbal subjects; see section 4 for further details.

(9) *dháagò á-míel'*
 woman:ABS PERF-dance
 'the woman danced'

(10) *ùbúr dháagò á-yáap`-è`*
 Ubur:ABS woman:ABS PERF-insult-3SG
 'Ubur insulted the woman'

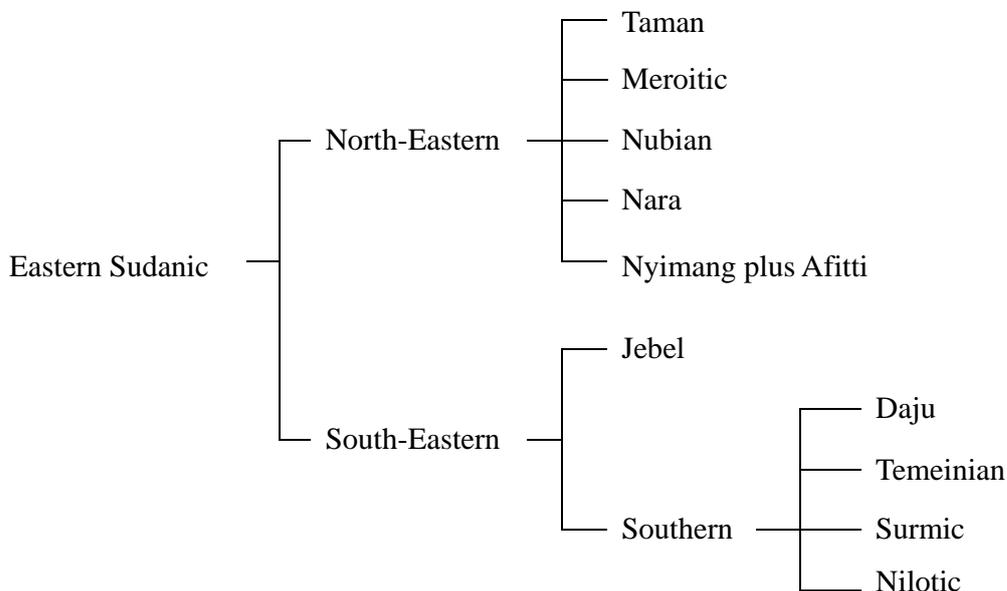
<8> Parallel to the Nilotic branch, one finds variation between Nominative-Absolutive and Ergative-Absolutive systems in its closest relative, the Surmic branch within Eastern Sudanic (Dimmendaal 1998). Furthermore, a Marked Nominative system is attested in Berta (Andersen 1995). Berta does not appear to be a member of Eastern Sudanic, although it is part of Nilo-Saharan (Dimmendaal To appear). Consequently, this phenomenon also has an areal dimension, as Marked Nominative systems are found in Nilo-Saharan (more specifically, Nilotic and Surmic) languages to the southeast and south of the Nuba Mountains, as well as in one language (Berta) spoken east of the Nuba Mountains. Since Berta constitutes a relatively isolated genetic unit within Nilo-Saharan, and is clearly not a member of Eastern Sudanic, its Marked Nominative system is not further discussed here.

<9> A main goal of the present contribution is to trace the historical origin of the Marked Nominative and the related Ergative system in Nilotic and Surmic. More specifically, the main goal of the present study is to show that:

- Differential Object Marking constituted the historical basis for the morphologically unmarked form which objects (O-roles) take in Nilotic and Surmic.
- Post-verbal Agent-marking in transitive predications originated from an extension of Instrumental and Genitive case marking, which in turn resulted in (split) ergativity in Nilotic and Surmic.
- Marked Nominative systems resulted from an extension of (ergative) post-verbal case markers for Agents in transitive constructions to Subjects in intransitive constructions in the same two sub-branches of Eastern Sudanic.

<10> Figure 1 shows the sub-classification of Eastern Sudanic that serves as a framework for the historical comparison of case-marking strategies:

Figure 1: Sub-classification of Eastern Sudanic



2. Tama: A typical representative of the Northern branch of Eastern Sudanic

<11> We have seen that marked Nominative case only occurs in the Southern branch of Eastern Sudanic, and only when subjects (A and S) follow rather than precede the verb. The case system found in Northern members of Eastern Sudanic hereafter referred to as NE, is quite different from that of South-Eastern Eastern Sudanic, hereafter SEE, in several respects. First, these languages have a verb-final constituent order. Second, they inflect the O-role (i.e. the object), rather than A or S for case. Third, they tend to have an extensive case marking system for peripheral semantic roles, e.g. Dative, Instrument, Locative, Ablative and Comparative. The NE languages share this feature with neighbouring, more distantly related Nilo-Saharan languages, as shown in Dimmendaal (2010), (Table 1).

Table 1: Dependent-marking in Nilo-Saharan

Language group	Constituent Order	Peripheral Case	
Saharan	V-final	yes	
Maban	V-final	yes	
Fur	V-final	yes	
Kunama	V-final	yes	
Eastern Sudanic	Nubian	V-final	yes
	Tama	V-final	yes
	Nyimang	V-final	yes

<12> The Tama group within North-Eastern Sudanic consists of a cluster containing Abu Sharīb, Mararit, Darnut, Miisiirii (also known as Mileeri or Jabaal), Tama, Erenga and Sungor (Edgar 1991: 111). Table 2 summarizes the case markers of Tama (Dimmendaal 2009a):

Table 2: Tama case markers

Nominative	∅
Accusative	-iŋ, -iŋ (plus other allomorphs)
Locative	-ta
Instrumental-comitative	-gi
Instrumental-mediative	-ε, -e
Genitive	-ŋo, -a, -l (plus allomorphs)
Ablative	-in (plus allomorphs)
Comparative	-inda

<13> Case markers in Tama are clitics (or 'phrasal affixes') which attach to the final constituent in a noun phrase, as shown in examples (11-12):

(11) *wàl-tá* *wàl ànáá-tá*
house-LOC house underneath-LOC
'in the house' 'underneath the house'

(12) *biràk-ír-ín* *biràk dùùt-ír-ín*
river-SPEC-ABL river big-SPEC-ABL
'from the river' 'from the big river'

<14> Accusative case marking in this language is not an obligatory inflectional feature of objects. Instead, a prominence hierarchy determines whether case marking occurs. Accusative case marking in Tama is:

1. obligatory with pronominal objects;
2. obligatory with proper names as objects;
3. obligatory with objects performing the semantic role of Recipient or Beneficiary;
4. not obligatory from a syntactic point of view with object NPs performing the role of Patient or Theme;
5. excluded with coverbs that form a complex predicate with light verbs ('do/say').

<15> The following examples illustrate this so-called 'Differential Object marking' system (cf. Bosson 1985, Aissen 2003, and Dimmendaal 2010 for a comparison of terminology.) Whereas the O-role is obligatorily marked for Accusative case in (13) and (14), case marking is not obligatory from a syntactic point of view in (15) or (16). And in (17), which contains a complement (coverb) in combination with a light verb 'say', an Accusative case marker is actually excluded.

(13) *wâ-ŋ* *áwí* *tíłłní-ŋá*
 1SG-ACC snake:NOM 3:bite-PERF
 'a snake bit me; I was bitten by a snake'

(14) *wâ* *Nimeiri-ŋ* *kùbáłít-ír* *nì-síłłní-ŋó*
 1SG:NOM Nimeiri-ACC glass-SPEC 1SG-give-PERF
 'I gave Nimeiri the glass'

(15) *wâ-né* *kùbáłít-ír* *ní-síłká*
 1SG-FOC glass-SPEC 1SG-want
 'I want a glass'

(16) *tààt-ír-łíŋ* *lósłwéy*
 child-SPEC-ACC 3SG:drink.CAUS
 '(s)he is feeding the baby'

(17) *bààr* *nú-łnú-tó*
 anger 1SG-say-NEG
 'I am not angry'

<16> As argued by Dimmendaal (2010) in a survey of Differential Object marking in Nilo-Saharan, the conditions for Accusative case marking in Tama are also relevant for other members of this phylum. Moreover, not only semantic features like definiteness and animacy condition the distribution of Accusative case marking in these languages; the pragmatic status of constituents inthetic and categorical statements also plays a crucial role.

<17> As shown in section 1 above, Eastern Sudanic languages belonging to the Nilotic and Surmic subgroups do not have Accusative case marking; instead, objects take 'Absolute' case, i.e. are morphologically unmarked for case. From a historical and comparative perspective, therefore, the absence of case marking on objects in Surmic and Nilotic does not need to be explained separately. It is best explained as the extension or generalization of an economy principle involving Differential Object Marking, leaving out case marking for objects altogether. What needs to be explained from a historical and comparative point of view is the emergence of formal case marking for A-roles and S-roles in Nilotic and Surmic.

<18> Rather than marking both the O-role and the A-role in transitive predications, it may be enough to mark only one of the two. As we shall see next, it is exactly this latter feature, the explicit formal marking of A-roles in certain syntactic contexts, which gave rise to Ergative (and subsequent) Marked Nominative systems in Surmic and Nilotic.

3. The emergence of Ergative and Marked Nominative constructions in Eastern Sudanic

3.1. Typological restructuring in Southern members of Eastern Sudanic

<19> Nilotic and Surmic languages differ rather dramatically from NE languages in a number of respects. The latter are part of a typological zone which includes a range of more distantly related Nilo-Saharan languages in Chad, Sudan, Ethiopia, and Eritrea (namely Saharan, For, Maban, Mimi, and Kunama), a zone which itself links up with the "Ethiopian convergence area" (Heine 1976, Dimmendaal 2007b). The deviant structure of Surmic and Nilotic in terms of case marking and constituent order is summarized in Table 3.

Table 3 Case marking in Nilotic and Surmic

Language	Const. Order	NOM/ERG	ABS	Peripheral Case
Western Nilotic:				
Anywa	V2/OVS	ERG	yes	no
Päri	OVS	ERG	yes	no
Dinka	V2	NOM	yes	marginal
Nuer	V2	NOM	yes	marginal
Shilluk	V2/OVS	ERG	yes	no
Luo	SVO	no case	no	no
Eastern Nilotic:				
Bari group	SVO	no case	no	no
Lotuxo	SVO	no case	no	no
Ongamo-Maa	V-initial	NOM	no	no
Southern Nilotic:				
Kalenjin	V-initial	NOM	yes	no
Datooga-Omotik	SVO	no case	no	no
Surmic:				
Majang	V-initial	ERG	yes	no
South Western:				
Baale	V2	NOM	yes	reduced
Didinga	V-initial	NOM	yes	reduced
Tennet	V-initial	NOM	yes	reduced
South-Eastern:	V2	ERG	yes	reduced

<20> The present contribution argues that the common ancestor of Nilotic and Surmic underwent two innovations historically: first, by moving from a strongly dependent-marking towards a head-marking system at the clausal level (reducing case and extending the marking of argument structures on verbs); second, by shifting from a verb-final to a verb-second or verb-initial structure.

<21> What is the actual evidence for these claims? Remnants of a more extensive case marking system, i.e. of a dependent-marking strategy at the clausal level can be found in Surmic and a number of Nilotic languages. Surmic languages tend to use one (peripheral) case marker for

the Dative and one (Oblique) form for other semantic roles, more specifically Instrument-Manner-Comitative-Locative (Dimmendaal 1998:41).

- <22> An even more reduced system is attested in Nilotic, where we only find remnants of peripheral case marking in Western Nilotic languages (Dimmendaal 2005). Compare Nuer, where the citation form corresponds to the Absolutive form, which again is used for objects (regardless of their position) and for pre-verbal subjects; the corresponding Locative case form frequently involves non-concatenative morphology in Nuer (18):

	<u>Citation</u>	<u>Locative</u>	
(18)	<i>lɛp</i>	<i>lɛb</i>	'tongue'
	<i>lɔc</i>	<i>lɔci</i>	'heart'

- <23> The same phenomenon occurs in the closely related Dinka language. These remnant features strongly suggest the former presence of a more elaborate system of peripheral role marking by way of case, as is still found in NE. But, as argued next, the system of case marking for peripheral semantic roles still found today in Taman and Nubian languages also provides a natural historical explanation for the innovation of an Ergative and Marked Nominative systems in Nilotic and Surmic.

- <24> The detailed analysis by Stirtz (2012) of the only (Eastern) Jebel language probably still spoken today, Gaahmg (Ingassana), makes clear that this language also marks post-verbal Agents, whereas pre-verbal Agents (or subjects of intransitive predications) are unmarked for case, as are objects. Stirtz (2012: 281) claims that subjects (and objects) in this language are not marked for case. But this claim forces the author to come up with a somewhat arbitrary glossing for this inflectional marker each time it occurs in a particular construction. As Stirtz (2012: 124) himself points out, "[t]he genitive function is not marked with a suffix, but only by a tone change." However, this case form is used, not only for the possessor in a genitive construction, but also used for post-verbal subjects in transitive predications (19):

(19)	<i>ɲɛ̄m-ə̄n-s-ī</i>	<i>aggaàr(-ɛ̄)</i>	
	break.CAUS-AP-COMP-PAS.A	hunter.GEN	
	'something was broken by a hunter making someone break it'		☐

- <25> In this example, the Agent noun is optionally followed by a marker - (which is left unglossed in Stirtz 2012). Whereas there is no Instrumental case marker with this form in Gaahmg, there is a marker expressing Accompaniment with a similar form. The latter differs minimally (namely in tone) from what is referred to in the present study as the Ergative case marker. So etymologically, the Ergative case marker in example (19) is most likely related to the Instrumental-Mediative still found in NE languages like Tama (see Table 2 above). Although there is a marker *-ī* glossed as a passive agent by Stirtz (2012), example (19) is clearly not a passive, because the actual passive construction takes on a different form in Gaahmg. As pointed out by Stirtz (2012: 174), the so-called Agented passive construction (or Ergative construction, as it is called in this paper) is often used with object focus to indicate a post-verbal encoding of an Agent (or an Experiencer). Given the fact that number marking on the verb agrees with the Agent, the latter must be treated as a core constituent, and not as an optional, peripheral 'by-phrase' introducing the Agent of a passive-like construction.

- <26> Whereas pre-verbal Agents in Gaam are not inflected for case, post-verbal Agents are, as shown by the following alternation (20-21, where the suffix *-ɛ̄* is glossed as a subordinate clause-final marker by Stirtz (2012):

(20) *ʃāā-n t̥ir-sé ɲíí*
 person-DEF kill-COMP what
 'what did the person kill?'

(21) *ɲíínā t̥ir-s-ī ʃáà-n-ē*
 what kill-COMP-PAS.A person.GEN-SBO
 'what did the person kill?'

- <27> As post-verbal subjects are excluded with intransitive predications in Gaam (Timothy Stirtz, personal communication), the result is an Ergative case marking system. Whereas the question words *ɲíí* and *ɲíínā* are both glossed as 'what' in the examples above, the latter probably contains a relative clause marker *-na* (attested independently as such in Gaahgm; see the description by Stirtz 2012: 296). Consequently, constructions such as (21) probably involve some sort of clefting. Note, however, that the so-called subordinate clause-final marker on the noun ('person') is not a general subordinate clause marker; it is only used in combination with post-verbal Agents (of transitive predications).
- <28> As stated above, Genitive case marking is expressed by way of tonal changes in Gaahmg, so there is no immediate segmental evidence that this is a reflex of the original Genitive marker *-i* still found as such in NE (see, for example, Table 2 above). However, the use of the Genitive case form for possessors in possessive constructions as well as for post-verbal Agents in transitive predications parallels the use of the Genitive case form in Nilotic languages like Dinka, as in example (4) above.
- <29> Nilotic and Surmic probably form a subgroup within Eastern Sudanic together with the Daju group and Temeinian (i.e. Temein plus Dese and Doni), as suggested by the suppletive singular/ plural alternation for 'cow' (Dimmendaal 2007). At the same time, there is no evidence that Daju and Temeinian shared the innovation of an Ergative case marker with Nilotic and Surmic. As shown above, the latter marker only occurs with post-verbal Agents. Since this marker is also attested in the Jebel language Gaam, the innovation must go back to Proto-SEE. Daju and Temeinian are much closer to Nilotic and Surmic grammatically and lexically than they are to Gaahmg (i.e. Jebel). Since pre-verbal subjects (or Agents) are never marked for case in any of these Eastern Sudanic languages, the absence of the ergative case marker in Daju and Temeinian is best explained as an innovation following from the fact that in these latter groups the constituent order has become SVO (as far as present knowledge goes).

3.2. An indirect reflex of a former peripheral case marker

- <30> Whereas semantic roles such as Instrument (or the related notions of Manner and Comitative or Accompaniment) tend to be expressed by way of prepositions or verbal extensions in SEE, there is an interesting indirect reflex of the Instrumental case marker *-ε/-e*. This marker, still attested synchronically in NE languages like Tama (illustrated above), is used with post-verbal Agents (in transitive clauses) in Nilotic languages like Pāri, and with post-verbal Agents and Subjects (of intransitive clauses) in Surmic languages like Tennes. The other Ergative/ Nominative marker in these and other Surmic and Nilotic languages, *-i/-i*, most likely goes back to an early Eastern Sudanic Genitive case marker.
- <31> Reh (1996) analyzes the cognate post-verbal markers in Anywa as definiteness markers, rather than Ergative case markers. But this analysis is problematic both synchronically and diachronically. First, why would a language use such markers to express definiteness when subject noun phrases occur post-verbally, but not pre-verbally? Second, if these are really definiteness markers, why is it impossible to use them with objects? Third, there is no (historical) comparative evidence for such definiteness markers; definiteness or specificity is expressed by

way of different markers in Nilotic languages. Fourth, as shown here, there is comparative evidence for these markers as Instrumental and Genitive case markers historically.

<32> Synchronically, *-ε/-e* and *-i/-i* are in complementary distribution phonologically in Pāri: *-i/-i* occurs with nouns ending in a consonant (with the preceding sonorant being doubled) as well as with nouns ending in a high vowel. The case suffix *-ε/-e* is used when the noun ends in a non-high vowel. But this allomorphic distribution is most likely a later development. In the Surmic language Tennet, *-ε/-e* and *-i/-i* are also in complementary distribution. But here, the distribution is determined by semantic, rather than phonological features of the subject noun. In Tennet, *-i/-i* is used with proper names to mark a (post-verbal) A-role or S-role, whereas *-ε/-e* occurs with other types of post-verbal Agents and Subjects (22-23).

(22) *órông Lówór-i kákát Lohám-i áríza*
 want Lowor-NOM spear:SUBJ Loham-NOM bull:ABS
 'Lowor wants Oham to spear the bull'

(23) *órông Lówór-i Lohám kíkíya*
 want Lowor-NOM Loham:ABS come:SUBJ
 'Lowor wants Loham to come'

<33>As we shall see below, historically the presence of the marker *-i/-i* links up neatly with similar strategies in NE groups like Nubian and Meroitic. The semantic distribution as found in Tennet (as against the phonologically conditioned distribution in Pāri) thus probably reflects the more archaic situation. From a historical and comparative point of view, we thus observe a typological shift in SE languages away from a system in which prominent Objects were inflected for case towards one in which prominent Agents were inflected for case.

<34>Interestingly, Tennet turns out to be more archaic than Pāri in at least one other respect. Randal (2000: 72) has shown that in specific subordinate (complementizer) clauses in Tennet the order for intransitive predications is SV, rather than VS (as in main clauses), whereas corresponding transitive verbs may follow the VAO pattern. Whereas in main clauses, both the post-verbal A-role (with transitive predications) and the post-verbal S-role (with intransitive predications) are inflected for case, thus giving rise to a Marked Nominative rather than an Ergative case system, the situation is different with dependent (or subordinate) clauses. As shown in (20), the Subject of intransitive predications can only precede the intransitive verb in a dependent clause. In other words, Tennet has remnants of an erstwhile Ergative system in dependent clauses. Cross-linguistically, subordinate or dependent clauses are often more conservative than main clauses, as they are less subject to communicative dynamism, and thus to innovations. The constituent order as found in subordinate clauses in Tennet also strongly suggests that (O)VA (in transitive constructions) as against SV (in intransitive constructions) were the common constituent order in main clauses at an earlier stage. This, of course, is the common constituent order still found in Western Nilotic languages like Pāri, and thus probably reflects an archaic property of SEE. The generalization of a strict verb-initial constituent order in main and subordinate clauses in Southern and Eastern Nilotic as well as in main clauses in the Didinga-Murle group within Surmic must consequently be an innovation historically.

<35> There are at least two additional case suffixes used with post-verbal Agents in Surmic languages. The first one, *-na-*, is used with plural (as against singular or transnumeral) Agentive nouns or noun phrases in post-verbal position in Baale (24, Dimmendaal 1998: 63):

(24) *á-dákkè èèró-nà*
 IMPF-eat.3PL children:NOM
 'the children were/are eating it'

<36> This case marker in Baale again appears to have cognates in Northern representatives of Eastern Sudanic, for example in Kunuz Nubian, which has a Genitive marker *-na* (with a number of allomorphs (25, Abdel Hafiz 1988: 94):

- (25) *id* 'man'
id-na ka 'man's house'

<37> In the South-Eastern Surmic language cluster Tirma-Chai-Mursi one finds a case suffix *-o* used with post-verbal Agents and Subjects (of intransitive predications). This suffix is strikingly similar to a widespread Genitive case suffix in Surmic (compare the table in Dimmendaal 1998: 41). Possibly, this case suffix is an innovation of the Tirma-Chai-Mursi cluster. It is spoken in the vicinity of the Western Nilotic Dinka-Nuer cluster, where post-verbal Agents and Subjects also take a case form which is formally identical to the Genitive (compare Andersen 2002).

<38> All Ergative and Nominative case markers in Nilotic and Surmic thus seem to have originated from (an extension of) the Instrumental and Genitive case markers; see Table 4.² Cross-linguistically, such strategies are well attested. Compare Jespersen (1909: 152) on the origin of the Proto-Indo-European A(gent) marking, namely from a Genitive, if it was animate, and from an Instrumental case, if it was inanimate; compare also Garrett (1990) on case in the historical development of Indo-European.

Table 4: Eastern Sudanic case markers

Northern branch (NE)	Instrument, Associative, Manner	Genitive
Taman	-ɛ, -e	-i, -i
Nyimang	-e, -e	-i (Directional)
South-Eastern branch (SEE)	Ergative, Nominative	Genitive
Gaahmg	-ɛ, -e	tone
Southern branch (SE)		
Surmic		
South-Western Surmic	-ɛ, -e, -i, -i	-o
South-Eastern Surmic	-o	-o and other suffixes
Nilotic	-ɛ, -e, -i, -i, tone	

<39> As pointed out by Doris Payne (personal communication), Genitive markers are prototypically associated with nominal or nominalised constructions. But in the case of Nilotic and Surmic there does not seem to be any evidence for this latter syntactic property so far. Presumably, its causes (nominalisation with the Agent in transitive constructions being expressed by way of Genitive case) are to be sought at a deeper historical level in Eastern Sudanic. There is reason to believe that the case suffix *-i/-i* in SE goes back much further in history. A cognate marker *-i* is found in Old Nubian (Brown 2002) as well as Meroitic.³ Brown (2002: 32-33) calls this inflectional marker, which was used with nominal subjects, a "Subjective

² Dimmendaal's (1983: 261) internal reconstruction in Turkana shows that the Nominative case inflection goes back to a segmental suffix. Whether these tonal inflectional markers are reflexes of the erstwhile Ergative (Instrumental) case marker, the Genitive case marker or both, cannot be determined at this point in time.

³ I would like to express my thanks to Claude Rilly for pointing out this crucial similarity.

marker". Since a Genitive case marker *-i/-i* is attested in at least one other NE group, the Taman cluster, its origin as a former Genitive case marker still seems to be the most plausible hypothesis. But how and why did it turn into a case marker for Agent nouns (i.e. an Ergative case marker)? Examples from other parts of the world may give us a clue. Givón (1980) discusses examples from the Tibetan (Tibeto-Burmese) language Sherpa, where a Genitive subject (Agent) noun phrase apparently became an Ergative noun phrase through reanalysis of a nominalised clause as a main clause. As argued by Givón (1980), similar cases have been adduced for other languages and language families. What one might expect to find in Old Nubian (or modern Nubian descendants for that matter) would be a historical link between a finite (perfective) verb form and an older nominalised (infinite) verb form in which Agents were expressed through Genitive noun phrases. All one can say at this point in time is that our current understanding of the historical development of Nubian – as well as the analysis of complex clause structure in modern Nubian languages – does not allow us to make claims about the original syntactic distribution of this marker *-i/-i*.

- <40> In his comparative Nilo-Saharan study, Ehret (2001: 208) reconstructs a number of case suffixes, among them an 'Instrument-agent' marker **-ye* for the early stages of Nilo-Saharan. He links the Tama Instrument marker to the subject denote *-ye* in Saharan languages like Kanuri, but also to a case suffix *-i* in Surmic languages like Majang. Also, the verbal Instrumental extension *-ie* in Nilotic languages like Maasai is treated as a reflex of this original case suffix. But as argued in the present study, the case suffix *-i* in Surmic (and Nilotic) must have a different origin, namely Genitive case marking. Moreover, the verbal marker of the Instrumental role in Maasai presumably has a different origin as well which cannot be elaborated upon here for reasons for space. The evidence from one group of relatively closely related Nilo-Saharan languages, namely those belonging to Eastern Sudanic, suggests a slightly different scenario at least for this subgroup, namely the extension of an original Instrumental marker towards an Ergative case marker (**-e*).
- <41> A final issue, not pursued here again for reasons of space, concerns the structure of independent subject and object pronouns in Nilotic and Surmic. Such pronouns may be used in addition to the cross-reference markers on verbs, e.g. for pragmatic reasons (topicalisation, focus marking). In Nilotic languages, for example, they frequently seem to contain a petrified suffix *-ni*. This may in fact be a reflex of an earlier Accusative case suffix which was retained as an inherent element of independent pronouns after case marking for syntactic O-roles (i.e. syntactic objects) became obsolete.
- <42> The reduction of peripheral case marking in SEE (i.e. in Gaahgm (Jebel) and the Southern members of Eastern Sudanic), and the drift towards a verb-second or verb-initial constituent order in this branch was compensated for by an extension of head marking at the clausal level in these languages. The result was a radically different language type, such as the Nilotic language Maasai, where semantic roles such as Beneficiary, Recipient, Instrument, Direction and Location tend to be expressed on the verb; alternatively, such semantic roles may be introduced by prepositional phrases, but not by way of case-marked noun phrases, as in NE languages like Tama. Compare the following Maasai examples (26-29):

(26) *a-dót-ú nkújít*
 1SG-pull-VEN grass:ABS
 'I pull out grass'

(27) *á-írrág-áá Náròk*
 1SG-sleep-IT Narok:ABS
 'I sleep at Narok'

(28) *á-ból-óki papá óléné*
 1SG-open-DAT father:ABS basket:ABS
 'I open the basket for father'

(29) *á-dúŋ-lé enkálém*
 1SG-cut-INST knife:ABS
 'I cut it with a knife'

4. Why passives did not constitute the historical basis for Ergative or Marked Nominative systems in the South-Eastern branch

<43> Whereas ergative constructions sometimes appear to arise through a reinterpretation of erst-while passive constructions as active constructions, there is no evidence for this scenario in Eastern Sudanic.⁴ First of all, it should be noted that all Nilotic and Surmic languages with Ergative (or Marked) Nominative systems have separate morphological passives. If passives were reinterpreted as active (ergative) constructions, one would expect to find at least some languages without a morphological passive. But as the following examples from Dinka (Western Nilotic) show, these languages do have morphological passives (and active constructions with postverbal Agents marked for case,

Active

(30) *bájŋ à-tòoc ḍòok*
 chief PERF-send boy
 'the chief sends the boy'

Passive

(31) *ḍòok à-tòoc (n)è bájŋ*
 boy D-send:PASS PREP chief:OBL
 'the boy is being sent by the chief'

<44> Whereas in Dinka, passive morphology involves vertical (non-concatenative) morphology on the verb, several other Nilotic and Surmic languages have a segmental passive marker, usually a suffix *-i* (or *-j*) used in addition to ergative constructions.

<45> Etymologically, the Ergative case markers in Surmic and Nilotic go back to Instrumental and Genitive case markers respectively, as argued above. Again, oblique phrases expressing the Agent in passive constructions may be expressed with the same marker as Instruments, as cross-linguistic studies have shown. Compare French *par*, which may be used to express a peripheral phrase marking Instrument as a semantic role or the Agent in a passive construction. But again, there is no reason to assume that a peripheral Agent marked by way of an Instrumental (or Genitive) case was reinterpreted as a core constituent in passive constructions in the historical development of SEE. Instead, the role or function of the Instrumental-Mediative case marker (still found as such in languages like Tama) must have been *extended* to that of an obligatory Agent marker in an *active* construction at some point in the historical development of this Eastern Sudanic branch.

<46> This latter typological phenomenon is attested synchronically in at least one Niger-Congo language in the Nuba Mountains – Tima. Whereas Greenberg (1963) assumes that Tima plus the

⁴ The "passive flavour" of such clauses (as Christian Lehmann, personal communication, phrased it) may have to do with the fact that such clauses are best translated as passive constructions in the meta-language English. As pointed out by Calvert Watkins (personal communication), there is no evidence that ergative constructions in Indo-European languages go back to passives.

closely related languages Katla and Julud form one sub-branch of the Kordofanian branch of Niger-Congo, this cluster probably constitute an isolated cluster within Niger-Congo (Dimmendaal, To appear b). Constituent order in Tima, which varies between SVO, OVS, SOV and VSO, is strongly governed by pragmatic principles. When Objects precede the verb and the A-role is expressed by way of a post-verbal constituent, the latter is formally marked. Since post-verbal Subjects (in intransitive constructions) do not seem to be allowed in Tima, the result is a system with split ergativity (32).

(32) *má kálùk ò Khamisi*
 what eat ERG Khamisi
 'what did Khamisi eat?'

<47> The post-verbal Agent-marking proclitic *ò* in Tima is formally identical to a prepositional proclitic marking Instrument, *ò*. However, there are three important structural differences between the status of the Instrumental phrase and the Agent phrase in Tima (Dimmendaal 2010c), namely:

1. Contrary to Instrumental phrases, the Agent noun phrase is an *obligatory* core constituent.
2. Contrary to Instrumental phrases, the Agent noun phrase *obligatorily* occurs immediately after the verb (with the Object preceding the verb).
3. When the post-verbal Agent is a pronoun, the latter is expressed as a bound morpheme attached to the verb (rather than as an independent syntactic phrase, as with instrumental phrases).

<48> The following example illustrates the third property, the behaviour of pronominal Agents:

(33) *má alkálùk-ná*
 what 2SG-eat-ERG.2SG
 'what did you eat?'

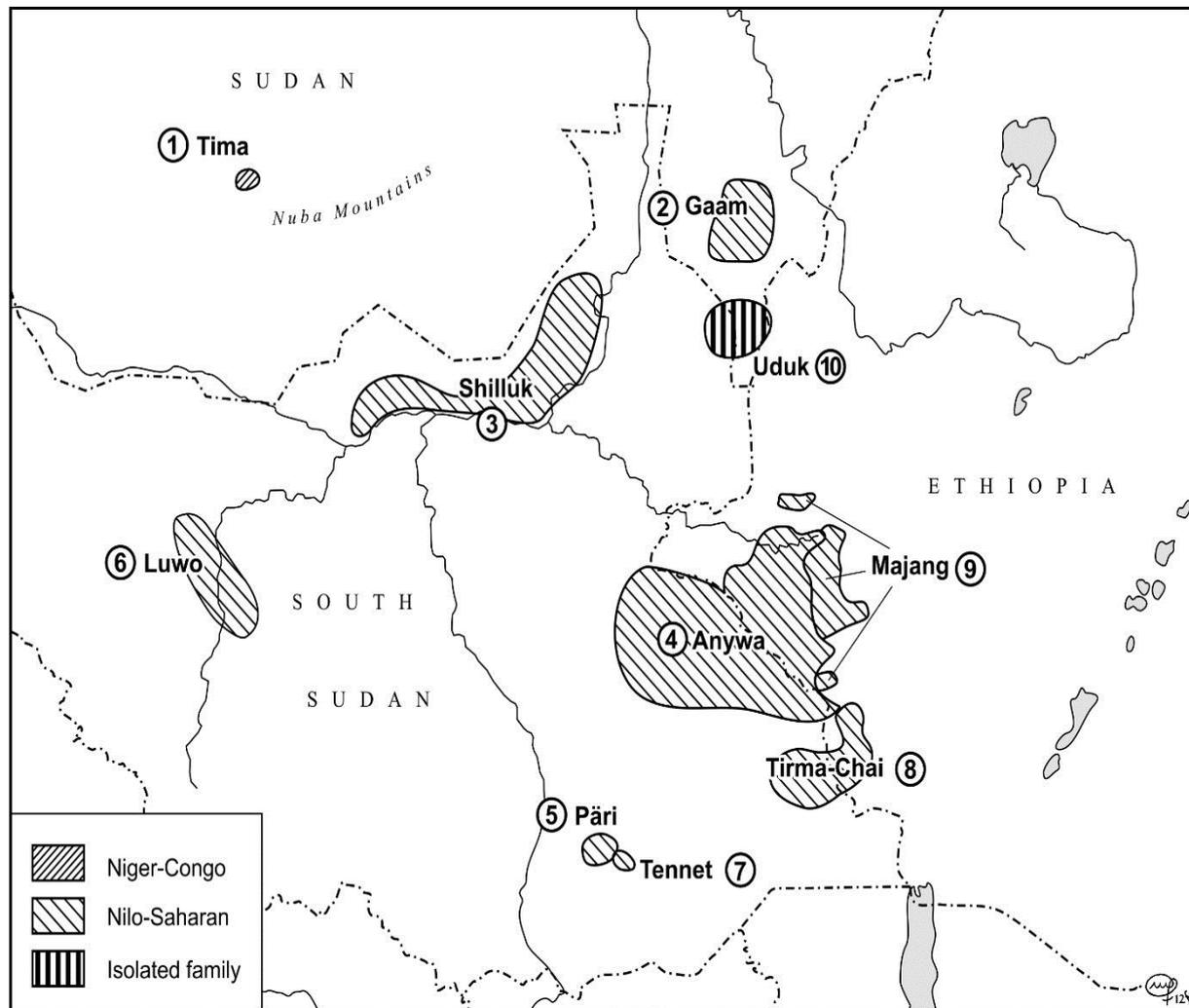
<49> We thus find at least one language in the Nuba Mountain area today – as it happens it is Niger-Congo – which has also extended the use of an Instrumental marker to that of (obligatory) post-verbal Agents, i.e. an Ergative marker.

<50> There is one Western Nilotic language spoken south of the Nuba Mountains, Shilluk, which manifests ergativity, but which did not retain the original Ergative case suffixes **-ε / *-e* and/or **-I / *-i*. The innovated ergative marker in Shilluk is expressed by a proclitic marker *yi*, as shown by Miller and Gilley (2001). It could hardly be a coincidence that this marker is formally identical to a widespread Western Nilotic preposition *yi*, functioning as an Oblique marker and introducing different semantic roles including Instrument.

<51> More recently, ergative features have been found in at least one language belonging to the Koman cluster in the borderlands between Ethiopia and Sudan, namely Uduk (currently studied by Don Kilian; personal communication 2012). This language cluster is treated as a primary branch of the Nilo-Saharan phylum by Greenberg (1963), and as an independent family in Dimmendaal (2011). Whether or not these languages are distantly related to the Eastern Sudanic groups discussed here is not relevant for the origin of ergativity in southern members of Eastern Sudanic, since the actual markers are not cognate. What is relevant, however, is the areal distribution of these various language groups that manifest (split) ergativity (see Map 1). Nilotic and Surmic constitute expansion zones, whereas neighbouring areas to the east (in Ethiopia) and the west (in the Nuba Mountains) constitute residual zones (i.e. areas with a high degree of genetic and typological diversity). The most plausible explanation for the radical change of these Eastern Sudanic groups (Nilotic, Surmic, and also

including the Jebel group) is areal contact during their southward expansion with languages of this type (now only found in residual zones in the area). The southward expansion of SE groups was probably triggered by dramatic climatological changes in the area, more specifically the "Wadi Howar diaspora", as argued for by Dimmendaal (2007a).

Map 1 The distribution of languages with (split) ergativity



5. A remaining puzzle: Why is ergativity so rare in Africa?

<52> Within both Nilotic and Surmic, some languages have Ergative-Absolute case systems, whereas the majority of closely related languages have Nominative-Absolute systems. As argued above, the latter must go back historically to (split) ergative systems. Due to the detailed analysis of the only remaining Jebel language, Gaahmg, it is now clear that this Eastern Sudanic language also has an Ergative-Absolute case system. Although it cannot be shown at this point in time that the system in Berta had the same origin, it is rather striking that this language also uses the same, universally rare, Marked Nominative system. It therefore seems likely that areal contact played a role. Today, such languages are found in residual zones east and west of the Nilotic-Surmic expansion zones, namely in the Nuba Mountains and the borderlands between Ethiopia and Sudan. However, one burning question still remains unanswered: Why is ergativity, so common cross-linguistically, so rare in Africa? There are several possible reasons.

- <53> It may be an accidental consequence of history. Ergativity may simply have disappeared as a result of the generalization of post-verbal subjects in transitive and intransitive clauses due to areal contact. A verb-initial syntax and corresponding post-verbal marking of Agents and Subjects can be observed in Southern Nilotic (Kalenjin), in Eastern Nilotic (Teso-Turkana, Maa) and in Didinga-Murle (Surmic). The latter (Surmic) languages are strongly influenced by Teso-Turkana, as argued in Dimmendaal (2005). The Nilotic languages in turn may have developed a verb-initial syntax (with corresponding case-marking features for Agent and Subject) through areal contact with the Kuliak languages. One member of this cluster, Ik (Teuso), marks the post-verbal Subject (in intransitive clauses) and the Agent (in transitive clauses) with Nominative case whenever the Agent refers to a third person (König 2002: 115).⁵
- <54> This historical hypothesis, plausible in itself, is weakened by the following complications that would need to be accounted for. Apart from the question of why the Kuliak languages did not develop an ergative system, we are left asking why Berta also has a Nominative-Absolutive, rather than an Ergative-Absolutive, system. Moreover, Marked Nominative systems are also attested in Cushitic and Omotic (Afroasiatic) languages; compare the survey by König (2006). None of these Afroasiatic languages, however, manifests (split) ergativity, as far as present knowledge goes. At the same time, we see that the (Marked) Nominative is often formally similar to, or even identical to, Genitive case in Omotic languages, for example. And the latter often form the etymological basis for ergative markers.
- <55> Such constellations suggest that there is a deeper, structural reason why ergativity is so rare in (Eastern) Africa, and that it is something in the inherent organization of these languages which results in parallel developments.⁶ Mithun (1991) has observed that lexical aspect (Aktionsart), agency, control and affectedness are semantic features that have a bearing on the split of Subject between Agent and Patient. Thus, inchoatives denote temporary conditions (or states) and may call for Object marking for the affected entity. State (as opposed to affectedness) may call for Subject marking, as Azeb Amha (2009) shows for the Omotic language Wolaitta. Such fluid-S and Split-S marking are very common in Nilo-Saharan and Afroasiatic languages in the area. Song (2001: 152) has observed that head marking on the verb is a far more frequent realization of active-stative marking at the clausal level than is dependent marking; the verb is a more compatible host for the active-stative marking than is the noun. Diathesis or voice marking on the verb is also prominent in Cushitic and Omotic, as well as in Nilo-Saharan, languages. It would seem, then, that several of the Nilo-Saharan and Afroasiatic languages in the area have an elaborate system of grammatical relations marked on verbs (and may be characterized as "Active languages" in the sense of Klimov 1976)). But this of course leads towards another "chicken-and-egg" question: Why are such verb-coding systems more common, not only in this area but on the African continent as a whole? Perhaps the ultimate answer is: Ignoramus et ignorabimus.

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5 Complications occur, according to the same author (König 2002: 115), when the Agent is a first or second person; in that case, the Object also occurs in the Nominative.

6 Azeb Amha & Dimmendaal (2006) and Dimmendaal (2007a, 2011) have argued for this so-called '*self-organizing*' principle on independent grounds.

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Abbreviations

ABL	Ablative	LOC	locative
ABS	Absolutive	NE	Northern Eastern Sudanic
ACC	accusative	NOM	nominative
AP	antipassive	NTS	having a non-topical subject
CAUS	causative	OBL	casus obliquus
COMP	complete	PAS.A	agented passive
D	declarative	PAST	past tense
DAT	dative	PERF	perfective
DEF	definite	SBO	subordinate clause marker
ERG	ergative	SEE	South-Eastern Eastern Sudanic
FOC	focus	SG	singular
IMPF	imperfective	SPEC	specifier
INST	instrumental	SUBJ	subjunctive
IT	itive	VEN	ventive
NEG	negation		

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