# PCC and Ergative Case: Evidence from Neo-Aramaic

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### 1. NENA

For over a millenium, until about the 8<sup>th</sup> century AD, Aramaic (Semitic) was the lingua franca of the Middle-East. It was then replaced by Arabic throughout most of the region. Yet Neo-Aramaic is still spoken today in some areas.

We discuss the North-Eastern Neo-Aramaic group of dialects (NENA), which contains over a hundred dialects spoken by Jewish and Christian communities originating in villages and towns in western Iran, southeastern Turkey and northern Iraq east of the Tigris river (Khan 2007).

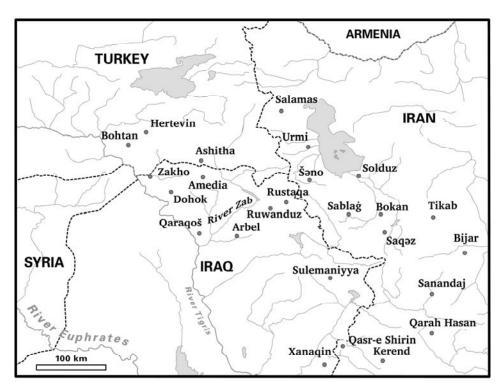


Fig. 1. The North-Eastern Neo-Aramaic dialect area

We argue that NENA is an ergative language, the only ergative language in the Semitic family. Ergativity in NENA has the following characteristics, which are quite common among ergative languages: it is split ergativity (only attested in the perfective aspect) and it is marked by verbal agreement affixes rather than by Case.

#### 1.1. The marking of transitive verbs

All transitive verbs are marked, both in the perfective and imperfective aspect, by two agreement suffixes, optionally separated by the past tense marker -wa:

(1)	a.	V <sub>IMPF</sub> -	- NOM-suffix (–	- wa) –	- DAT-suffix
	1.	17	MOM auffin (		DAT suffis

b.  $V_{PERF}$  – NOM-suffix (– wa) – DAT-suffix

(2)	NOM-suffix	DAT-suffix	(Jewish Sanandaj)
3мs	-Ø	-le	
3fs	- <i>a</i>	-la	
3pl	- <i>i</i>	-lu	
2мs	-et	-lox	
2FS	-at	-lax	
2pl	-etun	-lăxun	
1MS	-na	-li	
1FS	-an	-li	
1pl	-ex	-lan	

The examples in (3) below (from Jewish Sanandaj) illustrate the inversion in the cross-referencing of subject and object between the perfective and the imperfective. In the imperfective (a) example, the NOM suffix -i cross-references the subject and the DAT suffix -la cross-reference the object. This is reversed in the perfective (b) example, where the NOM suffix cross-references the object, and the DAT suffix cross-references the subject.

(3)	Agreement inve	rsion
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a.	Imperfective					
	barux-ăwal-i	baxt-ăke	garš-í-wa-la			
	friend-PL-my	woman-DEF	pull <sub>impf</sub> -NOM.3PL-PAST-DAT.3FS			
	'My friends were pulling the woman.'					

b. Perfective
baxt-ăke
barux-ăwal-i
gərš-í-wa-la
woman-DEF
friend-PL-my
pull<sub>PERF</sub>-NOM.3PL-PAST-DAT.3FS
'The woman had pulled my friends.'

#### 1.2. The marking of intransitive verbs

#### <u>Split-S dialects</u>

a.

Dixon 1994 coined the term *Split-S* for ergative languages where the marking of intransitive subjects is split between unaccusative subjects, which are marked like objects, and unergative subjects, which are marked like transitive subjects. The following example is from Jewish Sulemaniyya which is a Split-S dialect:

brat-i **qim-a** daughter-my rise<sub>PERF</sub>-NOM.3FS 'My daughter rose.' b. kalba **nwəx-le** dog bark<sub>PERF</sub>-DAT.3MS 'The dog barked.'

#### <u>Extended-Erg dialects</u>

Dixon 1979 recognized the existence of ergative languages where intransitive subjects are coded like transitive subjects, and he called such languages *Extended-Ergative*. The following example is from Christian Barwar, which is an Extended-Erg dialect:

#### (5) Christian Barwar

a. brat-i **qim-la** daughter-my rise<sub>PERF</sub>-DAT.3FS 'My daughter rose.' b. kalba **nwix-le** dog bark<sub>PERF</sub>-DAT.3MS 'The dog barked.' We do not discuss here an additional type of dialect, where the extension of the dative suffix to unaccusative verbs is optional. The nominative marking of unaccusative verbs survives as a perfective stative (present perfect), with the dative marking appearing in dynamic unaccusatives. For further details about this type of dialect see Doron and Khan 2012.

#### 2. Arguments for (morphological) ergativity

In the following four subsections, we adduce four arguments for the ergative nature of all the NENA dialects, including the Extended-Erg dialects.

#### 2.1. Agreement inversion

Agreement inversion between the perfective and imperfective, illustrated in (3) above, if found in Extended-Erg and Split-S dialects alike.

#### 2.2. Morphological markedness

DAT-agreement is morphologically marked relative to NOM-agreement, as it has no null exponents. Marked agreement of the subject is a characteristic of ergative systems (Dixon 1979:77).

#### 2.3. Subject-agreement drop

Subject agreement in the perfective is dropped with null 'impersonal' subjects (as has been documented for other ergative languages by Comrie 1988). In the examples in (6), the 3PL subject DAT-agreement marker is missing. This drop of agreement-marking is related to the clitic nature of the DAT-suffixes (cf. Preminger 2009).

(6)		Christian Barwar				
	a.	gawra qṭil-ø	b.	baxta qțil-a	c.	naše qțil-i
		man kill <sub>perf</sub> -NOM.3MS		woman kill <sub>PERF</sub> -NOM.3FS		people kill <sub>PERF</sub> -NOM.3PL
		'The man was killed.'		'The woman was killed.'		'The people were killed.'
	lit:	'They killed the man.'		'They killed the woman.'		'They killed the people.'

The overt argument in (6) is an object rather than a derived subject, as it is cross-referenced by NOMagreement, which only objects are in Christian Barwar (Christian Barwar being an Extended-Erg dialect). Moreover, the NOM-suffix can be missing gender and number specification with indefinite feminine or plural arguments, a property of object agreement rather than subject agreement:

#### (7) Christian Barwar

prim-ø 'ərwe slaughter<sub>PERF</sub>-NOM.3MS sheep.PL 'Sheep were slaughtered.' (Khan 2008: 750)

#### 2.4. The Person-Case Constraint (PCC)

The PCC was formulated by Bonet 1991 as a universal constraint: "In a combination of a weak direct object and an indirect object [clitic, agreement marker or weak pronoun], the direct object has to be third person." (Bonet 1991: 182). The PCC was later reformulated by Anagnostopoulou 2003, 2005 and Béjar & Rezac 2003, 2009 as a consequence of relativized minimality, whereby a Person/Case relation between a head H and a dependent X is barred by the intervention of an oblique dependent Y:

(8) 
$$H > Y > X$$
 (> is c-command)  
\*Person/Case Agree

Accordingly, X cannot realize  $1^{st}/2^{nd}$  person features, but must realize  $3^{rd}$  person, which is not a person feature but rather default morphology.

The PCC holds in NENA in ditranstive constructions with dative and direct object suffixes. The dative indirect object cross-referenced by DAT blocks agreement of the direct object:

 (9) Christian Qaraqosh (Khan 2002) k-ew-i-láh-ila INDC-give<sub>IMPF</sub>-NOM.3PL-DAT.3MS-DO.3MS 'They give it to him.' impossible with 1<sup>st</sup> or 2<sup>nd</sup> person direct objects

In most NENA dialects, including most Extended-Erg dialects, the dative subject counts as a PCC intervener. In the PCC-abiding dialects, NOM-agreement across a dative subject is restricted to 3<sup>rd</sup> person, whether or not that subject is overt:

#### (10) Christian Barwar

#### a. transitive

3ms	gríš-ø-le	'He pulled him'
3fs	griš-á-le	'He pulled her'
3pl	griš-í-le	'He pulled them'
2ms	* griš-ət-le	1MS * griš-ən-le
2fs	* griš-at-le	1FS * griš-an-le
2pl	* griš-itu-le	1PL * griš-əx-le

#### b. transitive with null impersonal subject

3ms	gríš-ø	'He was pulled'
3fs	gríš-a	'She was pulled'
3pl	gríš-i	'They were pulled'
2ms	* griš-ət	1MS * griš-ən
2fs	* griš-at	1FS * griš-an
2pl	* griš-itu	1PL * griš-əx

Under no accepted theory of Case can the intervening element possibly be a nominative subject, i.e. a dependent of the T node, the highest position in the clause, since it intervenes between the object and the head that the object depends on, i.e. its position must be structurally lower than that head. This argues strongly for the non-nominative nature of the subject, even in Extended-Erg dialects.

## 3. The analysis of ergativity

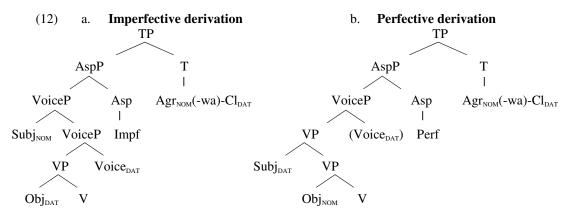
The existence of Extended-Erg dialects provides evidence

- in favor of ergative subjects being "adjunct like", similarly to the possessive adjunct of nominalization (Bok-Bennema 1991, Johns 1992, Nash 1996, Alexiadou 2001, McGinnis 2008).
- against "Marantz's ergative generalization": ergative case never appears on derived subjects (Marantz 1991)
- against the strictly-inherent-case view of ergativity (Mahajan 1989, 1994, Nash 1996, Woolford 1997, Legate 2002, 2008, Aldridge 2004, 2008a, 2008b, Laka 2006, Ura 2006, and others)
- against the view that ergative case is assigned/probed by T (Bobaljik 1993, Laka 1993, 2000, Rezac 2008)

The parametric distinction between Split-S and Extended-Erg can be reduced to a parametric variation in the distribution of Voice in perfective derivations. Voice must be present in Extended-Erg dialects and missing in Split-S dialects:

(11) The Voice-Parameter Extended-Erg Voice Split-S \*Voice

Imperfective and perfective derivations are shown in (12).



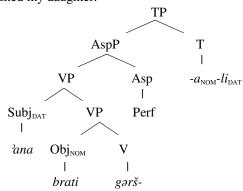
In the perfective derivation, Subj is merged as an adjunct to VP, and is marked as DAT, either by Voice, in derivations with Voice, or otherwise inherently. The object is assigned nominative Case by T. According to this analysis, perfective derivations (12b) have adjunct subjects. It follows that Subj and Obj are in the same domain, and therefore Subj is a PCC intervener. We thus derive the existence of PCC-abiding NENA dialects.

In some Extended-Erg dialects, the subject has been reinterpreted as an argument of Voice, making these dialects PCC-obviating. No Split-S dialects are PCC-obviating. This diachronic development is still taking place now. Some PCC-obviating dialects, such as Christian Urmi and Ashitha, are presently in the process of becoming PCC-abiding. This development constitutes counter-evidence to functionalist theories such as Haspelmath 2004, where PCC-abiding is explained as lack of grammaticalization of certain Case/ Agreement combinations, which may historically develop into PCC-obviation through the grammaticalization of these combinations. Crucially, a functional explanation cannot account for the reverse process – whereby grammatical combinations later become "un-grammaticalized"; yet it is precisely this direction of change which is attested in NENA.

We provide below an illustration of a Split-S version of the perfective derivation (12b):

#### (13) **Perfective derivation in Split-S dialects** (Jewish Sanandaj)

<sup>°</sup>ana brat-i gərš-a-li I daughter-my pull<sub>PERF</sub>-NOM.3FS-DAT.1S 'I pulled my daughter.'

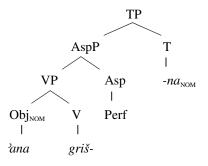


Since the subject is an adjunct in (13), it is not obligatory, and may be omitted, which productively generates anticausative examples (other than for verbs where both arguments of the verb are internal, such as subject-experiencer verbs). Unlike subject-agreement drop in Extended-Erg dialects, the object is not restricted to 3<sup>rd</sup> person; for example, in (14) below, the derived subject is 1<sup>st</sup> person. Moreover, since Voice is not merged in the Split-S version of perfective derivations, the subject of anticausative verbs is not marked as dative, rather it is marked as nominative by T.

#### (14) Anticausative derivation in Split-S dialects (Jewish Sanandaj)

'ana gríš-na

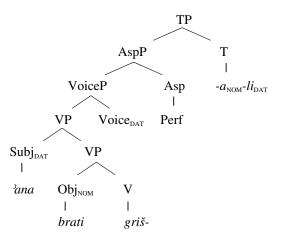
I pull<sub>PERF</sub>-NOM.1MS 'I got pulled.'



We now turn to the Extended-Erg version of the perfective derivation (12b). In Extended-Erg dialects, Voice is merged in all perfective derivations:

#### (15) **Perfective derivation in Extended-Erg dialects** (Christian Barwar)

'ana brat-i griš-a-li I daughter-my pull<sub>PERF</sub>-NOM.3FS-DAT.1S 'I pulled my daughter.'



There are no anticausative derivations in extended-Erg dialects (other than for a lexically determined class of verbs which can be unaccusative even in the imperfective), since Voice is required in the derivation, and in turn requires an external argument if there is one:

#### (16) \* Anticausative derivation in Extended-Erg dialects (Christian Barwar)

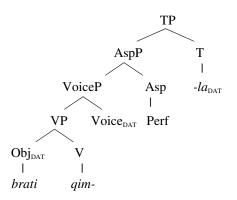
 brat-i griš-la daughter-my pull<sub>PERF</sub>-DAT.3FS
'My daughter got pulled.' If Voice itself is interpreted as an impersonal argument, we find examples of null impersonal subjects where the dative agreement clitic is dropped, but where the null impersonal subject competes with the object for person agreement. In such examples, we only find null impersonal subjects with 3<sup>rd</sup> person agreement:

- (17) **'Null impersonal subject' derivation in PCC-abiding Extended-Erg dialects** (Christian Barwar)
  - a. brat-i griš-a daughter-my pull<sub>PERF</sub>-NOM.3FS 'My daughter was pulled.'
  - b \* 'ana griš-ən I pull<sub>PERF</sub>-NOM.1MS 'I was pulled.'

In extended-Erg dialects, there is no derivation without Voice, therefore even unaccusative subjects are marked as dative:

#### (18) Unaccusative derivation in Extended-Erg dialects (Christian Barwar)

brat-i qim-la daughter-my rise<sub>PERF</sub>-DAT.3FS 'My daughter rose.'



#### 4. Conclusion

Determining that a particular language is ergative cannot be based automatically on the marking of the intransitive subject as different from the transitive subject. Some ergative languages are Extended-Erg, i.e. mark the intransitive and transitive subject alike. Yet these subjects have other characteristics that distinguish them, and therefore Extended-Erg languages are ergative, not nominative-accusative. The marking of the intransitive subject as object is but one characteristic of ergativity, albeit the best know one. Ergativity should be judged by the totality of the ergativity syndrome, of which agreement reversal and subject drop are important symptoms. According to our findings, ergativity is a wider phenomenon than has generally been recognized. We have provided evidence that the boundaries of ergativity should be pushed back to include a wider range of alignments.

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