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Ergative Remnants in Sorani Kurdish?¹

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Abstract

BYNON (1980: 160) states: "Given the loss of ergative agreement marking in the verb, the clitic must, it would seem, now definitely be analyzed as a marker of agreement with the agent-subject despite its anomalous position in the sentence", and concludes that "in spite of its various no longer functional traces of ergativity, Suleimaniye must be considered to have ceased to be ergative."

However, ergativity is still claimed for Sorani Kurdish.² Recently HAIG rejected BYNON's analysis and stated (2008: 302) "The O is only occasionally overtly cross-referenced [...]. However, when it is cross-referenced, then exclusively on the verb, and using the same set of suffixes that cross-reference an S."*

In this article I argue in favour of BYNON (1979, 1980) and show that there is no agreement of the object and the verb. The personal endings used in the past tense of transitive verbs take over the various functions of enclitic pronouns. On the other hand, enclitic pronouns used in the past tense of transitive verbs are, in fact, subject agreement markers, personal endings, so to speak.

After a short introduction to ergativity and relevant terminology (Section 1), I will give a brief survey of the historical development of the ergative construction in Iranian (Sections 2 and 3). A comparison of Middle Persian and Sorani Kurdish (Section 4) is made to understand the differences between the past tense constructions of these two languages which look so similar at first glance. In Section 5, I propose an explanation of the development in Sorani Kurdish and then discuss the function of personal markers, which are in my view not as complicated as HAIG (2008: 295) puts it (Section 6).

* In the printed version of this article I erroneously claimed that HAIG states ergativity for Sorani Kurdish. I apologize for this mistake. (24/09/2010).

1. Introduction

It is well known that the past stem of nearly all of the New Iranian languages goes back to the Old Iranian past participle,³ and that the introduction of this nominal form into the verbal paradigm led to an untypical system of case assignment to the

¹ In this paper, the term "Sorani Kurdish" refers to standard Central Kurdish, which is spoken in Iraq and Iran, and which is based on the dialect of Sulaimaniya (Kurdish: *Sılēmānī*), cf. Kreyenbroek (2005: Section "Sōrāni poetry"). The sources which were investigated for this article ('ĀRIF 1986, JĀF 1970, OMAR 1993a–b, PĪRAMĒRD 1935, around 1939) represent examples of this standard. The variations in these sources (e.g. the durative prefix *da*- vs. *a*-; the spelling of *r*- beside *r*-, etc.) are irrelevant to the grammatical relations which are the topic of this article. Concerning the encoding properties of A and O in the past tense of transitive verbs, my sources behave similarly as far as I can tell. The same holds true for the data discussed by Bynon (1979, 1980) and Haig (2008), which are not drawn from the standard language, but from dialects spoken in the Sulaimaniya region (plus some data from other regions also). For details of the dialects see, e.g., Haig (2008) and MacKenzie (1961).

I wish to express my gratitude to Agnes Korn and to the anonymous reviewers for many critical comments and suggestions which helped enormously to improve this article.

² LAZARD (2005: 84) notes ergative alignment for Sorani Kurdish.

³ Yaghnobi is the only exception known to me; here the past participle is still a past participle. For the simple past (or "aorist") and the imperfect, the (diachronically speaking) augmented present stem, is used. The past participle is used for the analytic constructions of the perfect and pluperfect; i.e., the Old Iranian synthetic forms of the perfect and aorist disappeared even in Yaghnobi.

grammatical relations (such as A, O, S).⁴ There has been a long discussion about the interpretation of this past participle construction. The proposals suggested so far are the passive, the possessive, the ergative, and the agential construction. The following description refers to ergativity as it is found in fully ergative languages.⁵

Table 1. Accusative vs. ergative pattern.						
accusative	e language		ergative language			
A	0		A	О		
	S		S	S		

In an accusative patterning language, a transitive verb assigns nominative case to its logical subject and accusative case to its logical object. In a description of a fully ergative language the term "subject" is problematic, and so A and S are used instead. A stands for the subject of a transitive verb, O for the object of a transitive verb and S for the subject of an intransitive verb. In an accusative language (also called nominative) A and S are treated in the same manner with respect to case assignment and/ or agreement, while O is marked differently, that is to say it is assigned accusative case. In an ergative language, on the other hand, O and S are treated in the same manner while A is marked differently, viz. it is assigned ergative case. If there is no separate ergative case, an oblique case is used. For example, in Hindi the case of the agent goes back to the instrumental, 6 while OP uses the genitive/dative. 7

Table 2. Diatheses in relation to acc. and erg. pattern.						
	active	passive	antipassive			
accusative language	<u>A</u> OV ✓	<u>O</u> V marked	<u>A</u> V inherent			
ergative language	A <u>O</u> V ✓	OV inherent	<u>A</u> V marked			

To form the diathesis passive in a prototypically accusative language, so that O is promoted while A is demoted, a marked construction is necessary (referred to as "marked" in Table 2). In a prototypically ergative language, on the other hand, there is no need for a passive because O is the primary actant anyway, and A the secondary. The passive is, so to speak, inherent in the active construction in a prototypically ergative language. Hence an active of an ergative language can be interpreted as an active or as a passive of an accusative language depending on the context. The diathesis to promote A and demote O is called antipassive.⁸

⁴ See, e.g., Skjærvø 1985, Lazard 1984. For the term "grammatical relation" see Palmer (1994).

⁵ Languages with split ergativity differ in many respects from prototypical ergative languages.

⁶ Bynon (2005: 6ff.), Bubeník (1998: 137).

⁷ In OP the functions of the genitive and the dative have coalesced, the form of which is the genitive.

⁸ Iranian languages that show ergative patterns exhibit split ergativity; i.e., ergativity appears only in a subdomain, namely in all verbal forms derived from the former past participle. The continuous decline of the possibility of a passive interpretation as one can observe it, e.g., in MP, is surely connected with the occurrence of new passive forms.

2. Interpretation of the past participle construction

GEIGER (1893) introduced the term "passive construction" for the past participle construction. He obviously chose this term because in the Iranian languages which usually pattern accusatively, the A in a past participle construction is assigned oblique case and the O is assigned direct case (cf. Old Persian ex. 1). This is the coding pattern of a passive in an accusative language. It was not considered a problem that at least in the New Iranian languages this construction is by no means a passive.⁹

Benveniste (1952) emphasized the structural similarity of the possessive construction of the *mihi est* type¹¹ and the past participle construction in Old Persian (OP): in OP the possessor is assigned genitive/dative case, just like the A in a past participle construction. The possessum is assigned nominative case, just like the O in a past participle construction. The past participle could be interpreted syntactically as an attribute of O. Furthermore he remarked that some languages use auxiliaries to construct the perfect: to be originally for intransitive verbs, and to have originally for transitive verbs. Now, according to him, it is structurally the same in OP. OP, however, does not have a verb to have, and uses the possessive construction of the mihi est type instead. Hence OP makes use of the possessive construction (instead of to have) also for constructing the perfect of transitive verbs. And that is why the past participle construction is to be interpreted as a possessive construction and should be called accordingly. Cardona (1970) refuted a rather marginal argument of BEN-VENISTE. 12 Although he did not discuss Benveniste's other observations, Ben-VENISTE's approach has been abandoned and its designation and interpretation as a "passive construction" celebrated a revival, e.g., in Bynon 1979 & 1980 (but differently 2005). Finally LAZARD (1984) combined the arguments of both sides and expressed it succinctly (2005: 81 note 1):

On a discuté la question de savoir si cette construction est possessive ou passive. Vaine querelle. C'est, en iranien, une périphrase fonctionellement active, formée d'un participe passif et d'un complément possessif représentant l'agent [...].

He dismissed the term "passive construction" with the argument that the past participle construction is the only way to express the perfect in OP (1984: 241f.). In other words, since there is no opposition active vs. passive, the motivation for the exist-

⁹ According to STEINER (1976: 231) this problem is simply of no importance; he suggests that it only concerns bilingual speakers. I fail to see the logic of this claim.

¹⁰ Underlyingly, the finite verb is *asti* (3sg. of "to be"), which is usually omitted.

¹¹ In this possessive construction the possessor stands in an oblique case, and the possessum in the direct case.

¹² Benveniste's statement in question was that the agent in a passive construction had to be expressed by a prepositional phrase headed by *hačā*. But in DB V 15/16 we find enclitic pronouns in the genitive/dative in this function (DB V 31/32 is restituted). Skjærvø (1985: 215f.) considers the postposition *rādi* possible in this function as well.

ence of a passive grows thin. Furthermore, SKJÆRVØ (1985: 217) mentioned that the past participle construction co-occurs with the imperfect active and passive. So the question of diathesis is a question of interpretation depending on the context. Hence we find a construction which is indifferent to the diatheses active and passive of an accusative language. This means that there is good reason to refer to the past participle construction in OP as an ergative construction (cf. Table 2).

To sum up, the past participle construction in OP is an ergative construction when O and S occur in the direct case and the verb agrees with them, and A occurs in an oblique case, but the construction does not function as a passive. That a passive interpretation is nevertheless sometimes possible is not only no counter argument, but, quite on the contrary, it is to be expected in an ergative setting (see the discussion for Table 2 above).

There is still one more term which has to be mentioned here: "agential construction". This was introduced by MacKenzie (1961) in his description of Central Kurdish (for a discussion see Section 4 below).

3. The past participle construction in Old Iranian

The OP verbal system underwent considerable changes. The past participle construction appears already as a fully grammaticalized verbal form for the perfect, and the aorist and the synthetic perfect are merely relics. Hence it is impossible to draw conclusions about the origin of the past participle construction by only looking at OP.

Avestan, at least Old Avestan, is more archaic than OP. The verbal system of Young Avestan seems to be already in a stage of change (cf. Kellens 1984: 376, 377) so that one cannot be sure whether the attested agrist and perfect forms are 1) morphologically correct, but perhaps obsolete, 2) morphologically correct, but used in the wrong way, 3) morphologically incorrect, but correctly used, or 4) archaic or artificial forms.

There are Avestan examples of a past participle which can quite well be interpreted as having verbal function, and even as active ones (cf. the translation of ex. 2 and ex. 3 by Kellens/Pirart 1988). In some cases an interpretation of the *mihi est* possessive type is possible (ex. 2: "this here is a found one to me" = "I have this found one here"), ¹³ rather not plausible (ex. 4: "whom our souls have as a worshipped one"), or rather excluded (ex. 3: †"what we have as an asked one", ex. 5: †"he has a Ratu-pleasing given one"). ¹⁴

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2) a\bar{e}m m\bar{o}i id\bar{a} vist\bar{o}
OAv. this EP1sg. here see.PP/find.PP
Nom.sg.m Gen./Dat. Nom.sg.m
"Ici, i'ai trouvé celui-ci [...]." (Y 29.8a)
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^{13 &}quot;I have him as someone found here." Lit.: "This (one) is found (to) me here."

¹⁴ The translations of the OAv. examples follow Kellens/Pirart (1988). All other translations are my own. The various editions of the Avesta diverge in many cases.

parštā 3) пā уā tōi āhmā pərəsā-čā EP1pl. EP2sg. OAv. ask.Imv-and Rel. 1pl.Pron. ask.PP Acc. Nom.pl.n Gen./Dat. Acc. or Instr. Nom.pl.n "[...] et demande-nous ce que tu nous as pourtant déjà demandé." (Y 43.10c)

4) yā nō ištā uruuōbiiō
OAv. Rel. EP1pl. worship.PP soul
Nom.pl.f Gen./Dat. Nom.pl.f Dat./Abl.pl.m
"[...] who are worshipped by our souls" (Y 56.2d=j, 63.2d=j)

5) dātō hē miiazdō ratufrīš YAv. give.PP EP3sg. sacrifice Ratu-pleasing Nom.sg.m Gen./Dat. Nom.sg.m Nom.sg.m

Looking only at OP, one could come to the conclusion that the past participle construction came into use because the agrist and perfect got lost. In OAv., however, the synthetic agrist and perfect forms are still in use (cf. Kellens, 1984: 376 ff., 412 ff.), so that one wonders what the motivation for the past participle construction might have been.¹⁵

Looking at exx. 2–5, it seems obvious that the origin of the past participle construction was a nominal clause: the past participle is used as a predicative noun and agrees with its O, which is the grammatical subject of the clause. The A of the later ergative construction might have resulted from an actant which originally could have had various thematic roles. There could have been an extension of meaning from dativus commodi to agentivity (cf. Delbrück 1893: 300 on the "Dativ der betheiligten Person"). Alternatively, the case may have been taken over from other non-canonical subject constructions (e.g. from the possessive construction of the *mihi est* type, cf. Haig 2008: 82f.). The Avestan instances give no clear picture: various cases appear to be used to index the same thematic role. However, it is debatable whether the functions are indeed the same. Maybe the thematic roles of the verb triggered the choice of case, for instance, in the way that the actant was assigned instrumental case if it was an A lacking the feature [+control]; and was assigned genitive/dative case if the A was an agent. In the way that the actant was assigned genitive/dative case if the A was an agent.

Probably this nominal clause filled a gap in the aspect-tense system. The synthetic perfect expressed a result of an action or process with respect to A (BRUGMANN 1916: 768). Perhaps the past participle construction expressed the result with respect to O (cf. Delbrück 1897: 484).

¹⁵ Compare: Y 29.1a $k\bar{\nu}$ $m\bar{\nu}$ tašat "Qui m'a charpenté?" (KELLENS/PIRART 1988: 107), where tašat is 3sg. active injunctive aorist; Y 51.8b $\nu\bar{\nu}$ ašəm dādrē "qui a toujours soutenu l'Harmonie" (KELLENS/PIRART 1988: 182), where dādrē is 3sg. middle indicative perfect (characterized by reduplication).

¹⁶ In most instances, the agent is an enclitic pronoun in the genitive/dative (e.g. *mōi* in ex. 2). Possible examples with nouns have been interpreted in various ways; if interpreted as agent, cases used would include the genitive, the dative (e.g. *uruuōbiiō* in ex. 4: dative/ablative), and maybe also the instrumental (e.g. *ahū* in Y 29.6b).

¹⁷ I will discuss this problem in detail in my PhD thesis.

4. Comparing Persian and Sorani Kurdish

In what follows I will compare Persian and Sorani Kurdish¹⁸ to illustrate the similarities and differences between these two languages. From exx. 6a-9b one might conclude that Sorani Kurdish is a split ergative language: while in the present domain transitive verbs show accusative patterning (ex. 6a and ex. 8a), ex. 7a and ex. 9a¹⁹ appear to suggest an ergative pattern similar to the one seen in other Iranian languages. In the present tense transitive and intransitive verbs behave alike. For both cases, the subject (A in ex. 6a, S in ex. 6b) agrees with the personal ending (-yt or $-\bar{t}t$, respectively).²⁰ The same applies for the past tense of intransitive verbs (ex. 7b). In the past tense of transitive verbs, however, the verb shows no ending at all (ex. 7a). This could be interpreted as a zero ending, which would be the ending of the 3sg. So one could posit agreement of O and the verb. Since A is indexed by an enclitic pronoun (EP), which is an oblique form, ²⁵ the construction appears to be ergative. ²¹

				1	present			
6a)	tō	kār	da-ka	a-yt		6b)	tō	da-xaw-īt
SK	you	work	Dur-r	nake.Prs2	2sg.	SK	you	Dur-sleep.Prs2sg.
	"You are working."				"You are sleeping."			
					past			
7a)	tō	kār-ıt		kırd-Ø?		7b)	tō	xawt-īt
SK	you	work-2s	g.EP	make.Prt.	-3sg.?	SK	you	sleep.Prt2sg.
"You worked."							"You	slept."

Exx. 8–9 show a 3sg. as subject. The present tense patterns accusatively (ex. 8a and ex. 8b). Ex. 9b illustrates that the ending of the 3sg. in the past tense is zero. In ex. 9a the object of ex. 8a ("two teacups") occurs as personal ending. If one assumes pro-drop for O, one can posit agreement of O and the verb.

					present			
8a) <i>av</i>		1 .	yāła	da-bā	D 0	8b)		da-xaw-ē
SK D			acup	Dur-bring	.Prs.3sg.	SK	Dem.	Dur-sleep.Prs3sg.
"F	He/She i	s bringin	g two te	acups."		"He/She is sleeping."		
					past			
9a) av	w	Ø?	bır	d-ın-ī		9b)	aw	xawt-Ø
SK D	em.	pro-drop	? car	ry.Prt3pl.	-3sg.EP	SK	Dem.	sleep.Prt3sg.
"He/She brought them."							"He/She s	slept."

¹⁸ In the examples taken from the literature, the orthography has been standardized. Especially PIRAMERD does not use diacritics for, e.g. $/\bar{o}/$ by $<\bar{s}>$. Short vowels are often not written. The examples of $S\bar{a}r$ are counted in sentences or lines respectively from p. 56 on. This inconvenient way of quoting is due to the problem that I only have my notes of a copy of the pages 56-68 which I numbered in the way described. ¹⁹ The full pronouns need not be present (pro-drop). Ø stands for a zero-ending or a dropped pronoun.

There are no case distinctions in Sorani.

²¹ The double occurrence of A in ex. 7a and ex. 9a – first as a full pronoun, then as an enclitic pronoun – could be explained as a way to emphasize A. However, Table 3 will show that this is not the case.

In ex. 9a O is expressed by the personal ending on the verb, but one can posit agreement of O and the verb only if one assumes pro-drop for O. However, a clause containing both O as a noun or personal pronoun and a personal ending indexing O does not occur in Sorani; the presence of one of these excludes the occurrence of the other (cf. exx. 10–21, where the full pronoun indexing O is highlighted). If O agreed with the verb in exx. 10–12, the clauses would be (10) $\dagger t\bar{o}$ - $m n\bar{a}rd$ - $\bar{t}t$, (11) $\dagger \bar{e}ma$ - $v h\bar{e}n\bar{a}$ -v n-v n-v

- 10) *wtt-ī parīzād har awsāya ka tō-m nārd* SK say.Prt.-3sg.EP PN every then when you-1sg.EP send.Prt. "She said: Parīzād, just when I sent **you**,..." (MZ p. 7, l. 12)
- 11) **ēma**-y hēnā-ya sar aw qīn-a ba dwāzda siwār SK we-3sg.EP bring.Prt.-to on Dem. hate-Def. to twelf rider "He made **us** hate the twelve riders." (DSM p. 22, 1. 13)
- 12) āxırī **mın**-ıt hēnā-ya sar qīn-ī SK finally I-2sg.EP bring.Prt.-to on hate-3sg.EP "Finally you made **me** hate him." (MZ p. 21, 1. 6–7)

Exx. 13–16 are instances of personal endings (highlighted) indexing O, whence O cannot be represented by a noun or a pronoun. In ex. 13, O is indexed by the personal ending in all the three clauses, twice followed by an enclitic pronoun. In ex. 14 the enclitic pronoun is attached to the durative prefix.

- kırd-**ım** 13) rašabā lūl-ī hāt pēčā-**m**-y-awa SK storm come.Prt. grab.Prt.-1sg.-3sg.EP-postv. turned-3sg.EP make.Prt.-1sg. bırd-**ım**-ī tā čāw bıŕ carry.Prt.-1sg.-3sg.EP till Dur.-make.Prs.3sg. eye part "A storm came, grabbed me, spun me around, (and) took me as far as the eye can see." (RD p. 72)
- 14) kart-ī duwam la nāx-awa a-y-xwārd-**um**-awa
 SK part-EZ second from inside-postp. Dur.-3sg.EP-eat.Prt.-1sg.-postv.
 "The second part was eating **me** up from inside." (DŠN p. 90)

In ex. 15, -y indexing the agent is attached to the object $py\bar{a}ta$. The personal ending is a complement of the preposition $b\bar{o}$ (so $b\bar{o}$...-in "for them"); it does not agree with the object. The personal ending of the following verb does not refer to the same referent, but to the aforementioned object "two teacups".

15) $d\bar{u}$ $py\bar{a}ta$ -y $b\bar{o}$ $t\bar{e}$ -krd-m-u brd-m- \bar{i} -ya $ž\bar{u}$ r-awa SK two teacup-3sg.EP for in-make.Prt.-3pl.-and carry.Prt.-3pl.-3sg.EP-to room-postp. "She filled two teacups for them and brought **them** into the room." (Šār sentence 75)

In ex. 16 the agreement marker attaches to the object in all four instances: ama-y, $p\bar{o}l\bar{t}s-\bar{t}$, $-um-y\bar{a}n$, and $\dot{r}\bar{u}-y$. -y in $h\bar{o}daka-y$ "his room" is an example of a possessive use of enclitic pronouns in the past tense. The personal ending of $t\bar{e}-kurd-um$ is a complement of the cliticized preposition $t\bar{e}$.

	ŕaīs-ī	dāīra	ka	am-a-y	$dar{\imath}$ - $bar{u}$
SK	director-EZ	office	when	this-Def3sg	.EP see.Prtbe.Prt.
	<i>ba hīddat-awa</i> with anger-postp.		<i>nārd</i> send.Prt.	<i>bırd-ım-yān</i> carry.Prt1sg	
	$bar{o}$ to	sarāka headquarters	$\check{c}\bar{u}$ - m - a go.Prt1sgto	nāw in	<i>hōda-ka-y-u</i> room-Def3sg.EP-and
	<i>ba hīddat-awa</i> with anger-postp.		<i>ŕū-y</i> face-3sg.EP	<i>tē-kırd-ım</i> to-make.Prt	1sg.

[&]quot;When the chief of the office saw this, he angrily sent the police. They brought me to the headquarters. I went into his room, and he looked at me angrily." (MW p. 28, l. 16–17)

A comparison of Middle Persian and Sorani Kurdish transitive verbs in the past tense yields the pattern shown in Table 3. The unmarked word order is AOV in both languages. In MP the enclitic pronouns as well as the full pronouns can be dropped (pro-drop) while this is possible only for the full pronouns in Sorani Kurdish. In Sorani Kurdish, the enclitic pronouns must always be present. The implication is that A agrees with the enclitic pronouns in Sorani Kurdish.

Table 3	Table 3. Clause structure of Middle Persian and Sorani Kurdish.									
]	Middle Persian				Sorani	Kurdish				
A	О	verb		A	О	function?	verb			
N	N/Pron.	V		N	N/Pron.	EP	V			
Pron.	N/Pron.	V		Pron.	N/Pron.	EP	V			
EP	N/Pron.	V		FIOII.	IN/FIOII.	Er	v			
Ø	N/Pron.	V		Ø	N/Pron.	EP	V			

The agreement of the enclitic pronouns with A has already been observed by BYNON (1979: 217). HAIG (2008: 288 ff.) agrees by speaking of "cross-reference" between A and the enclitic pronouns. According to him, however, there is twofold agreement: A with the enclitic pronouns, and O with the personal endings. So one can group S with O in opposition to A, which yields the ergative pattern. As mentioned above, O and the personal ending cannot co-occur. Therefore it is questionable whether the term agreement is applicable. Even if one only takes into account the set of personal markers in use (enclitic pronouns for A vs. personal endings for S and O), one cannot group S and O together because the personal endings can also replace any other oblique form (cf. Section 6).²² Their function in the past of transitive verbs as pronouns is different from their function in the past of intransitive verbs and in the present where they are true agreement markers.

MACKENZIE did not consider the co-occurrence of A and the enclitic pronouns to be agreement, but stated that the enclitic pronouns "resume" (i.e.: index again) A (MACKENZIE 1961: 107 f.). That is why he called them agent markers in the past tense of transitive verbs and the construction an "agential construction".

Looking at Table 3, it is obvious that the term "agential construction" cannot be transferred to the ergative construction of MP. In MP, the enclitic pronouns do not agree with A (or "resume" it); unlike in Sorani Kurdish, they are not agent markers.

²² Furthermore, the sets of endings differ in the 3sg.: $-\bar{e}$ in the present, and $-\varnothing$ in the past, see Section 6.

Another difference is that O can still agree with the verb in MP while it does not do so in Sorani Kurdish. O is replaced by the personal ending. Hence the personal ending is pronominal. The enclitic pronouns and the verbal personal endings exchange their roles, so to speak. This raises the question of how to account for the situation in historical terms.

5. A proposal for Sorani Kurdish

To explain the situation in Sorani Kurdish it is helpful to look at the development of Persian: the nominal clause with a past participle as predicative noun becomes a verbal clause, yielding the two structures at stage 1 (Table 4).

Table 4. Persian stage 1.							
A (N/Pron.)	O (N/Pron.)	main verb (as PP)	auxiliary "to be" (agreeing with O)				
O (N/Pron.)	A (EP)	main verb (as PP)	auxiliary "to be" (agreeing with O)				

In MP the enclitic pronouns occur predominantly at the beginning of the clause, so that there is an AOV order (cf. stage 2a in Table 5).²³

Table 5. Persian stage 2a.						
A (N/Pron.)	O (N/Pron.)	main verb (as PP)	auxiliary "to be" (agreeing with O)			
A (EP) ²⁴	O (N/Pron.)	main verb (as PP)	auxiliary "to be" (agreeing with O)			

Furthermore the case distinction is lost. The enclitic pronouns, which are per se oblique forms, 25 remain the only indicator of the ergative construction when they express A. In some cases the agreement of O and the verb still reveals the ergative encoding patterns. Hence, in the frequent case of a noun in the 3sg.²⁶ as both A and O, the ergative construction is invisible. And the restructuring of the past tenses must have started at this point.²⁷ In the subsequent development of New Persian the enclitic pronouns remain oblique forms and no longer index A or agree with it.²⁸

Sorani Kurdish seems to have started out like the Persian stage 1 (Table 6).

Table 6. Sorani Kurdish stage 1.						
A (N/Pron.)	O (N/Pron.)	main verb (as PP)	auxiliary "to be" (agreeing with O)			
O (N/Pron.)	A (EP)	main verb (as PP)	auxiliary "to be" (agreeing with O)			

Unlike in Persian, however, the enclitic pronouns were not moved to the position of the grammatical subject to yield AOV order. Instead, it seems that the agent was

²³ In my MP data base there are 3046 EP in the function of A, of which 251 EP occur after O, of which 52 O are not relative pronouns (as of April 2009).

²⁴ When the EP comes first, it can be attached to, e.g., a conjunction.

²⁵ See Nyberg (1974: 279). The Middle and New Iranian enclitic pronouns derive from the Old Iranian enclitic ones; these are used for various oblique cases.

In many instances the 3pl. is not resumed by an agreement marker either.

²⁷ In my MP data base there are 6280 instances of transitive verbs, of which 2783 are marked as agreeing with O, 2651 as agreeing with A or O, 680 as not agreeing at all. Already 148 transitive verbs are marked as agreeing with A (as of April 2009).

28 Interestingly, the enclitic pronoun is used as an agreement marker of the 3sg. in the past tense of transport.

sitive as well as intransitive verbs in some New Persian dialects.

preposed to the clause, presumably in a hanging-topic position. Thus A seems to be doubled: A, OAV (stage 2b, Table 7).²⁹ The relation of the agent in the hangingtopic position and A in the form of an enclitic pronoun inside the clause can be viewed as topic agreement. This topic agreement was then reinterpreted as verbal agreement (stage 3, Table 8). The object-verb agreement does not necessarily have to be cancelled, but Sorani Kurdish abandoned it. Nevertheless, it retained the possibility of expressing the object as an enclitic pronoun if it does not occur as a nominal phrase, but in the form of a personal ending of the verb.

In the past tense of transitive verbs, the personal endings function as enclitic pronouns and can encode not only the object, but other oblique forms as well (cf. Section 6). They retain their morpho-syntactic restrictions; i.e., they can only occur in a position attached to the verbal stem. 30 Likewise, the enclitic pronouns functioning as personal endings in the past tense of transitive verbs retained their morpho-syntactic behaviour. They occur in the second position of their phrase. The fact that they cannot be attached to the grammatical subject in modern Sorani Kurdish could be explained by the subject not originally having been part of the clause because it appeared in a hanging-topic position.³¹

Table 7. Sorani Kurdish stage 2b.							
A	О	A	main verb (as PP)	auxiliary "to be"			
(hanging topic)	(N/Pron.)	(EP)		(agreeing with O)			

The auxiliary might have developed into a personal ending in stage 2b. This is connected to the development of the past participle into the past stem.

Table 8. Sorani Kurdish stage 3.								
A	0	EP	verb	_				
(N/Pron.)	(N/Pron.)	(agreeing with A)						
A	X	EP	verb	О				
(N/Pron.)		(agreeing with A)		(personal ending)				

One might want to relate stages 1-3 of Sorani Kurdish to historical periods. As we do not have Sorani Kurdish sources from these periods,³² such an attempt can only be based on a comparison with the historical development of Persian. Stage 1 might refer to *Old Sorani Kurdish, stage 2b to *Middle Sorani Kurdish, and stage 3 to New Sorani Kurdish. Needless to say, this remains hypothetical, and it is of course

²⁹ Cf. Bynon (1979, 1980). In these articles she considers a passive construction as the starting point of the past participle construction while she suggests a "modally marked evidential" as its origin in BYNON (2005: 1). The described hanging-topic construction (cf. Table 7) is still very common with transitive and intransitive verbs in Sorani Kurdish.

When enclitic pronouns and personal endings appear together on the past tense stem, the order can vary (cf. Section 6).

³¹ Cf. HAIG (2008: 285): "In Suleimani, the general rule for clitic placement is that clitics attach to the leftmost constituent of their phrases." If one considers the subject to be outside the verbal phrase, one obtains an explanation of why the enclitic pronouns tend to occur at the beginning of the clause, but are never attached to the subject. I assume that they cannot even occur in front of the subject. However, further research is necessary to answer this question properly.

32 The earliest authors who was a first formula and they cannot be a second as a second and they cannot be a second as a second a

The earliest authors who wrote in Sorani Kurdish are from the first half of the 19th century, and those who wrote in Kurmanji Kurdish are from the second half of the 16th century (KREYENBROEK 2005).

possible that the changes took place in the Kurdish of the Old or New Iranian period, unlike the development in Persian. At any rate, if Sorani Kurdish and Kurmanji Kurdish have a common predecessor, then they should have separated at stage 2b, at whatever time this stage is to be located.

6. Functions of personal markers in Sorani Kurdish

The functions of the personal markers (enclitic pronouns and personal endings) were already mentioned in the preceding sections. Here I will provide a more systematic overview both to illustrate their various functions in more detail and because HAIG (2008: 290–301) devotes a long discussion to the issue.

There are two kinds of personal markers in Sorani Kurdish: enclitic pronouns and personal endings (see Table 9).

Table	Table 9. Personal markers in Sorani Kurdish. ³³								
	encli	tic pronouns		personal	endings				
	sg.	pl.		sg.	pl.				
1st	-(ı)m	$-(i)m\bar{a}n^{34}$		-(ı)m	-īn∕-yn				
2nd	-(1)t	-(ı)tān		-īt/-yt ³⁵	(-)36				
3rd	-ī/-y	-yān		$-\bar{e}^{37}$	$-(i)n^{36}$				

In all forms derived from the present stem, the personal endings function as agreement markers, and the enclitic pronouns function as any oblique form. In exx. 17–19, the enclitic pronoun is highlighted. It is attached to the durative prefix or the negation, and represents the object.

```
17) nā-m-nās-īt?
SK Neg.-1sg.EP-know.Prs.-2sg.
"Don't you know me?" (Šār sentence 131)
```

18) *min da-y-zān-im*SK I Dur.-3sg.EP-know.Prs.-1sg.
"I know **him**." (MZ p. 15, l. 14)

³³ The alternations of the suffixes are due to euphonic reasons.

³⁴ Haig (2008: 297) mentions that "in the dialects of Piždar and Mukri, the first person plural forms of the pronominal clitics (in most dialects $=m\bar{a}n$) are often replaced by a form -in [i.e. -in], clearly reminiscent of the corresponding Set 2 agreement suffix [i.e. -in]." Haig concludes (2008: 297): "the distinction between pronominal clitics and agreement suffixes has blurred, both functionally and phonologically." However, the 1pl. enclitic pronoun -in is probably not an innovation ("replacing" an old form), but an archaism. Similarly, Middle Persian shows a 1pl. -in < Old Iranian * $-n\bar{a}h$ (cf. Old Avestan $-n\bar{a}h$) in older texts, besides more common -in, which is an innovation by adding the plural suffix -in to the 1sg. enclitic pronoun -in. Hence, the personal markers do not tend to coincide. On the contrary, they tend to be more clearly distinguished (cf. Korn in this volume).

³⁵ The ending of the 2sg. imperative is usually -a. Some verbs have a special subjunctive stem which is occasionally used, e.g. "to do": Prt. ktrd-, Prs. ka-, subjunctive stem kar-.

³⁶ Pro-drop is possible despite the 2pl. and 3pl. not being distinguished.

³⁷ There are a few verbs with a different 3sg. Verbs the present stem of which ends in $^{\circ}\bar{e}$ - do not take the ending $-\bar{e}$. One may assume a zero ending or a contraction of stem and ending. Verbs whose present stem ends in $^{\circ}a$ - end in $^{\circ}a$ in the 3sg., e.g., da-ka-m "I do", da- $k\bar{a}$ "he/she/it does".

```
19) ēstā
               d\bar{a}-m-a-n\bar{e}-n
SK now
               down-1sg.EP-Dur.-lay.Prs.-3pl.
     (here:) "Then they make me sit (again)." (MW p. 31, 1. 3)
```

In ex. 20 the enclitic pronoun is a complement of the cliticized adposition $-\bar{e}$.

```
da-m-de-vt-\bar{e}?
20) key
SK when
               Dur.-1sg.EP-give.Prs.-2sg.-to
    "When will you give (it) to me?" (Šār sentence 67)
```

Furthermore, the enclitic pronouns can be used as possessive pronouns (for examples see MacKenzie 1961: 76ff.).

In the past tense of intransitive verbs the functions of the personal markers remain the same. Conversely, in the past tense of transitive verbs the subject always agrees with an agreement marker in the form of an enclitic pronoun. Additional enclitic pronouns can occur in the same sentence with their usual functions as possessive pronouns or as complements of prepositions³⁸ (cf. ex. 21):

```
21) dwāyī
                     bāwk-ıt
                                        pē-v-wut-īt
SK afterwards
                     father-2sg.EP
                                       to-3sg.EP-say.Prt.-2sg.
    "Afterwards your father said to you, ..." (\check{Sar} sentence 117)
```

There are two enclitic pronouns in this example: -tt serving as a possessive pronoun (highlighted), and -y- as the agreement marker.

Ex. 21 illustrates another change of function. As already explained, the personal ending can represent the object (cf. exx. 13–16). If this is not the case, the personal ending is free to represent any oblique form. In ex. 21, the personal ending -īt is governed by the prefixed preposition $p\bar{e}$: $p\bar{e}$...- $\bar{i}t$ "to you". In exx. 22 and 23, the personal endings represent possessors: pal ...-īt "your arms", taqrīr ... -ım "my report". The enclitic pronouns attached to the objects are the agreement markers. This change of function may be confusing at first glance.

```
22) hāt-ın
                       pal-yān
                                      bast-īt-awa
SK come.Prt.-3pl.
                       arm-3pl.EP
                                      bind.Prt.-2sg.-postv.
    "They came (and) bound your arms." (DŠN p. 36)
```

23) *hāsił* bırd-ım-yān bō pōlīsxāna lawē taqrīr-yān wargırt-**ım** SK in short carry.Prt.-1sg.-3pl.EP to police station there report "In short, they brought me to the police station. There they accepted my report." (MW p. 29, 1, 22)

In the following examples the personal ending represents the complement of an adposition (both highlighted). In ex. 29 it is the circumposition basar ...-dā which governs the personal ending.

```
jınēw-ī
                                       pē-dā-m-u
24) mındāł-ēk-vān
                                                            tıf-ī
                                                                           lē-kird-im
SK child-Indef.-3pl.EP abuse-3sg.EP to-give.Prt.-1sg,-and saliva-3sg.EP to-make.Prt.-1sg.
     "One of their kids swore at me and spat at me." (\check{Sar} sentence 9)
```

³⁸ The same holds true for Middle Persian with the only exception that the enclitic pronouns do not agree with A in the past tense but represent it (cf. Brunner 1977: 97ff.).

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25) $dw\bar{a}y\bar{i}$ $b\bar{a}wk$ -it $p\bar{e}$ -y-wut- $\bar{i}t$

SK afterwards father-2sg.EP to-3sg.EP-say.Prt.-2sg. "Afterwards your father said **to you**, ..." (*Šār* sentence 117)

26) bi-zān-a čon-im **bō** rāzāndū-**yt**-awa!

SK Subj.-know-Ipv.sg. how-1sg.EP for decorate.Prt.-2sg.-postv. "Have a look, how I decorated (it) **for you!**" (*Šār* sentence 197)

27) $min-\bar{i}\check{s}$ $\check{s}aw-\bar{e}k$ $p\bar{e}-m-wut-in$

SK I-too night-Indef. to-1sg.EP-say.Prt.-3pl. "And one night I said to them:..." (MW p. 21, 1. 3–4)

28) batām xwā am-īš-ī ba xēr $b\bar{o}$ na-gēŕā-m

SK but god Dem.-too-3sg.EP to good for Neg.-turn.Prt.-1sg. "But God didn't turn this into good **for me**." (MW p. 28, 1. 8)

29) $dast-\bar{i}$ $ba-sar-d\bar{a}$ $z\bar{a}l$ $kird-\bar{i}n$

SK hand-3sg.EP to-on-postp. dominant make.Prt.-1pl. "He extended his dominance over us." (MZ p. 18, l. 18–19)

In ex. 30 the personal ending represents the benefactive.

30) aw xušk-ī xō-y pēškaš kırd-**um** SK Dem. sister-EZ self-3sg.EP³⁹ present make.Prt.-1sg.

"He gave **me** his own sister as a present." (MZ p. 23, 1. 12)

Ex. 31 mirrors ex. 20, which is in the present tense. In ex. 20 the complement of the cliticized preposition $-\bar{e}$ is an enclitic pronoun attached to the durative prefix: $da-m-de-yt-\bar{e}$; in ex. 31 it is the personal ending: $na-a-d\bar{a}-m-\bar{e}$.

31) awsā agar ba-šīrīnī qısa-m na-kırd-āya SK then if with-sweetness word-1sg.EP Neg.-make.Prt.-Irr.

 $t\bar{u}tin$ -aka- $y\bar{a}n$ na-a- $d\bar{a}$ -m- \bar{e}

tobacco-Def.-3pl.EP Neg.-Dur.-give.Prt.-1sg.-to

"Then, if I hadn't spoken friendly, they wouldn't have given **me** the tobacco." (MW p. 24, 1. 22–23)

To clarify the change of function of the personal markers, Table 10 visualizes how the core arguments (subject and object) and various other oblique functions (e.g. benefactives, possessors, etc.) can be represented by personal markers depending on the verbal stem.

Table 10. Representation of constituents by personal markers.				
	subject	obliqui		object
present	personal ending	enclitic pronoun		
past	enclitic pronoun		personal ending	

 $^{^{39}}$ stands for خۇى stands for خۇى. The first ω represents the possessive pronoun and the second the enclitic pronoun, which functions as agreement marker of a transitive verb in the past tense.

The use of the enclitic pronouns for oblique forms in the past of transitive verbs is not surprising. It is the use of the personal endings for oblique forms which deserves attention. There are a few instances of this phenomenon in Middle Iranian.⁴⁰ A probable explanation of this phenomenon in Sorani may be the following: the personal endings functioned as agreement markers (agreeing with O). When the function of agreement was taken over by the enclitic pronouns (agreeing with A) in the way sketched in Section 5, the use of the personal endings was shifted to pronominal reference of O. Since the personal endings now had pronominal functions, their reference could be enlarged to include other oblique forms.

HAIG (2008) considers the personal endings in the past of transitive verbs as agreement markers. Thus, the sequence of personal markers in $d\bar{\iota}$ -m- $\bar{\iota}$ t "I saw you" (cf. ex. 32) is problematic for him (cf. HAIG 2008: 290ff.) and within his framework, the personal ending $-\bar{\iota}$ t should come first. Instead, the enclitic pronoun is attached to the past stem, followed by the personal ending.⁴¹ Nevertheless, if one interprets the personal ending as a pronoun, and the enclitic pronoun as an agreement marker, the sequence matches the expectations.

```
32) hēnda nāsīk bū-yt ka dī-m-īt
SK so lovely be.Prt.-2sg. when see.Prt.-1sg.EP-2sg.
"You were so lovely when I saw you." (RD p. 98)
```

On the other hand, the personal ending which represents O comes first when A is 3sg. (cf. ex. 33), and occasionally also when it is 3pl. (cf. exx. 16 and 23). For a detailed description, see HAIG (2008: 292).

```
33) kırd-īt-y-a maŕ
SK make.Prt.-2sg.-3sg.EP-to sheep
"He turned you into a sheep." (DŠN p. 34)
```

I think one can best explain the variations in the sequence of personal markers by assuming a conflict between form and function: in the past of transitive verbs, personal endings which represent O are formally endings but functionally pronouns. The enclitic pronouns which agree with A are formally pronouns but functionally endings. When form wins over function, the personal endings come first. Where the order is the other way around, function triumphs over form, i.e. agreement markers precede pronominals. It seems that the choice of the appropriate sequence is triggered by the degree of markedness of A. The most unmarked form is the 3sg. In such a case the form triggers the sequence of the personal markers. If A is a speech act participant (1st or 2nd person), the function triggers the sequence. If A is a 3pl.,

⁴⁰ So far I have collected instances for Bactrian, Middle Persian, and Parthian. However, most of these examples would need a detailed discussion, so I only give one quite certain example from Middle Persian: *čē agar-im kāmag hād ēg-im rāh ī rāst nimūd hēnd* "because if it was desirable for me, then I would have shown them the right way" (*Škandgumānīg Wizār* Chapter 11, sentence 271), where *hēnd* is 3pl. and refers to the indirect object "them". The modal translation is due to the preceding if-clause; *nimūd hēnd* is formally a simple past. See also MacKenzie (1964), Tafazzoli (1986), and Yoshida (2003: 157b) on this matter.

⁴¹ I have not seen any instance of the enclitic pronoun attached to the conjunction ka which would be the

⁴¹ I have not seen any instance of the enclitic pronoun attached to the conjunction *ka*, which would be the preferred pattern, e.g., in MP.

the sequence is arbitrary. It remains a task for futher investigation whether e.g. A as a 3pl. comes first when its referent is animate or human.

7. Conclusion

Sorani Kurdish is an accusative language without split ergativity. However, the enclitic pronouns and the verbal personal endings exchange their roles in the past tense of transitive verbs. Agreement is achieved with enclitic pronouns. The personal endings function as pronouns and may refer to O or any other oblique form. This state of affairs reflects an earlier split ergativity system in Sorani Kurdish, which resembles the Middle Persian type. In contrast to Middle Persian, Sorani Kurdish grammaticalized topic agreement as verbal agreement. Hence, the crucial point is to figure out whether enclitic pronouns agree with A, or whether they are A themselves. Their occurrence alone is no evidence of ergativity.

Abbrevations

```
= subject of a transitive verb, logical subject
abl.
          = ablative
acc.
          = accusative
Αf
          = Āfrīnagān
dat.
          = dative
DB
          = the OP inscription of Darius at Behistūn
          = definiteness ending (occurring in the definite article in the singular: -(a)k-a, and together with
Def.
          the demonstrative pronouns am-a = "this" and aw-a = "that". In case of attribution it is suffixed
          to the referent, e.g.: am py\bar{a}w-a = "this man")
          = demonstrative pronoun
Dem.
DSM
          = Pīramērd (1935)
DŠN
          = OMAR (1993b)
Dur.
          = durative prefix (building present and imperfect: (d)a-)
          = enclitic pronoun
erg.
          = ergative
ex(x).
          = example(s)
EZ
          = Ezafe
f.
          = feminine
Indef.
          = indefiniteness ending, singular ending respectively (functions as indefinit article: -\bar{e}k, -yak)
Imv.
          = imperative
          = instrumental
Instr.
Irr.
          = irrealis
          = masculine
MP
          = Middle Persian
MW
          = JAF (1970)
ΜZ
          = Pīramērd (around 1939)
          = neuter
n.
          = negation (in the present: n\bar{a}-, in the imperative: ma-, otherwise: na-)
Neg.
Nom.
          = object of a transitive verb, logical object
O
OAv.
          = Old Avestan
OP
          = Old Persian
```

0 = zero-ending or pro-drop

pl. = plural PN = proper name PP = past participle

= postposition $(-d\bar{a} \text{ and } -(a)wa)$ postp.

= postverb (-(a)wa)posty. Pron. = personal pronoun

= present (present stem of the verb) Prs. Prt. = preterite (past stem of the verb)

RD = OMAR (1993a)Rel. = relative pronoun

= subject of an intransitive verb S

sg. = singular SK = Sorani Kurdish

Subj. = subjunctive prefix (building subjunctive present and past and the imperative: b(i)-)

Šār = 'ĀRIF (1986) = verb Y = Yasna

YAv. = Young Avestan

Bibliography

'Ārif, Ḥosayn 1986: Šār. Baghdad.

BENVENISTE, Émile 1952: "La construction passive du parfait transitif." In: Bulletin de la Société de linguistique de Paris 48, pp. 52-62.

Brugmann, Karl 1916: Vergleichende Grammatik der indogermanischen Sprachen: II/3. Strassburg: Trübner.

Brunner, Christopher J. 1977: A Syntax of Western Middle Iranian. Delmar, New York: Caravan Books. Bubeník, Vít 1998: A Historical Syntax of Late Middle Indo-Aryan (Apabhramśa) [Current Issues in Linguistic Theory 165]. Amsterdam/Philadelphia: John Benjamins.

BYNON, Theodora 1979: "The Ergative Construction in Kurdish." In: Bulletin of the School of Oriental and African Studies 42, pp. 211–224.

- 1980: "From Passive to Active in Kurdish via the Ergative Construction." In: Elizabeth Closs TRAUGOTT, Rebecca LABRUM and Susan SHEPHERD (eds.): Papers from the 4th International Conference on Historical Linguistics. Amsterdam: John Benjamins, pp. 151-163.
- 2005: "Evidential, Raised Possessor, and the Historical Source of the Ergative Construction in Indo-Iranian." In: Transactions of the Philological Society 103:1, pp. 1–72.

CARDONA, George 1970: "The Indo-Iranian Construction mana (mama) krtam." In: Language 46, pp. 1-12.

DELBRÜCK, Berthold 1893: Vergleichende Syntax der indogermanischen Sprachen III/1. Strassburg: Trüb-

1897: Vergleichende Syntax der indogermanischen Sprachen IV/2. Strassburg: Trübner.

GEIGER, Wilhelm 1893: "Die Passivconstruction des Präteritums transitiver Verba im Iranischen." In: Ernst Kuhn (ed.): Festgruß an Rudolf Roth. Stuttgart: Kohlhammer, pp. 1–5.

HAIG, Geoffrey 2008: Alignment Change in Iranian languages. Berlin/New York: Mouton de Gruyter.

HAŽĀR 2003: Farhang-e kordī-fārsī. Tehran: Sorūš, 1381 h.š.

JAF, Aḥmad Mukhtar 1970: Meseley Wijdan. Baghdad: Īršād.

Kellens, Jean 1984: Le verbe avestique. Wiesbaden: Reichert.

KELLENS, Jean, and Eric PIRART 1988: Les textes vieil-avestiques 1: Introduction, texte et traduction. Wiesbaden: Reichert.

KREYENBROEK, Philip Gerrit 2005: "Kurdish Written Literature." In: Encyclopædia Iranica (accessed at http://www.iranica.com/newsite/ May 2009).

Orientalia Suecana LVIII (2009)

- LAZARD, Gilbert 1984: "Deux questions de linguistique iranienne La construction passive du parfait transitif La versification du moyen-iranien occidental." In: Jean TAILLARDAT, Gilbert LAZARD and Guy SERBAT (eds.): Émile Benveniste aujourd'hui II. Louvain: Peeters, pp. 239–248.
- 2005: "Structures d'actances dans les langues irano-aryennes modernes." In: Dieter Weber (ed.): Languages of Iran: Past and Present Iranian Studies in memoriam David Neil MacKenzie [Iranica 8]. Wiesbaden: Harrassowitz, pp. 81–93.

MACKENZIE, David Neil 1961: Kurdish Dialect Studies I. London: Oxford University Press.

— 1964: "The 'Indirect Affectee' in Pahlavi." In: Kaikhusroo Jamaspasa (ed.): Dr. J.M. Unvala Memorial Volume. Bombay: Kanga, pp. 45–48.

Nyberg, Henrik Samuel 1974: A Manual of Pahlavi II. Wiesbaden: Harrassowitz.

OMAR, Feryad Fazil 1993a: <u>Roşnayî le dengewe – Leuchten aus der Stimme</u>. Berlin: Institut für Kurdische Studien.

- 1993b: Dengî Şî're Namoyek Stimme eines fremden Gedichts. Berlin: Institut für Kurdische Studien.
- 2005: Kurdisch-deutsches Wörterbuch (Soranî). Berlin: Institut für Kurdische Studien.

PALMER, Frank Robert 1994: *Grammatical Roles and Relations*. Cambridge: Cambridge University Press. Pīramērd 1935: *Dwāzda Siwāray Miryān*. Sulaimaniya: Žyān.

— around 1939: Sarguruštey Mam-u Zīn. Sulaimaniya: Žyān.

SKJÆRVØ, Prods Oktor 1985: "Remarks on the Old Persian Verbal System." In: Münchener Studien zur Sprachwissenschaft 45, pp. 211–227.

STEINER, G. 1976: "Intransitivisch-passivische und aktivische Verbalauffassung." In: Zeitschrift der deutschen morgenländischen Gesellschaft 126, pp. 229–280.

TAFAZZOLI, Ahmad 1986: "The 'Indirect Affectee' in Pahlavi and in a Central Dialect of Iran." In: Rüdiger Schmitt and Prods Oktor Skjærvø (eds.): Studia Grammatica Iranica – Festschrift für Helmut Humbach. München: Kitzinger, pp. 483–487.

YOSHIDA, Yutaka 2003: "Review of BD 1." In: Bulletin of the Asia Institute 14, pp. 154-159.