Alignment change in Iranian:
What happened to person agreement?

Paper held at the Workshop on Patterns of alignment in the Indo-Iranian languages:
Towards a typology. LSI, Ann Arbor, July 13-14 2013
Geoffrey Haig, Bamberg
geoffrey.haig@uni-bamberg.de

Organization of the talk:
1 Alignment in case and agreement in West Iranian: basic observations
2 Alignment in agreement: the evidence from typology:
   2.1 The dissociation of case and agreement
   2.2 A-agreement vs. P-agreement
3 Contemporary West Iranian: what happened to the pronominal clitics?
   3.1 A-past clitics in Central Kurdish and elsewhere
   3.2 Person suffixes on past transitive verbs in Central Kurdish
   3.3 Summary of agreement with past transitive verbs, C. Kurdish
4 Motivations: evidence from text-based typology
5 Conclusions

- I use S, A and P for intransitive subject, transitive subject and transitive object
- Focus on West Iranian
- Focus on person, rather than gender agreement

1. Basic observations on alignment in Iranian
Main parameters for determining alignment in inflectional morphology:
(i) case on S, A and P; (ii) agreement morphology indexing features of those NPs on external constituents, most commonly the predicate. (cf. Dixon 1995, Donohue 2008, Haig 2011 inter alia).

---

1 This is a corrected and revised version of the handout distributed at the talk; many thanks to the discussants for very stimulating comments, and their contributions, some of which have found their way into these revisions.
Early Old Iranian: accusative alignment in case marking:

| Morphologically least marked |  \( S-\emptyset = A-\emptyset \) |  \( \neq \) | Morphologically marked |  \( P-\text{ACC} \) |

Accusative alignment in agreement:

| Determines agreement |  \( S = A \) |  \( \neq \) | No impact on agreement |  \( P \) |

The Case/Agreement correlation:
Agreement is determined by the NP with the least-marked case (here: nominative)

Old/Middle Iranian period (2-3000 years ago): emergence of “Tense Sensitive Alignment” (Haig 2008): Past transitive clauses (and only there) developed ergative alignment in case:

Ergative alignment in case marking (past tenses only), early Middle Iranian:

| Morphologically least marked |  \( S-\emptyset = P-\emptyset \) |  \( \neq \) | Morphologically marked |  \( A-\text{OBL} \) |

- The verb forms involved in past transitive constructions were participles
- Agreement on participles exclusively with the P, and gender, rather than person.
- Thus historically, agreement in the past transitive construction was P-determined
- Initially, person agreement was carried by copular verbs, which combined with the participles.

The A was indexed via a pronominal clitic in the Wackernagel position, P here agrees in gender with participle (Old Persian):

(1)

\[
\text{avaθā = šām} \quad \text{hamaranam} \quad \text{kartam}
\]

\[
\text{thus = 3pl:A} \quad \text{battle.NEUT.SG.NOM} \quad \text{do.PTCPL.NEUT.SG}
\]

‘Thus they engaged in battle’ (Old Persian, Haig 2008: 95)
(2) Middle Iranian: A still indexed via Wackernagel clitic pronoun, P-agreement in number/person with the copular:

\[ ME=m \quad l’sd’l \quad YKTLWNt’ \quad HWEnd \]

because=1S highwayman(PL) kill:PTCPL COP:3PL

‘Because I killed the highwaymen’ (Heston 1976: 177)

(3)

\[ xyn\text{dg} \quad bwd \quad hym \quad ‘w=r’n \quad dryst \quad (q)yrd \quad hym \]

ill \quad become:PTCPL \quad COP:1S \quad and=2PL \quad healthy \quad do:PTCPL \quad COP:1S

‘(I) was ill and you cured (me).’ (MacKenzie 1999c: 53–54)

(4) \[ u=š \quad ėn=iz \quad guft \]

\[ \text{and}=3S:A \text{ this too say}.PTCPL \]

‘and he said this too’ (late Middle Persian, Haig 2008: 95)

Summary A-indexing:

- A indexing was anaphoric, rather than obligatory.
- However, instances of clitic doubling are already attested in Middle Iranian. A-indexing via a clitic pronoun seems to have become obligatory relatively quickly in Middle Persian, and is certainly obligatory in those languages that have basically preserved this system (see below).

P-agreement, however, already showed inconsistencies in Middle Iranian, as in the following:

(5)

\[ u \quad andaršut-hēnd \quad u=[šān] \quad ō \quad vištāsp-šāh \quad namač \quad burt-hēnd \quad u \]

and enter:PST-PL \quad and=3PL \quad to \quad Vištāsp-šāh \quad hommage \quad pay \quad \text{and} \quad and \text{fravartak} \quad bēdāt-hend[\ldots] \quad letter

‘and they entered and payed hommage to Vištāsp-šāh and delivered the letter.’ (Utas 1976: 80)

However, note that evaluating P-agreement in Middle Iranian is difficult, due to zero-exponence of third person, cf. data from Jügel (2012), where more than 50% of the past transitive clauses in Middle Persian and Parthian that were considered either show “no agreement” (?), or are not
decidable whether A or P. The actual data from Jügel (2012) were not available to me at time of writing; the figures are taken from Korn (2013).

1.1  **Summary Early Middle Iranian person agreement in past transitive clauses**

A-indexing: pronominal / obligatory (?), via clitic pronouns

P-indexing: obligatory(?), via affixal morphology on copulas, later on the participles themselves, presumably via univerbation of participles + copula

**Gender agreement with P**, where maintained, is generally consistent, but as yet no representative survey available. The generalization that presents itself, though has yet to be verified, is that gender agreement with P appears to be more consistent and diachronically stable than person agreement with P.

Zazaki, Northern Kurdish (Paul 1998)

\[ \text{wextî} \quad \text{ki} \quad \text{to} \quad \text{äw-i} \quad \text{šimit-a} \]

at.time that 2SG:OBL water-FEM:DIR drink:PST-FEM.SG

Hawramî (MacKenzie 1966: 52), perfect indicative

\[ \text{di'anâ} = \tilde{s} \]

\[ \text{see:PERF.MASC} = 3SG:A \quad \text{‘he has seen me(masc.)’} \]

\[ \text{di'enâ} = \tilde{s} \]

\[ \text{see:PERF.FEM} = 3SG:A \quad \text{‘he has seen me(fem.)’} \]

1.2  **Person agreement in the past transitive construction in later languages**

- No comprehensive survey available, following are provisional observations
- does not consistently match the expected case/agreement correlation, which would lead us to expect agreement with P, when the case marking is ergatively aligned
- Agreement may be determined by the P, but is often mediated by animacy/number/information structure considerations
- Agreement may be determined by the A (in the Oblique case), again subject to animacy etc. considerations
- agreement morphology may disappear entirely, while ergative case alignment may be maintained, or may be lost
- agreement morphology may be co-opted for agreement with a recipient, addressee, benefactive (MacKenzie’s “Indirect affectee construction”, cf. Korn’s presentation at this workshop, and below)
2  **Alignment in agreement: the evidence from typology:**

2.1  **The dissociation of case and agreement:**
Warlbiri case alignment is ergative, agreement is accusative (though mediated by person considerations)

(6)  
\[
\begin{array}{c|c|c}
S & ka-rna & parnka-mi \\
\hline
ngaju-Ø & AUX.PRES-1sg & run-NPST \\
\end{array}
\]

1SG-ABS 'I am running'

(7)  
\[
\begin{array}{c|c|c|c}
A & ka-rna & P & nya-nyi \\
\hline
ngajulu-rlu & AUX.PRES-1SG & marlu-Ø & kangaroo-ABS & see-NPST \\
\end{array}
\]

1sg-ERG 'I see the kangaroo' (Warlbiri, Hale 1982)

2.2  **A vs. P agreement in typology**

In fact, there is a more basic factor at work here. For agreement in a transitive clause – regardless of alignment type – we basically have the following four options:

1. Agreement with A  
2. Agreement with A & P  
3. Agreement with P  
4. Agreement with neither

The available evidence from typology points to a clear asymmetry with regard to the distribution of these options world-wide:

- Konstanz universals, #293: IF the transitive verb agrees in person with the direct object, THEN at least some transitive verb forms agree in person with the subject of a transitive verb [since disproved by Savosavo, (Wegener 2008), GH].  
- Kibrik (2011): the privileged role of “principal” (S/A) in agreement  
- Bickel et al. (2011): the strong bias towards S/A in agreement systems in the majority of genetic groupings  
- Agreement with A is vastly preferred; where P "agreement" is found, it is generally "anaphoric", rather than obligatory agreement (Siewierska 2004:132).

The last point is important. We need to draw a distinction between:
**Obligatory** person indexing on a predicate, that is, non-local expression of person features of one of the arguments, triggered by a particular syntactic configuration, and is required regardless of information structure, or animacy considerations of the NP involved.

**Conditioned** indexing, which is not obligatory; its presence is conditioned by factors intrinsic to the NP itself, but external to the verb. Four factors are typically attested:

**Conditioning factors:**

1. presence vs. absence of the NP in the clause domain (Siewierska’s “anaphoric agreement”, cf. object markers in Chichewa, Bresnan & Mchombo 1984)
2. Animacy features of the NP (3sg, non-human object marker in Abkhaz, Hewitt 1989)
3. Information structure (object marking in Ostyak, Nikolaeva 2001)
4. Displacement factors: the expected marker is co-opted by a higher-ranked argument (object set of agreement markers must agree with a dative NP (if present), rather than a P, e.g. Warlbiri, Hale 1982)

The typological findings with regard to person person indexing in transitive clauses can be summed up as follows (Haig 2013):

If a language exhibits any obligatory bound person indexing of A and P in a transitive clause, the most likely configuration is:

- A agreement is obligatory
- P agreement is conditioned, where conditioned refers to the four conditioning factors mentioned above

This is not an exceptionless claim (cf. Savosavo, Wegener 2008), but a description of an agreement configuration that is (1) relatively specific, and (2) found so frequently in languages of different areal and genetic provenance that it is difficult to consider it pure coincidence. The relative paucity of P-agreement can also be interpreted as following from the interaction of two constraints, in the spirit of Kiparsky (2013):

(a) Agreement is controlled by the highest-ranked argument \((A \succ P)\);
(b) Agreement is controlled by the nom/absolutive NP.

In a transitive clause with accusative alignment, both constraints conspire to favour the A as the controller of agreement. With accusative alignment, no perfectly optimal solution is available, as A-determined agreement will violate (b), while P-determined agreement will violate (a).
However we look at it, it appears that typologically, the deck is stacked against P-determined agreement from the outset. With ergative case alignment, the preference for agreement with the absolutive NP (constraint (b) above) can be strong enough to overcome other pressures, thus yielding P-determined agreement, but the evidence from typology generally points in favour of A as the preferred controller of agreement, suggesting that it is the ranking of syntactic functions that is the higher-ranked constraint. Against this backdrop, the general instability of P-determined agreement, already evident in Middle Iranian, is not surprising.

3 Contemporary West Iranian: What happened to the pronominal clitics?

<table>
<thead>
<tr>
<th></th>
<th>Old Iranian</th>
<th>accusative</th>
<th>cf. Vedic</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>genitive/dative</td>
<td></td>
<td></td>
</tr>
<tr>
<td>sg. 1st</td>
<td>OP -mây</td>
<td>OP, Av. -mâ</td>
<td>gen./dat. -me acc. -mâ</td>
</tr>
<tr>
<td></td>
<td>OAv. -môî, YAv. -mê</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2nd</td>
<td>OP -taîy</td>
<td></td>
<td>gen./dat. -te acc. -te</td>
</tr>
<tr>
<td></td>
<td>OAv. -tiî, - tô, YAv. -ti</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3rd</td>
<td>OP -saiy</td>
<td>m., f.: OP -šîm, -dim; Av. -îm, -hîm, -dim; n.: Av. -îf, -diî</td>
<td>acc. -îm, -šîm; n. -ô</td>
</tr>
<tr>
<td></td>
<td>OAv. -hôî, YAv. -hê, -sê</td>
<td></td>
<td></td>
</tr>
<tr>
<td>pl. 1st</td>
<td>OAv. -nî, YAv. -nô²</td>
<td>OAv. -nô, YAv. -nô</td>
<td>obl. -nas</td>
</tr>
<tr>
<td>2nd</td>
<td>OAv. -vô, YAv. -vô</td>
<td>OAv. -vô, YAv. -vô</td>
<td>obl. -vô</td>
</tr>
<tr>
<td>3rd</td>
<td>OP -šîm</td>
<td>m., f.: OP -šîs, -diî; Av. -îs, -hîs, -diî; n.: Av. -î, -diî</td>
<td>acc. -îm, -šîm; n. -ô</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 1: Pronominal clitics in Old Iranian and Old Indic (Korn 2009)

Wherever pronominal clitics are found, they occur in at least some of the following three functions (simplified, cf. Haig 2008 for detailed explication):

1. to index pronominal arguments in a number of oblique functions (adnominal possession, prepositional complements, recipients etc.)
2. to index P with the present tenses of transitive verbs (O-present)
3. to index the A of a past transitive verb (A-past)

Three main outcomes can be found:

1. **All pronominal clitics are lost** (Northern Kurdish, Māzanderānî, Semnānî, Gilaki, Zazaki; see note below on Balochi)

2. **Pronominal clitics are retained, but only in functions (i) and (ii), clitics indexing an A-past function** (Persian ...)

3. **Pronominal clitics are retained in all three functions, but A-past clitics diverge in terms of placement principles, and in terms of obligatoriness, from all other clitic usages** (Central Kurdish, Vafsi, Delvari, Northern Talyshi ...)
Note on (1): the loss of pronominal clitics
I assume that pronominal clitics are an inherited features of West Iranian, and where they are not present, they have been lost (rather than the other way round). Entire clitic paradigms are not lost overnight; instead we would expect them to disappear step-wise, and it would be interesting to see the ways this happens. Some varieties of Balochi shed light on the pathways of loss: In Turkmen Balochi (Axenov 2006: 107-110) and Balochi of Sistan (Delforooz 2010:256) only third person clitics remain. In Balochi of Karachi (Farrell 2003), pronominal clitics are not obviously present at all, even in the text selections provided, though the interpretation of some of the verbal endings is unclear to me (possibly pron. clitics in origin). Farrell does not discuss pronominal clitics anywhere in the paper. My impression is that the clitics were lost in the heavy contact situation of Karachi Balochi, but this is speculative.

3.1 The A-past clitics
- Mobile, freedom of host selection
- Obligatory

(8) \textit{min šart = im kird-uwa lagal xwā}
\begin{align*}
\text{1s:A covenant = 1s:A make.PST-ASP with God}
\end{align*}
I made a covenant with God’ (Central Kurdish, MacKenzie 1962)

(9) \textit{duxtōr hālan ĕtōmbil = i girt}
\begin{align*}
\text{doctor:A immediately car = 3s:A take.PST}
\end{align*}
‘The doctor immediately took the car’ (Central Kurdish, MacKenzie 1962)

(10) \textit{tū ařā če ima = t kyās ařā inā}
\begin{align*}
\text{2SG why 1PL = 2SG:A send:PST to here}
\end{align*}
‘Why did you send us here?’ (Gorani of Gawrajū, Mahmoudveysi et al. 2012: 39)

(11) \textit{man ketāb = ō dā mūsā-yā}
\begin{align*}
\text{1SG book = 1SG:A give:PST Musa-OBL}
\end{align*}
‘I gave the book to Musa’ (Lashari, Dabir-Moghaddam 2008:85)

(12) \textit{tæmæn æz tani sīæ = m há-giræ}
\begin{align*}
\text{1SG:OBL from 3SG:OBL apple = 1SG:A PREV-take:PST}
\end{align*}
‘I took an apple from him’ (Vafsi; Stilo 2008: 380)
(13) \( si-\tilde{s} = om xeri \)
for-3SG = 1S:A buy:PST
‘I bought (it) for him’  (Delvari, Haig & Nemati, ms.)

3.1.1 Principles of clitic placement: Rightward drift (Haig 2008)

From Wackernagel position to a VP-based position, and in some languages, basically winding up as verbal affixes.

\[
\begin{align*}
\text{Clause-second} & \rightarrow \text{VP-based} & \rightarrow \text{V-based} \\
(1-5) & \rightarrow (8-13) & (\text{cf. Tab. 2})
\end{align*}
\]

Where clause-second is (approximately) maintained, there is often an additional constraint against cliticization to an overt A NP, so clause-second may be overridden. Note that this is sometimes taken as evidence for the claim that the overt A NP is outside the clause proper, i.e. a left-dislocated topic; this would be in line with Givón’s approach to the emergence of agreement as de-pragmatization of originally pragmatically-marked topic constructions.

Table 2: The end of the line (V-based clitics): Semnānī agreement paradigms (past tense), (Gérardin & Laisis 2012)

<table>
<thead>
<tr>
<th>Intransitive</th>
<th>Transitive</th>
<th>Middle Iranian clitic pronouns</th>
</tr>
</thead>
<tbody>
<tr>
<td>1SG</td>
<td>-\textit{un}</td>
<td>-\textit{un} = m</td>
</tr>
<tr>
<td>2SG</td>
<td>-\textit{e}</td>
<td>-\textit{at} = t</td>
</tr>
<tr>
<td>3SG</td>
<td>-\textit{e}, -\textit{i}</td>
<td>-\textit{e}\textsuperscript{s} = \textit{s}</td>
</tr>
<tr>
<td>1PL</td>
<td>-\textit{en}</td>
<td>-\textit{mun} = mān</td>
</tr>
<tr>
<td>2PL</td>
<td>-\textit{en}</td>
<td>-\textit{tun} = tān</td>
</tr>
<tr>
<td>3PL</td>
<td>-\textit{en}</td>
<td>-\textit{šān} = šān</td>
</tr>
</tbody>
</table>


What is interesting, however, is that the formal facts of cliticization have not kept pace with the functional aspects of obligatoriness and scope effects, which are clearly indicative of agreement (Samvelian 2007).
3.2 Person suffixes on past transitive verbs in Central Kurdish

The verbal affix is anaphoric index, rather than an obligatory agreement type. The pronominal nature of the P-index is shown in (14a) and (14b):

(14)  

a. *dena*  
\[\text{de}=y\text{-}\text{kušt}-\text{in}\]  
otherwise  \[\text{IPFV}\text{-}3s\text{:A}\text{-kill}\text{.PST}\text{-}3\text{PL}\text{:P}\]

b. *dena*  
\[\text{ewān}_i=\text{i}\text{-}\text{de-}\text{kušt }^*-\text{in}_i\]  
otherwise them:\text{P}=\text{3s}\text{:A } \text{IPFV}\text{-kill}\text{.PST}\text{-}3\text{PL}\text{:P}\n
‘otherwise he would kill them’ (Mukri Kurdish, Öpengin (in prep.), glosses adapted)

But “affix doubling” is possible when the P is a full NP, though the details remain somewhat obscure:

(15) *estēre-k-ān_i=mān*  
\[\text{de-bižārt}-\text{n}_i\]  
star\text{-DEF}-\text{PL}\text{:P}=\text{1PL}\text{:A } \text{IPFV}\text{-count}\text{.PST}\text{-}3\text{PL}\text{:P}\n
‘(we would sit at night and) count the stars.’  (Mukri Kurdish, Öpengin (in prep.)

(16) *nāme-k-ān_i=ī*  
\[\text{dā-n}_i\text{ be kuř-eke-ī}\]  
letter\text{-DEF}-\text{PL}=\text{3SG}\text{:A } \text{give}\text{.PST}\text{-}3\text{PL}\text{:P to boy}\text{-DEF-OBL}\n
‘he gave the letters to the boy.’  (Mukri Kurdish, Öpengin (in prep.)

For most cases, indexing a P is sensitive to the presence of NP argument in the local domain. It is thus (a) affixal; yet (b) pronominal.

3.3 Animacy-determined co-opting of the verbal affixes

The old affixal morphology is regularly associated with “Indirect Participants”: Experiencers, Benefactives, Recipients, External Possessors, and Addressees: Human, affected by the event, but not directly. Such arguments may in fact be prepositional complements.

The data in this section come from a variety of Sorani, Mukri Kurdish (Öpengin, in prep.)

(17) *ew*  
\[\text{beserhāt}-e-ī\text{-}\text{bo}\text{ gērā-m-ewe}\]  
DEM\text{-real.story-DEM1}=\text{3SG}\text{:A to narrate}\text{.PST}\text{-1SG}\text{:ADDRESS}\text{-ASP}\n
‘(he) narrated this experience to me at a coffee house.’
(18) *feqet qīse=m lē de-pirsī-y*

only issue =1SG:A from IPFV-ask:PST-2SG:ADDRESS

‘I would only ask council of you.’

(19) *pūł-eke=yān ne-de-dā-mē*

money-DEF =3PL:A NEG-IPFV-give:PST-1SG:RECIP-DRCT

‘They would not give me the money.’

We also find the complements of complex predicates:

(20) *emin ʕerz=im kird-ī*

1SG NVP.present =1SG:A do:PST-2SG:RECIP

‘I presented it to you (lit. I did presentation to you’

(21) *ew kābrā-e nižād=ī dā-w-m*

DEM fellow-DEM NVP.rescue =3SG:A give:PST-PTCP-1SG:RECIP

‘That fellow saved me.’

3.3.1 Slot displacement effects: when clitics oust suffixes (Mukri Kurdish, cf. also Samvelian 2007, 2007)

Intransitive, 2sg S:

(22) *(eto) roišt-ī*

2P:S leave.PST-2P:S ‘you left’

Transitive, 2sg P:

(23) a. *(eme) to=mān nard bo šar-ī*

1PL:A 2S:P =1PL:A send:PST to city-OBL

b. *(eme) nard =mān -ī bo šar-ī*

1PL:A Ø send.PST =1PL:A-2P:P to city-OBL

‘We sent you to the the city’ (Mukri Kurdish, Öpengin (in prep), glosses adapted)
3.3 Summary of agreement in past transitive clauses, Central Kurdish

1. The grammaticalization of erstwhile clitic pronouns to obligatory agreement markers with A, yet while retaining syntactic mobility and freedom of host selection
2. The de-grammaticalization of erstwhile affixal morphology to become pronominal markers indexing a P
   (ii) displacable from the stem-adjacent slot
   (iii) co-opted to index an Indirect Participant (Recipient, Benefactive, Possessor)

Central Kurdish has basically re-aligned its agreement system yielding a typologically quite commonplace system involving:

   Obligatory indexing (agreement) with S/A
   Conditioned /non-obligatory indexing of P
   Co-opting of P-indexes by higher-ranking Indirect Participants

One way of looking at the association of agreement types with morphological formatives is in terms of Corbett (2006) notion of “canonical” agreement, which predicts certain types of associations:

**Figure 1: The canonical association of agreement type with morphological exponent:**

```
Obligatory agreement               Anaphora
   ↓                             ↓
Affixal morphology    →   Clitics    ←   Free pronouns
```

**Fig. 2: Agreement in Central Kurdish past transitive clauses**

```
Obligatory agreement               Anaphora
   ←                             ↓
Affixal morphology    ←   Clitics    ↓   Free pronouns
```
4. Motivations: evidence from text-based typology

In natural spoken language, transitive subjects are

(a) overwhelmingly pronominal / zero (between 80-95%) (Du Bois 1987, Haig & Schnell, submitted)

(b) overwhelmingly [+hum] (>90%, Haig & Schnell, submitted)

Transitive objects are

(a) approx. 50% full NPs

(b) approx 70% [-hum]

These figures are based on an analysis of connected spoken narratives texts from 11 languages (Haig & Schnell, submitted).

The Animacy connection: Why P-agreement is co-opted for Recipients etc.


In verb agreement, “we find a common, motivated pattern across a wide range of languages: agreement is often carried out in such a way that the verb agrees with noun phrases that are higher in animacy, and fails to agree with those lower in animacy, even when this overrides, in particular cases or in general, grammatical relations, the usual determiners of agreement cross-linguistically.”

Several semantic/pragmatic factors thus conspire against P-determined agreement:

- P is significantly more frequently indefinite / non-topical, hence full NP rather than pronoun/zero
- P is significantly less frequently [+human] than A
- P is overwhelmingly third person anyway, therefore, person agreement is not particularly informative for P: we would end up redundantly indexing third person for P on the vast majority of transitive verbs. For A, on the other hand, a greater range of person values is regularly attested. For P, number or gender agreement is more informative than person.

When case-marking shows ergative alignment, we might expect to find P-agreement on the assumption that agreement is generally controlled by the NP in nom/abs. However, the above-mentioned factors from animacy / discourse appear to override the latter pressure, at least in the long term.
5. Conclusions

- The morphological legacy of the Old Iranian participles meant that agreement in past transitive clauses was P-determined from the outset
- Where gender has been retained as an agreement feature, it generally appears to be consistently P-determined
- Where person became the sole agreement feature, the trend has been for the abandonment of P-determined agreement, and the re-installment of A-determined agreement
- For achieving the latter, clitic pronouns (where they have been maintained) have grammaticalized to obligatory agreement markers
- In Central Kurdish, original P-determined verbal suffixes have degrammaticalized, becoming pronominal rather than agreement markers, and are subject both to displacement effects and to functional re-calibration as exponents of higher-ranking non-core arguments.

References
Corbett, Greville. 2006. Agreement. CUP


Haig, Geoffrey & Schnell, Stefan. Submitted. The discourse basis of ergativity revisited (available online at academia.edu)


Haig, G. & Fatemah Nemati. ms. Clitics at the syntax-pragmatics interface: The case of Delvari pronominal enclitics


Korn, A. 2013. Patterns of ergativity and differential object marking in Iranian. Paper held at the Workshop Patterns of alignment in the Indo-Iranian languages: Towards a typology. LSI, Ann Arbor, July 13-14 2013


Islands. Ph.D. Dissertation, MPI for Psycholinguistics, Radboud Universiteit Nijmegen.
Siewierska, A. 2004. Person. CUP.