

**Head & dependent marking and the Pamiri verb:
a defaults-based account in Network Morphology**
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The Pamiri languages are a group of eastern Iranian languages spoken in southeastern Tajikistan and adjoining regions of Afghanistan, Pakistan and China. They have attracted the attention of researchers working on alignment and case because some of the languages possess an unusual double-oblique construction (where A and O are oblique-marked), and others have an even more unusual tripartite system of case marking distinguishing A, S and O (e.g. Payne 1980, Bickel & Nichols 2009, Dixon 1994).

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| <p>(1) Double oblique, Oroshori
 mun = um tā = r kitob vuĵ.
 me.OBL=1SG you.OBL=to book bring.PERF
 ‘I have brought you a book.’</p> | <p>Tripartite system, Yazgulyam
 mon š = tu wint.
 me.OBL D.O.=you see.PST
 ‘I saw you.’ (c.f. <i>az</i> ‘I’, direct case form)</p> |
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These contemporary phenomena are the vestiges of an old split or partial ergative system that characterized this group’s ancestral language, where in past tense contexts verbs agree with O and not A, and case marking distinguishes A from O and S (Pirejko 1979, Èdel’man & Dodyxudoeva 2009, Palancar 2009, Skjærvø 2009, Stump & Hippisley 2011). This inheritance is synchronically observable not only in marking on the dependent (case on the noun) but also in the very complex system of head marking (verb agreement) in member languages of the group. The modern Pamir languages can be classified according to their position on a four-dimensional path from Canonical Partial Ergativity, i.e. where in the past tenses agreement and case display behaviour consistent with an ergative alignment system, to Canonical Accusativity. The table in (3) shows the position of Shughni on this path.

(3)	<i>Grammatical domain</i>	<i>Canonical partial ergativity</i>	<i>Transitional phase</i>	<i>Canonical accusativity</i>
1.	Preterite Verb agrees in person/number			
	a. with O	encoded like S	→	not encoded <i>Shughni</i>
	b. with A	not encoded	encoded, but not like S <i>Shughni: 3sg</i>	encoded like S <i>Shughni: other than 3sg</i>
2.	Preterite Verb agrees with S in gender	Yes <i>Shughni</i>	→	no
3.	Case of A	oblique	→	direct <i>Shughni</i>
4.	Case of O	not oblique	oblique <i>Shughni</i>	specifically accusative

In Shughni, objects don’t control agreement and transitive subjects show direct case (both properties of canonical accusativity); on the other hand, verbs may express gender agreement (a property of canonical partial ergativity), and while agreement markers for subject and agent are *mostly* the same (a property of canonical accusativity), they are different in the 3sg (a transitional property). In (4) there is a special agreement in =*yi* where the external argument is an agent; in (5) the verb expresses gender agreement through root vowel alternation - suggesting Shughni is in a stage of transition from one alignment system to the other.

- (4) a. *yā* = *yi* kud wīn-t. b. *yu* = *yi* kud wīn-t.
she=3SG dog see-PAST he=3SG dog see-PAST
‘She saw a dog.’ ‘He saw a dog.’

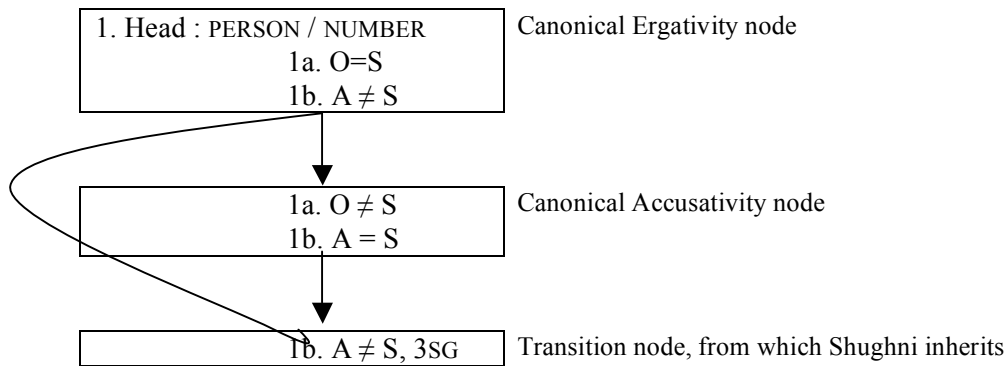
- (5) a. *yā* wirov-d. b. *yu* wirūv-d.

she stand.FEM-PAST
'She stood.'

he stand.MASC-PAST
'He stood.'

We offer a computational account of the synchronic facts about dependent and head marking that situates the morphosyntax of these languages in their historical context. Central to our account is the assumption that by default, each Pamir language inherits a complex of generalizations defining a canonical system of partial ergativity, but that these generalizations are subject to override by specific generalizations about individual languages. Overrides therefore express innovations of a particular kind. We work in Network Morphology (Brown and Hippius 2011), an inferential-realizational framework in which morphosyntactic features are theoretically independent of their phonological realization. We focus on the inheritance hierarchy of morphosyntactic features relevant for head and dependent marking, and assume an orthogonal hierarchy that captures the way these feature combinations are spelled out.

In our inheritance hierarchy, the highest node encodes facts that are true for canonical partial ergativity, the historical situation. The path towards canonical accusativity is represented as inheritance with overriding.



The historical system of object-agreement marking coinciding with subject agreement marking and subject agreement being distinct from agent agreement is overridden by an innovated accusative alignment system where A and S agreement are the same. However, a vestige of ergativity is found in the 3SG of Shughni, where S and A do not display the same agreement; this vestige is expressed as a second line of inheritance from the root node. A language like Shughni inherits part of its array of alignment facts from this transition node. When all the facts are distributed across a network of nodes such as these, the Pamir languages' varied alignment systems can be defined as inheriting from different source nodes; in this way, we capture both similarities and differences among the Pamir languages in the manner in which they preserve / override the inherited system of alignment, independent of variation of form.

References

- Bickel, Balthasar, & Johanna Nichols. 2009. Case marking and alignment. *The Oxford handbook of case*, ed. by Andrej Malchukov & Andrew Spencer, 304-321. Oxford: Oxford University Press.
- Brown, Dunstan; and Andrew Hippius. 2011. *Network Morphology: a Defaults-Based Approach to Word Structure*. Cambridge: Cambridge University Press.
- Èdel'man, D. I., & Leila Dodyxudoeva. 2009 a. The Pamir languages. In: Gernot Windfuhr (ed.) *The Iranian Languages*. 773-786. London/New York: Routledge.
- Palancar, Enrique. 2009. Varieties of ergative. In: Andrej Malchukov & Andrew Spencer (eds) *The Oxford Handbook of Case*. Oxford: OUP.
- Payne, John R. 1980. The decay of ergativity in Pamir languages. *Lingua* 51, 147-86.
- Pirejko, Lija. 1979. On the Genesis of the Ergative System in Indo-Iranian. In: Frans Plank (ed.) *Ergativity: Towards A Theory Of Grammatical Relations*. 481-488. London: Academic Press.
- Skjærvø, Prods Oktor. 2009. Old Iranian. In: Gernot Windfuhr (ed.) *The Iranian Languages*. 43-195. Routledge.
- Stump, Gregory; and Andrew Hippius. 2011. Valence sensitivity in Pamirian past-tense inflection: a realizational analysis. In: Agnes Korn, Pollet Samvelian and Geoffrey Haig (eds) *Proceedings of the 3rd International Conference on Iranian Linguistics*. Wiesbaden: Reichert.