

Tripartite-Like Alignment, DSM, and DOM in Tati, Taleshi, and Kurmanji Kurdish: A Typological and Functional Perspective

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Abstract

Tripartite alignment, where intransitive subjects (S), transitive agents (A), and objects (O) receive distinct case-marking, is rare. Tati, Taleshi, and Kurmanji Kurdish, though not fully tripartite, exhibit tripartite-like effects in specific contexts, especially in past-tense clauses. These languages also display Differential Subject Marking (DSM) and Differential Object Marking (DOM), resulting in complex case-marking asymmetries. This study examines their alignment systems within a typological and functional framework, highlighting the influence of discourse features like animacy, definiteness, and topicality. Findings show that alignment is dynamic rather than fixed, shaped by both internal pressures and external influence from Persian, Azerbaijani, and Turkish. Through comparison with related Indo-Iranian languages, this research clarifies how morphosyntactic and discourse-pragmatic constraints interact in shaping alignment.

Keywords: Keywords: Tripartite-like alignment, Differential Subject Marking (DSM), Differential Object Marking (DOM), Case-Marking Variation, Alignment Shift, Language Contact, Northwestern Iranian Languages

Introduction

The study of case-marking and alignment systems in Iranian languages has long been central to typological and historical linguistics (Comrie 1978, 33; Dixon 1994, 21). This paper focuses on three Northwestern Iranian languages: Tati, Taleshi, and Kurmanji Kurdish, which exhibit complex interactions of tripartite-like alignment, Differential Subject Marking (DSM), and Differential Object Marking (DOM). While these languages do not maintain full tripartite systems, they display tripartite-like features

under specific morphosyntactic, semantic, and discourse conditions.

Tati and Taleshi, spoken in Qazvin and Gilan, are Northwestern Iranian languages in close contact with Persian and Azerbaijani (Stilo 2004; Yarshater 1969). Kurmanji Kurdish, also Northwestern Iranian, is spoken in Turkey, Iran, Iraq, and Syria, and shows notable dialect variation (Haig and Matras 2002). All three display split alignment and structural change due to contact with dominant regional languages like

Persian, Turkish, and Azerbaijani (Stilo 2015; Haig 2018).

Tripartite alignment, where S, A, and O are morphologically distinguished, is rare cross-linguistically (Deal 2010). While Nez Perce and Warlpiri exhibit full tripartite systems, Tati, Taleshi, and Kurmanji show context-sensitive variants (Haig 2008). Building on work on Iranian alignment (e.g., Stilo 2015), this study (1) assesses the scope of tripartite-like patterns, (2) analyzes functional motivations for DSM and DOM, and (3) situates these within broader typological and diachronic perspectives, including contact influence.

The study addresses four key questions: What structural and functional factors govern tripartite-like alignment in these languages? How do DSM and DOM interact, and to what extent are they shaped by animacy, definiteness, and topicality? How do these case-marking patterns compare cross-linguistically with established alignment typologies? Do they reflect inherited structures, recent innovations, or contact-induced changes? To answer these questions, the analysis draws on field data, corpus evidence, and previous researches.

The paper is organized as follows. Section 2 provides a theoretical overview of alignment and differential marking. Section 3 examines case-marking patterns in Tati, Taleshi, and Kurmanji Kurdish. Section 4 presents comparative and functional perspectives, including historical developments. Section 5 explores broader typological implications. Section 6 concludes with a summary of findings.

Theoretical and Typological Overview

This section reviews case alignment, Differential Subject Marking (DSM), and Differential Object Marking (DOM) from a theoretical and typological perspective, focusing on Tati, Taleshi, and Kurmanji Kurdish.

Linguistic alignment refers to how languages mark S, A, and O, with major systems including nominative-accusative, ergative-absolutive, and tripartite (Comrie 2013). Some languages show split alignment based on tense, aspect, or animacy (Dixon 1994; Mirdehghan Farashah 2013). In split-ergative systems, discourse, verb morphology, and restructuring introduce variation (Haig 2008; Legate 2012). This study adopts a split-alignment framework to better capture this complexity.

Case Alignment Systems in Typology

The primary case alignment types are:

- Nominative-Accusative: S and A are treated alike, while O is distinct.
- Ergative-Absolutive: S and O are treated alike, while A is marked ergatively (Dixon 1994: 35).
- Tripartite: S, A, and O all receive distinct markers (Comrie 2013: 87).
- Fluid/Split: Alignment shifts based on tense, aspect, animacy, or discourse prominence (Haig 2008: 125).

Examples¹:

1) Persian (Nominative-Accusative)²

Ali	ketâb=râ	xând.
Ali.NOM	book-ACC	read.PAST

“Ali read the book.”

(2) Old Persian (Ergative-Absolutive)

adam	Auramazdâha	upastâma	frâbara
I.ERG	Ahura-Mazda	support.ABS	bring.PAST.1SG

“I brought [it] with the support of Ahura Mazda.”
(Kent 1953: 116)

(3) Nez Perce (Tripartite)

éwiks	hi-nekceey’x	payná-ha.
man.NOM		3SG-run.PRES

“The man is running.”

éwiks-ne	hi-pn-éec’	payná-ha.
man-ERG	3SG-chase-PRES	dog.ABS

“The man chases the dog.”

éwiks-nim	hi-wewluqce’	payná-ha.
dog-ACC		3SG-bite.PRESman.ABS

“The dog bites the man.” (Deal, 2010: 3)

Differential Subject Marking (DSM)

DSM occurs when subjects (A or S) are differ-

1. Glossing abbreviations: A = agent, O = object, ERG = ergative, ABS = absolutive, NOM = nominative, ACC = accusative, OBL = oblique, PAST = past, PRES = present, PROG = progressive, SG/PL = singular/plural, 1/2/3SG = first/second/third person singular.

2. In all examples, clitics (e.g., *Ezafê* -e, accusative -râ, topical -a, ergative -e) are marked with an equals sign (=) to reflect their phonological attachment and syntactic independence (e.g., *zan=e*, *ketâb=râ*). In contrast, true affixes such as verbal endings and tense markers retain hyphenation (-) (e.g., *xând-am* “I read”).

entially marked based on semantic or pragmatic factors, such as animacy, definiteness, or topicality (Aissen 2003, 461). In Tati, Taleshi, and Kurmanji Kurdish, DSM typically involves ergative marking in past-tense transitives.

(4) Tati (DSM in Past Tense)

zan=e	ketāb	xund.
wo man-ERG	book	read.PAST

"The woman read the book."

zan	raft.
woman.NOM	go.PAST

"The woman left." (based on Stilo 2015)

Here, the agent (zan 'woman') receives an ergative marker (-e) in the past-tense transitive clause, but remains unmarked in the intransitive clause.

Differential Object Marking (DOM)

Differential Object Marking (DOM) refers to the selective marking of direct objects based on semantic and pragmatic factors such as animacy, definiteness, or specificity (Bossong 1991, 146; Aissen 2003; Silverstein 1976). DOM has been widely observed across languages, particularly in those with ergative or mixed alignment systems.

In Tati and Taleshi, DOM is marked via an accusative suffix (-a) that typically surfaces with definite objects. The presence or absence of this suffix reflects varying alignment patterns. When the object is definite, an ergative-absolutive alignment becomes more prominent; when the object is indefinite or generic, marking tends to be neutral or absent.

This contrast is illustrated in the following Taleshi examples:

(5) Taleshi (DOM with Definiteness)

Ergative-Absolutive:

mardom=e	dokhtar=a	xun.
man-ERG	girl-ACC	see.PAST

"The man saw the girl."

Neutral/Unmarked Case:

mardom	dokhtar	xun.
man	girl	see.PAST

"A man saw a girl." (Stilo 2015: 192)

These examples, drawn from traditional Taleshi usage, show how DOM interacts with alignment. In contexts involving definite NPs, case marking be-

comes more explicit, reinforcing the ergative structure. When definiteness is absent, the language allows for case neutralization, potentially signaling a shift in alignment under language contact pressures (Bossong 1991, 145–146; Stilo 2015, 192–193).

The Role of Language Contact in Alignment Change

Contact with Persian, Azerbaijani, Turkish, and Arabic has contributed to alignment changes in Tati, Taleshi, and Kurmanji Kurdish. In Tati and Taleshi, younger speakers are increasingly omitting ergative marking in past-tense transitive clauses, signaling a shift toward nominative-accusative alignment. This is especially evident in contact-heavy regions and has been documented by Stilo (2015: 193).

(6) Traditional Tati (Older Speakers, Ergative Marking Preserved)

zan=e	ketāb=a	xund.
woman-ERG	book-ACC	read.PAST

"The woman read the book."

(7) Younger Speaker Variation (Ergative Marker Dropped)

zan	ketāb=a	xund.
woman	book-ACC	read.PAST

"The woman read the book."

In Kurmanji, while the ergative alignment system is generally preserved, dialects influenced by Sorani Kurdish and Turkish show a weakening of oblique case marking in past-tense transitives.

(8) Traditional Kurmanji (Oblique Subject in Past Tense)

min	te	dibîni.
1SG.OBL	2SG.DIR	see.PAST

"I saw you."

(9) Contact-Induced Variation (Nominative Used Instead of Oblique)

ez	te	dibîni.
1SG.NOM	2SG.DIR	see.PAST

"I saw you." (Haig and Matras 2002: 92)

These changes reflect the influence of bilingualism and convergence with surrounding dominant languages. While DSM is eroding, DOM remains stable, likely due to its compatibility with accusative alignment in Persian and Turkish (Bossong 1991: 45;

Aissen 2003: 464).³

Case-Marking in Tati, Taleshi, and Kurmanji Kurdish

This section analyzes the case-marking patterns in Tati, Taleshi, and Kurmanji Kurdish, focusing on alignment systems, DSM and DOM.

General Case-Marking Strategies

The case-marking systems in these languages exhibit key morphosyntactic features:

- Tripartite-like alignment in past-tense transitives in Tati and Taleshi (Stilo 2004: 274; Yarshater 1969: 76).
- Split alignment based on tense in Kurmanji Kurdish (Haig 2004: 16; Haig and Matras 2002: 89).
- DSM and DOM across all three languages (Bossong 1991: 146; Aissen 2003: 464).
- A gradual shift toward nominative-accusative alignment in Tati and Taleshi due to contact with Persian and Azerbaijani (Stilo 2015: 193; Gharib 2016: 58).
- Variation in oblique case marking in Kurmanji dialects, influenced by Sorani Kurdish and Turkish (Haig and Matras 2002: 92; Haig 2008: 121).

Table 1 summarizes these distinctions:

Table 1: Key Morphosyntactic Features in Tati, Taleshi, and Kurmanji Kurdish

Feature	Tati	Taleshi	Kurmanji
Alignment System	Tripartite-like (Past), Nominative-Accusative (Present)	Tripartite-like (Past), Nominative-Accusative (Present)	Split-Ergative (Past), Nominative-Accusative (Present)
Ergative Marking	-e (Past-tense agents)	-e (Past-tense agents)	Oblique case for past agents
Accusative Marking	-a (Definite objects)	-a (Definite objects)	Direct case used variably
DSM Presence	Yes (Based on tense and animacy)	Yes (Based on tense and animacy)	Yes (Tense-conditioned split)
DOM Presence	Yes (Definiteness-sensitive)	Yes (Definiteness-sensitive)	Yes (Strong DOM effects)
Verbal Agreement	Subject agreement dominant	Subject agreement dominant	Verb agreement conditioned by split-ergativity
Language Contact Influence	Persian and Azerbaijani	Persian and Azerbaijani	Turkish and Sorani Kurdish

This table summarizes alignment systems, case marking, and agreement patterns, highlighting cross-linguistic contrasts relevant to tense, animacy, and language contact.

Two-Term Case System

All three languages exhibit a two-term case distinction, particularly in present-tense constructions where nominative-accusative alignment is dominant. However, Tati and Taleshi retain a tripartite-like distinction in past-tense transitives, while Kurmanji maintains split-ergativity (Stilo 2004: 274; Haig 2004: 16).

(10) Tati (Two-Term Case in Present Tense)

mard ketāb xunē.
man.NOM book read.PRES

“The man reads the book.” (Stilo 2004: 274)

(11) Kurmanji (Two-Term Case in Present Tense)

ez te dib/nim.
1SG.NOM 2SG.ACC see.PRES

“I see you.” (Haig 2004: 16)

3. While DOM appears stable, dialectal variation exists, particularly in Kurmanji, where certain dialects influenced by Sorani Kurdish show reduced accusative marking (Matras 2010, 114).

Verbal Agreement Patterns

Verbal agreement patterns correspond closely to case-marking systems and alignment types:

Tati and Taleshi: Agreement follows a nominative pattern in present-tense constructions but may align with ergative structures in past-tense transitives, where the verb agrees with the absolutive argument (Stilo 2004: 273–275).

- Kurmanji: Verb agreement follows a split pattern, aligning with nominative-accusative structures in the present tense and shifting to ergative-based agreement in the past tense, where the verb typically agrees with the object, not the oblique subject (Haig 2004: 16).

(12) Taleshi (Subject-Verb Agreement in Present Tense)

zan ketâb xune.
woman.NOM book read.PRES

“The woman reads the book.” (Mirdehghan Farashah and Nourian 2010: 5)

(13) Kurmanji (Split Agreement in Past Tense)

min te dibîni.
1SG.OBL 2SG.DIR see.PAST

“I saw you.” (Haig 2004: 16)

Split Case Marking

Split case marking occurs in all three languages under different conditions:

- Tati and Taleshi: Split between tripartite-like alignment (past) and nominative-accusative alignment (present).
- Kurmanji: Tense-based split-ergativity, where past-tense transitive subjects are marked oblique, while present-tense subjects follow nominative-accusative patterns.

(14) Tati (Split Case in Past Tense)

mard=e ketâb=a xund.
man-ERG book-ACC read.PAST

“The man read the book.” (Stilo 2004: 274)

(15) Kurmanji (Split Case in Past Tense)

min mal=ê dît.
1SG.OBL house-ACC see.PAST

“I saw the house.” (Haig 2004: 16)

Summary of Case-Marking Patterns

Table 2 contrasts case-marking patterns by tense, including alignment type, ergative and accusative marking, and agreement mechanisms across the three languages.

Table 2: Comparative Case-Marking Strategies in Tati, Taleshi, and Kurmanji Kurdish

Feature	Tati	Taleshi	Kurmanji
Past Tense (Transitive)	Tripartite-like	Tripartite-like	Split alignment
Present Tense	Nominative-Accusative	Nominative-Accusative	Nominative-Accusative
Ergative Marking	-e (Agent)	-e (Agent)	Oblique Case
Accusative Marking	-a (Object)	-a (Object)	Direct Case (Only in some contexts)
Verbal Agreement	Subject agreement dominant	Subject agreement dominant	Split-ergative verb agreement

Comparative and Functional Analysis

This section investigates the comparative and functional properties of tripartite-like alignment, differential subject marking (DSM), and differential object marking (DOM) in Tati, Taleshi, and Kurmanji Kurdish. By situating these within a broader typological context, including Iranian languages (Pashto, Balochi), Indo-Aryan languages (Hindi-Urdu), and typologically distinct languages (Basque, Nez Perce, Warlpiri), it examines their structural and pragmatic functions.

Cross-Linguistic Comparisons of Tripartite-Like Alignment

Comparative analysis of alignment patterns across languages reveals typological affinities and distinctions. Tati and Taleshi display tripartite-like alignment in past-tense transitives, while Kurmanji Kurdish presents a unique pronominal tripartite system.

Alignment Types

Examples below illustrate tripartite, split ergative, and nominative-accusative alignment systems:

(16) Tripartite - Nez Perce

ewiks hi-nekkeey'x payná-ha.
man.NOM 3SG-run.PRES

“The man is running.” (S = NOM)

éwíks-ne hi-pn-éec' payná-ha.
man-ERG 3SG-chase-PRES dog.ABS

"The man chases the dog." (A = ERG, O = ABS)

éwíks-nim hi-wewluqce' payná-ha.
dog-ACC 3SG-bite.PRES man.ABS

"The dog bites the man." (O = ACC) (Deal 2010, 58)

Nez Perce fully distinguishes A, S, and O with separate case markers, making it a true tripartite alignment language.

(17) Split Ergative - Hindi-Urdu

Ravi=ne kitaab parhī.
Ravi-ERG **book** **read.PAST**

"Ravi read the book." (A = ERG)

Ravi so raha h ai.
Ravi.NOM **sleep.PROG** **AUX**

"Ravi is sleeping." (S = NOM) (Butt 2013, 104)

Here, ergative case (-ne) appears only in past perfective transitive clauses, while S (intransitive subject) and A (present-tense agent) remain unmarked, illustrating split ergativity.

(18) Nominative-Accusative - Persian

Ali ketâb=râ x ând.
Ali.NOM **book-ACC** **read.PAST**

"Ali read the book."

Ali raft.
Ali.NOM **go.PAST**

"Ali left."

Persian treats A and S identically (nominative), while O (definite object) receives accusative marking, showing a clear nominative-accusative system.

Nez Perce (Tripartite Alignment)

As a rare example of true tripartite alignment, Nez Perce consistently distinguishes A, S, and O with separate markers across clause types, as shown in example 16, making it a valuable comparative model for analyzing Tati and Taleshi.

Basque (Ergative-Absolutive Alignment)

(19) Basque Example

gizon=a etorri da.
man-ABS **come.PAST AUX**

"The man came."

gizon=ak mutil=a ikusi du.
man-ERG **boy-ABS** **see.PAST AUX**

"The man saw the boy." (Laka 2006, 43)

Basque consistently applies ergative-absolutive alignment across all tenses and clause types, unlike Tati and Taleshi, where ergativity is restricted to past-tense transitives.

Tati and Taleshi (Tripartite-Like in Past Tense)

These languages show tripartite-like alignment only in past-tense transitives. The ergative case (-e) is used for A, while S is unmarked (nominative).

(20) Tati Example

zan=e ketâb=a xund.
woman-ERG **book-ACC** **read.PAST**

"The woman read the book."

zan raft.
woman.NOM **go.PAST**

"The woman left."

Kurmanji Kurdish (Pronominal Tripartite-Like System)

Kurmanji exhibits a pronominal split system where nominative, oblique, and accusative forms distinguish S, A, and O.

(21) Kurmanji Example

ez diçim malê.
1SG.NOM **go.PRES** **home**

"I am going home."

min te dibîni.
1SG.OBL **2SG.DIR** **see.PRES**

"I see you."

ez=ê tê bibînin.
1SG.ACC **2SG.OBL** **see.PASS.PRES**

"I am seen by you."

Summary Table: Comparative Alignment

Table 3 provides a typological comparison of alignment across languages, situating Tati, Taleshi, and Kurmanji within broader linguistic systems. It highlights their tripartite-like and split alignment features in relation to Indo-Iranian, Basque, and Nez Perce structures.

Table 3: Comparative Alignment Patterns Across Languages

Language	Alignment Type	DSM	DOM	Ergative Marking Condition
Tati	Tripartite-like (past)	Yes	Yes	Past-tense transitives
Taleshi	Tripartite-like (past)	Yes	Yes	Past-tense transitives
Kurmanji	Split (pronominal)	Yes	Yes	Past-tense transitives
Pashto	Split Ergative	Yes	Yes	Perfective aspect
Hindi-Urdu	Split Ergative	Yes	Yes	Perfective aspect (with ergative verb agreement)
Basque	Full Ergative-Absolutive	No	No	Across all tenses
Nez Perce	Tripartite	No	No	Across all tenses

Functional Motivations for DSM and DOM

DSM and DOM are influenced by various functional factors across languages. These include animacy, definiteness, topicality, and discourse prominence, which play a significant role in the case-marking strategies of Tati, Taleshi, and Kurmanji Kurdish (Aissen 2003, 461; Bossong 1991, 17).

Animacy and Definiteness

Both DSM and DOM are commonly conditioned by animacy and definiteness, as seen in Northwestern Iranian and Indo-Aryan languages (Lazard 1992, 88).

4.2.1.1. DSM and Animacy

In past-tense transitives, animate agents (A) are more likely to receive ergative marking, while inanimate subjects often remain unmarked.

(22) Tati

mard=e ketâb=a xund.
man-ERG book-ACC read.PAST

“The man read the book.”

sang ofiâd.
stone.NOM fall.PAST

“The stone fell.” (Stilo 2015, 194)

Here, *Mard* (‘man’) is marked ergative (-e), while *Sang* (‘stone’) remains unmarked, showing that animate agents receive overt case-marking more frequently than inanimates (Aissen 2003, 470).

4.2.1.2. DOM and Definiteness

Definite and highly referential objects (O) are more likely to be marked accusative, while indefinite objects often remain unmarked (Bossong 1991, 22).

(23) Taleshi

mard=e dokhtar=a xun.
man-ERG girl-ACC see.PAST

“The man saw the girl.”

mard dokhtar xun.
man.NOM girl see.PAST

“A man saw a girl.” (Lazard 1992, 92)

Here, *dokhtar-a* (‘the girl’) is marked accusative (-a) when definite, while in the second sentence, *dokhtar* (‘a girl’) remains unmarked when indefinite.

Pragmatic and Discourse Effects

DSM and Topicality

Ergative marking in Tati and Taleshi aligns with topicality, as marked agents (A) tend to be discourse-prominent (Haig 2008, 130), i.e., ergative marking is more likely with discourse-prominent subjects.

(24) Taleshi

zan=e ketâb=a xund, mard ham did.
woman-ERG book-ACC read.PAST man.NOM also see.PAST

“The woman read the book, and the man saw (it) too.” (Stilo 2015, 197)

Here, *zan-e* (‘the woman’) is ergative-marked because she is already topical, while *mard* (‘the man’) remains unmarked because he is introduced later (Aissen 2003, 474).

DOM and Information Structure

Accusative marking is more frequent when the object is definite, topical, or highly referential (Lazard 1992, 95).

(25) Kurmanji

min *mal=ê* *dit.*
ISG.OBL house-ACC see.PAST
“I saw the house.”

ez *mal* *dit.*
ISG.NOM house see.PAST
“I saw a house.” (Haig 2018, 301)

In the first case, *mal-ê* (‘the house’) is marked accusative (-ê) due to topicality, while in the second, *mal* (‘a house’) remains unmarked (Bossong 1991, 28).

Summary Table of DSM and DOM Functional Motivations

To summarize the factors influencing DSM and DOM in Tati, Taleshi, and Kurmanji Kurdish, table 4 presents a comparative overview:

Table 4: Functional Motivations for DSM and DOM Across Tati, Taleshi, and Kurmanji

Functional Factor	Tati	Taleshi	Kurmanji
DSM - Animacy	Animate agents receive ergative marking (-e), inanimate subjects remain unmarked.	Same as Tati.	Ergative marking in past-tense transitives, mostly with animate subjects.
DOM - Definiteness	Definite objects marked (-a), indefinite objects unmarked.	Same as Tati.	Accusative (-ê) used for definite objects, indefinite objects unmarked.
DSM - Topicality	Topical agents more likely to be marked (-e).	Same as Tati.	Topical agents retain ergative marking in past-tense.
DOM - Information Structure	Accusative marking more frequent for referential, discourse-salient objects.	Same as Tati.	Accusative (-ê) strongly tied to information structure.

This table provides a clear comparative summary of how animacy, definiteness, and topicality influence DSM and DOM in these languages.

Having reviewed current alignment patterns across Tati, Taleshi, and Kurmanji, we now turn to

their historical development. Section 4.3 examines how contact with Persian, Azerbaijani, Turkish, and Arabic has influenced these systems. Comparative evidence reveals the erosion of ergative structures, emergence of DOM, and shifting agreement patterns. These changes reflect an interaction of internal grammatical evolution and external convergence pressures, reshaping alignment in response to both typological inheritance and language contact.

Historical Developments and Language Contact Effects

The case-marking systems of Tati, Taleshi, and Kurmanji Kurdish have undergone significant transformations through prolonged contact with Persian, Azerbaijani, Turkish, and Arabic. These interactions, along with internal grammatical changes, have reshaped alignment systems, subject/object marking, and verbal agreement. Tati and Taleshi have seen the erosion of ergative alignment, once marked by the agentive suffix -e, under Persian and Azerbaijani influence (Stilo 2015; Lazard 1992). In Kurmanji Kurdish, although split ergativity persists, contact with Turkish and Sorani Kurdish has weakened oblique subject marking and promoted nominative-style agreement (Haig and Matras 2002; Haig 2008). Discourse factors, like agent topicality and fixed word order, have further reinforced these trends (Aissen 2003; Haspelmath 2008).

Influence of Persian and Azerbaijani on Tati and Taleshi

Tati and Taleshi have been in long-term contact with Persian and Azerbaijani, both of which exhibit nominative-accusative alignment.

Alignment shifts reflect typological convergence. Azerbaijani Turkish, a major contact language, uses nominative-accusative alignment and SVO order, with no ergative marking (Johanson 2002). Younger Tati and Taleshi speakers increasingly mirror this structure, eroding ergative -e. This reflects structural convergence beyond bilingualism, reinforced by lexical and syntactic calques (Stilo 2015: 194).

Contact has significantly influenced their case-marking structures, contributing to the gradual erosion of ergativity and increased use of DOM (Lazard 1992, 88; Stilo 2015, 194).

Erosion of Ergative Marking

In past-tense transitive constructions, the traditional Tati ergative suffix -e, as used by older speakers, is increasingly omitted among younger generations, reflecting a shift toward nominative-accusative alignment under the influence of Persian and Azerbaijani.

(26) Traditional Tati

zan=e ketâb=a xund.
 woman-ERG book-ACC read.PAST
 “The woman read the book.” (Stilo 2015, 196)

(27) Younger Speaker Variation (Ergative Dropped)

zan ketâb=a x und.
 woman book-ACC read.PAST
 “The woman read the book.” (Lazard 1992, 93)

This syntactic shift mirrors the diachronic evolution of Persian, which once displayed ergative alignment in similar contexts but has fully transitioned to a nominative-accusative system (Haig 2008, 130; Lazard 1992, 88–95). The convergence illustrates how sustained bilingualism contributes to the erosion of typologically marked structures like ergative case.

Persianization of Object Marking (DOM)

Persian has played a significant role in shaping differential object marking (DOM) in Tati and Taleshi, where accusative marking increasingly correlates with definiteness, closely resembling Persian -râ usage⁴ (Aissen 2003, 470).

(28) Persian

Ali ketâb=râ xând.
 Ali book-ACC read.PAST
 “Ali read the book.” (Comrie 2013, 198)

(29) Taleshi (Definite Object)

mard=e dokhtar=a xun.
 man-ERG girl-ACC see.PAST
 “The man saw the girl.” (Stilo 2015, 199)

(30) Taleshi (Indefinite Object)

mard=e dokhtar xun.
 man-ER girl see.PAST
 “The man saw a girl.” (Stilo 2015, 199)

In both languages, definiteness conditions object marking, definite objects receive overt case marking (-râ in Persian, -a in Taleshi), while indefinite ones do not. This parallel pattern reflects structural convergence driven by sustained contact with Persian

(Bossong 1991, 22; Lazard 1992, 91; Aissen 2003, 470).

Impact of Turkish and Arabic on Kurmanji Kurdish

Kurmanji Kurdish has long been in contact with Turkish and Arabic, leading to notable changes in its morphosyntax. Dialectal studies show signs of convergence in Turkish- and Sorani-influenced Kurmanji varieties, particularly in urban and frontier dialect zones (Öpengin and Haig 2014, 143–176). Turkish has particularly influenced case marking and agreement, while Arabic contact has contributed to lexical and syntactic innovations in certain dialects (Haig 2018, 301).⁵

Weakening of Oblique Case in Past-Tense Transitives

In some dialects of Kurmanji Kurdish, the traditional ergative alignment, marked by oblique subjects in past transitive clauses, is weakening due to prolonged contact with Turkish, which uses a nominative-accusative system (Lazard 1992, 95; Haig 2018, 305).

(31) Traditional Kurmanji

min te dibini.
 1SG.OBL 2SG.DIR see.PAST
 “I saw you.” (Haig and Matras 2002, 98)

(32) Contact-Influenced Variant

ez te dibini.
 1SG.NOM 2SG.DIR see.PAST
 “I saw you.” (Haig 2018, 305)

This shift signals a gradual erosion of ergative case-marking in favor of nominative subjects, especially in urban and Turkish-influenced varieties of Kurmanji (Haig 2008, 130–135).

Influence on Verbal Agreement

Language contact has also affected verbal agreement in Kurmanji Kurdish. Traditionally, object agreement was marked on the verb in past transitive constructions, reflecting ergative alignment (Haig and Matras 2002, 103).

(33) Traditional Kurmanji (Ergative Object Agreement)

4. Recent research has further explored cross-linguistic DOM variation between Persian and Armenian, examining triggering factors that influence object marking strategies (Mirdehghan Farashah, Barzegar, and Azatyan, 2025).

5. In addition to Turkish and Arabic influences, Sorani Kurdish, a predominantly nominative-accusative variety, has also contributed to weakening oblique marking in some Kurmanji dialects (Matras 2010, 114).

min *te* *dibi.*
 1SG.OBL 2SG.DIR see.PAST
"I saw you." (Haig and Matras 2002, 103)

However, some dialects now favor subject-based agreement, aligning more closely with Turkish and Arabic, which use nominative-accusative patterns (Haig 2018, 312; Aissen 2003, 474).

(34) Contact-Influenced Variant (Subject-Based Agreement)

ez *te* *dibinim.*
 1SG.NOM 2SG.DIR see.PRES
"I see you." (Haig 2018, 312)

This shift reflects a reanalysis of agreement roles, particularly among younger or urban speakers, where subject prominence overrides ergative agreement structures, signaling typological convergence.

Summary Table of Historical Changes in Case Marking

Table 5 summarizes key historical and contact-induced changes affecting the alignment and case-marking systems of Tati, Taleshi, and Kurmanji Kurdish.

Table 5: Summary of Case-Marking Changes in Tati, Taleshi, and Kurmanji Kurdish

Feature	Tati	Taleshi	Kurmanji	Degree of Change
Erosion of Ergative Marking	Increasingly omitted (-e) in past transitive clauses	Same as Tati	Oblique case weakening in some dialects	Moderate
Shift Toward Accusative Alignment	Growing use of nominative-accusative patterns	Same as Tati	Reduced ergative marking in contact zones	Significant
Influence on Object Marking (DOM)	Definiteness-driven -a marking (influenced by Persian -râ)	Same pattern	Accusative (-ê) remains, but usage shifts under Turkish/Arabic influence	Moderate
Verbal Agreement Changes	Subject agreement increasingly preferred	Same as Tati	Move from object to subject agreement	Moderate

These patterns illustrate typological convergence under areal pressure from Persian, Azerbaijani, Turkish, and Arabic, especially in regions with high bilingualism. While Tati and Taleshi show parallel trends due to Persian and Azerbaijani contact, Kurmanji Kurdish displays selective restructuring influenced by Turkish and Arabic, especially in verbal agreement and case-marking erosion.

5. Synthesis and Typological Implications

Summary and Comparative Insights

This study has analyzed tripartite-like alignment, differential subject and object marking (DSM and DOM) in Tati, Taleshi, and Kurmanji Kurdish. Our findings emphasize the interaction between morpho-

syntactic alignment, discourse-pragmatic factors, and language contact in shaping these systems.

Tripartite-Like Alignment in Broader Typological Perspective

Although none of the languages display full tripartite alignment, all distinguish S, A, and O under specific conditions:

- Tati and Taleshi exhibit tripartite-like alignment in past-tense transitives: agents marked with ergative -e, objects with accusative -a, and intransitive subjects unmarked.

- Kurmanji employs pronominal distinctions and split alignment, with oblique-marked agents in the past tense and nominative alignment elsewhere.

These patterns parallel developments in other Indo-Iranian languages like Hindi-Urdu and Pashto (Butt 2013, Mohanan 1994).

Interaction of DSM and DOM: Evolutionary Trajectory

DSM applies mainly in past transitive clauses, with agent marking via -e in Tati/Taleshi and oblique forms in Kurmanji. DOM reflects animacy and definiteness hierarchies, with overt marking (e.g., -a, -ê) reserved for specific or topical objects.

This co-marking strategy enables flexible word order by providing morphological cues for argument structure (Aissen 2003, 470).

Functionalist and Cognitive Motivations and the Role of Word Order

Case marking supports processing efficiency and disambiguation while allowing syntactic flexibility (Haspelmath 2008, 32). Selective marking reflects information structure: marked subjects are often non-topical; marked objects are typically definite or prominent.

Trends among younger speakers indicate a reduction in overt marking, suggesting increasing reliance on fixed word order, a shift already seen in Persian and Turkish (Lazard 1992, 102).

Stability and the Role of Language Contact in Change

Contact with Persian and Azerbaijani has driven realignment in Tati and Taleshi; Turkish and Sorani influence have similarly affected Kurmanji:

- Ergative -e is increasingly dropped in Tati/Taleshi; nominative forms are preferred in Kurmanji past tenses (Haig 2018, 301).
- DOM remains stable, possibly due to its typological compatibility with dominant languages (Bossong 1991, 22).

Alignment as a Continuum

Our findings support viewing alignment as a continuum, with these languages occupying transitional zones between ergative and accusative systems. Case-marking strategies are shaped by both internal structures and external influences, highlighting their

fluidity across time.

Comparative Summary of Alignment Shifts

The following table highlights the gradual loss of ergativity vs. retention of DOM in the languages under consideration:

Table 6: Summary of Alignment Trends

Feature	Tati	Taleshi	Kurmanji
Ergative Marking (Past Tense)	Declining (-e dropped)	Same	Retained but weakening
Oblique Case	Historically present	Same	Weakening under contact
Nominative-Accusative Shift	Strong among younger	Strong among younger	Partial shift
DOM (Definite OM)	Retained (-a)	Retained (-a)	Retained (-ê)
Reliance on Word Order	Increasing	Increasing	Some reliance; split remains

Table 6 summarizes these alignment shifts, emphasizing the erosion of ergativity in Tati and Taleshi, and partial retention in Kurmanji.

Implications for Linguistic Typology and Iranian Languages

The case-marking systems of Tati, Taleshi, and Kurmanji Kurdish align with broader typological patterns involving split alignment and differential marking. Cross-linguistic comparisons reveal the following:

- Tripartite-like effects occur selectively, placing these languages between fully tripartite systems (e.g., Nez Perce) and split alignment languages (e.g., Pashto, Balochi). Tati and Taleshi display tripartite marking mainly in past-tense transitives; Kurmanji retains it in pronominal forms. Pashto shows more systematic ergative alignment, especially in verb agreement (Haig 2018, 308).
- DSM and DOM interactions are typologically consistent with Pashto and Balochi, where animate agents receive DSM and definite objects take DOM. In contrast, languages like Basque (ergative) lack DSM, and nominative-accusative systems such as Persian and Mazandarani show no DSM.
- Contact pressures drive realignment: All three

languages exhibit erosion of ergativity and a shift toward nominative-accusative alignment—similar to patterns in Pashto, Balochi, and Hindi-Urdu. Kurmanji's split system resembles Hindi-Urdu and its pronominal alignment mirrors Nez Perce and Warlpiri. Sorani Kurdish further contributes to the weakening of oblique case in Kurmanji (Matras 2010, 114).

- Word-order flexibility correlates with morphological retention: Kurmanji retains case distinctions due to freer word order, while Tati and Taleshi increasingly rely on syntax, paralleling Persian and Turkish trends (Lazard 1992, 127).
- DOM remains stable and typologically resilient, while DSM erodes more rapidly.

These findings reinforce that Tati, Taleshi, and Kurmanji occupy an intermediate zone within a typological continuum: DSM weakens first, DOM persists, and syntactic strategies compensate for morphological reduction.

Historical Perspective on Alignment Change

Alignment systems in Tati, Taleshi, and Kurmanji follow a broader Indo-Iranian trajectory shaped by internal restructuring and external contact. Table 7 summarizes key historical phases:

- Old Iranian (500 BCE): Dominant tripartite and ergative alignment (e.g., Avestan, Old Persian).
- Middle Iranian (200 CE): Emergence of split alignment (e.g., Middle Persian, Parthian).
- Early Modern Iranian (1000 CE): Transition toward nominative-accusative alignment, especially in Persian.
- Present Day: Languages such as Tati, Taleshi, Kurmanji, Pashto, Balochi, and Hindi-Urdu show varying degrees of realignment.

As Table 7 shows, case-marking systems have gradually shifted from ergative and tripartite structures to nominative-accusative alignment. While DSM has weakened, DOM remains stable, underscoring its resilience. These patterns reflect a broader trend of morphological reduction balanced by syntactic adaptation.⁶

6. Each language across these time intervals is rated on a scale from 0 to 5, where: 0= Absent (feature no

Table 7: Alignment Change Over Time

Feature	Old Iranian (500 BCE)	Middle Iranian (200 CE)	Early Modern (1000 CE)	Present Day
Tripartite Alignment	4 (strong)	2 (weak but present in some constructions)	2 (weak)	1 (rare/ surviving)
Ergative Alignment	5 (full)	4 (split)	3 (shrinking)	2 (weak/ disappearing)
Nominative-Accusative	1 (minimal)	2 (growing)	3 (dominant in Persian)	5 (strong)
Differential Subject Marking (DSM)	4 (common)	4 (common)	3 (weakening)	2 (shrinking)
Differential Object Marking (DOM)	2 (minimal)	3 (moderate)	4 (strong)	5 (fully developed)
Word Order Flexibility	5 (high)	4 (moderate)	3 (rigidifying)	2 (fixed SOV in Persian, flexible in Kurmanji/ Tati)

Visualizing Alignment Patterns: Comparative Bar and Radial Charts

To support the analysis of alignment and differential case marking, two visualizations are provided.

Comparative Bar Chart: Cross-Linguistic Alignment Patterns

Figure 1 compares alignment flexibility, DSM/DOM presence, and contact-induced change across Tati, Taleshi, Kurmanji Kurdish, and other Indo-Iranian languages. Key trends include:

- Kurmanji retains the greatest case-marking flexibility, supporting word-order variation.
- Tati and Taleshi show moderate flexibility, with ergative marking eroding under Persian

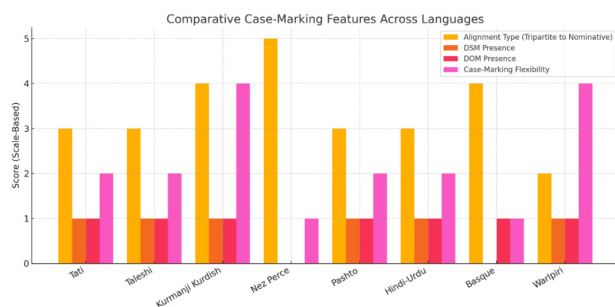
longer present); 1= Rare (only retained in marginal contexts); 2= Weak (survives but significantly eroded); 3= Moderate (still used but undergoing change); 4= Strong (widely present but beginning to weaken); 5= Full (fully grammaticalized and actively used)

and Azerbaijani influence.

- Pashto and Hindi-Urdu reinforce Indo-Iranian split-ergative patterns.
- Younger speakers of Persian-influenced languages increasingly adopt nominative-accusative alignment.

These trends highlight how language contact shapes alignment structures differently across these languages.

Figure 1. Comparative Bar Chart: Alignment Variation



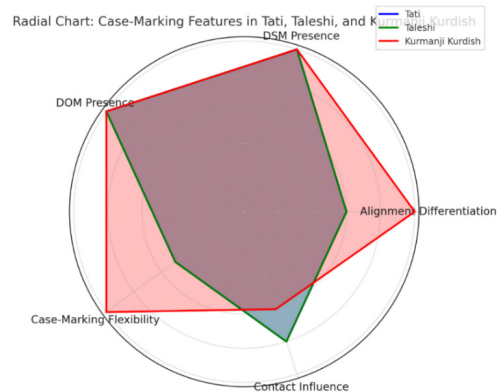
Radial Chart: Case-Marking Profiles

Figure 2 maps key grammatical features shaping alignment systems in these languages, including:

- Tripartite-like alignment in past-tense transitives (Tati, Taleshi) and pronominal forms (Kurmanji).
- DSM in ergative past-tense contexts.
- DOM, sensitive to animacy and definiteness.
- Word-order flexibility, highest in Kurmanji.
- Contact influence, from Persian, Azerbaijani, Turkish, and Arabic.

The chart highlights the overlapping and distinct features of these three languages, visually demonstrating their alignment continuum.

Figure 2. Radial Chart: Case-Marking Features in Tati, Taleshi, and Kurmanji Kurdish



Summary of Visual Data

Figures 1 and 2 visually affirm the study's findings:

- Kurmanji maintains strong morphological distinctions, especially in pronominal ergativity.
- Tati and Taleshi fit within split-ergative Indo-Iranian patterns but show DSM erosion.
- Language contact (Persian, Turkish, Azerbaijani) drives convergence toward nominative-accusative structures.
- DOM remains robust across all languages, unlike DSM, which is increasingly omitted by younger speakers.

These patterns align with historical changes outlined in Section 5.2.1 and Table 7.

Interpretation of Typological Trends

The visualizations align with the historical trajectory outlined in Table 7, confirming that DSM is eroding, DOM remains stable, and case-marking flexibility is gradually giving way to fixed alignment structures.

- The radial and bar charts visually confirm that alignment variation is dynamic, not categorical.
- Kurmanji retains strong morphological distinctions, especially in pronouns, where ergative alignment persists in past-tense transitives.
- Tati and Taleshi reflect Indo-Iranian split-ergative systems, with past-tense agents marked ergatively and DOM applied to definite objects.
- Language contact effects are evident: Persian

contributes to DSM loss, while Turkish and Azerbaijani reinforce accusative alignment, prompting gradual restructuring.

- The weakening of DSM in Tati and Taleshi mirrors changes in other Northwestern Iranian languages influenced by Persian.

Concluding Insights from Visual Analysis

These visualizations confirm that alignment variation is shaped not only by grammatical inheritance but also by discourse-pragmatic factors. This supports the role of information structure in morphosyntactic change.

Alignment should be viewed as a continuum, not as fixed types. Tati, Taleshi, and Kurmanji Kurdish exemplify transitional stages between ergative and accusative alignment, shaped by typological inheritance, contact pressure, and functional adaptation. The findings reaffirm that morphosyntactic restructuring is a dynamic process influenced by both internal grammar and external contact.

Conclusion and Discussion

The research findings clarify the alignment dynamics in Tati, Taleshi, and Kurmanji Kurdish while contributing to the broader debate on how languages balance case-marking strategies with discourse-pragmatic needs and contact-induced pressures.

The following is a summary of the answers to the four research questions addressed in this study, along with references to the corresponding sections where each is discussed.

Q1: Structural and Functional Factors Behind Tripartite-Like Alignment

- Tati and Taleshi exhibit tripartite-like alignment in past-tense transitive clauses, where agents (A) take the ergative marker (-e), objects (O) receive the accusative (-a), and intransitive subjects (S) remain unmarked (§3.2 and 3.3).
- Kurmanji Kurdish follows a split alignment system, where pronominal forms maintain tripartite distinctions (S, A, O), while verbal morphology follows an ergative pattern in past-tense transitive clauses (§3.4).
- Functionally, these case-marking distinctions support argument disambiguation, allowing flexible word order while preserving syntactic clarity (§4.2).

Q2: Interaction of DSM and DOM with Animacy, Definiteness, and Topicality

- DSM occurs in past-tense ergative constructions, where only animate/definite agents receive explicit ergative marking (-e in Tati/Taleshi, oblique forms in Kurmanji) (§2.2 and 3.2–3.4).
- DOM applies selectively to definite/specific objects, ensuring that highly referential arguments receive overt accusative marking (-a in Tati/Taleshi, -ê in Kurmanji) (§2.3, 3.2–3.4).
- DSM and DOM function as an integrated strategy, optimizing case-marking economy and informativeness, following hierarchical effects similar to Indo-Iranian languages (Haspelmath 2008, 32) (§4.2).

Q3: Cross-Linguistic Comparison and Typological Positioning

- Tati, Taleshi, and Kurmanji align with other Northwestern Iranian languages, particularly Pashto and Balochi, where DSM and DOM follow similar discourse-driven patterns (§4.1).
- Kurmanji's split alignment system resembles Indo-Aryan languages like Hindi-Urdu, particularly in its past-tense ergative constructions and verbal agreement (§4.1.1 and 4.1.5).
- Kurmanji's pronominal tripartite system shares similarities with Nez Perce and Warlpiri, reinforcing the idea that alignment is not purely morphosyntactic but also interacts with discourse factors (§4.1.5).
- Overall, these languages exhibit alignment behaviors that blur strict typological boundaries, reinforcing a continuum-based model of alignment rather than a rigid classification (§5.2).

Q4: Historical, Innovative, and Contact-Driven Influences

- The ergative past tense in Tati, Taleshi, and Kurmanji is a remnant of Old Iranian alignment, preserved under discourse and animacy constraints (§2.4 and 4.3).
- Language contact with Persian, Azerbaijani, and Turkish is gradually eroding ergativity, particularly among younger speakers of Tati

and Taleshi, who increasingly omit ergative markers (-e) (§4.3).

- Despite shifts in subject marking, DOM remains stable across all three languages, reinforcing the typological observation that object marking tends to be more resilient than subject marking (§4.3 and 5.2.1).
- Kurmanji's alignment patterns have also been influenced by Turkish, weakening oblique case-marking in certain dialects (§4.3.2).

These findings support typological views of alignment as a continuum rather than a set of rigid categories (Comrie 2013). In line with Aissen (2003) and Haspelmath (2008), the case-marking strategies in Tati, Taleshi, and Kurmanji reflect adaptations to tense, animacy, and discourse prominence. The persistence of ergativity from Old Iranian (Haig 2008) and its erosion under contact (Matras 2010) align with broader contact-induced change (Öpengin and Haig 2014). Despite realignment, DOM remains stable across the languages, as observed by Bossong (1991). This supports a gradient restructuring model shaped by inheritance, discourse, and contact.

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