On the Relationship of Case to Agreement in Split-Ergative Kurmanji and Beyond

Mark Baker and Ümit Atlamaz
Rutgers University
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Abstract: We argue that tense-based split ergativity in Adıyaman Kurmanji (Northern Kurdish) is best accounted for by a theory in which case can be assigned by agreement. In present tense sentences, the subject is in so-called direct case, the object is oblique, and the verb agrees with the subject, whereas in past tense sentences, the subject is oblique, the object is direct, and the verb agrees with the object. We develop a theory in which the agreement-bearing head F is lower than T but higher than v. In past tense, this undergoes cyclic Agree, agreeing downward with the object if there is one, otherwise upward with the subject. In present tense, however, VP is a distinct spell out domain, forcing F always to agree upward with the subject. Either way, F assigns direct case to whatever NP it agrees with, and oblique is assigned to all other arguments. Support for this theory comes from the order of tense and agreement morphemes, from the passive nature of past stems but not present stems, and from the fact that Kurmanji does not distinguish ergative, accusative, and dative cases, but uses a single oblique form for them all. We then contrast our theory with alternatives in which morphological case is assigned first and determines which NP the verb agrees with. Our theory accounts for the fact that related Iranian languages can have the same agreement system as Kurmanji but lack the case system, whereas no known Iranian language has this distinctive case system without the agreement pattern. Finally, we show how our phase-based theory can be adjusted to account for other known case-and-agreement patterns in Iranian languages, while still explaining why some variations seem never to happen.

Keywords: Kurmanji (Kurdish), split ergativity, agreement, case assignment, phases, v head, Iranian languages

1. Introduction

1.1 The core data

The Kurmanji (Northern Kurdish) language of Southeastern Turkey presents a very interesting kind of split ergativity, as illustrated in examples (1)-(4), taken from the dialect of Adıyaman (AK)—a dialect that is like the so-called standard or literary variety (Thackston 2006) in all relevant respects. In present tense sentences, the subject is in unmarked case, the object (if any) bears a marked case, and the verb shows full person and number agreement with the subject, as shown in (1) and (2).

(1) Ez di-rv-im-e. (Present tense, intransitive)
I.DIR IMPF-run.PRES-1SG-PRES.COP
‘I am running.’

1 [Acknowledgements omitted for now]

2 Abbreviations used in this paper include: 1, first person; 2, second person; 3, third person; ABS, absolutive; ACC, accusative; AK, Adıyaman Kurmanji; B&V, Baker and Vinokurova (2010); CL, clitic; COP, copula; DIR, direct; DK, Diyarbakır Kurmanji; ERG, ergative; EZ, ezafe marker; IE, Indo-European; IMPF, imperfective; MK, Muş Kurmanji; NOM, nominative; NOML, nominalizer; OBL, oblique case; PART, participle; PAST, past tense; PERF, perfective; PL, plural; PN, proper noun; PRES, present; PTPL, participle; SG, singular; SK, standard Kurmanji; SUBJN, subjunctive.
In contrast, past tense sentences are ergative, in the sense that subjects of transitive clauses bear a marked case, while both objects of transitive clauses and subjects of intransitive clauses have unmarked case. The verb shows full person-number agreement with the object if the clause is transitive; otherwise it agrees with the subject. This is seen in (3) and (4). The verb ‘run’ in (3) happens to be unergative, but unaccusatives show the same surface case and agreement patterns.

(3)  a. Ez  rvi-m.  (Past tense, intransitive)
    I.DIR  run.PAST-1SG
    ‘I ran.’

    b. Tı  rvi-yi
    You.DIR  run.PAST-2SG
    ‘You ran.’

    c. Hew  rvi-Ø
    He.DIR  run.PAST-3SG
    ‘He ran.’

(4) a. Mı  tı  di-yi.  (Past tense, transitive)
    I.OBL  you.DIR  see.PAST-2SG
    ‘I saw you.’

    b. Te  ez  di-m.
    You.OBL  I.DIR  see.PAST-1SG
    ‘You(sg) saw me.’

    c. Te  em  di-n.
    You.OBL  we.DIR  see.PAST-PL
    ‘You(sg) saw us.’

Notice that the agreement suffixes used in the present and past tenses are essentially the same (-m 1.SG, -e/i 2.SG, -Ø/e 3.SG, -n PL), except for a small difference in the third person singular form.

1.2 The interest of the core data

These data are of potential theoretical interest for several reasons. First, the phenomenon of split ergativity is intrinsically interesting, and we do not yet know as much as we should like about what conditions it and why. Kurmanji is a relevant language to consider in this regard, alongside better-known
languages like Hindi, Georgian, Basque, various Mayan languages, and so on (see Coon and Preminger 2012 for an overview and general proposal).

Second, Kurmanji’s specific brand of split ergativity makes it very clear that case and agreement are deeply intertwined in this language. Split ergativity means (by definition) that case patterns vary across clause types: they are different in past tense clauses and present tense clauses. Now in Kurmanji, the agreement pattern also varies across clause types. Moreover, case and agreement clearly covary: in all clause types, the verb agrees with the unmarked NP, even though which NP (the subject or the object) is unmarked varies. Therefore Kurmanji is a language in which case and agreement are closely related in some way—unlike, say, Georgian or Warlpiri or Burushaski, where case and agreement operate independently. It is a language, then, from which we might realistically hope to learn something about the nature of the theoretical relationship between case and agreement. In particular, we might learn whether agreement determines which NP has unmarked case, as in Chomsky (2000, 2001) and related work, or whether agreement responds to which NP has unmarked case, as in Bobaljik (2008), Preminger (2011), and related work. If one of these views gives us a better explanation for how and why case and agreement covary with the tense-aspect of the clause, then we will have a reason to prefer that theory.

Third, Kurmanji is interesting and unusual in that the marked case on the transitive subject in past clauses—what might be called ergative—is systematically identical to the marked case on the object in present tense clauses—what might otherwise be called accusative. This can be seen for certain pronouns in (1)-(4): (5) gives a complete set of pronoun forms.

(5) Case forms of pronouns:

<table>
<thead>
<tr>
<th>Features</th>
<th>1sg</th>
<th>2sg</th>
<th>3sg</th>
<th>1pl</th>
<th>2pl</th>
<th>3pl</th>
</tr>
</thead>
<tbody>
<tr>
<td>“NOM”</td>
<td>Ez</td>
<td>Tı</td>
<td>Hew</td>
<td>Em</td>
<td>Un</td>
<td>Hewno</td>
</tr>
<tr>
<td>“ERG” = “ACC”</td>
<td>Mı</td>
<td>Te</td>
<td>Wi/we</td>
<td>Me</td>
<td>We</td>
<td>Wono</td>
</tr>
</tbody>
</table>

(6) shows that it is also true for a nonpronominal NP, which bears the regular case suffix –ê.

(6)  

a. Ez Eşxan-ê di-vun-im-e
   I.DIR Eşxan-OBL IMPF-see.PRES-1SG-PRES.COP
   ‘I am seeing Eşxan.’

b. Eşxan-ê ez di-m.
   Eşxan-OBL I.DIR saw.PAST-1SG
   ‘Eşxan saw me.’

The AK dialect also has some common nouns that have irregular inflection. For example, the unmarked form of ‘boy’ is lawık and the marked form is lêwık, with an ablaut-style stem change. This same irregular form is also used as both the object of a present clause and the subject of a past clause, as shown in (7).

(7)  

a. Eşxan lêwık di-vun-ê.
   Eşxan.DIR boy.OBL IMPF-see.PRES-3SG-PRES.COP
   ‘Eşxan sees the boy.’

b. Lêwık Eşxan di.
   Boy.OBL Eşxan.DIR see.PAST.3SG

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3 In this paper, we use “NP” as a cover term for any maximal nominal expression, whether NP, DP or other. We leave open which nominals in Kurmanji (and other Iranian languages) project to the DP level, noting that the language does allow bare-looking NPs, as in (7), and does not have articles—hence our mild preference for NP. However, this is in no way crucial to our analysis (and we assume (tentatively) that nominals containing a possessor and an ezafe marker are in fact DPs, where D theta-marks the possessor).
‘The boy saw Eşxan.’

The identity of “ergative” and “accusative” is thus a pervasive pattern in Kurmanji, transcending the distribution of one or two individual morphemes. This suggests that it is more than just suppletion at PF.\(^4\)

Split ergativity in Kurmanji and some nearby Iranian languages seems quite different in this respect from the otherwise-similar ergativity splits found in languages like Georgian and Hindi, where unmarked nominative/absolutive case has a distribution similar to unmarked case in Kurmanji, but the “ergative” case on transitive past tense subjects is morphologically quite different from the “accusative” case on (some) objects (\textit{ne vs ko} in Hindi; \textit{-m(a) vs \textasciitilde s} in Georgian) (see, for example, Harris (1981) and Butt and Deo (2001/2005)). This raises the possibility “ergative” and “accusative” really are the same case in the syntax of Kurmanji, and how that is possible could tell us something about the mechanisms of case assignment. The traditional term for what we have been calling “unmarked case” in Iranian linguistics is \textit{direct} case, and the traditional term for “marked case” is \textit{oblique} case; we use those terms from here on. This distinctive feature of the split system is summarized in tabular form in (8).

\begin{table}[h]
\centering
\begin{tabular}{|c|c|}
\hline
 & Transitive Subject & Direct Object \\
\hline
Present clauses & Direct case; Verb agrees with it & Oblique case; Verb does not agree with it \\
\hline
Past clauses & Oblique case; Verb does not agree with it (in person) & Direct case; Verb agrees with it. \\
\hline
\end{tabular}
\caption{(8)}
\end{table}

Note that the transitive subject in present tense is coded just like the direct object in past tense, and the transitive subject in past tense is coded just like the direct object in present tense, for both case and agreement. We refer to this distinctive pattern as the crossed system of case, and the crossed system of agreement—especially in section 3 when we compare Kurmanji with other Iranian languages.

1.3 Theoretical background

The crossed case-and-agreement pattern in Kurmanji is not unknown to generative research. Previous analyses in generative terms include Dorleijn (1996) and Karimi (2013). In one way, our analysis will have much in common with theirs, in that like them we claim that there is something defective about the past stems in Kurmanji, a residue of their origins as passive-like participles in Old Iranian (see Haig (2008), among others). In particular, we claim that \textit{v} in clause structures with past stems is not a phase head, whereas \textit{v} with present stems is a phase head, as usual. This drives the case-and-agreement differences, a view we inherit from Karimi (2013). (See also Karimi (2010).) Dorleijn’s work precedes the theoretical notion of a phase, but her driving intuition has similarities; for her, the past stem is defective in not assigning accusative case. This also plays a role in Karimi’s analyses.)

Our deployment of this idea will be significantly different, however. In part, this is because our theoretical interest in these data is slightly different: we focus on the relationship between case and agreement, whereas Karimi’s focus is on some special restrictions on agreement that are typical of Central Kurdish (Sorani) but not Northern Kurdish/Kurmanji. In particular, we are interested not only in the

\(^4\) Yet another complication in some dialects is the fact that oblique marking interacts with gender marking in certain ways. For example, although the affix \textit{-\textasciitilde e} marks oblique on both masculine and feminine singular nouns in AK, in the standard variety and in Muş, \textit{-\textasciitilde e} is found only on feminine nouns, whereas singular masculine nouns are zero-marked in the oblique. The important point for us is that this additional wrinkle holds equally for oblique case used as ergative and for oblique case used as accusative, showing again that those are deeply the same. Additional case-sensitive morphemes are found in nominals that are modified in various ways (e.g., the ezafe marker in (16)) and those too seem not to distinguish ergative from accusative. However, these morphemes vary some across dialects, and we have not worked out all the forms for AK yet.
crossed agreement pattern (as Karimi is) but also in the crossed case pattern, the fact that “ergative” in past sentences (which Karimi calls “dative”) is identical to “accusative” in present tense sentences in Kurmanji. For Karimi, this is an accidental homophony: “dative” is inherent case assigned by v in past clauses, whereas “accusative” is structural case assigned by v in present tense clauses. The fact that they are systematically homophonous is an accident of morphology/history on his view. We aspire to capture this in a more principled way, and learn something about case and agreement by doing so.

As background, we invoke Marantz’s (1991) four-way distinction among cases, which will give us the terms we need to distinguish the various kinds of case at work in Kurmanji and other Iranian languages. Marantz distinguishes lexical, dependent, unmarked, and default case, as follows:5

\[(9)\] Marantz’s case realization disjunctive hierarchy: (p. 24)
\[
\begin{align*}
\text{a. Lexically governed case} & \quad \text{i.e., case determined by the lexical properties of a particular item, such as quirky case assigning verbs in Icelandic, or adpositions in many languages}. \\
\text{b. ‘Dependent’ case} & \quad \text{accusative case and ergative case} \\
\text{c. Unmarked case} & \quad \text{e.g., nominative or absolutive case assigned to any NP in a clause; genitive case assigned to any NP inside an NP/DP} \\
\text{d. Default case} & \quad \text{assigned to any NP whatsoever not otherwise marked for case}
\end{align*}
\]

What this already rather rich typology of case does not include is case assigned to an NP by a functional head that agrees with it—the principal kind of structural case assignment according to Chomsky (2000, 2001). Our analysis adopts Marantz’s distinctions, but also makes room for agreement-assigned case. In particular, we locate it on the hierarchy after the assignment of dependent case, but before unmarked case:

\[(10)\] Expanded case realization disjunctive hierarchy:
\[
\begin{align*}
\text{a. Lexically governed case} \\
\text{b. Dependent case (accusative case and ergative case)} \\
\text{c. Agreement-assigned case} \\
\text{d. Unmarked case (e.g., nominative in clauses, genitive in NPs)} \\
\text{e. Default case}
\end{align*}
\]

In this respect, our analysis will be syncretic, combbing the best elements of Marantz’s agreement-free case theory with a dose of Chomsky’s agreement-driven case theory.6 Most crucial for Kurmanji itself is the relationship between (10c-e): we claim that direct case on arguments is agreement-assigned case ((10c)), whereas oblique case is unmarked case in the sense of (10d). (10a) plays a minor role in Kurmanji, for a small number of experiencer predicates. (10b) plays no essential role in AK, but does play a role in some related languages and dialects which we extend the discussion to in section 3. Our conclusion will be that we should not eliminate from UG the idea that functional heads can assign case to the NPs they agree with, as has been recently proposed by Bobaljik (2008), Levin and Preminger (in press), etc., but rather we should embed it in this fuller theoretical context.

To give the reader an overview of how these pieces fit together, we outline our account of Kurmanji’s crossed case and agreement system from the beginning, as in (11).

\[(11)\]
\[
\begin{align*}
\text{a. } v_{\text{pres}} \text{ in Kurmanji is strong phase head, but } v_{\text{past}} \text{ is not.} \\
\text{b. The agreeing head F is lower than T but higher than } v—\text{i.e. lower than in (say) English.} \\
\text{c. As a result, in past clauses F can see the object and agree with it if there is one; otherwise}
\end{align*}
\]

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5 See Preminger (in press) for an interesting way of deriving this case hierarchy from how a syntactic derivation is constructed. He does not discuss the difference between unmarked case and default case, however, and denies a role for agreement-assigned case.

6 For other efforts to combine the two, based on data from other languages, see Baker and Vinokurova (2010) on Sakha (Yakut) and Baker’s (in press) broad typological study of case marking.
it agrees with the subject (Cyclic Agree); in present clauses, F never sees the object by the PIC and thus always agrees with the subject.

d. F assigns direct case to the NP it agrees with ((10c)).

e. Otherwise, all NPs in argument position when TP or VP is spelled out are assigned oblique case (unmarked case, (10d)).

f. Otherwise, NPs receive default case ((10e); alternatively, they remain radically caseless).

In section 2, we go through the claims in (11) one by one, fleshing them out, presenting independent evidence for them, and showing how they work together to derive the patterns in (1)-(7). Then in section 3, we compare our proposal with alternatives that eschew the idea that agreeing functional heads assign case, taking the case pattern to be primary and deriving the crossed agreement pattern from that (section 3.1). This comparison leads us to face some microparametric issues, since there is significant diversity in Iranian languages, such that one set of assumptions might seem better for one variety and a quite different set of assumptions seems better for another. We make a case that the agreement-driven approach in (11) is supported by the microparametric variation we find in this family. First, the agreement-driven approach predicts that the Kurmanji pattern of crossed agreement could survive in languages that have lost the crossed case marking pattern, and this is confirmed by Central Kurdish languages (Sorani and Hawrami (section 3.1). Finally, we consider what happens to the core Iranian system when a dose of dependent case marking creeps into it (cf. (10b)). We show that the typologically rare pattern of double oblique clauses in the dialect of Kurmanji spoken in Mus and some of the Tatic varieties spoken near the Caspian Sea can be accounted for in these terms. Although these varieties are more complex than AK is in using the full resources of (10), they can be accommodated into our phase-based system, and our overall theory still makes substantive predictions about alignment patterns that can never happen in an Iranian language—predictions not obviously made by alternative approaches.

2. Agreement-Driven Split Ergativity in Standard Kurmanji

2.1 Getting to the bottom of past versus present clauses in Kurmanji

We begin with developing (11a), the claim that the fundamental difference between clauses with past and present verb stems which drives the split ergative pattern in Kurmanji is in the phasal status of the v node. Similar to Karimi’s (2010, 2013) analysis of Central and Northern Kurdish, we claim that the v of present clauses is a strong phase head, whereas the v of past clauses is not. In our version, this difference then influences what a functional head F can agree with by the Phase Impenetrability Condition (PIC). That in turn influences what NP F assigns direct case to, and thus what NPs are left to get oblique case.

At first, it may seem unlikely that the crucial difference between past and present clauses is located in v, rather than in T or other TAM-related functional heads like Aspect, Mood, etc. But in fact, this fits the details of verb morphology in Kurmanji (and other Iranian languages) very well. “Past” versus “present” in Iranian languages is not so much a semantic distinction involving time reference as it is a formal-morphological distinction centered on what version of the verb stem is used. Haig (2008: 10) makes this very clear in his overview of alignment in Iranian languages. He writes: “For the time being, it needs to be emphasized that ergative, or more generally non-accusative, alignments in Iranian languages are always associated with the past stems of transitive verbs. Now, past stems are generally also associated with the semantic notions of pastness and perfectivity, while present tenses are generally associated with present and future meanings. But in some languages, the expected correlations do not always hold. Yet crucially, the link between ergative alignment and past stem continues to obtain, even when the semantics do not match up.” He goes on to give examples from three varieties that have “imperfect” tenses that are based on the present stem, refer to eventualities in the past, and govern accusative rather than non-accusative alignment.
Haig’s observation about what conditions non-nominative/accusative case and agreement is certainly valid for Kurmanji. Inflected verbs in Kurmanji can consist of at least four morphemes: an aspect-mood prefix (imperfective di-, subjunctive bi-), a verb stem (past or present), an agreement suffix, and a copular suffix historically related to the verb ‘be’ (present -e, past -u). (12) gives the major forms for AK; see also Thackston (2006).

(12) a. di-her-im  IMPF-go-1SG  ‘I go’ (simple present)
b. di-her-im-e  IMPF-go-1SG-COP.PRES  ‘I am going’ (present continuous)
c. çü-m  went-1SG  ‘I went’ (simple past)
d. di-çü-m  IMPF-went-1SG  ‘I was going; I used to go’ (past imperfective)
e. çü-m-e  went-1SG-COP.PRES  ‘I have gone’ (present perfect)
f. çü-vu-m  went-be.PAST-1SG  ‘I had gone’ (past perfect)
g. bi-k-im  SUBJN-do-1SG  ‘for me to do [it]’ (present subjunctive)

Given these various tense-aspect components, it is clear and striking that it is the innermost one, the verb stem, that determines whether case and agreement are ergative or not. For example, the imperfective prefix di- can go on a present stem to give simple present (habitual) or on a past stem to give past imperfective. If the stem is past, the subject is oblique; if it is present, the subject is direct. Aspect per se (presence or absence of di-) has no influence on this.

(13) a. Ez  di-k-im.
    I.DIR  IMPF-do.PRES-1SG
    ‘I do (it).’

b. M1  di-kur.
    I.OBL  IMPF-do.PAST(3SG)
    ‘I was doing it, used to do (it).’

Kurmanji is different in this way from Hindi and other languages in which perfective versus imperfective is the primary factor conditioning split ergativity. Similarly, the subjunctive prefix bi- can attach to a present stem to give a present subjunctive (used in embedded clauses) or to a past stem to give a past subjunctive (used only in conditionals). The former clause type is accusative, and the latter is ergative.

(14) a. Ez  bi-k-im.
    I.DIR  SUBJN-do.PRES-1SG
    ‘… that I do (it).’

b. M1  bi-kur-u
    I.OBL  SUBJN-do.PAST-COP.PAST.3SG
    ‘If I had done (it)…’

Finally, the present tense copular suffix -e can go on a present stem to give a present progressive (in AK only), or on a past stem to give present perfect. The first is an accusative clause; the latter an ergative one.

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7 Kurmanji also has a future tense, but it is periphrastic, consisting of the verb/particle (d)e plus the present subjunctive verb form (Thackston 2006:42). Like the present subjunctive, case and agreement in future clauses follow an accusative pattern. See also the limited past subjunctive in (14b) and Thackston (2006:61) for a past conditional tense, which is also based on the past stem and triggers ergative patterns.

8 We switch verbs in (12g) because the subjunctive form of the verb ‘to go’ happens to be irregular (her-in), and does not have the overt subjunctive marker ‘bi-’ that is visible on most other verbs.
Sometimes the past stem is the present, and could realize the thematic agent as a genitive clitic. Accusative objects, could be predicated of theme subjects, to say why v.PAST in Kurmanji should have this unusual connection with the active or acc. language, but these participles co-occur before the speech time or not (his answer: yes and no). For Dorleijn (1996:103-113), there are several bits of evidence that this is true synchronically in Kurmanji (as well as historically; see Haig (2008: Ch 2), Windfuhr (2009: 31-32), Karimi (2010:702-703), and references cited there). First, in addition to the finite verb forms in (12),

Clearly, then, it is the verb stem that determines the ergativity of the clause in Kurmanji, not any higher tense-mood-aspect head. This might be a bit surprising, since in other languages we are used to thinking of split ergativity as being governed by aspect (perfective versus imperfective), which might well be housed in a higher functional head (Asp or T). But the clearest aspectual distinction in Kurmanji is di-imperfective versus O- perfective (Gündoğdu, 2011), and this category is independent of ergativity. In contrast, (11a) says that the crucial factor is whether VP is a spell out domain or not, and this should be determined low in the functional structure of the clause, by whether the v that selects VP is a phase head or not. So some combination of v+V should be the determining factor on this view. And that is what we say that the present and past stems are: combinations of v+V. Note that the morphology of past stems versus present stems is quite irregular in Kurmanji. Sometimes the past stem is the present stem plus the vowel –i (burr vs. burri ‘cut’), sometimes the past stem is the present plus an extra consonant (e.g. –t, biz vs. bist ‘hear’); sometimes the two stems form a suppletive pair (e.g., her vs. cü ‘go’ in (10)). So these stems are not readily decomposed into morphemes that we can study separately. But this is not unexpected for v-V combinations, which often do not have a clear morpheme for v as opposed to V.

We can take this a step further, to say why v.PAST in Kurmanji should have this unusual property. The reason, we claim, is that the past stem in Kurmanji is intrinsically passive, whereas the present stem is not, following Dorleijn (1996:103-113). There are several bits of evidence that this is true synchronically in Kurmanji (as well as historically; see Haig (2008: Ch 2), Windfuhr (2009: 31-32), Karimi (2010:702-703), and references cited there). First, in addition to the finite verb forms in (12),

9 Note that the verb stem also apparently contributes heavily to the primary tense interpretation of an eventuality as occurring before the speech time or not. It is not clear exactly how this happens. An anonymous reviewer says that it is theoretically impossible for true tense interpretation to be attributed to a head as low as v. We are not sure whether that is true apart from specific theoretical assumptions, but in any case it is not our purpose here to give a compositional analysis of the tense-aspect semantics of Kurmanji clauses (a challenging enterprise, no doubt). We assume for concreteness that T is present anyway, although it has little overt expression apart from conditioning the form of the copular suffix to -e or -u. Thus, T can still play a role in the compositional semantics of the clause.

10 In this respect, our proposal for Kurmanji has a point of similarity with Ura’s (2000: 219) approach to aspect-based split ergativity, in that what is crucial is the lexical properties of the v node. Ura’s version, however, does not draw any direct connection with the active or passive nature of v, and he suggests that ultimately it is the Aspect node that determines which sort of v is used. This complication is neither necessary nor appropriate for Kurmanji.

11 Dorleijn’s (1996) use of this idea is quite different from ours, however. For Dorleijn, the past stem fails to assign accusative case, and this triggers ergativity within the theory of Bok-Bennema (1991). Her proposals for how case and agreement actually work in ergative clauses are somewhat idiosyncratic, however.

12 In broad terms, a diachronic relationship between passive-perfect participles and ergative clause structures can be discerned in many languages, including the nearby Indo-Aryan languages. We leave open, however, whether or not this historical source always works out in the same way within synchronic grammar. See Butt and Deo (2001/2005) for some remarks on the historical situation in Indo-Aryan. Haig (2008) argues that past stem verbs in middle Iranian and the modern Iranian languages come from resultative participles in Old Iranian (OI). OI was an accusative language, but these participles could not have accusative objects, could be predicated of theme subjects, and could realize the thematic agent as a genitive clitic. Haig discusses in detail whether the relevant OI construction was really a passive construction or not (his answer: yes and no), but it was certainly a type of nonactive. The old past tense of OI was then lost, the participial nonactive construction became the only way of expressing past tense, richer case distinctions eroded into a single oblique form, and the Iranian family was on its way to where it is now.
Kurmanji has a participle made out of the past stem plus the suffix -i. This can be used as an adjective, for example to modify a noun. The participle in (16b) is syntactically parallel to the adjective in (16a).  

\begin{enumerate}
\item[(16)]
\begin{enumerate}
\item beq-ê kesk
  \begin{flushright}
  \textit{frog-EZ green ‘(the) green frog’}
  \end{flushright}
\item beq-ê kuşt-i
  \begin{flushright}
  \textit{frog-EZ kill.PAST-PART ‘the killed frog’ (the frog is dead, passive interpretation)}
  \end{flushright}
\end{enumerate}
\begin{flushright}
\textit{Not: ‘the frog which killed x’ (active interpretation)}
\end{flushright}
\end{enumerate}

Now this participle form is clearly a \textit{passive} participle, in the sense that the modified noun must be the internal argument of the verb form—its theme, not its agent. This can be seen in the only possible interpretation of (16b). To express an active meaning like ‘the frog that killed’ the complementizer \textit{ki ‘that’} must precede the participial verb form; we take this to be a full relative clause \textit{CP} containing higher functional heads, hence a less pure manifestation of a simple verb phrase with a past stem. Thus when we look at a syntactically smaller construction, we see that the participle built from the past stem in Kurmanji is like a passive/past participle in English \textit{(a murdered man)} and not like an active/present participle \textit{(an eating man)}. In contrast, there is no participle form based on the present stem in Kurmanji, so there is no similar reason to say that the present stem is passive-like.

The past stem but not the present stem is also used in nominalizations in Kurmanji. These are formed by attaching the affix –\textit{in} to the past root, as seen in (17).

\begin{enumerate}
\item[(17)] kuşt-in-a beq-ê né rmd-e.
  \begin{flushright}
  \textit{kill-NOML-EZ frog-OBL not good-COP.PRES ‘To kill (the) frog is not good.’ (Lit: The frog’s killing is not good)}
  \end{flushright}
\begin{flushright}
\textit{Not: ‘For the frog to kill is not good.’}
\end{flushright}
\end{enumerate}

These nominalizations are also intrinsically passive in that they allow the theme argument of the verb root to be expressed like a possessor in the larger nominal, but they do not allow an agent argument to be expressed. Hence ‘the killing of the frog’ in (17) means that the frog is killed, not that the frog has killed something. (In contrast, English nominalizations can be ambiguous between active and passive readings; see Grimshaw (1990).) Again, we have evidence that the past stem is passive-like, whereas there is no evidence of this for the present stem.

One further construction to mention in this connection is Kurmanji’s quasi-passive construction, used when the subject is not important or is unknown. It is constructed by using the nominalized form of the transitive verb together with the verb ‘come’, the nominalization acting like a (directional) complement of ‘come’ and the theme argument realized as its subject.

\begin{enumerate}
\item[(18)] Xanî hat firot-in-ê.
  \begin{flushright}
  \textit{house.DIR came sell-NOML-OBL ‘The house was sold.’ (Lit: ‘The house came to selling.’)}
  \end{flushright}
\end{enumerate}

So the nominalization is a crucial ingredient in Kurmanji’s version of a periphrastic passive, and the past stem (not the present stem) is a crucial element of the nominalization. This is another indication that the past stem is passive in nature.  

\begin{flushnote}
\textsuperscript{13} The morpheme glossed EZ in these examples is the so-called \textit{ezafè} marker, which comes between a noun and its modifier or possessor, a famous property of Iranian languages. See Samiiian (1994), Ghomeshi (1997), Larson and Yamakido (2008), and Karimi (2007) for discussion, among others.
\end{flushnote}
So what? The relevance of this for our overall interests comes from Chomsky’s (2000, 2001) assertion that active v is a strong phase head but passive v is not. This then helps to ground our hypothesis, given that we say that the past stem is a conflation of a passive v and the V root, whereas the present stem is a conflation of an active v and the V root.\textsuperscript{15} For purposes of this work, we adopt the strong and orthodox view about the phasehood of v stated in (19).\textsuperscript{16}

\begin{equation}
(\text{19}) \quad \text{v is a strong phase head if and only if it theta-marks a specifier in SpecvP}
\end{equation}

Further support for (19) in the Iranian context comes from the behavior of a small number of dyadic nonagentive verbs in some Kurdish varieties, following an argument of Karimi’s (2010, 2013) (we thank an anonymous reviewer for pointing this out to us). AK does not (as far as we know) have the relevant clause type, but Sorani does, and so does the conservative Bādīnānī dialect of Northern Kurdish spoken in Iran, according to Haig (2008: 257-262).\textsuperscript{17} This dialect has a range of nonagentive dyadic verbs with experiencer or possessor subjects, including verbs that mean ‘have’, ‘catch sight of’, ‘feel sorry for’, ‘overhear’, ‘want’, and ‘need’. What is interesting about these verbs is that they have even in the present tense the same “ergative” case-and-agreement pattern that agentive verbs have only in the past tense: the experiencer subject has oblique case, the theme (stimulus) argument has direct case, and the verb agrees with the stimulus argument, as shown in (20).

\begin{align}
(\text{20}) & \quad \text{a.} \quad \text{Ana} \quad \text{harp} \quad \text{na-vē-n.} \quad (\text{Haig, 2008:260}) \\
& \quad \text{1PL:OBL horse:PL NEG-be.necessary:PRES-3PL} \\
& \quad \text{‘We do not want horses.’} \\
& \quad \text{b.} \quad \text{Ta} \quad \text{az} \quad \text{na-vē-m.} \quad (\text{Haig, 2008:261}) \\
& \quad \text{2s:OBL 1S NEG-be.necessary:PRES-1S} \\
& \quad \text{‘You do not want me.’}
\end{align}

Given that these verbs are nonagentive, it is reasonable to assume that the v of these verbs does not assign a thematic role, even in the present; rather, the two arguments of this verb are assigned inside VP, like the goal and the theme arguments of a ‘give’-type verb (see Karimi 2013:71, 73). (This is a common view for psych verbs in many languages: see e.g. Belletti and Rizzi (1988), and, for a more recent version, Baker to appear.) On this proposal, the rough clause structure of (20) would be \[\text{TP T … [vP v [VP we [horses want ...]]]}\]. Then if the special “ergative” case and agreement pattern does indeed come from there being two arguments in the clause and no vP-level phase boundary, we should be able to explain why past clauses and present clauses of psych verbs pattern the same in terms of (19). Other clause types that we expect not to have a phase boundary even in present clauses are ones with unaccusative and passive verbs. This does not have many observable consequences for AK because the language has no morphological passive and unaccusatives have only one NP involved in case and agreement, but see (57) below from Hawrami. Examples like (20) also show in a slightly different way that case and agreement are closely

\textsuperscript{14}Dorleijn (1996:107-108) shows that the nominalization based on the past tense root is also used as a complement of \textit{dan} ‘give’ to form a periphrastic causative construction. It has a passive quality in this context, too.

\textsuperscript{15}We note that it seems common to associate passive voice value with past tense value and active voice value with present tense value, at least in IE languages, although we do not know exactly why this is so.

\textsuperscript{16}On this point, we differ from the related proposal of Karimi (2010). Karimi claims that v.PAST in (Central) Kurdish does theta-mark its specifier, but it is not a phase head because it lacks its own phi-features (and hence cannot assign accusative case to the object). Karimi’s idea is further from Chomsky’s (2000, 2001) in this respect.

\textsuperscript{17}This dialect thus gives us the opportunity to answer a question posed by an anonymous reviewer, which would not be answerable in AK alone.
related in Kurmanji, since the special situations in which the verb can agree with the object in a present tense clause are also the special situations in which the object of a present tense clause has direct case.\footnote{Karimi (2010, 2013) gives a third argument that v\textsubscript{PRES} is a phase head and v\textsubscript{PAST} is not, based on the fact that present tense clauses have “accusative” (oblique) case objects in Hawrami and Mukriyâni, but past tense clauses do not. See (55) for our analysis of this fact, which is also in terms of phases, but does not depend on v\textsubscript{PRES} having phi-features—an unobservable property in Kurdish, which Karimi assumes for theoretical reasons, following Chomsky.}

Returning to clauses with past verb stems, it is notable that whereas the passive nature of the past stem shows up when it is used apart from the functional superstructure of a clause, in participles and nominalizations, simple clauses with a past stem verb are clearly not passive. All observers of Kurmanji agree that the ergative subject c-commands and can bind the direct object in a past clause in Kurmanji, just as the nominative subject c-commands the direct object in a present clause as shown by phenomena like reflexive binding and quantifier scope (see Haig 1998, 2008: 215-223, Dorleijn 1996:85-89, Gündoğdu 2011, and Atlamaz 2012). So although the vP is passive, the clause as a whole is not. Something very similar to this holds in English, French, and other Western IE languages: participles that are intrinsically passive in isolation ((21a)) are used in active clauses if and only if they appear with the transitive auxiliary have ((21b)). Have contrasts with be, in that if be is used the clause is passive ((21c)).

(21) a. A well-written book; Written so quickly, the book contained many unclear sections.
   b. John has written the book.
   c. The book was written (by John).

We claim that Kurmanji is the same, except that the transitive auxiliary that does the work of have in (21b) is phonologically null in Kurmanji. Given this, the structure of past and present clauses is approximately as in (22).\footnote{This is similar in a sense to Karimi’s (2013) view that v\textsubscript{PAST} in Sorani does not assign an agent theta role, but that role is assigned by a separate head, which he equates with APPL (applicative). Karimi assumes this only for Central Kurdish, however; for Northern Kurdish (Kurmanji) he assumes that even v\textsubscript{PAST} assigns an external theta-role. This pushes him to a less-standard view of what makes v a phase head, based not on thematic properties (see (19)) but rather on having phi-features (see also Karimi 2010: 706).} (Here we ignore the possibility of aspect heads (e.g. di-) and other TAM functional heads, since these are not involved in theta-marking, agreement or case marking.)

(22) a. \[TP [AuxP Eşxan \emptyset\textsubscript{have} [\langle vPAST \ [vP me see ]\rangle]] \] (Past)
   b. \[TP [vP Eşxan v\textsubscript{PRES} (+phase) [vP me see ]]\] (Present)

Since v\textsubscript{PAST} is passive, it is not a strong phase head, so its complement is not spelled out. In contrast, v\textsubscript{PRES} is active (if it theta-marks a subject), so it is a strong phase head, and its complement is a spelled out domain, invisible to elements higher in the structure. The present stem is a conflation of V+ v\textsubscript{PRES}; the past stem is a conflation of V+ v\textsubscript{PAST}. The upshot of this is that there is a phase boundary internal to the clause in active present sentences but not in past sentences in Kurmanji.\footnote{We also tentatively assume that the null auxiliary \emptyset\textsubscript{have} is not a phase head in Kurmanji, even though it theta-marks a specifier, the agent of the clause as a whole. Have in English is presumably different in this respect, perhaps because it has more lexical and phonological content than \emptyset\textsubscript{have} in Kurmanji. If however the agreeing head F is where we say it is in the next section, the phasal properties of Aux in Kurmanji are not crucial to the analysis.}

Finally, we should say a bit more about the distribution of the null auxiliary ‘have’: why is it present in all and only sentences in Kurmanji with past tense stems? Our view is that its distribution is almost like have in English, and it is regulated by the same principles—even if we do not know with complete clarity what those principles are. The auxiliary ‘have’ makes (at least) two important contributions to a clause: it makes the external argument associated with the passive participial verb assignable again (if there is one implicit in the verb’s lexical semantics), and it helps to bear tense and agreement morphology which could not otherwise be expressed on the nonfinite participle. So (23a) is bad in English, where have is used with a simple verb stem or a present participle. These verb forms
express a v that already assigns the external theta-role allowed by the lexical meaning of the V write. Hence, there is no need or possibility of have also being used to assign this same thematic role (or another one). The same considerations should rule out using the null auxiliary with the present stem in Kurmanji. On the other hand, (23c,d) show that the passive participle cannot be used in English without some form of auxiliary, either have or its intransitive analog be. This presumably is due to the fact that matrix clauses must have tense, and tense cannot be realized on participles in English. A clause with past stem and no auxiliary ‘have’ can presumably be ruled out in the same way in Kurmanji.

(23)  
  a. *John has write/writing the book.  
  b. John has written the book.  
  c. *John written the book.  
  d. *The book written in six months.

The one remaining question, then, is why vP headed by v_{Past} cannot be used as a simple passive in Kurmanji, without using null ‘have’. Part of the answer, presumably, is that an auxiliary is still needed as a realization site for TAM morphology—cf. (23d) versus (21c) in English. But then why can’t Kurmanji past stem constructions be used with (only) an intransitive auxiliary (overt or null), comparable to ‘be’ in English or ‘become’ in other languages? This we take to be simply a lexical gap: Kurmanji happens not to have an intransitive auxiliary (or it has one, but it cannot select v_{PRES}). The transitive auxiliary is then the only choice. We expect this to be a point of low level crosslinguistic variation, and probably it is. Thus, Paul (2009: 570) mentions that for the nearby Iranian language Zazaki, finite past stem verbs can be used without an overt subject with passive force. We assume then that Zazaki has a null intransitive auxiliary and Kurmanji simply does not. This sketches out a story then about why a null have-like auxiliary is used if and only if a past stem vP is used in a full finite clause in Kurmanji.

2.2 The position of the agreeing head

Next we need to say why this difference in the phase structure of the clause affects how agreement happens, and (therefore) the case assignment pattern. We suggest that this is essentially an effect of the PIC. We want to say that the agreement bearing head F is above vP. Therefore, it will be able to see the direct object inside VP if v is v_{Past}, but it will not be able to do so if v is v_{PRES}, prevented by the PIC.

However, we have to be rather precise about just where F is in order to get the desired results. On the one hand, F cannot be identified with v itself, because a phase head is allowed to see into its own complement for purposes of Agree; this is how v* agrees with and assigns accusative case to the object in English and many other languages according to Chomsky (2000, 2001). On the other hand, F also cannot readily be identified with T or other very high functional head; if it were, it should always agree with the subject as the closest NP to it probing downward, as finite verbs do in the major Western IE languages. We thus claim that F is an intermediate functional head, higher than v, but lower than T. More specifically, we claim that it is below the null Aux head in (22a). (We leave open whether F is to be identified with a meaningful functional head in Kurmanji, such as Aspect or Mood, or whether it is a pure Agr head. We have no clear morphological evidence on this point, and its precise identity does not matter for purposes of case and agreement. It is important that it is present in all clause types, including unaccusatives.) So the fuller structures of past and present clauses are the following:
Then F probes downward, looking for a visible NP that it can agree with. In transitive past tense clauses like (24a), F finds the direct object inside VP. F can enter into Agree with this object because F c-commands it, no other NP intervenes between F and NP, and agreement is not blocked by the PIC, since \( v_{\text{PAST}} \) is not a phase head. In contrast, F cannot enter into Agree with the object in the present clause in (24b), for two reasons. First, Agree is blocked by the PIC (Chomsky’s 2000 version), given that \( v_{\text{PRES}} \) is a phase head and the object is inside its VP complement. Second, since \( v_{\text{PRES}} \) is active, not passive, the agent is generated in SpecvP, so it intervenes between F and the object; this also prevents F from agreeing with the object. The result is that finite verbs agree with the direct object in past clauses in Kurmanji, but in the present clauses they always agrees with the subject. The last important detail is that F can agree with the subject in Kurmanji in past clauses if the verb is intransitive, with no NP inside vP. For this we assume, following Rezac (2003) and Béjar and Rezac’s (2009), that if a functional head does not find a goal probing downward, then it can probe upward instead (Cyclic Agree). When that happens, F finds the subject in SpecAuxP in a structure otherwise like (24a), accounting for examples like (3).\(^{21}\)

There is some morphological evidence that supports our claim that agreement has a special position in Kurmanji, lower than in English and other languages with uniform subject agreement. This comes from the position of agreement in complex tense constructions. We have seen that Adiyaman Kurmanji has two tense-aspect combinations in which the present tense copula -e is an ingredient. They are the present progressive and the present perfect, as seen in (15) and repeated in (25).

(25) a. Ez \( \text{dr-k-im-}e \).
    I.DIR IMPF-do.PRES-1SG-COP.PRES
    ‘I am doing (it).’

    b. Mı \( \text{kir-i-ye} \)
    I.OBL do.PAST-3SG-COP.PRES
    ‘I have done (it).’

\(^{21}\) Béjar and Rezac (2009) only allow upward probing in a very local sense: if F fails to find an NP that it c-commands, then F can agree with an NP in a further projection of F (e.g., in SpecFP). Others allow less restrictive upward probing, including Baker (2008). Our structure can be made compatible with Béjar and Rezac’s restriction if we say that F is the Aux head in (24a). The price of adopting this version is that one would have to say there is a similar non-theta-assigning (be-like) null Aux in the present clause in (24b), because these clauses also have agreement. This could well be true, for all we know.
Now it is striking that these are also the same two tenses that require a present tense auxiliary (have or be) in English, as shown in the translations of (25) and again in (26).

(26)  a. She is doing it.
    b. She has done it.

This is surely not a coincidence: presumably these tense-aspect meanings are built up compositionally in both languages. Present perfect is formed by embedding a past stem or participle under a present tense state, and present progressive is formed by embedding a present/imperfective stem or participle under a present tense state. But despite having the same overall structure, there is a striking difference in agreement in the two languages: in English, person-number agreement is realized on the auxiliary, whereas in Kurmanji the auxiliary is invariant and agreement is affixed inside of it, directly to the verb stem. This makes sense if the agreement-bearing head in English is the highest head in the TAM structure, above the copular auxiliary, as generally assumed, but in Kurmanji it is lower, below the auxiliary heads. This then is independent motivation for the structural assumption that we use to explain why finite verbs in Kurmanji agree with objects rather than subjects when possible, whereas finite verbs in English never do this.

The specific auxiliary that we see in (25) is different from the one in (24a); it is present to contribute to the tense interpretation of the clause, rather than to assign the subject theta role. However, if the agreement-bearing head F is lower than the auxiliary we can see in (25), it is reasonable to think that it is lower than the auxiliary that we cannot see in (24a) as well.22

The total series of functional heads that we assume for Kurmanji clauses then is (27):

(27)  T – Aux* – F – Asp/Mood – v – V

This is a very normal functional structure, except for F being lower than usual. T has little overt expression in Kurmanji—maybe only conditioning past vs. present suppletion on the auxiliary below it, giving for example the difference between present perfect and pluperfect. Nevertheless, we assume that it is there for semantic reasons, leaving open to what extent the semantics of tense comes from the v node as opposed to the abstract T node.23 There can presumably be zero, one, or two Aux nodes, as in English; for example both the null theta-marking ‘have’ and the present tense ‘be’ presumably co-occur (25b). Since Aspect is a prefix and F and Aux are suffixes, it is not obvious what order they should go in; that decision is rather arbitrary. F is present in all finite clauses—and indeed Kurmanji has no nonfinite clauses, only subjunctive clauses (the normal form of embedding) and a kind of derived nominalization (see (17)). Notice that we have accounted for the crossed agreement pattern in Kurmanji without making any assumption about the case marking of the subject and the object. In this respect, our analysis is quite different from Karimi’s (2013). Karimi assumes that the agreeing head is the highest head (T), and it does not agree with the subject in past tenses in Kurmanji because the subject has inherent case (“dative”), assigned to it by vPAST. But we find this assumption both superfluous and somewhat problematic. We do not need it, and it is problematic because the past tense subject does not have a distinctive ergative/dative case in any version of Kurmanji; rather, it has oblique case identical to that of objects of transitive verbs.24

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22 We note, however, that pluperfects in Kurmanji are different: they consist of a past stem and a past form of ‘be’, with agreement attaching to ‘be’ (see (12f)). We do not know why Kurmanji’s two perfects differ in this way.
23 Compare the English pluperfect Chris had (already) written the paper, where the v associated with the participle ‘written’ contributes one bit of pastness, and T realized on the auxiliary have contributes another. (MORE?)
24 Another difference in our otherwise similar accounts concerns why agreement with the object is blocked in present but not past in Kurmanji. Karimi (2013) treats this as an intervention effect: vPRES has full phi-features and vPAST does not, so only vPRES counts as an inter vier. In contrast, for us this a simple PIC effect. As a result, we do not need to say that v ever has phi-features in Kurdish—and indeed there is no morphological evidence that it does. For example, inflected verbs never have two sets of agreement, one for v and one for T.
We do not mean to deny that an NP having quirky case can prevent F from agreeing with it in Kurmanji, as in standard analyses of Icelandic. Indeed, this may play a minor role in Kurmanji. Adıyaman Kurmanji has a small number of intransitive predicates with experiencer subjects that appear to bear quirky oblique case; ‘feel cold’ in (28) is an example. The subject of this predicate is invariantly oblique in present tense as well as past, and the verb does not agree with it. (See Haig, 2001:260 (265) for a very similar example from the conservative Badīnānī dialect spoken in Iran.)

(28) Mı sor-e.
    LOBL cold-COP.PRES.3SG
    ‘I am cold.’

For this very small class of verbs, we simply say that experiencer predicates can require quirky/lexical oblique case on their sole arguments, just as similar predicates can require quirky dative, accusative, or genitive case on their subjects in Icelandic. As in Icelandic, the finite verb in Kurmanji cannot agree with the subject when it has lexically determined case, so there is no possibility of direct case being assigned to the subject in (28). This shows that lexical case takes precedence over agreement assigned case, as we foresaw back in (10). However, there is no need to subsume normal transitive sentences in past clauses to this, with the suspect assumption that transitive subjects get inherent case in past only.

The analysis of the dyadic experiencer predicates in the Badīnānī dialect shown in (20), is slightly different. Here too F agrees with the theme argument, rather than the subject. Part of the reason why this is possible is because even vPRES is not a phase head when it does not theta-mark as specifier, when all of the arguments of the verb are internal arguments, as previously discussed. However, we also need to consider issues of intervention: why doesn’t the experiencer argument block F from agreeing with the theme, given that it is the thematically higher argument. (This is true crosslinguistically, and Haig (2008: 261) confirms that the wanter argument can bind a reflexive in the theme argument in this dialect.) Following Broekhuis’s (2007) analysis of similar constructions in Icelandic, we tentatively assume that since the experiencer and the theme are coarguments at the left edge of the same VP, they are equidistant to F. Experiencer constructions like (20) are different in this regard from normal transitive constructions like (24b), where the higher argument is theta-marked by a distinct head (vPRES) from the theme argument in VP, so the two arguments are not equidistant. As a result, F can thus in principle agree with either the experiencer or the theme, as far as intervention is concerned. However, the experiencer in (20) receives inherent oblique case, just as the one in (28) does. This makes it ineligible to F to agree with, just as the experiencer argument is not in (28). Therefore, F can in fact only agree with the theme argument in this construction. Our analysis of an example like (20a) (minus the negation) is thus in (29).

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25 In contrast, similar experiencers must be in PPs in the Muş dialect (Gündoğdu, personal communication 2013). Even in Kurmanji, it is possible that these “subjects” are really PPs where the P ra can be elided under some conditions. Nothing much hinges on this either way for us.

Note that the oblique case assigned by these nonagentive verbs as an idiosyncratic property is systematically identical morphologically to the oblique case assigned as an elsewhere case to NPs in argument position (see (32b) below). This is true even though the syntactic principle/rule by which it is assigned must be different—or this would not be a lexical case. This seems like a weakening of our general theoretical-methodological position that if two case forms are the same, they should be assigned by the same rule, all things being equal. Although we do not have a complete formal understanding of this, it seems that languages avoid having verbs assign lexical cases that are not otherwise part of the language’s morphological repertoire, lexical cases not being common and systematic enough to be worth having a special set of forms for. We see this in Icelandic too, where verbs can have subjects with quirky dative, accusative, or genitive cases—all cases with other, more productive uses in the language. Since Kurmanji has only two case forms to work with, if it chooses to use a special marked lexical case for subjects of certain verbs, to contrast with the normal direct case, oblique is the only option.
So the reason that there is agreement with the object even in present clauses with this small set of verbs is a combination of the fact that nonactive \( v \) is not a phase head and the fact that the higher argument bears lexical case. The same analysis works the well-known dative-nominative verbs in Icelandic.\(^{26}\)

Before moving on to issues of case, there is one complication to the crossed agreement pattern in AK and other dialects of Kurmanji that should be mentioned. This is the fact that it is possible for past verbs to show plural agreement (-\( n \)) with a third plural subject in oblique case if the object is third person singular. Thackston (2006) does not mention this possibility, but it happens in AK and most other dialects of Northern Kurdish (Dorleijn, 1996:118-119; Haig, 2008: 231-245, esp. 242). (30) is an example:

(30) \[ \text{Wono hew di-\( n \)} \]
\[ \text{they.OBL he.DIR saw-PL} \]
\[ \text{‘They saw him.’} \]

In AK at least, this possibility is quite restricted: the verb cannot agree with the oblique subject if the object is other than 3\(^{rd}\) singular ((31a)), nor if the subject is first or second person plural ((31b)).

(31) a. \[ *\text{Wono ez di-\( n \)} \]
\[ \text{they.OBL I.DIR saw-PL} \]
\[ \text{saw-1SG} \]
\[ \text{‘They saw me.’} \]

b. \[ \text{Me/we hew di-\( (*n) \).} \]
\[ \text{we.OBL/you.PL.OBL he.DIR saw-\( (*PL) \)} \]
\[ \text{‘We/you saw him.’} \]

\(^{26}\) Significantly, Broekhuis (2007) shows that datives in Icelandic do not block agreement with a nominative NP when the two are coarguments, but they do in much-discussed examples where the dative is an argument of the matrix verb and the nominative is the argument of an embedded verb, hence not equidistant (see also Bobaljik (2008) for this generalization, and a different account).

Recall, however, that AK and most other dialects of Kurmanji do not have dyadic verbs with quirky case subjects (see also Haig (2008: 257)). Karimi (2013:70-71) gives examples meaning ‘have’ in what he calls “Northern Group Kurdish”, but they are not possible in AK: rather one says ‘Ali’s pen exists’, with ‘Ali’ as possessor, or ‘To Ali a pen exists’, with ‘Ali’ in a PP headed by \( ra \). This then raises the possibility that all experiencers in (our dialects of) Kurmanji are really PPs, not NPs at all (see also note 25). In that case, the fact that experiencers in Kurmanji do not count as intereners preventing F from Agreeing with the theme could be simply due to the fact that as a PP the experiencer does not Match the probing features of F. That is also an option for us.
We take this wrinkle to be entirely compatible with our analysis of agreement in past clauses in terms of Cyclic Agree. Indeed, it is part and parcel of Bejar and Rezac’s (2009) view of Cyclic Agree that a functional head (or combination of heads) can have some of features fixed by looking downward, but still look upward to find values for other features. We assume, then, that third person singular NPs in (colloquial) Kurmanji are always marked for person, but may be unmarked for number.27 (Note that plural marking on NPs is not required to get a plural interpretation in AK.) Therefore, when F probes downward in (30), its person feature is fixed as third, but its number feature can remain unvalued. F can then probe upward and agree with the subject, which fixes its number value as [plural]. (31a) is impossible because local pronouns are fully specified for number as well as person, we claim, so F has all its features satisfied by the first goal it finds and it cannot probe again. (31b) is impossible because F is fixed as third person by downward probing, and this prevents it from agreeing with a first or second person subject, even if it could get a plural feature by doing so. We do not claim that this is the only possible analysis of this pattern, 28 nor is this analysis of plural agreement with oblique subjects in past clauses is crucial for what follows. However, we mention it because it exists, and it requires us to be a bit more careful in how we state the relationship between case and agreement in (32a) below.

At this point, we have an analysis of what NP F agrees with in different structures in Kurmanji and why. This analysis depends on the different nature of vPAST and vPRES in Kurmanji. It does not, however, depend on knowing already which NPs are marked with direct case and which are marked with oblique case, apart from a small number of experiencer predicates in one dialect. It can, then, be taken as the cause of that case distinction, as we develop in the next section.

2.3 Canonical case assignment in Kurmanji

Given what is already in place, it is very easy to derive Kurmanji’s unusual crossed case pattern from the agreement pattern already derived. The necessary case assignment rules are simply the two given in (32).

\[(32) \quad \begin{align*}
    &a. \quad F \text{ in Kurmanji assigns direct case to the NP it agrees with in person.} \\
    &b. \quad \text{Otherwise, an NP in argument position gets oblique case when its phase is spelled out.}
\end{align*}\]

(32a) is a straightforward instance of agreement-assigned case, as in (10c), whereas (32b) is an instance of unmarked case, as in (10d). It is probably nondistinct from the standard Chomskian statement that T assigns nominative case to an NP under agree, but for present purposes nothing much hinges on whether or not we equate the Kurmanji category F with the UG category T and the Kurmanji direct case with the UG notion of nominative. (32a) implies that subjects of intransitive sentences, subjects of transitive sentences in agentive present clauses, and objects of transitive sentences in past clauses and with psych predicates all get direct case, since all these arguments are agreed with. The qualification “in person” ensures that the subject in an example like (30) is not in direct case, even though the verb agrees with it in

27 Note that this is different from the widespread view that third person is unmarked (absence of person) but number is marked on NPs headed by a common noun, as an anonymous reviewer reminds us. We assume (tentatively) that whether a category is marked with a negative feature value and is left unmarked for that feature is a partially idiosyncratic matter, varying somewhat from language to language.

28 There may be some differences in the details of how this happens in different dialects of Kurmanji. However, the data given in the literature is not very systematic, and it is often stated in terms of tendencies, not firm rules, so we do not pursue this phenomenon further. An alternative view (recommended to us by anonymous reviewers) could be to see (30) versus (31) as a kind of Person-Case Constraint (PCC) effect, since agreement with the subject is possible in number but not in person. However, (30) and (31) cannot be accounted for under normal approaches to the PCC, including Karimi’s (2010) for Sorani (and indeed the empirical facts are quite different). The reason is because in PCC analyses it is the lower of the two arguments that cannot be agreed with in person, because agreement with it is disrupted by the higher one. In contrast, it is person agreement with the higher argument (the agent) that is restricted in this paradigm. That is why we propose to analyze this in terms of Bejar-and-Rezac style Cyclic Agree instead. (Note that Karimi (2013) also seems to retreat from this aspect of his (2010) analysis.)
number.29 (The ungrammaticality of (31b) shows that is not the full person-number agreement that is seen elsewhere in the language.) (32b) then implies that all other arguments, including objects of transitive sentences in the present and subjects of transitive sentences in the past get oblique case. Note also that we crucially do not make the standard Chomskian assumption that v assigns accusative case to the object under agreement—not even for vPRES (contrast Karimi 2010, 2013). This is because on the one hand there is no morphological evidence that v is an agreeing probe in Kurmanji in addition to F, nor is there evidence that Kurmanji has an accusative case distinct from the oblique case attributable to (32b).

This analysis captures some significant empirical generalizations about Kurmanji. First and foremost, it captures the straightforward generalization that Kurmanji argument NPs have direct case if and only if the verb agrees with them. (On the qualification concerning arguments, see below.) As a corollary of this, it follows that every Kurmanji clause (except (28)) has one and only one argument NP in direct case. This stems from the fact that F agrees with only one NP in any Kurmanji clause, together with the fact that an argument NP gets direct case only if F agrees with it.30

It also follows from this analysis that “accusative” case in present clauses and “ergative” case in past clauses are the very same case (oblique), assigned by the same rule of case assignment. Capturing this sets our analysis apart from previous analyses, including Karimi’s (2013). A theoretical challenge is posed by the fact that the two main uses of oblique case in simple clauses seem to have little in common, such that they do not constitute a natural class in structural terms. Our analysis addresses this by treating oblique as an elsewhere case. In this way, we capture the important fact that there is never a distinction in form between “accusative” objects and “ergative” subjects in Kurmanji for any class of nominal expression, including pronouns, regularly inflected nouns, irregularly inflected nouns, and possessors or modified nouns. The alternative would be to have one rule assign ergative, to have a different rule assign accusative, and to have the two cases spelled out synchronically with the same morphological material at PF. That would clearly be the right way to go if this was a common syncretism crosslinguistically, or if there were only partial syncretism between ergative and accusative in Kurmanji—if for example the regular inflection -ê on common nouns was the same, but some pronouns or irregularly inflected nouns distinguished ergative from accusative. But using the same case for ergative and accusative is otherwise rare across languages (see section 3.1 for more discussion), and in AK the identity between these two cases is a pervasive fact about AK’s morphosyntax, going deeper than any particular morpheme or lexical item (see section 1.2). Our account captures this fact.

A third virtue of our analysis is that it immediately accounts for the case marking of goal phrases in ditransitive constructions in Kurmanji. In general, there are two ways of expressing goals in this language, depending on the verb. One is as a PP that is headed by the postposition ra and comes before the verb, as shown in (33).

(33)  Mı  te       ra  kitaw  şond.
     I.OBL you.OBL to  book.DIR  send.PAST.3SG
     ‘I sent you a book.’

This is not directly relevant to our topic, because here the P presumably assigns case (oblique) to the goal NP. The other, more interesting expression of a goal is as an NP that follows the verb, as shown in (34).

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29 An alternative formulation would be to say that F assigns direct case to NP if NP is the first one that F agrees with, in derivational terms. The two descriptions are coextensive within our theory.

30 An anonymous reviewer questions how deep our derivation of this fact is, asking whether one could have two different agreeing heads F, each of which agreed with and assigned direct case to a different NP. Our answer is that this is conceivably possible absent a more principled theory of what functional heads in a clause structure can bear agreement and why. However, there is no evidence that Kurmanji clauses do in fact have two such heads. In particular, the verb shows only one set of phi-features.
The PP form of the goal is totally impossible after the verb, whereas the NP form can sometimes be scrambled before the verb (at least if it is quantified), but after the verb is clearly its normal position.\(^{31}\)

The word order in (34) shows that Kurmanji is not a straightforward head final language. We assume that the goal here is the complement of V, and the theme is its specifier, as in Larson (1988). This gives us a structure (in the present) like \([vP \, Agent \, v \, [\vP \, theme \, [V \, goal]]]\), with v lowering to V morphologically. Most interestingly for our purposes, these postverbal goal phrases always bear oblique case, regardless of the tense, even though there is no P head to attribute this to. (34) shows this for a present sentence, and (35) shows it for the corresponding past tense version.

\[\text{(34) } \text{Ez} \, \text{kitaw-ê} \, \text{dr-d-im-e} \, \text{te.} \quad (\#t \, \text{you.DIR})\]
\[\text{I.DIR} \, \text{book-OBL} \, \text{IMPF-} \text{give.PRES-1SG-COP.PRES} \, \text{you.OBL}\]
\[\text{‘I am giving you the book.’}\]

\[\text{This additional fact about case in Kurmanji follows directly from our agreement-driven analysis. Since the goal is deep down in the VP, lower than the theme argument, the agreeing head F is never in a position to agree with it. That the theme argument asymmetrically c-commands the goal is confirmed by the scope facts in (36), where the preverbal theme necessarily takes scope over the postverbal goal.}\(^{32}\)

\[\text{(35) } \text{Mı} \, \text{kitaw} \, \text{do} \, \text{te.} \quad (\#t \, \text{you.DIR})\]
\[\text{I.OBL} \, \text{book.DIR} \, \text{give.PAST.3SG} \, \text{you.OBL}\]
\[\text{‘I gave you the book.’}\]

In present tenses, F cannot see the goal argument inside VP because VP is a spell out domain, whereas in past tenses, F can see into VP but the first NP it finds probing downward is the theme, not the goal. Therefore F agrees with the theme in (35), not the goal, and assigns it direct case. Therefore the goal gets the unmarked case for arguments, namely oblique. This fits the generalization that every argument is oblique, except for the one NP that the verb agrees with. We derived above that only one NP argument in a Kurmanji clause can be in direct case because of the uniqueness of agreement, but oblique case is the

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\(^{31}\) AK differs in this respect from some other Iranian languages, where the postverbal goal/direction phrase is a PP (see (55a) below from Hawrami and Karimi (2010: 705) for Sorani) or is connected to the verb by an ezafe-like suffix on the verb (Thackston (2006:69) mentions this possibility, but says it is only seen sporadically in Kurmanji). The category of the post-verbal goal is thus a locus of low-level variation within the family. But for AK it is clear that the overt PP version of the goal is blocked in postverbal position and there is no trace of an ezafe marker in e.g. (35). Extraction data also suggests that the goal in (33) and (34) is a simple NP, since extraction of/from a PP can leave a resumptive pronoun in Kurmanji, but there is/can be no such pronoun when a postverbal goal is extracted.

\(^{32}\) As an additional control, note that if the goal scrambles to a position before the theme, as in (i), the reading changes, such that the universal quantifier does get wide scope.

\[(i) \, \text{Eşxan-ê} \, \text{herkes-i} \, \text{kitaw-ik} \, \text{do-ye.}\]
\[\text{Eşxan-OBL} \, \text{everyone-OBL} \, \text{book-one.DIR} \, \text{give.PAST.3SG}\]
\[\text{‘Eşxan gave everyone a book.’ (can be different books, ∀>>∃)}\]
elsewhere case, so no uniqueness requirement is expected to hold for it. And indeed (34)-(36) show that there can be more than one oblique nominal in a Kurmanji clause. Our analysis of (35) is given in (37).  

(37)  

We might wonder at this point what happens in a structure in which there is a goal NP but no theme: then could F in the past tense agree with the goal and assign it direct case, since no theme intervenes? We believe that the question cannot be answered, because no such structure exists. Kurmanji certainly does have structures with theme subjects and postverbal goals, as shown in (38).

(38)  

Once again, the postverbal goal is oblique even in the past clauses. But ‘go’ here is presumably an unaccusative verb, whose subject is base-generated as SpecVP. Therefore it also intervenes between F and the goal at the point where Agree applies, prior to moving to the subject position, preventing F from agreeing with the goal, just as in (37). (38) is also possible with a seeming unergative verb like *rvi-m ‘run.PAST-1SG’ substituted for *çi-m. The question then is whether ‘run’ is still unergative when it combines with a direction phrase. We know that specifying a goal makes similar manner-of-motion verbs unaccusative for purposes of auxiliary selection in languages like Dutch and Italian (Levin & Rappaport Hovav, 1995; Hoekstra, 1984; Rosen, 1984). Indeed it may be a theorem of theta theory that it is impossible for a verb to select a goal argument unless it also selects a theme argument (possibly covert), since there cannot be a goal unless there is something that is moving to that goal (perhaps metaphorically). That is what we tentatively assume. If so, it follows from our theory that goal NPs buried deep in the Kurmanji VP always receive oblique case because the functional head F can never agree with them, the two being separated at least by the theme NP. The overarching generalization is that argumental NPs in Kurmanji always get oblique case unless they are in a position where F can agree with.

33 Note that we do not assume that the theme and the goal are equidistant to F in this structure, even though they are both arguments of the same head (V). The ‘give’ type structure differs in this respect from the experiencer structure in (29), where the two arguments are equidistant. Our intuition here is that goal in (37) is more deeply embedded in the VP than either argument of ‘want’, as reflected also by its special postverbal position. However, the structure in (37) deserves closer investigation, and perhaps further internal structure for the VP would prove warranted.
It may even be possible to extend this generalization still further, given that objects of Ps and possessors in DP are also consistently in oblique case in Kurmanji, never in direct case, as seen in (39).

(39) a. Bı mı; İt Eşxan-ê (object of P) with I.OBL at Eşxan-OBL
    ‘with me’ ‘at Eşxan’s’

b. Mektew-ê m学校-EZ IOBL
    ‘my school’

Here we could derive the oblique case from (32b) by saying that P and D are phase heads, so F can never agree into PP or DP to assign direct case. The result is that NPs inside PP and DP are always oblique.34

We see, then, that a very simple explanation can be given for Kurmanji’s unusual crossed case pattern if we assume that direct case is assigned by the clausal head F to the NP it agrees with. Then all other arguments are oblique. We do not have to find a structural property that all oblique NPs have in common, because oblique is an unmarked case in Marantz’s sense, hence applied in disjunctive fashion to any NP not otherwise assigned case by F.

2.4 On some special clause types in Kurmanji

Before going on to alternatives and other languages, we mention a few additional qualifications to what we have said so far. These require us to nuance our simple descriptive generalizations somewhat, but they do not change the overall theoretical picture, we claim.

One unsurprising qualification to make concerning our descriptive generalizations is that it is perfectly possible for Kurmanji clauses to have no overt argument in direct case. They routinely do not if the subject of a present tense clause is pro-dropped, or if the object of a past tense clause is (see, e.g. Dorleijn, 1996:89, 95). This “exception” is common in many languages.

More subtly, null indefinite objects of verbs like ‘eat’ still have ergative subjects in the past tense in Kurmanji, as shown in (40). We therefore assume that such sentences always have a syntactically represented object that is active for purposes of case and agreement (Baker (In Press) makes the same observation for Shipibo, a uniformly ergative language). More specifically, we assume that F agrees with this null indefinite object in the past tense, giving the verb third singular person features. The null indefinite object then gets direct case, leaving the subject to get oblique case.

(40) Mı (şiw) xor. (*Ez)
    IOBL (food.DIR) eat.PAST.3SG. (*I.DIR)
    ‘I ate.’

Examples like (40) are important because they give us a way to handle a small and otherwise problematic class of so-called indirect transitive clauses in Kurmanji, mentioned by Dorleijn (1996: 91). These clauses seem to have a PP complement and a subject but no object, the subject nevertheless being ergative in past clauses. An example from AK that is cognate with one of Dorleijn’s examples is (41).

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34 However, if P and D are phase heads, then different unmarked cases could apply when their complements are spelled out—e.g. a special genitive case assigned to NPs/DPs when the complement of D is spelled out (Marantz, 1991, Baker in press). Therefore we might have to add to (27) the statement that oblique case is the elsewhere case for phases of all kinds, potentially weakening the explanation somewhat.

35 Although pro-drop of an agreed-with subject is relatively common in Kurmanji, pro-drop of an agreed-with object may be more limited in ways that suggest it might be a null topic rather than a simple pro, according to Dorleijn (1996:88-89, 95). This could be an interesting topic to pursue, but we do not do so here.
Mılı Mehemed-ê xıst.
I.OBL at Mehmed-OBL beat.PAST(3SG)
‘I hit Mehmet.’

Here the PP argument seems to triggers oblique case on the subject, even though F presumably cannot agree with a PP. Examples like (41) could thus call our agreement-driven account of split ergativity into question. However, all of the predicates of this type that we can think of in AK also easily allow a direct object. The verb xıst in (41), for example, more generally means ‘drop’, and it can also take a direct object, with or without a PP complement, as shown in (42).

(42) a. Mı kilit xıst.
   I.OBL key.DIR drop.PAST.3SG
   ‘I dropped the key.’

b. Mı ker li Mehemed-ê xıst.
   I.OBL knife.DIR at Mehmed-OBL drop.PAST.3SG
   ‘I hit the knife at Mehmet.’ (i.e., ‘I stabbed Mehmet.’)

So the expression ‘to drop X at Y’ seems to be an idiom in Kurmanji for ‘to hit Y with Z’ and the X argument can be a null indefinite, as it is in (41). This null indefinite object nevertheless counts as syntactically present in the clause for purposes of case and agreement in (41), just as it does in (40).36

Examples like (40) and (41) should not distract us from the fact that unergative verbs in general—verbs with agent subjects that have no ability to take an object—do not permit their subjects to have oblique case in past tenses in Kurmanji (see (3)). Dorleijn (1996:83n.13) also recognizes this clearly. She writes “Active intransitives that are not derived from transitive verbs do not trigger ergative case in Kurmanci, contrary to the situation in e.g., Georgian.” Haig (2008:7) makes the same point for West Iranian languages more generally: “Active alignment, also known as split-S or fluid-S (Dixon, 1994), is but marginally relevant in the Iranian context (the exception being East Iranian Wakhi).” These seemingly optionally transitive verbs in Kurmanji are thus no more than a minor complication, since hard-to-observe null objects are only possible for verbs that also take straightforward overt objects.37

Finally and perhaps most importantly, Kurmanji also has some instances of clauses that have more than one nominal in direct case, in apparent contradiction to our descriptive generalization above. Like Persian and other languages in the region, Kurmanji has light verb constructions, in which a noun plus the light verb ‘do’ is the equivalent of a single verb in other languages. For example, Kurmanji has no simple verb ‘to pray’, but uses a light verb construction ‘to do prayer’. In a present clause, the subject and the noun part of the light verb construction are both in direct case, as shown in (43).

(43) E nmê dr-k-im-e.
   I.DIR prayer.DIR IMPF-do-1SG-COP.PRES
   ‘I am praying.’

Our claim is that ‘prayer’ in (43) is not a true object. Indeed, it is not an argument of the verb at all; rather it is a noun adjoined to V to form a kind of complex predicate.38 As such, it falls outside the primary

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36 Dorleijn’s (1996: 91) other example of an indirect transitive clause is an expression meaning ‘to look at’. A corresponding example in AK uses the intransitive verb ‘wander’, and it does not behave like an indirect transitive.
37 We also conclude from this that a theory in which oblique case is assigned as an inherent case by v to its specifier, as proposed by Woolford (2006) and many others for languages like Hindi, Georgian, and Basque, is not appropriate for Kurmanji (disagreeing with Karimi 2013). See Baker (in press) for some general discussion.
38 An anonymous reviewer suggests that ‘prayer’ might be exempt from case in (43) because it has incorporated into the verb. (He/she actually suggests that it would escape dependent case assignment for this reason, but the
domain of case theory. This is why we restricted the rule of oblique case assignment in (32b) to apply only to NPs that are arguments. In essence, we are drawing a rather familiar distinction between NPs that are arguments and NPs that are not: NPs in argument positions must have a case value (direct or oblique) (Chomsky 1986: 94-95, crediting Joseph Aoun), but NPs that are not in argument positions do not get a case value and can show up as bare noun roots. These bare noun roots are homophonous with the direct case, which has no distinctive suffix in Kurmanji, but they are more properly caseless. One way of describing this is to say within the terms of the Marantz-inspired disjunctive hierarchy in (10) that oblique is the unmarked case for NP arguments in TP or VP, but direct is the default case for NPs that are otherwise not case-marked. This fits with the fact direct case is used as the citation form of nouns in Kurmanji, and NPs in isolation from any clause (e.g. curses) are also in bare (direct) form, rather than oblique.

This way of formulating the rule of oblique case assignment rule in (32b) also covers the fact that predicate nominals in Kurmanji bear direct case, not oblique case, as shown in (44).

(44) Tu xwêndekar î.
you.SG.DIR student.DIR COP.PRES.2SG
‘You are a student.’

suggestion applies just as well to unmarked case assignment.) We think this is a real possibility, and when we say that the noun is adjoined to the light verb, we mean to leave open whether it is there by base-generation or as the result of a syntactic derivation (such as incorporation a la Baker (1998)).

The issue of incorporation is also potentially relevant to the phenomenon of differential object marking (DOM), in which objects (e.g. in present clauses) may fail to manifest oblique case when they are nonspecific indefinites, showing up in bare/direct case instead. DOM of this sort does not happen in AK or standard Kurmanji (Stilo, 2009:62) (or MK), but it is attested in the Turkish-influenced variety studied by Dorleijn (1996:62), and it is a robust property of many other Iranian languages (Bossong, 1985; Haig, 2008; Stilo, 2009; Windfuhr, 2009:33-35). A possible analysis of this is that consistent with our theory is that nonspecific objects in these languages undergo (pseudo-) incorporation into the verb (cf. Baker, 2014) and thus escape the oblique-assigning rule in (32b), just as ‘prayer’ does in (43). UG allows for several different types of DOM, however, and we lack the data needed to discern which type the relevant Iranian languages have.

Unlike unmarked case assignment, Agree is not restricted to arguments. Thus, in a past clause, the subject of a light verb construction is oblique, as seen in (i). Within our assumptions, this implies that F does find the noun ‘prayer’ when it probes downward and agrees with it. This prevents F from agreeing upward with the subject argument, consigning the subject to get oblique case. Note that there is no particular theoretical reason why the set of elements undergoing Agree and the set of elements that undergo unmarked case assignment should be identical. Hindi is another language in which (pseudo-)incorporated nouns are visible for agreement (Mohanan, 1995).

(i) Mi nmê kir.
1.OBL prayer.DIR do.PAST(3SG)
‘I prayed.’

In contrast, the subjects of predicate nominal constructions like (44) are not oblique in the past tense. Within the terms of xxxx, this could follow from the fact that predicate nominals are embedded under an extra functional projection (EP, for “equative phrase”), and this extra structure blocks agreement as well as case assignment.

Note that Karimi (2013) makes a similar distinction between “Nominative case” (assigned by T) and “nominative case” (by default at PF). Our account is no worse than his in this respect. More generally, we might conjecture that languages will not in general create a unique case form for a default case of narrow usage, but will borrow the most common form used for arguments, i.e. direct in Kurmanji. It seems perverse to imagine, for example, that a language would have a citation form for NPs in isolation and used metalinguistically that was not otherwise a form used in the core grammatical system. In this respect, default case would be similar to, but opposite from, lexical case (cf. note 24): lexical case borrows a form most likely to contrast with ordinary arguments, whereas default case borrows a form most likely to match ordinary arguments.
We must bear in mind, then, that oblique is the unmarked case for argumental NPs, but there is also a restricted class of NPs not in argument positions that get default case (or are truly caseless).\footnote{Hanging topics are another sort of bare NP in non-argument position that might be considered here. However, topics in AK always need to bind a pronoun in the comment clause, and they inherit their case marking (direct or oblique) from the pronoun that they bind. AK has some adverbs in oblique case, but we assume these are really PPs.} We thus see evidence for Marantz’s whole disjunctive hierarchy in (9) in addition to agreement-assigned case.

2.5 Conclusions and Implications

These special clause types complicate the statement of the key empirical generalizations that we derived from our theoretical assumptions in section 2.3. However, they do not complicate our theory of structural case and agreement in any serious way, once we understand the structures involved, beyond motivating the restriction that oblique case assignment only happens to NPs in argument positions. The main news, then, is that there is some nontrivial structure to what might be deemed default case assignment in Kurmanji: the unmarked case for arguments is oblique, whereas the true default case for other NPs (nonarguments) is bare, not observably different from direct case.

Given this, one might be tempted to try to subsume the direct case on arguments to the true default case (see Preminger 2014 for such an effort in other languages). And if it were only subjects that bore this case, that might be feasible. However, this is precisely what Kurmanji’s particular brand of split ergativity makes it hard to do. It is patently not all and only subjects that get direct case in Kurmanji among the class of arguments. On the contrary, in past clauses subjects do not get direct case and direct objects do. Thus, it seems impossible to treat oblique case as occurring in a natural class of environments, such that the rule of oblique case assignment can be stated simply and directly, and the direct case can be left as the (only) elsewhere case. Indeed, this seems to be no more feasible than stating the rule of direct case simply and directly (covering both arguments and nonarguments) and leaving oblique case as the only default case.

What does work is to take advantage of agreement to aid the otherwise fragmented case system. First we give an analysis of agreement that does not depend on the structural case marking of the NPs,\footnote{Agreement depends only on whether an NP has received quirky/lexical case, as experiencers do in (28) and (29).} but rather on a distinction in the phase status of past and present vs. Then we capitalize on the truly exceptionless fact that all NPs that F agrees with are in direct case, by saying that F assigns direct case to the NP it agrees with. Once agreed-with NPs are taken care of in this way, the set of NPs that receive oblique case are a natural class: they are simply the NPs in argument positions that do not already have direct case. Therefore we state the simple rule of oblique case assignment in (32b). Finally, we say that other NPs, not in argument positions, are left caseless. Since direct case happens to receive the null exponent on regular common nouns in Kurmanji, the first class of NPs and the third class of NPs end up looking the same. In this way, the facts about case and agreement in Kurmanji come under analysis in a way that is maximally simple, and which depends ultimately on the fundamental distinction between past stems and present stems, which is a very deep and old feature of Iranian languages (Haig 2008: 9-10).

We conclude from all this that it is possible for functional heads to assign case to NPs under agreement.\footnote{In fact, we don’t have to say quite this, necessarily. It is conceivable that Agree applies before oblique case assignment, and the agreed with NP is barred by this from receiving oblique case. As a result, it remains caseless, and is spelled out in the same way as NPs not in argument positions at PF. This variant has the advantage of not needing to draw a syntactic distinction between receiving direct case and being caseless, when no such distinction is evident in the noun paradigms. Its conceptual flaw is that it does not say why being agreed with should prevent an NP from later receiving oblique case. In contrast, the standard Chomskian view has a simple account of this: F agreeing with NP bleeds the assignment of elsewhere case to NP because F assigned its own case to NP under agreement. That is why we take this view. If, however, further theoretical inquiry provides another natural reason why agreement with F should prevent NP from receiving case, we would accept this revision as a friendly} In this, we agree with Chomsky (2000, 2001) but not with some prominent recent challenges to this view, including Bobaljik (2008) and Levin and Preminger (in press).
3. On alternative analyses and related languages

We believe that the analysis we have developed for Adıyaman Kurmanji is the simplest and most elegant one available using current theoretical resources, and the one that is best-grounded in the details of Kurmanji’s system of verb inflection. However, we agree with some colleagues who want to believe a different theory that our analysis is not the only descriptively adequate one permitted by current theoretical notions. Moreover, it is notable that on all accounts there is a great deal of variation in how case and agreement work in closely related Iranian languages (Haig 2008, Dorleijn 1996, Stilo 2009). It is possible, then, that if one started with another language, or if one tried to consider a larger set of languages all together, one would be led to a different theoretical optimum. Indeed, the new theoretical optimum might be one that drew the opposite conclusion about the relationship between case and agreement than ours—one in which case assignment always happens independently of agreement, and agreement is shaped by the results of case assignment.

It is not feasible to imagine every theoretical alternative, nor to analyze every Iranian language in the light of every other Iranian language in a single article, and trying to do so would strain the attention span of everyone involved. But we can say something about alternatives that have occurred to us or have been suggested to us, and comment on some of the major known patterns among the Iranian languages, as identified by sources like Dorleijn (1996), Stilo (2009), Windfuhr (2009), and especially Haig (2008).

3.1 The outlines of a case-driven account and its limits

Recall that Kurmanji’s split ergativity makes it especially clear that case and agreement are closely related in this language, because the two shift together when the clause shifts between past and present. Assuming that this is not a coincidence, case should thus depend on the outcome of agreement or agreement should depend on the outcome of case (or perhaps both depend on some other, more abstract factor). We have developed a theory of the first kind and pointed out its advantages. What would a theory of the second kind be like? The challenge in this would be to get the case assignment rules to work, after which the agreement would be straightforward.

The likely contenders all make use Marantz’s (1991) idea of dependent case, also adopted in Bobaljik (2008), Baker and Vinokurova (2010), Preminger (2011), Levin and Preminger (in press), and Baker (in press). This type of case was mentioned back in (9), but we have not made use of it up to now. The core idea of dependent case is that ergative case is assigned to the higher of two NPs in the same clause, whereas accusative case is assigned to the lower of two NPs in a clause. Otherwise NPs get some version of unmarked case—usually called either nominative or absolutive, depending on which dependent case(s) are in play in the language.

To make a dependent case analysis work for Kurmanji, one would have to do at least three things. First, one would have to say that both ergative and accusative are at work in the same language. This is not unprecedented; tripartite languages like Nez Perce are known to have this quality. Second, one would have to say that both cases are spelled out the same way at PF. This is also not unprecedented, and Distributed Morphology PF has the resources to do this using underspecification, disjunctive ordering, and impoverishment rules. Third, and most crucially, one would have to say that which dependent case is assigned depends on what the tense-aspect of the clause is. This would be the most innovative part of the alternative proposal and, we claim, the most problematic.

One version of the case-driven view that we have considered seriously, and that has been proposed to us by Jonathan Bobaljik is the following (see also Gündoğdu, 2011):
(45)  
a. Assign ergative to the higher of two NPs in past clauses.
b. Assign accusative to the lower of two NPs in present clauses.
c. Otherwise assign NP direct case (=nominative).
d. F agrees with NP only if NP has direct case.

…and PF spells out ergative and accusative with the same morphemes.

(45a) and (45b) bit the bullet, saying explicitly that ergative and accusative are both assigned in Kurmanji, but in different clause types. After this, the rest is simple: leftover NPs get direct case, and the finite verb agrees only with those NPs. Finally, PF neutralizes the syntactic difference between ergative case and accusative, and this part of the account is intrinsically somewhat stipulative. Given that the identity of ergative and accusative is a pervasive pattern throughout the language, not attributable to just one or two morphemes, the best way to do this might be through an impoverishment rule. For example, “accusative” could be universally the feature bundle [+low, +dept], “ergative” could be the feature bundle [+high, +dept], and there could be impoverishment rules in Kurmanji that remove the features [+low] and [+high] from the representation, so that no vocabulary item can be sensitive to the distinction. Our account does not need this device, so it is part of the cost of taking a case-driven analysis. However, our opinion of how high the cost is might depend on global factors—including whether related languages do distinguish ergative and accusative morphologically, making the homophony in Kurmanji look accidental.

Another version of a case-driven account is (46), suggested by an anonymous reviewer.

(46)  
a. Assign dependent case upward in past clauses.
b. Assign dependent case downward in present clauses.
c. Otherwise assign NP direct case (=nominative).
d. F agrees with NP only if NP is direct.

(46) handles dependent case slightly differently. Its conception is that ergative and accusative are not different cases but rather a single case that is assigned in a different way in different clause types: upward (to the subject) in some, but downward (to the object) in others. This version can thus avoid using a PF device like impoverishment to neutralize the contrast between ergative and accusative case inherited from the syntax. The anonymous reviewer even claims that (46a,b) is more faithful to Marantz’s (1991) original intentions, since the terms “upward” and “downward” are taken from his paper. (We are not sure that we agree with this point, since Marantz’s paper is relatively brief and informal in its terminology, and could be made precise in different ways. However, we leave this question to the interpreters.)

Although it is somewhat more elegant than (45) in its treatment of the homophony of ergative and accusative, we foresee problems for (46) when it is taken in a broader theoretical and typological context. For example, this interpretation of ergative and accusative seems to foreclose on an otherwise attractive analysis of tripartite languages like Nez Perce, illustrated in (47).

(47)  
a. Hi-páay-na háama.
   3S-arrive-ASP man
   ‘The man arrived.’

b. Háama-nm hi-néec-’wi-ye wewúkiye-ne.  (Rude 1986:127)
   man-ERG 3S-pO-shoot-ASP elk-ACC
   ‘The man shot the elk(pl).’

These are languages in which it seems desirable to treat ergative and accusative as two different dependent cases applying simultaneously in the same clause (see Baker (in press), Deal (2010)). But the view of ergative and accusative as being the same case assigned in different ways in different clauses seems not to permit this. The reviewer anticipates this objection, and questions whether one should take too seriously Deal’s very brief suggestion for a single language. But Baker (in press) works this out in
detail, and shows that there are a decent number of such tripartite languages, including Semelai, Coast Tsimshian, Diyari, and other Australian languages. Indeed, according to Legate (2008) many languages that have so-called NP-based split ergativity are really tripartite languages, so this is an important type that has been undercounted in previous literature. Furthermore, ergative and accusative are not only copresent but morphologically distinct in (47). This seems to be typical, not only for uniformly tripartite languages like Nez Perce, but also for split ergative languages that are superficially more like Kurmanji. For example, Georgian has non-nominalive subjects with one set of tense-aspects and non-nominaive objects with a different set. However, the two are lexically distinct (ergative -m(i), accusative/dative) -s). The homophony of ergative and accusative in Kurmanji is thus a very special property of this language (although deeply embedded in it), and (re)interpreting what ergative and accusative case are in UG in order to account for it seems like a mistake, likely to make it harder to account for general typological patterns. Indeed, the more stipulative version in (45) might actually be better in this respect.41

Our other major concerns about a case-driven approach hold for both (45) and (46). One involves case marking of postverbal goal NPs like (35). Kurmanji clearly does not have a distinct dative case for such arguments. Now in general, when a language has dependent accusative case and no dative case, accusative is assigned to both internal arguments, whereas when a language has dependent ergative case and no dative, both internal arguments are left to be absolutive. This is seen in (48) for Amharic (accusative) and Shipibo (ergative) (see Baker in press for more data and discussion).

(48) a. Lemma. Ambaz-in tarik-u-n naggar-at. (Amharic)
   Lemma.M Almaz.F-ACC story.M-DEF-ACC tell-(3mS)-3fO
   ‘Lemma told Almaz the story.’

   b. Maria-nin-ra Jose piti meni-ke. (*Jose-kan) (Shipibo)
   Maria-ERG-PRT Jose fish give-PRF *José-ERG
   ‘Maria gave Jose fish.’

Assuming that this is robust and a principled consequence of how dependent case assignment works, then (45) and (46) both predict that the goal argument of ‘give’ should alternate in case in Kurmanji, just as the direct object does: it should be oblique in present clauses, where (45b) or (46b) applies, but direct in past clauses, where only (45a) or (46a) applies. This prediction is false: rather, the goal argument is oblique in both clause types, as shown in (34) and (35), repeated here as (49).45

44 A slightly different variant (alluded to by an anonymous reviewer) could be to revise (45a) to say that oblique case is assigned in the relevant context in past clauses and revise (45b) to say that the same oblique case is assigned in a different context in present clauses. This avoids PF impoverishment by saying that two different syntactic rules can assign the same morphological case features. A theoretical objection to this is that we want a theory that can explain why some cases are syncretic in many languages, while others are syncretic in few or none. For example, ergative case is the same or almost the same as genitive case in many languages, but accusative case is very rarely the same as genitive. To capture this, we want to say that ergative shares feature values with genitive, whereas accusative does not. Where do those feature values come from? The plausible answer is that they are UG records of how the case was assigned in the syntax: for example, ergative is assigned to the highest NP in a clause and genitive is assigned to the highest NP in a nominal, so they share the feature [+high], and that feature can trigger the insertion of the same morphemes at PF (whereas accusative is assigned to the lowest NP in a clause, so has the contrasting feature [+low]). Our ability to account for these typological patterns of syncretism would be seriously compromised if we dissociate the case being assigned from the rule that assigns the structural case, in general. (And languages like Nez Perce and Georgian suggest that ergative and accusative are not generally cases that share features.)

45 An anonymous reviewer suggests that a dependent case theory can account for this pattern given two assumptions: (1) the goal is higher in the structure than the theme at the point where dependent case applies, and (2) the goal in past clauses qualifies for high dependent case (ergative) by virtue of c-commanding the theme. We believe that both of these assumptions are false. First, there is no other evidence that the goal c-commands the theme at any point in the derivation of (49) (rather than the contrary), so we follow Larson (1988) and Baker (1997) in assuming the goal
In contrast, our agreement-driven analysis extends to this data without further stipulation: $F$ agrees with the one closest NP, and that can never be the goal, since goal presupposes theme and the theme is always closer to $F$ in Kurmanji (because it has no “dative shift”). This is a clear advantage for our proposal.

Another major distinguishing issue is that in our theory the difference between past clauses and present clauses ultimately traces back to a difference in the phasal status of the $v$ heads: the $v$ that forms the present stem is a phase head, and the $v$ that forms the past stem is not. This is a (relatively) clear, discrete, and important theoretical distinction, prominent in recent theorizing. It also has some empirical grounding within Kurmanji, given the morphological structure of verbs and the passive nature of past stems, as discussed in section 2. In contrast, accounts like (42) and (43) based on dependent case cannot draw a meaningful connection to the theory of phases. The problem is not that dependent case assignment cannot be sensitive to whether there is a phase boundary in the clause; indeed, it can be, as Baker (in press) shows. In particular, if there is a phase boundary between the subject and the object, dependent case will not be assigned. The problem is that the analyses in (42) and (43) cannot say that $v$ is a strong phase head in either past or present clauses. If $v_{\text{PAST}}$ were a phase head, then ergative would not be assigned because the subject cannot see the object; if $v_{\text{PRES}}$ were a phase head, then accusative would not be assigned, because the object cannot see the subject. So the distinction between a phase head and nonphase head is useless to these accounts. As a result, they have no ready answer to questions about why and how the verbal morphology of the clause correlates with differences in case and agreement. It seems that these must be bald stipulations for the case-driven alternatives, not amenable explanation (at least not in synchronic terms). Kurmanji is quite different in this respect from Coast Tsimshian (CT), as analyzed by Baker (in press). CT has both ergative and accusative case, and it has tense-aspect-conditioned split ergativity. But in CT clauses with one kind of aspect particle both ergative and accusative are assigned (a tripartite pattern), whereas in clauses with the other kind of aspect particle neither is assigned:

\[(50)\]

\[\begin{align*}
\text{a. Yagwa-} & \ t'uus-{dit} & \text{Dzon-} & \text{Meli. (Dunn 1995:67)} \\
\text{Pres-3sE} & \text{push-ERG.PN} & \text{John-ACC.PN} & \text{Mary.} \\
\end{align*}\]

\[\text{‘John is pushing Mary.’}\]

\[\begin{align*}
\text{b. Nah} & \ t'uus-\text{as} & \text{Dzon-s} & \text{Meli.} \\
\text{past} & \text{push-ABS.PN} & \text{John-ABS.PN} & \text{Mary} \\
\end{align*}\]

\[\text{‘John pushed Mary.’}\]

This CT pattern can be explained by saying that $nah$ is a phase head and $yagwa$ is not, this phase boundary affecting ergative and accusative case equally. But a phase boundary cannot inhibit one dependent case and facilitate the other, which is what we see in Kurmanji’s distinctive crossed pattern. So one cannot go farther with (45) and (46), at least not along these lines. Our account also happens to be much closer to that of other generative linguistics working on Kurdish languages in this respect.

This discussion fills out our claim that our analysis of Kurmanji is the simplest, most elegant, and most explanatory account available using current theoretical tools. However, we have not yet looked
beyond Kurmanji to other Iranian languages. It is easy to imagine that what one wants to have a true explanation of and what one is content to stipulate will change when one sees how related languages may differ from each other. Indeed, it is conceivable that our analysis is too “elegant” for its own good.

3.2 Crossed agreement without case marking

First let us proceed top-down, asking what sort of variation our theory readily expects, and how those expectations compare to expectations of a case-driven theory and compared to what can be observed in the Iranian family. Then in the next section we look at some other seemingly more problematic varieties..

Our agreement-based account makes at least one very simple and straightforward prediction, which is that a language could have exactly the same verb agreement patterns as Kurmanji has, but without having any distinction between direct and oblique cases. This is because agreement does not depend in any way on structural case on our view. One would get just such a language if $v_{\text{PRES}}$ is a phase head, $v_{\text{PAST}}$ is not, the agreeing head $F$ is in the middlefield above $v$ and below Aux, $F$ agrees with the closest visible NP below it if any, otherwise upward with the subject—but the rule assigning oblique case in (32b) is lost, so there is no longer a distinction between direct and oblique case.

And indeed this pattern is attested in the Iranian family. In particular, Sorani (Central Kurdish) and South Kurdish are like this (Haig, 2008:Ch.6; Karimi, 2010). (51) shows present tense sentences, and the verb agrees with the subject in both the transitive and intransitive. (52) shows past tense sentences: in (52a), the intransitive verbs agree with the subject, but in (52b) the transitive verbs agree not with the subject but with the direct object. (Note that an agreed-with first or second person object must be pro-dropped in Sorani, see Karimi (2010) for discussion.) Note also that the agreed-with subject in (51a) and (52a) is identical in form to the not-agreed with subject in (52b); there is no case distinction.

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46 Karimi (2010) says that in Sorani a verb agrees with the object in the past only if it is third person (agreement in number) or if it is pro (agreement in number and person). A past clause has an overt first or second person pronoun object if and if the verb bears default (3rd singular) agreement. We take agreement in this variety to be essentially the same as in Kurmanji, with a wrinkle for overt local pronouns, perhaps attributable to the fact that they are intrinsically focused (otherwise they are pro-dropped). (In contrast, Karimi says that agreement in person with the object is blocked, and examples with pro-dropped objects are different because the VP undergoes focus movement.)

Karimi’s (2013) description of Central Kurdish is slightly different. Here he states that many speakers do not allow agreement with an overt object in the past, even in number. This variety might be more like our analysis of Muş Kurmanji, where $F$ is higher, above $\text{AuxP}$, so that the subject always prevents it from agreeing with the object.

47 A special property of past tense subjects in Sorani and Hawrami (and many other Iranian languages), visible in (52b), is that they are doubled by a clitic which is encliticized to the first constituent inside VP. See Haig (2008:105-117) and Karimi (2010:698-699) for discussion. Karimi takes this clitic to be an indirect manifestation of ergative (“dative”) case on the subject. However, the same clitics are used for other NPs too, including possessors, objects of Ps, etc. These clitics were present in Middle Western Iranian, were lost in Kurmanji (and Zazaki), but are found also in (for example) Tatic languages that have maintained the oblique/direct case system. Therefore, it seems that these clitics have nothing crucial to do with how case and agreement on the finite verb work in Iranian.

Karimi (2013) argues for a different view. For him, the subject clitic is a manifestation of an agreeing applicative head, which is used to assign the subject theta-role in past tense sentences, similar to our use of a null $\text{Aux}$ (cf. note 17). He then attributes the fact that finite verbs freely agree with the object in past clauses in Kurmanji but not in (some versions of) Sorani to the presence of this clitic in Sorani: it is a head fully specified for phi-features that intervenes between $T$ and the object, preventing $T$ from agreeing with the object in Sorani. Although this looks good for the contrast between Kurmanji and Sorani, the correlation does not hold up more generally. Hawrami, for example, has subject clitics like Sorani does, but the finite verb can still agree with the object in the past (even first and second person pronouns), according to Holmberg and Odden’s (2004) (28).

We tentatively assume that the clitics in Sorani and Hawrami are just weak pronouns not marked for case. Their distribution is similar to that of oblique NPs in Kurmanji not because they are intrinsically oblique, but because they are not used in positions where $F$ agrees with NP, since then pro-drop is possible, and that is a more economical form of pronominalization. Why these clitics are required with subjects in past clauses is an interesting question, but we take it to be not directly related to the issues of case and agreement being studied here.
(51) a. \text{min} \text{ a-č-im.}  \text{ Present tense} \quad \text{(Haig, 2008:281)}\\
1S PROG-go:PRES-1S\\
‘I am going.’

b. \text{tō ċī a-ka-y lēra?}\\
you what PROG-do:PRES-2S here\\
‘What are you doing here?’

(52) a. \text{min hāt-im bō erā.}  \text{ Past tense} \quad \text{(Haig, 2008:288, 290)}\\
1S come:PAST-1S to here.\\
‘I came here.’

b. \text{min šart=im kird-uwa łagal xwā.}  \quad \text{not kird-im}\\
1S bond=1s:CL do:PAST-PTPL with God.\\
‘I have made a bond with God.’

Bāŋ=yān kird-im.\quad \text{call=3PL.CL do:PAST-1S}\\
‘They called me.’

This supports our claim that the special agreement pattern that Northern and Central Kurdish share is not dependent on there being case distinctions on the NPs. However, it is problematic for case-driven approaches like (45) or (46). According to those alternatives, if a dialect lost the dependent case rules, we’d expect agreement to change too, such that the finite verb always agreed with the subject.

More generally, from our agreement-driven perspective we expect that an Iranian language could have a different case pattern without having a different agreement pattern, since agreement does not depend on case. The Hawrami dialect of Gorani, described by Holmberg and Odden (2004) is another example. The core facts are in (53) and (54). Like Kurmanji and Sorani, the verb agrees with the subject except in the past transitive sentence (54b), where it agrees with the object. But the case system is a bit different from either form of Kurdish: the object is oblique in the present clause in (53b) (like Kurmanji), but the transitive subject is not oblique in the past clause in (54b) (like Sorani).

(53) a. \text{Ahmał ma-ram-o}  \quad \text{Present tense}\\
Ahmad INFL-run-3s\\
‘Ahmad runs.’

b. \text{pyā -k-e æsp-ækæ-i mæ-win-â}\\
people-the-PL horse-the-OBL INFL-see-3p\\
‘The people see the horse.’

(54) a. \text{žiwa kæwt-ge}  \quad \text{Past tense}\\
Zhiwa fell-3sf\\
‘Zhiwa fell.’

b. \text{Ahmel bi zæ-k-e=§ girt-e,}\\
Ahmed goat-DEF-PL=3S.CL took-3p\\
‘Ahmed took the goats’
For our agreement-driven theory, this is no problem. The principles that govern agreement are the same. However, the rules for assigning unmarked case are slightly different. They can be stated as follows:\(^{48}\)

\[(55)\]

a. If an NP argument has no case when the complement of \(v\) is spelled out, assign it oblique.

b. Otherwise, NP has direct case.

\((55)\) takes advantage of Marantz’s idea that the unmarked case can be different in different domains; for him this is the difference between unmarked case and true default case (see (9c,d)). For example, genitive can be the unmarked case in a DP domain and nominative/absolutive the unmarked case in a clause. Baker (in press) extends this idea, saying that, since VP can be a spell out domain distinct from TP, it can have its own characteristic variety of unmarked case. In particular, Baker claims that partitive is the unmarked case for VP-internal NPs in Finnish. \((55)\) combines this possibility with the fact that the VP complements of \(v_{\text{PRES}}\) are spelled out separately, whereas the VP complements of \(v_{\text{PAST}}\) are not—the same distinction that shapes agreement in these languages.

This Hawrami pattern is more problematic for case-driven accounts, because they need to say why the verb agrees with the object but not the subject in \((54b)\), even though there is no distinction in case to attribute this to. (Note also that agreement is with the lower of the two unmarked NPs in \((54b)\). This is contrary to Bobaljik’s (2008) hypothesis that a verb will always agree with the higher of two unmarked NPs in a single clause within a case driven account, as is true in Hindi.) Also like Hawrami in this respect is the MukIryäni dialect of Kurdish, mentioned by Karimi (2013: 59, n.8).

One might consider retrenching and assuming that Sorani and Hawrami still have the same oblique-direct case distinction as Kurmanji, but it is not spelled out overtly at PF. This is essentially Karimi’s (2010, 2013:64) view, at least for subjects in past versus present clauses. In other words, oblique could be spelled out as a null morpheme at PF in Sorani, just as direct is. (Hawrami would be a more complex, since oblique would be spelled out overtly in some contexts but not others.) But this would be a more abstract analysis, raising obvious learnability questions, and there is some empirical evidence against it. Unlike Kurmanji, Hawrami has a kind of applicative alternation, as seen in \((56)\).

\[(56)\]

a. puł=im da pænæ=|= (separate P) (Holmberg and Odden 2004)

\[
\begin{align*}
\text{money}=1\text{S.CL} & \quad \text{gave-3S} & \quad \text{to}=2\text{S.CL} \\
\text{‘I gave you money.’}
\end{align*}
\]

b. puł=im pænæ=da-i (incorporated P)\(^{49}\)

\[
\begin{align*}
\text{money}=1\text{S.CL} & \quad \text{to=gave-2S} \\
\text{‘I gave you money.’}
\end{align*}
\]

In \((56a)\), the goal argument appears low in the VP, after the verb, much as goal arguments do in Kurmanji, although with the significant difference that the goal is expressed as a PP in Hawrami. \((56b)\) shows an alternative construction in which the P shifts to the right of the verb (an instance of head movement, let us assume, as in Baker 1988) and now the finite verb agrees with the goal argument (which is pro-dropped), not with the theme argument as in \((56a)\) and the Kurmanji equivalent. We may infer, then, that the goal argument has shifted to the edge of the VP or vP in \((56b)\) so that it is higher than the

\(^{48}\) Haig (2008: 185) cites MacKenzie (1966:51) as saying that oblique case is still used on a subject in a past clause in Hawrami in relatively rare cases when the subject is an inanimate noun (e.g. ‘the heat’, ‘illness’, ‘thirst’), whereas Holmberg and Odden do not mention this. We leave open how to account for this detail in any variety that has it.

\((55)\) predicts that goal NPs low in the VP should alternate in case in Hawrami, being oblique in present clauses but direct in past clauses, unlike Kurmanji. However, the prediction cannot be tested because low goals are PPs, not NPs, in Hawrami (see \((56a))\).

\(^{49}\) In an active applicative in these languages, the goal can only be realized as pro. We do not know why this is, but similar constraints are found on affected arguments (e.g. ethical datives) in many other languages too.
theme argument, as is common in dative shift alternations (cf. Larson 1988). Now the important fact about (56b) for our purposes is that the pro-dropped goal is a possible target for agreement, so we must say that it does not have inherent oblique case; rather it must have direct case (or no case at all). Now Hawrami also has a reasonably standard morphological passive construction (unlike Kurmanji). (54) gives the result of applying passive to a base structure like (56b), with a goal-expressing P adjoined to the verb.

(57)  
\[
\text{žiwa} \quad \text{gul-e}=\hat{s} \quad \text{paenæ}=\text{mæ-ði} \quad \text{r-y-\text{å}}. \\
\text{Zhiwa flower-PL=3S.CL} \quad \text{to}=\text{INFL-give-PASS-3pl}
\]

\text{‘Zhiwa will be given flowers.’}

(Holmberg and Odden 2004)

Here the goal argument has become the subject, as befits it as the highest argument inside VP/vP. (We can tell this because it triggers a subject clitic affixed to the theme argument; see note 42.) But the striking thing about (57) is that the finite verb agrees with the theme argument ‘flowers’ (third plural), not with the goal argument ‘Zhiwa’ (feminine singular). So in (57) the goal argument seems to be resistant to the verb agreeing with it, just as agentive subjects are, but in (56b) the goal argument is not resistant to the verb agreeing with it. This does not make sense from the perspective of an account in which agreement is driven by covert case distinctions, since in Icelandic (the model for this sort of analysis) a goal argument would have inherent dative case in both (56b) and (57). Rather, what is clearly different between (56a) and (57) is the structural position of the goal: it is below F in (56b) but above it in (57). And that is expected to be the critical factor in a theory like ours, which is based on Cyclic Agree, not on covert inherent case. Furthermore, Sorani seems to be the same as Hawrami in this respect, if one puts together the partial paradigms in Haig (2008) and Karimi (2010). Examples like (332) in Haig (2008: 293) are like (56a) (with a source P incorporated, rather than a goal P), and passive examples like (43) in Karimi (2010:710) are like (57).

We have seen then that our agreement-driven approach makes the strong and correct prediction that other Iranian languages could have the same crossed agreement system as Kurmanji does without having the same case system, as long as the difference between past and present verb stems is maintained (as it is in nearly all Iranian languages; Haig 2008: 9-10). In contrast, a natural prediction of case-driven accounts like (45) and (46) would be the converse: an Iranian language could maintain the crossed case system of Kurmanji but lose the agreement system that allegedly depends on it. But there is no evidence that this ever happens in Iranian languages. Kurmanji’s case-and-agreement system is preserved from Western Middle Iranian, according to Haig (2008: ch.3). Another language that has maintained the crossed case system is Zazaki, but Zazaki also has a Kurmanji style crossed agreement system; the two languages have no essential differences with respect to split ergativity. Balochi may be another such

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50 These examples also raise questions for the theory of intervention. The key question is why does the goal block F from agreeing with the theme in (56b) but not (57). It is tempting to say that the difference is because the goal has moved to SpecTP in (57), so its trace no longer intervenes between F and the theme argument. However, movement does not seem to be the crucial factor in one clause constructions in Icelandic (Broekhuis 2007, Bobaljik, 2008), nor in goal constructions in Kurmanji (see (37) and (38)). We therefore assume that even traces block agreement (or, equivalently, Agree happens before an intervening NP moves out of the way). Rather, we conjecture that the goal argument in the applicative construction and the theme argument are equidistant from F at the left edge of VP, just as the experiencer and theme are in (29). In effect, this is saying that applicative constructions in these languages are symmetrical object constructions, like applicatives in Kichaga and other Bantu languages. In experiencer constructions, lexical case on the experiencer forces agreement to be with the goal. In these applicative-like constructions, the factors are different. Any bias toward agreeing with the goal rather than the theme in (56b) can be attributed to the goal needing to be pro and pro needing to be licensed by agreement. Any bias toward agreeing with the theme rather than the goal in (57) can be attributed to the goal being a trace, an intrinsically worse target for agreement. This proposal makes certain predictions, but we do not have access to a native speaker to test them.
language, according to Stilo (2009: 705) and Haig (2008: 12, 185). There is thus no microparametric evidence that the unusual case system of Kurmanji can exist without the agreement system, whereas there is microparametric evidence that the agreement system can exist without case distinctions, or with different case distinction. This is further support that case is agreement-driven in this family.

3.3 Other Iranian patterns

So far we have looked for the low-hanging fruit, where each of the main theoretical options we are comparing makes its simplest prediction and looks for support. If we look at the Iranian languages in a bottom-up fashion, we find some other alignment patterns attested. These do require nontrivial additions to our theory. In particular, they give us reason to include dependent case, the fourth kind of case allowed for by Marantz (1991), into our own account. However, we show that we can add this to our theory without all hell breaking loose. Even with this addition, our theory is more restrictive than a theory like (45), which allows dependent case rules to vary with the tense-aspect of the clause.

A relatively clear instance of dependent case in an Iranian language comes from Pashto, following the description of Robson and Tegey (2009: 730). Pashto can be seen as the opposite of Hawrami. It has retained the familiar crossed agreement pattern, but whereas Hawrami has maintained the oblique case on objects in present sentences but not on subjects in past sentences, Pashto has oblique case on subjects in past sentences but not on objects in present sentences. This is seen in the examples in (58).

(58) a. Ahmad paxtun win-i. (Present transitive)
   Ahmad Pashtun.DIR.m.sg see.PRES.IMPF-3s
   ‘Ahmad is seeing the Pashtun.’

   b. Paxtun pə kābəl ke wos-ed. (Past intransitive)
      Pashtun.DIR.m.sg in Kabul in live:PAST.IMPF-3s
      ‘The Pashtun lived in Kabul.’

   c. Puxt-ān-ə topo kāfən ke wos-ed. (Past transitive)
      Pashtun-OBL.m.sg rifle here-bring.PAST.PERF.3s
      ‘The Pashtun brought the rifle.’

We can be more comfortable calling this manifestation of oblique a true ergative case, since the only NP arguments of a clause it is used for are transitive subjects. Now Baker (in press) gives some conceptual arguments that ergative case can only be a dependent case, never a case assigned by a functional head under agreement, because there is no structural reason why agreement should be limited to the subjects of transitive clauses only. Therefore, we attribute the following case system to Pashto:

(59) a. If NP1 c-commands NP2 at the spell out of TP, then assign NP1 ergative (=oblique).
   b. Otherwise, NP has direct case.

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51 However, Jahani and Korn’s (2009) description of Balochi looks more like the Tatic languages mentioned below; there is clearly significant variation across the dialects. Stilo (2009) also mentions Northern Talyshi as having the crossed case pattern, but we have not been able to synch this with what Haig says about that language.

52 There are certainly languages which have shifted to a simpler agreement system, where the finite verb always agrees with the subject, including Persian. But those languages have lost the ergative case system too. Nor does it seem plausible to that case is more prone to historical change than agreement is in general. For example, the major Dravidian languages have the same nominative-accusative case system, but some of them have agreement (Tamil) and others have lost it (Malayalam). See Baker (in press) for evidence that agreement is case-driven in Tamil.

53 Pashto also uses the oblique case on the NP complement of an adposition.
Ergative case applies to subjects in past clauses only because $v_{\text{PRES}}$ is a strong phase head but $v_{\text{PAST}}$ is not, as in Kurmanji. As a result, the object is spelled out in the same domain as the subject in past clauses but not in present clauses. We conclude, then, that there is no intrinsic reason why an Iranian language cannot include dependent case marking in its grammatical system, in addition to the other types.

With this possibility in mind, we turn to the most important alignment pattern found in NW Iranian languages beyond those already discussed: the so-called double oblique pattern. This is the most widespread type of so-called “deviant case marking” in Kurdish languages, according to Haig (2008: 226). It is found in dialects of Kurmanji, including the one spoken in Muş, as described and analyzed by Gündoğdu (2011). This dialect (MK) is exactly like AK and standard Kurmanji in present clauses, but it is different in the past clauses, where the transitive subject and the direct object are both in oblique case. The verb then bears invariant third singular agreement by default, and there is no NP in direct case in the clause. Thus, (60a) and (60b) are like AK, but (60c) is notably different.

(60)  

a. Ez te di-bin-im. (transitive present)
     LDIR you.SG.OBL IMPF-see.PRES-1SG
     ‘I see you.’

b. Ez ket-im.  (intransitive past, Gündoğdu, 2011:77)
     LDIR fall.PAST-1SG
     ‘I fell down.’

c. Mm te dit (transitive past, Gündoğdu, 2011:81)
     L.OBL you.SG.OBL see.PAST.3SG
     ‘I saw you.’

This pattern is also common in the dialect spoken around Diyarbakır, studied by Dorleijn (1996: 62, 118). The double oblique pattern in past clauses is also found in some languages of the Tatic group, spoken further to the East, around the Caspian sea (e.g. Vafsi and Kafteji, Stilo 2009: 706, 709), with the complication that objects are differentially marked in some (cf. note 34). From other branches of Iranian, Stilo (2009) mentions West Balochi and Roshani, and Windfuhr (2009: 34) adds Semnani and Yaghnobi. This pattern is also of typological interest, since an alignment pattern in which the same case form is used for both arguments of a transitive verb but not for the sole argument of an intransitive verb is extremely rare across languages; Comrie (1981:118-119) explains why languages should strongly disfavor it, and says that it may be found only in some Iranian languages among all the languages of the world.

We analyze this double oblique pattern as being another result of dependent case creeping into Iranian. As such, our analysis of MK does adopt some important elements of a case-driven analysis like (45). We cannot say that the subject is oblique in (60c) because the verb agrees with the object instead of the subject, since the verb manifestly does not agree with the object in this variety. Rather, we say that the subject gets its oblique case by dependent case assignment, like (59a) from Pashto. In addition, this case prevents $F$ from agreeing with the transitive subject (whereas $F$ can agree with the intransitive subject). These assumptions are stated in (61), where (61a-c) is a subpart of our expanded disjunctive case hierarchy in (10), with agreement-assigned case ordered between dependent case and unmarked case.

(61)  

a. If NP1 c-commands NP2 at the spell out of TP, then assign NP1 ergative case.

b. $F$ agrees with NP only if NP has no case feature, and $F$ assigns NP direct case.

c. Otherwise NP in argument position at Spell Out receives oblique.

… and ergative case and oblique case are realized by the same morphemes at PF.

Although (61) does make use of several of the ingredients of (45), which we avoided for AK, it crucially does not make use of explicit tense sensitivity. The ergative rule in (61a) is stated in general terms, just as it would be for a pure ergative language. This rule then interacts with the phase-structural distinction
between past and present clauses in Kurmanji, which holds for MK just as for AK. When v is a strong phase head—when a present stem is used—then VP is spelled out separately from TP, the subject in SpecTP does not see the object inside VP, and ergative case is not assigned to the subject. F can then agree with it and assign it direct case. In contrast, when v is not a strong phase head—when a past stem is used—then VP is not spelled out separately from TP, the subject in SpecTP does see the object in VP, and ergative case is assigned to the subject. Then F cannot agree with it and cannot assign it direct case.

We have not yet accounted for the core observable difference between MK and AK, which involves oblique case being on the object of past clauses as well as present clauses. Recall from section 3.1 that we cannot account for this by adding a rule of accusative dependent case assignment to the system. That might work for the marked case on the object on the past clause in (60c), but it does not work for the marked case on the object on the present version in (60a), since the same phase boundary that prevents dependent case from being assigned to the subject should prevent dependent case from being assigned to the object. Rather, we claim that the other crucial difference between MK and AK is that the agreeing head F in MK has reverted to its crosslinguistically most common position: it is T, above the subject of both past clauses and present clauses. The subject therefore always prevents F from agreeing with the object in MK, by intervention, as in English.\(^{54}\) Since F (=T) can never agree with the object in MK, it can never assign direct case to the object. Therefore, the object must always get the unmarked case for arguments - which is oblique in MK, as in AK. Our analysis of case and agreement in Mus is summarize in (62). Here * marks crucial differences between MK and AK, \(^{\wedge}\) marks shared properties, and + marks properties that are important for MK that AK may or may not have.

\[(62) \begin{align*}
\text{a. } & \text{v}_{\text{PRES}} \text{ is a strong phase head; } \text{v}_{\text{PAST}} \text{ is not.} \\
\text{b. } & \text{If NP} \text{ c-commands NP2 in the same phase, assign it ergative} \\
\text{c. } & \text{F is high in the clause, above the subjects of past and present clauses.} \\
\text{d. } & \text{F agrees with the closest NP below it only if NP has no valued case feature.} \\
\text{e. } & \text{If F agrees with NP, F assigns NP direct case.} \\
\text{f. } & \text{If NP is an argument without a valued case feature, assign it oblique.} \\
\text{g. } & \text{Otherwise NP is unmarked for case (nonarguments).} \\
\text{h. } & \text{Ergative case and oblique case receive the same realization at PF.}
\end{align*}\]

Notice that there is only one crucial difference, namely (62c).\(^{55}\) Everything else is either the same in the two languages (62a, e, g, f) or it is crucial for MK and consistent with the surface patterns of AK (62b, h).

\(^{54}\) Note that in past clauses this is a sort of defective intervention, in the much-discussed sense of Chomsky (2000), given that F cannot Agree with the subject once it has received ergative case. Like Chomsky, we assume that all NPs (even inactive ones) count as interveners. Examples in which NPs with lexical case do not seem to intervene are due either to the NPs with lexical case being equidistant to the agreed with NP (following Broekhuis (2007)) or due to the NP with lexical case having the syntactic status of a PP. In this, we disagree with (e.g.) Bobaljik (2008).

Bobaljik (2008) argues that NPs with dependent case do not block the finite verb from agreeing with the object, modeling his analysis on the behavior of quirky case subjects in Icelandic. But the two languages that provide his empirical basis for this, Hindi and Tsez, may not be relevant languages. For Hindi, there is reason to think that “ergative” case is inherent case rather than dependent case, because it is possible on subjects of (some) unergative verbs, subject to an agentivity condition (see, e.g. Butt and King 2003). For Tsez and similar Caucasian languages, there is reason to doubt that the agreeing head is T, hence higher than the base position of the subject; for example, agreement with an absolutive object is found even on nonfinite verbs (Polinsky and Potsdam 2001: 588, 605). Hence F in Tsez could well be (approximately) where it is in Kurmanji, and therefore subject to Cyclic Agree.

\(^{55}\) Ideally, we would find morphological evidence of this difference, e.g. from differences in the inflectional paradigms of verbs in AK and MS. We do not have complete MK paradigms to evaluate if this is true. However, one difference is that MK does not have the present progressive form di-V.PRES-AGR-e that is found in AK (see (25a)). Hence, MK does not have as many forms suggesting that F is lower than Aux as AK does. (There is no obvious difference in the morphology of the present perfect however; this needs further investigation.)
We take this then to be an adequate account of how the difference between MK and AK can be a microparametric one, existing in closely related languages potentially in contact with each other.

One thing that may seem odd/stipulative about this analysis of the double oblique pattern in MK is that there are two cases that are quite different from the point of view of syntax which come out looking exactly the same at PF: the dependent case assigned to some transitive subjects and the elsewhere case assigned to NPs that are inaccessible to agreement. But probably this should make us feel a bit uncomfortable, since this sort of double oblique pattern is known to be extremely rare across languages, attested only in a few Iranian languages (Comrie 1981:118-119). Therefore, this is something that we do not want to have too nice an explanation for. Even in Iranian languages, the two syntactically different cases are morphologically distinct as often as not. Thus, Haig (2008:165) says that a few Tatic languages (Chali and Tārom dialects) and Sangesari (pp. 153-155, 159) use one case for subjects of intransitive verbs and present tense transitive verbs (the old direct case), a second one for the subjects of transitive verbs in the past tense only (a vestige of the old oblique case), and a third case for NPs inside VP (an innovative form, similar to accusative -ra ACC in Persian). An example set in a past clause is:

(63)  
a. má tá-de bedíä. (Sangesari, Haig, 2008: 160)  
1s:OBL 2s:ACC see:PAST  
‘I saw you.’ (originally from Christensen 1935: 126; present forms missing)

b. a bo rún razi reε mišúji.  
1s:DIR outside garden:OBL way go:PAST:1S  
‘I was passing the garden…’

c. neε má-de bedíä.  
3s:OBL 1s:ACC see:PAST  
‘He saw me.’

The analysis of these languages is presumably like (62) except that (62h) does not happen to make the analysis more opaque. Other languages that have this three-way case system are Mazand, Yazghulami, Rushani, Munji, (Windfuhr, 2009:34), Parmir languages, Parachi, and some dialects of Balochi and Wakhi.

3.4 Limits on alignment diversity in Iranian

Now that we have enriched our theory to allow for languages like MK and Sangesari, we have to ask whether what we are left with is a very weak overall theory of case and agreement. Once we permit ourselves to combine ingredients of a dependent case/case-driven analysis and elements of an agreement-driven analysis into a single account, as we foresaw in (10) and adopted in (62), are have we reached the point that any imaginable pattern is possible? Can the theory make correct predictions about patterns that are ruled out, or is it doomed to overgeneration? And is anything in fact ruled out in Iranian languages?

The answer, we claim, is that our theory does still explain why some patterns are unattested—if we go to the work of imagining what other patterns there could be. For example, the Muş Kurmanji pattern supposed arises from the older AK/Standard Kurmanji/Zazaki crossed pattern by a kind of analogical change, in which oblique marking on the objects of clauses sentences is extended to the objects of past clauses (Haig 2008: sec. 5.4.1). Now imagine a similar analogical change going in the other direction: an Iranian language that generalizes oblique marking on the subject from past clauses to present clauses. This would result in the hypothetical pattern in (64), with a double oblique pattern in present clauses only.
This pattern is also only one degree different from the stable “archaic” pattern. But no Iranian language does this, according to Haig (2008) or Windfuhr (2009: 34). Haig observes (2008: 194-195) a tendency/pressure in Iranian languages to “make the expression of O-past equivalent to that of O-pres” but no tendency at all to make the expression of A-pres identical to that A-past (see also pp. 13-14, 225-230).

He also states (p. 194) that throughout Iranian “The case of S must be identical to that of A-pres”. So it is not true that empirically anything goes when it comes to case and agreement in Iranian.

It is also significant that the unattested pattern in (64) cannot be generated by any plausible combination of the types of structural case assignment we have countenanced: agreement-assigned case, dependent case, and unmarked case. The crucial question is how could oblique case arise on the subject of present tense verbs? It cannot be agreement-assigned case, because the verb does not agree with oblique subjects, by hypothesis (just as verbs do not agree with oblique objects in MK). Suppose then that it is dependent (ergative) case. Then active \( v_{\text{PRES}} \) must have lost its strong phasehood in this variety, so that the subject can see the object and become ergative. But if active \( v_{\text{PRES}} \) is not a strong phase head, then nothing should block \( F \) in the middlefield from agreeing with the object and assigning it direct case, just as it does in the past clause. This type of case marking should thus give rise to a uniformly ergative language, not a split double oblique language. The last option for getting the oblique case on the transitive subject in (64a) is to say that it is some kind of unmarked case, assigned to NPs in argument positions when TP is spelled out. But this instance of unmarked case must crucially happen before \( F \) can agree with the subject, bleeding agreement (in violation of the disjunctive order posited in (10)). But then the same unmarked oblique case should apply even to the subject of an intransitive verb in (64a). This would give a kind of “marked nominative” pattern, not the split double oblique pattern we were aiming for. Therefore, there are imaginable case and agreement patterns that are impossible in Iranian languages (and universally, as far as we know), and our somewhat eclectic theory can still explain why.

In contrast, a theory that allows dependent case to be sensitive to tense directly could generate the hypothetical language in (64) just as easily as it could generate MK: it simply says that ergative case applies in all clause types and accusative case applies only in present clauses, the two cases being spelled out the same at PF. Since (64) does not happen, that alternative theory is too weak, whereas ours is not.

This is not the place to go through every imaginable pattern and discern whether it should be allowed or not. However, we close with one more general and potentially more fundamental observation. A key feature of our account is that it is based ultimately on \( v \) heads varying in their phase properties. That is the crucial factor determining whether or not \( F \) agrees with and assigns direct case to the object in AK, and also in determining whether two NPs see each other for the purposes of dependent case assignment in Pashto and MK. Given this, we expect that split ergativity should be limited to making a two-way distinction between clause types. This is because phasehood is fundamentally a binary distinction: either a head is a phase head, or it is not. (Alternatively, \( v \) is a strong/hard phase head or a weak/soft phase head; see Chomsky (2001).) This is not a notion that admits of a wide variety of flavors and subtypes. Therefore, if the phasehood of \( v \) is at the bottom of split ergativity in the Iranian family, then we expect only a two-way distinction among clause types: there is one case-and-agreement pattern

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56 On the contrary, he observes a (weakish) tendency to make the expression of A-past equivalent to that of A-pres—in other words, for Iranian languages to evolve into pure nominative-accusative languages, as Persian has. Indeed, this is as common an alignment pattern in Iranian languages as any (Windfuhr 2009:34), although less interesting.

57 For us, this follows from \( v_{\text{PRES}} \) being a strong phase head throughout the family. This (plus the absence of the right kind of object shift) prevents transitive subjects in present clauses from seeing the object, so as to get a dependent case distinct from that of an intransitive subject. Similarly \( v_{\text{PRES}} \) prevents \( F \) from seeing an object in VP, so if it agrees with and assigns case at all, it will do so to transitive and intransitive subjects equally.
that arises when \( v \) is a strong phase head, and another one that arises when \( v \) is not a strong phase head, but that should be all. There should be no third (or fourth…) alignment pattern.\(^{58}\)

This may not strike the reader as surprising, but it definitely does not go without saying. On the empirical side, the Iranian languages taken as a whole do allow many more than three alignment patterns, especially in the past tense: Kurmanji-Zazaki, Sorani, Hawrami, Pashto, Mus, and the various Tatic languages are all different.\(^{59}\) If so many alignment patterns exist in Western Iranian as a whole, why could not a single language use three of them? On the theoretical side, the restriction to a maximum of two alignment patterns also does not follow if we allow rules of case assignment to refer directly to the tense-aspect value of the clause, as the alternative case-driven proposals in (45) and (46) do. The reason is simply that Iranian languages have more than two tense-aspect combinations that such rules could in principle refer to. For example, one can imagine in these terms a case system like (65).

(65)  
\begin{enumerate}
\item Assign ergative to the higher of two NPs in clauses with perfective aspect.
\item Assign accusative to the lower of two NP in clauses with nonpast tense.
\item Otherwise assign NP direct case.
\item \( F \) agrees with NP only if NP has direct case.
\end{enumerate}

The only difference between (65) and (45) is that the accusative case rule refers to something different from the ergative case rule: one is keyed to tense and the other to aspect. Since tense and aspect are partially independent of each other, such a language could have up to four different alignment patterns in finite clauses, as outlined in (66). (Note that Kurmanji’s tense-aspect system is this rich, since the aspect prefix \( di- \) can go on both past and present stems, and both past and present stems can be used without \( di- \).)

(66)  
\begin{enumerate}
\item John-ERG money found-AGR \hspace{1cm} \text{Past perfective}
\item John-ERG money-ACC will-find-AGR \text{def} \hspace{1cm} \text{Nonpast perfective (future, subjunctive)}
\item John money-ACC is-seeking-AGR \hspace{1cm} \text{Nonpast imperfective}
\end{enumerate}

\(^{58}\) Note that this reasoning assumes that other things remain stable. For example, we assume that the position of the agreeing head \( F \) can vary from language to language (MK vs AK), but not from clause to clause within the same language (in Iranian, anyway).

\(^{59}\) Here we abstract away from (only) two qualifications that can complicate the Iranian picture: the possibility of differential object marking (DOM) on objects, and the possibility of pronouns having special (additional) case forms. For a tentative suggestion about the first, see note 34. We would approach the latter as in Legate (2008), assuming that pronouns might reveal a richer case system that is otherwise reduced at PF. For example, languages that would otherwise be analyzed like MK might actually need an analysis like Sangesari for the sake of pronouns.

With those qualifications, we have at least mentioned in good faith every Iranian alignment system we have read about, except the more complex one in the Tati dialects of Tārom, which draw a four way distinction in the cases of some pronouns, distinguishing nominative, ergative, and two innovative accusatives (Haig 2008:169-171, Stilo 2009: 713). But even this language has only two clause types: in past clauses transitive subjects are ergative, intransitive subjects are nominative and objects have accusative-1; in present clauses all subjects are nominative and objects have accusative-2. We can generate this system with the following rules, all of familiar types.

(i)  
\begin{enumerate}
\item Assign ergative (oblique) to the higher of two NPs in the same phase. (=Pashto, Mus)
\item Assign accusative-1 to the lower of two NPs in the same phase. (new, but parallel (ia))
\item Assign accusative-2 to an NP not otherwise marked for case when VP is spelled out. (=Hawrami)
\item Assign direct to an NP not otherwise marked for case when TP is spelled out. (=Hawrami)
\end{enumerate}

(ia) and (ib) apply only in past clauses and (ic) applies only in present clauses given the usual distinction between \( v_{\text{PAST}} \) and \( v_{\text{PRES}} \). (The agreement facts for this language are not described, so it is uncertain if \( F \) assigns direct or not.)

Stilo (2009:710) describes Vafsi as having more than two alignment patterns, but this results from DOM and the effects of movement on case. The direct object bears an innovative accusative case in past in SOV order, but has direct case in the rare OSV order (see also Haig 2008:166). Perhaps objects fronted in this manner are really hanging topics, and thus outside the domain of the core case system.
Informal descriptive treatments also could allow an Iranian language to have more than two alignment patterns, although one might expect more complex systems to be less common and less stable historically. So it is not the case that all perspectives predict the same restriction that our phase-based account does.

And the fact of the matter is that no Iranian language does have more than two different alignment patterns, judging by Haig’s (2008) in-depth study. He presents the languages as having at most a two-way distinction based on the difference between past stems and present stems, which goes back to Old Iranian. He writes (p. 9) “Throughout the entirety of the Iranian language family, ergative, or more generally non-accusative alignments, are almost completely restricted to a single formally defined environment: clauses headed by verb forms built from the past stem of transitive verbs.”

The various languages vary quite widely in what case-and-agreement pattern they manifest in clauses with past-stem verbs (Haig 2008: 13-14): it could be ergative, double-oblique, double-direct, tripartite, or simple accusative, with variations. But at the same time, the languages have very little variation in present tense sentences, which are always accusative (with or without DOM) with agreement with the subject (Haig 2008:14, 194), although specific case morphemes may be lost or innovated. The result is a wide variety of binary splits, but nothing more; the languages either maintain the two-way distinction between past and present or they level it so that the language is uniformly accusative (like Modern Persian). This restriction makes perfect sense from our perspective, based on the binary distinction of v being a phase head or not. Differences exist depending on what agreement and case resources are built on top of this distinction: where the agreeing head F is, whether it assigns case, what dependent cases a language might have, what elsewhere cases a language might have, and perhaps a few other factors. But there is a fundamental limit on the diversity at the core of the system. This is a big advantage of a theory like ours.

6. Conclusion

Our overall conclusion, then, is that the details of split ergativity in Adyraman Kurmanji support an analysis of this language in which agreement assigns case, rather than one in which case determines what is agreed with. Therefore, we do not want to eliminate case assigned by agreement from our theory of UG, contra the simplicity argument in Levin and Preminger (in press), for example. Rather, we fit it in alongside the other types of case assignment identified by Marantz (1991) and related work.

Fundamentally AK’s split ergativity comes down to two main facts: first, v in present clauses is active, so a phase head, whereas v in past tense clauses is passive, so not a phase head; second, the agreeing head in AK is lower than the past tense subject, so it agrees with the object if there is one, otherwise with the subject. Once we have developed this theory of agreement, then case marking is straightforward: whatever NP the verb agrees with has direct case, and all other NP arguments are oblique. This agreement-driven approach captures the fact that (standard) Kurmanji clauses have at least one direct case NP, that they have at most one direct case NP, and that so-called ergative case and accusative case are really the same case, namely oblique. That is an optimal account of split ergativity in Adyraman Kurmanji, and one that relates well to facts about its tense-aspect-voice system.

Other varieties of Iranian have different case assignment and agreement rules, but the fact that some preserve the agreement system of Kurmanji without having its case system supports our account over alternatives. More generally, it seems that that difference between present v but not past v being a phase head underlies and constrains the otherwise impressive diversity of case and agreement in the Iranian languages in substantive ways. This includes even those that have developed dependent case assignment as well as or instead of agreement-assigned case in their systems.

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60 The only noteworthy exception Haig mentions is with verbs of sensory perception, desire, and obligation, which behave like past tense clauses in some languages. These are psych verbs in (for example) the Badinâni dialect of Kurmanji, which we illustrated in (20) and analyzed in (29).
References
Atlamaz, Ü. (2012). Ergative as Accusative Case: Evidence from Adiyaman Kurmanji. İstanbul: MS.
Boğaziçi University.
Baker, M. C. (2014). Pseudo Noun Incorporation as Covert Noun Incorporation: Linearization and
Springer Netherlands.
and Linguistic Theory, 28, 593-642.
291-352.
Béjar, Phi Theory: Phi Features Across Interfaces and Modules (pp. 295-328). Oxford: Oxford
University Press.
Tiibingen: Narr.
and Studies, 5.
Zinmeister, New Perspectives on Case Theory (pp. 53-87). Stanford: CSLI publications.
Cambridge, Mass: MIT Press.
J. Uriagereka, Step by Step: Essays on Minimalist Syntax in Honor of Howard Lasnik (pp. 89-155).
Cambridge, Mass: MIT Press.
the 29th West Coast Conference on Formal Linguistics (WCCFL 29).
and Linguistic Theory, 73-120.
Musulûn Dialect. İstanbul: MS. Boğaziçi University.
Walter de Gruyter.
Publications.


