

The Ergative Phase

1 Introduction

In this squib, I will discuss one empirical domain where the *propositionality* and *phonetic integrity (isolability)* criteria to identify phases fail to capture certain empirical observations (see Chomsky 2000, 2001, 2008). Drawing data from the past transitive structures, *aka* ergative constructions, in Kurdish, I will demonstrate that the current arguments underlying the determination of the first phase (v*P vs. vP) fall short of accounting for the emergent case/agreement pattern and the cliticization domain in these structures. Instead, a view will be endorsed of the first phase in which a vP constitutes a strong phase only if its head is associated with a full complement of ϕ -features, regardless of whether an external θ -role is projected in [spec,vP]. Thus construed, the identification of a strong phase need not be procrastinated until the whole vP is formed, rather the status of a phase will be decided once a ϕ -complete/-defective v^o enters into the derivation.

The structure of this squib is as follows: in section 2 the basic descriptive facts underlying the case/agreement pattern in Kurdish will be presented. Section 3 will discuss the syntactic derivation of the ergative construction and domain of cliticization in Kurdish. In this light, I will present the challenges that Kurdish facts pose for the current view of phases. Section 4 constitutes the final remarks, encompassing a speculative solution to the problems raised.

2 Case/Agreement in Kurdish

In the next two subsections I will lay out a foundational description of case/agreement in Kurdish present and past tense clauses.

2.1 The Nominative-Accusative Case/Agreement

In terms of case and agreement, the present tense clauses follow a Nominative-Accusative system in Kurdish:

- (1) a. Hānā u Hedi da-ro-n bo madrasa
Hana and Hedi IMPRF-go.PRES-3.PL to school
‘Hana and Hedi are going to school.’
b. Hānā u Hedi nahār-e da-xo-n la madrasa
Hana and Hedi lunch-ACC IMPRF-eat.PRES-3.PL in school
‘Hana and Hedi are eating lunch at school.’

Kurdish displays two case distinctions on the full DPs. The Nominative Case on the full DPs lacks morphological instantiation, as is evident for the subject of intransitive (1a) and transitive (1b) clauses in Kurdish. The DP complement in VP bears Accusative Case, which is morphologically realized as a suffix *-e* on the DP. The agreement on the verb tracks the DP with Nominative Case, as expected. Suffice it to say that the resulting case/agreement pattern in the present tense clauses in Kurdish falls out naturally under the current view of cyclic derivation of syntactic structure i.e., phases.

However, the emergent case/agreement pattern in the past tense clauses in Kurdish constitutes a challenge for the formulation of phases if *propositionality* and

phonetic isolability criteria are to be maintained. In the next section, I will present the relevant data from the past tense clauses in Kurdish.

2.2 The Ergative-Absolutive Case/Agreement

Kurdish exhibits a tense-based split-ergativity in its grammatical system (Bynon1979; Friend1985; Haig1998, 2008; Holmberg and Odden2004; Karimi2010a,b). In clauses where the main verb is constructed of a past tense stem, the subject of intransitive clauses and the object of transitive clauses are treated alike as bearing Nominative Case whereas the subject of transitive clauses is marked differently.

(2) a. mēndāl-ak-ān ba otubus rošt-ən bo madrasa

child-DEF-PL by bus went-3.PL to school

‘The children went to school by bus.’

b. mēndāl-ak-ān nahār=yān xwārd-Ø la madrasa

child-DEF-PL lunch=3.PL.DAT ate-3.SG in school

‘The children ate lunch at school.’

In (2a), the subject DP bears Nominative Case and controls agreement on the verb. However, in (2a), a past transitive clause, the subject DP is doubled by a Dative clitic with which it agrees in full ϕ -features. In terms of its host selection, the Dative clitic tends to attach to the earliest non-subject constituent (Friend1985; Karimi2010a; Mahmoud1994). The object DP is in its bare form and does not take the Accusative marker *-e*, suggesting that the object DP bears Nominative Case.

If the object DP bears Nominative Case in the past transitive clause in Kurdish, we expect it to control agreement on the past transitive verb, and this prediction is indeed borne out, though in an intriguingly obscure way. The pattern of agreement in the past transitive, aka ergative, clauses in Kurdish follows from the Person-Case Constraint (Albizou 1997; Béjar and Rizac 2003; Bonet 1994). According to this constraint, the universal validity of which is yet to be determined, in the presence of a Dative argument, agreement with a direct object must be in 3rd person. This constraint was originally introduced to account for the resulting peculiarity in the agreement clustering of Dative indirect objects and Accusative direct objects. However, Karimi (2010a,b) argues that this constraint also accounts for the eccentric agreement arising in the ergative structures in Kurdish, where the Dative refers to the case borne by the clitic doubling the transitive subject.

The following data from Kurdish suggest that in the presence of an intervening Dative subject, agreement with the object DP is always 3rd person, though agreement for number is not affected:

- (3) a. Hānā mēndāl-ak-ān=i bērd-ən bo pārk
 Hana child-DEF-PL=3.SG.DAT took-3.PL to park
 ‘Hana took the children to the park.’
- b. Hānā mən=i bērd-Ø/*əm bo park
 Hana I¹=3.SG.DAT took-3.SG/*1.SG to park
 ‘Hana took me to the park.’

c. to awān=ət nārd-ən bo dādgā

you they=2.SG.DAT sent-3.PL to court

‘You sent them to the park.’

As is evident, in the presence of a Dative subject DP, agreement of the Nominative object with the verb is in 3rd person, whereas full agreement (in person and number) gives rise to ungrammaticality (4b). Thus construed, the Person-Case Constraint effect lends itself to an analysis in terms of Defective Intervention effects (Chomsky 2000). With this in mind, in the next section I will concern myself with question of the derivation of ergative structure in Kurdish and in this light I will assess the syntax of the first phase (v*P).

3 Ergativity and the v*P phase

Given the case/agreement pattern in the past transitive (ergative) construction in Kurdish, in the following sections it will be shown that the identification of a vP phase in terms of Chomsky’s (2001:12) interface criteria of *propositionality* (projecting ‘*full argument structure*’) and *phonetic isolability* will not withstand empirical scrutiny.

3.1 T°-Obj Agree

In this section I will present the syntactic derivation of the ergative construction in Kurdish. The following structure is suggested to represent its derivation in narrow syntax. The object DP with an uninterpretable Case feature merges with the past transitive verb to form VP. Next, v° merges with VP. Since the object DP ends up in Nominative Case at the end of the derivation, it is deduced that the transitive v° fails to check and value the

Case feature on the object as Accusative. Its Case-checking property being suppressed, the head v° is concluded to be disassociated with a full complement of uninterpretable ϕ -features, hence ϕ -defective². Accordingly, within vP , the Case feature on the object DP remains unchecked and concomitantly unvalued.

The external Θ -role is assigned to the subject DP upon merging in $[\text{spec},vP]$. Building on ideas developed in Aldridge 2008, Woolford 2006, Legate 2008, Mahajan 1989, I take the ergative case on the subject DP to be inherently licensed by the ϕ -defective v° . Since Kurdish morphology lacks a case marker distinct from Nominative and Accusative to single out the transitive subject in its ergative system, recourse is made to Dative-clitic doubling. I assume that the doubling Dative clitic is the spell-out of the lower copy of the subject DP after raising to $[\text{spec},TP]$ ³. Inherent case renders the external argument inactive though still visible for higher computations. Being associated with the categorial D° feature, the external argument raises to $[\text{spec},TP]$ to satisfy the EPP.

Upon merging, T° probes into its domain to locate a visible and active goal to get its uninterpretable ϕ -features valued. The only goal in its domain is the object DP with its unchecked Case features. Either taking the copy of the external argument at $[\text{spec},vP]$ as a Dative intervener, or taking the simultaneous intra-phase computations seriously, the context for the implementation of the Person-Case Constraint is conducive. All in all, the T° enters into Agree with the object DP and concomitantly the object DP ends up with Nominative Case (for similar approaches to derive the PCC, see Béjar and Rezac 2003; Sigurðsson and Holmberg 2008).

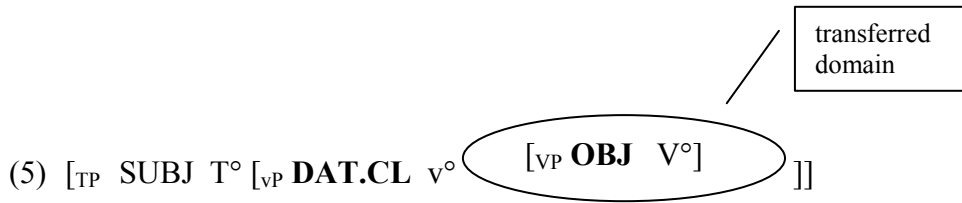
If correct, at this stage of the explication, two points concerning the Nominative Case on the object DP merits discussion. In effect, these two points are potential questions that may be raised as to how the Case on the object DP is licensed. The first one concerns Aldridge's 2008 contention that in an ergative structure, the absolutive case is assigned by the head v° to the object DP. Second, according to Legate 2008, in some ergative languages the Nominative Case on the object DP in an ergative construction is indeed a spurious one. Rather she holds that in such languages the morphological case distinction for Nominative and Accusative has been neutralized and accordingly at PF a single case marker instantiates both Nominative and Accusative alike. In both views, the Absolutive/Nominative Case on the object DP is a fundamentally structural Accusative Case which is checked by v° . The question may be raised as to whether the case/agreement pattern in the ergative construction falls into any of the above scenarios. The answer is negative. If the Nominative/Absolutive Case on the object DP were to be assigned/checked by the transitive v° in vP and given that Kurdish morphology makes available a separate Accusative Case marker *-e* from the Nominative, one would expect the object DP to bear Accusative Case in PF, *à la* Legate 2008. Augmenting the object DP with the Accusative marker suffix leads to ungrammaticality:

- (4) mēndāl-ak-ān nahār=yān/*nahār-e=yān xwārd-Ø la madrasa
 child-DEF-PL lunch=3.PL.DAT/lunch-ACC=3.PL.DAT ate-3.SG in school
 'The children ate lunch at school.'

Consequently, one is convinced to conclude that the Nominative Case on the object DP and the PCC effects observed in the past transitive construction in Kurdish are due to the T°-object Agree. Now a basic challenge arises as to how the object DP comes to be accessible to higher computations outside the vP while a transitive v*P is assumed to be a strong phase. However construed, a past transitive (ergative) vP in Kurdish is a ‘*propositional*’ syntactic object with its ‘*full argument structure*’ at the interface (Chomsky 2004: 124). Assuming that only material on the edge of v*P are accessible to higher computations, one would be led to conclude that the (propositional) vP in the past transitive construction (in Kurdish) does not constitute a strong phase.

3.2 The domain of cliticization

It is recalled that in order for the past transitive subject to be marked differently from the intransitive subject and transitive object, it is obligatorily doubled by an agreeing dative clitic. It was also recalled that in the proposed syntactic derivation of a past transitive construction, the agreeing dative clitic was taken to be the lower copy spell-out of the inherently case marked subject in [spec,vP]⁴. Descriptively speaking, the doubling clitic takes the earliest non-subject constituent as its host and given the SOV order of Kurdish, this constituent, in most canonical cases, amounts to the object DP (Friend 1985, Mahmoud 1994). Taking the propositional approach to the determination of the v*P phase seriously, the following configuration ensues after the cyclic transfer of the v° domain (i.e, VP):



Karimi 2010a,b provides ample evidence that the host-selection of doubling dative clitics in the ergative construction in Kurdish is a PF phenomenon, affecting only the adjacent constituents to the right of the clitic. If the ergative vP were taken to be a strong phase, we would then end up with the direct object DP transferred along with VP to PF, while the dative clitic in the vP edge waiting in abeyance for the next cycle. At this point the question arises how the dative clitic ends up on the direct object DP while they have been separated by two different cyclic transfers. The adjacency condition on host-selection would be somewhat easy to capture if both the host and the clitic were within one phase domain (invoking a PF operation much akin to Embick and Noyer's 2001 *Local Dislocation*), however one would be hard-pressed to assume that a kind of inter-cyclic combinatorial algorithm relates the two. Even if possible, at this stage it is far from clear how such local phonetic dependencies are to be captured and still maintain the phonetic isolability of phases (for similar objections to the phonetic isolability of phases see Boeckx 2007: 48-49; Gallego 2010:71).

To complicate the picture a little bit more, if we assume, as I do, that V°-to-v° movement and subsequently v°-to-T° movement takes place in Kurdish as a uniform *pro-drop* language, the *propositional* view of vP phase construction predicates that the dative clitic takes the verb as the earliest non-subject constituent as its host. For in this case, the

verb having moved successive cyclically ends up in the higher phase. Being in the same transferred portion, the verb becomes a more accessible host for the clitic to anchor to than the already processed direct object DP in the previous phase. However the cliticization pattern in Kurdish shows that in the presence of an overt object DP, it is that DP which hosts the clitic (5a) and it is only when there is no earlier non-subject overt constituent (the object DP), the verb may take the clitic (5b-c):

- (6) a. mindāl-ak-ān **diz-aka**=yān nārd bo kin māmōstā
 child-DEF-PL thief-DEF-3.PL.DAT sent to side teacher
 ‘The children sent the thief to the teacher.’
- b. mindāl-ak-ān *pro* **nārd**=yān bo kin māmōstā
 child-DEF-PL sent=3.PL.DAT to side teacher
 ‘The children sent (*non-emphatic*) him to the teacher.’
- c. *mindāl-ak-ān diz-aka **nārd**=yān bo kin māmōstā
 child-DEF-PL thief-DEF sent=3.PL.DAT to side teacher
 ‘The children sent the thief to the teacher.’

Accordingly, the adjacency requirement on the clitic placement, coupled with the arising case/agreement pattern, in the past transitive structures in Kurdish cast doubt on the validity of postulating such interface criteria as phonetic isolability and semantic integrity to identify phases.

4 Concluding Remarks

The question facing any attempt to define phases as syntactic chunks subject to cyclic transfer (for computational efficiency purposes) is thus how the difference in the case/agreement properties of present transitive v^*P as opposed to the past transitive vP is to be captured. The discussion in this section is by all means speculative and suggestive and far from conclusive. Capitalizing on the participle-like behavior of the past transitive verb as the most salient peculiarity of the argument structure of such constructions, one is led to conclude that what makes a present transitive vP different from its past counterpart concerns the (in)completeness of ϕ -bundle on the head v° . A present transitive v° is associated with a full complement of ϕ -features as it is derived historically from an inherently transitive counterpart in the earlier stages of the language (Bynion 1979, 2005). In contrast, a past transitive v° is ϕ -defective, owing to its retention of categorial properties associated with its participle predecessor (for a historical overview see Haig 2008). The logical conclusion to draw is, then, that a phase boundary should essentially be designated based on the ϕ -(in)completeness of the heads in narrow syntax and not on the interface properties of the transferred chunks of syntactic structure. Viewing phases from this perspective is qualitatively similar to the Phase Theory of Gallego 2010, where he plausibly argues that the interface properties of a phase are best conceived of as interface consequences of the transfer of a phase and not as a cause for transfer.

The emergent idea concerning the identification of phases is that the ϕ -completeness of a head in narrow syntax designates a phase boundary associated with that head. Accordingly, a ϕ -defective v° in the past transitive structure does not signal a

vP phase no matter how complete the vP is in terms of its argument structure, whereas a ϕ -complete v^o designates a v*P phase in the present transitive structure⁵. Construed this way, the case/agreement properties and the cliticization domain in the ergative construction in Kurdish receive a compelling explanation.

References

- Albizu, Pablo. 1997. Generalized Person-Case Constraint: A case for a syntax-driven inflectional morphology. In *Theoretical issues on the morphology-syntax interface*, ed. by Miryam Uribe-Etxebarria & Amaya Mendikoetxea, vol. XL, *ASJU*, 1–33. Donostia: Gipuzkoako Foru Aldundia/EHU.
- Aldridge, Edith. 2008. Minimalist analysis of Ergativity. *Sophia Linguistica* 55:123–42.
- Béjar, Susana. and Milan Rezac. 2003. Person licensing and the derivation of PCC effects. In *Romance linguistics: Theory and acquisition*, ed. by Pérez-Leroux, Ana and Yves Roberge, 49-62 Amsterdam, John Benjamins.
- Boeckx, Cedric. 2007. *Understanding Minimalist Syntax: Lessons from Locality in Long-distance Dependencies*. Oxford: Blackwell.
- Bonet, Eulalia. 1994. The Person-Case Constraint: a morphological approach. In *The morphosyntax connection*, ed. by Harley, Heidi and Collin Philips, 33-52, MIT Working Papers in Linguistics 22.
- Bynon, Theodora. 1979. The Ergative construction in Kurdish. *Bulletin of the School of Oriental and African Studies* 42:211–224.

- Bynon, Theodora. 2005. Evidential, raised possessor, and the historical source of the ergative construction in Indo-Iranian. *Transactions of the Philological Society* 103:1–72.
- Chomsky, Noam. 2000. Minimalist inquiries: The framework. In *Step by Step. Essays on Minimalist Syntax in Honor of Howard Lasnik*, ed. By R. Martin et al., 89–155. Cambridge MA: The MIT Press.
- Chomsky, Noam. 2001. Derivation by phase. In *Ken Hale: A Life in Language*; ed. by M. Kenstowicz, 1–52. Cambridge MA: The MIT Press.
- Chomsky, Noam. 2004. Beyond explanatory adequacy. In *Structures and Beyond: The Cartography of Syntactic Structures*, Vol. 3; ed. by A. Belletti, 104–131. Oxford: OUP.
- Chomsky, Noam. 2005. Three factors in language design. *Linguistic Inquiry* 36: 1–22.
- Chomsky, Noam. 2007. Approaching UG from below. In *Interfaces + Recursion = Language? Chomsky's Minimalism and the View from Syntax-semantics*; ed. by U. Sauerland & H-M. Gärtner, 1–30. Berlin: Mouton de Gruyter.
- Chomsky, Noam. 2008. On phases. In *Foundational Issues in Linguistic Theory. Essays in Honor of Jean-Roger Vergnaud*; ed. by Freidin, Robert; Carlos P. Otero; Maria Luisa Zubizarreta, 134–166. Cambridge MA: The MIT Press.
- Den Dikken, Marcel. 2007. Phase extension. Contours of a theory of the role of head movement in phrasal extraction. *Theoretical Linguistics* 33: 1–41.
- Embick, David., Rolf Noyer. 2001. Movement operations after syntax. *Linguistic Inquiry* 32, 555–595

- Friend, Robin. 1985. *Some syntactic and morphological features of Suleimaniye Kurdish*.
Doctoral dissertation, UCLA.
- Gallego, Ángel J. 2010. *Phase Theory*. Amsterdam: John Benjamins Publishing Company
- Haig, Geoffrey. 1998. On the interaction of morphological and syntactic Ergativity: Lessons from Kurdish. *Lingua* 105:149–173.
- Haig, Geoffrey. 2008. *Alignment change in Iranian languages: a construction grammar approach*. Mouton de Gruyter. New York
- Holmberg, Anders and David Odden. 2004. Ergativity and role-marking in Hawrami. In *Syntax of the world's languages (SWL 1)*, Leipzig, Germany.
- Karimi, Yadgar. 2010a. Unaccusative transitives and the Person-Case Constraint effects in Kurdish. *Lingua* 120: 693-716.
- Karimi, Yadgar. 2010b. *Ergativity: Its origin and nature*. PhD dissertation, Allameh Tabataba'i University, Teheran.
- Kent, Roland. 1953. *Old Persian*. New Haven, Connecticut: American Oriental Society.
- Legate, Julie. 2008. Morphological and abstract case. *Linguistic Inquiry* 39:55-101.
- Mahajan, Anoop. 1989. Agreement and agreement phrases. *MITWPL* 10: 217-252.
- Mahmoud, Lanja. 1994. *Kurdish personal affixes*. MA thesis, University of Texas at El Paso.
- Sigurðsson, Halldór and Anders Holmberg. 2008. Icelandic Dative intervention: Person and number are separate probes. In *Agreement restrictions*, ed. by d'Alessandro,

Roberta, Gunnar Hrafnbjargarson, Susann Fischer, 251-280. Mouton de Gruyter, Berlin.

Woolford, Ellen. 2006. Lexical case, inherent case, and argument structure. *Linguistic inquiry* 37:111-130.

¹It must be stressed that Kurdish independent personal pronouns do not exhibit any case distinction, hence assuming an invariant form no matter where their configurational position is in a clause.

²This line of reasoning finds further empirical support from the diachronic development of past transitive verb stems in Kurdish. Karimi (2010b) provides ample evidence that the past transitive verb stem in Kurdish has been historically derived from a participle in the earlier stages of the language. Being adjectival, a participle fails to assign structural Case to its complement. To maintain the continuity of its development, along with Karimi (2010b), I assume that the transitive v° in the past transitive construction in Kurdish still retains remnant formal categorial features associated mainly with its predecessor, i.e., the participle.

³The same mechanism of copy-spellout has been suggested in Karimi (2010a), though the argumentation slightly differs in that work.

⁴One would, also, be tempted to assume that the dative clitic doubling the transitive subject is the spell out of the head v° . However, this move faces a paradox since it was argued that the head v° is ϕ -defective on case-assigning grounds, whereas the dative clitic is associated with a full ϕ -bundle. For what it is worth, a proper characterization of the role of the doubling clitics is neither within the scope of the present study nor of direct relevance to the discussion of the domain of cliticization (for a fuller account see Karimi 2010b).

⁵Therefore, in a past transitive construction in Kurdish the syntactic derivation, having processed vP , proceeds to the next ϕ -complete head which is taken to be T° (through percolation from C°). It must be noted that the extension of the vP to CP phase does not follow from the v° -to- T° movement analysis of Gallego 2010 (who is in turn in the spirit of Den Dikken 2007) for *pro*-drop languages. Given the difference in the case/agreement properties of the past and present transitive constructions, this view of phase extension would wrongly predict that, along with the past transitive vP , the present transitive vP containing the present stem verb does not constitute a strong phase either, as in both cases v° -to- T° movement seems to be at stake.