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ECCENTRIC AGREEMENT AND MULTIPLE CASE-CHECKING*

1. THE PUZZLE

Among the exciting issues raised by the study of ergative systems is the extent to which they pose a challenge to claims made about universal grammar which are based on the study of non-ergative languages. In this paper, we investigate a particularly puzzling construction—the spurious antipassive (hereafter, SAP)—in Chukchi, a language that differs from many more well-studied languages not only in having an ergative case system but in a number of other ways as well. This particular construction illustrates well the familiar tension between descriptive and explanatory adequacy—the theory of morphology and syntax must be flexible enough to allow for the existence of such a construction, yet at the same time rigid enough to derive non-trivial predictions about possible and impossible systems. At first glance, the properties of the Chukchi SAP suggest that languages may differ quite radically, if not arbitrarily, in how they map syntactic representations onto sound and meaning structures. We will take it as our goal to defend instead the view that UG is quite narrow in the range of possible variation, and that the key ingredients of an analysis of the Chukchi SAP are all readily available in recent assumptions about morphology, syntax and the relation between the two. In developing our analysis, we will show not only how the SAP is possible within a constrained theory of UG, but also (to a large extent) why the SAP takes the particular form it does, how it is related to other properties of

Chukchi morphosyntax, and to other constructions in more familiar languages, and what our proposed theory excludes as impossible constructions. The paper is laid out as follows. In section 2 we present a basic sketch of the SAP, followed by a thumbnail sketch of our analysis. In section 4, we begin fleshing out the ingredients of the analysis, defending a particular take on the morphosyntax of ergative systems and a theory of agreement. The analysis is tentative in parts, though we have attempted throughout to indicate further testable consequences of our proposals where these arise. Section 5 draws parallels between the Chukchi ergative system and the superficially similar case pattern in French causative constructions, providing some measure of independent support for our assumptions. We then return to Chukchi, laying out our assumptions about the morphosyntax of the true antipassive. At that point, we will have completed the groundwork for our analysis, and we will show how the properties of the SAP fall out. The final section presents our conclusions and suggests some avenues for future research.

2. THE SPURIOUS ANTIPASSIVE

Chukchi is a Chukotko-Kamchatkan language spoken in the far northeast of Russia. For detailed descriptions, see Skorik (1977), Dunn (1999). Case-marking follows a canonical ergative-absolutive alignment, as the examples in (1) illustrate.[1]

(1)   a.   ɣəm-nan   ɣət   tə-ɬʔu-ɣət
             I-ERG   you.SG(ABS)   1SG.SUB-see-2SG.OBJ
             'I saw you.'   Skorik (1977) p44

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[1] Only pronouns have a morphologically distinct ergative case; other nouns use ether the instrumental or locative suffixes in this function. Nevertheless all nouns distinguish the transitive subject (marked) from the absolutive function (unmarked). Word order is reported to be free and although we report examples as given in the sources, we take surface order in Chukchi to be unenlightening. Abbreviations used in the examples are ERGative, ABSolutive, INSTRumental, ALLative, ACCusative, DATive, SG = singular, PL = plural, SUB/OBJ = subject/object (for agreement affixes), AP = antipassive, PROG = progressive aspect.

b.   ərɣə-nan   ɣəm   ne-ɬʔu-ɣəm
         3PL-ERG   me (ABS)   3.SUB-see-1SG.OBJ
         'They saw me.'   Skorik (1977) p.45

c.   ɣəm   tə-kətɣəntat-ɣʔak
         I (ABS)   1SG.SUB-run-1SG.SUB
         'I ran.'   Skorik (1977) p.19

In addition to case marking, arguments are cross-referenced on the Chukchi verb by agreement affixes, consisting of a prefix (sometimes null) and one (or more) suffixes. The prefix references the person and number of the subject (regardless of case-marking), note the occurrence of *t(ə)-* for both transitive (a) and intransitive (c) 1SG subjects. The suffix references the features of the subject for an intransitive verb, and for a transitive verb, it references the object or a combination of subject and object features (such portmanteau agreement morphology will play a role in the analysis below). Note that there is a distinct series of suffixes for subjects and objects. Thus in (b) the 1SG direct object is referenced by the suffix *-ɣəm*, while the 1SG intransitive subject in (c) is referenced by the suffix *–ɣʔak*. The choice of agreement suffix clearly distinguishes between morphologically transitive and intransitive verbs.

Like other ergative languages, Chukchi has an antipassive voice alternation (two, in fact), in which the logical object is expressed in an oblique case and the clause is formally intransitive in both case marking and agreement properties.[2] This is illustrated in (2).

(2)   a.   ʔaaček-a   kimitʔ-ən   ne-nɬʔetet-ən
                youth-ERG   load-ABS   3PL.SUB-carry-3SG.OBJ
                '(The) young men carried away the load'

      b.   ʔaaček-ət   ine-nɬʔetet-ɣʔet   kimitʔ-e
                youth-PL(ABS)   AP-carry-3PL.SUBJ   load-INSTR
                '(The) young men carried away a load'   Kozinsky et al. (1988) p.652

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[2] It is more accurate to say that an antipassive verb is detranisitivized—in clauses with three arguments (either basic,

To this point, the Chukchi facts are unremarkable and illustrate a fairly typical ergative system. As it happens, the basic transitive morphosyntax in (1a), (2a) is not available to all combinations of subject and object. Certain person-number combinations—a subset of the "inverse" combinations in which the object outranks the subject on a person-number hierarchy—are not expressible in the expected form. Instead, for these combinations, intransitive antipassive morphology is used on the verb, while external to the verb, clausal morphosyntax remains transitive (as evidenced by an ergative-absolutive case array). This construction is dubbed the "spurious antipassive" by Ken Hale in Halle and Hale (1997) and Hale (2002) in virtue of the fact that the antipassive morphology seems to have no effect on the syntax or semantics of the clause, yet it is obligatory in this construction.

(3)   *Spurious AP*   ə-nan   ɣəm   Ø-ine-ɬʔu-ɣʔi
                        he-ERG   I (ABS)   3SG.SUB-AP-see-3SG.SUBJ
                        'He saw me.'   Skorik (1977) p.44

In addition to the mismatch between the transitivity of the clause on the one hand (case) and the verb on the other (agreement), two further remarks are in order about the agreement morphology in the SAP. First, the intransitive agreement morphology on the verb is governed by the ergative argument. This is otherwise impossible; intransitive agreement morphology is always controlled by an absolutive argument. Conversely, the absolutive argument fails to govern any agreement on the verb. Again, this is not possible elsewhere in Chuckhi. In other words, agreement on the verb continues to treat the ergative argument as the subject of the clause, even though the case array is inappropriate for the particular agreement morphemes used.

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or derived by applicative formation) an antipassive verb will be formally transitive having (3-1=) 2 arguments. See, Kozinsky et al. (1988), Dunn (1999) for examples and discussion.

3.   THE STORY (A THUMBNAIL SKETCH)

At this point, we will outline our analysis and key assumptions. The presentation in this section will be quite sketchy, but is offered at this time so that our endpoint will be clear as we flesh out the motivation for these assumptions in the coming sections.

   We start with the analysis of a simple transitive clause, shown in (4).

(4)   Transitive Clause (Active)
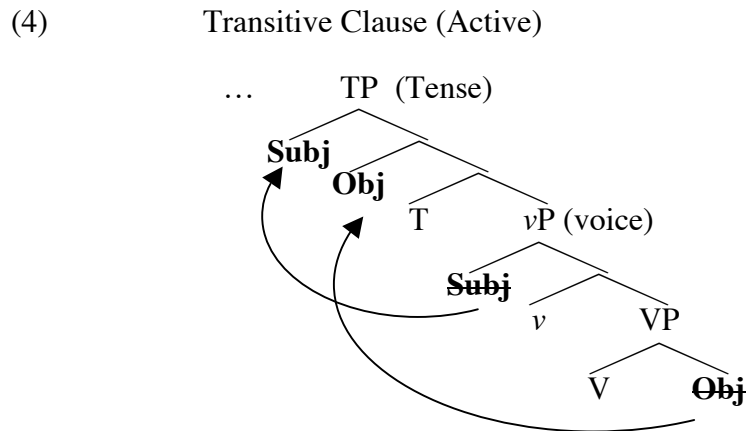
This derivation incorporates the premise that the relationship of syntactic configurations to argument structure is universal, and that ergative languages do not vary from nominative ones in this regard (see section 4.1 below). In current terms, this means that the internal argument is merged in VP and the external argument is introduced in the specifier of a functional projection, vP. The difference among case systems thus lies in the functional projections. We propose that the basic property that differentiates the ergative system in Chukchi from more familiar nominative-accusative systems is that in Chukchi, the v head cannot check/license object case, as proposed for other ergative systems by Bok-Bennema (1991) and Nash (1995).[3] We claim as well that a single head may check case on two arguments, if necessary for convergence. Since v in Chukchi cannot check object case, both subject and object raise to the domain of T° for

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[3] We will use the term "case-checking" to refer to whatever feature checking or licensing relationship obtains between a DP and an appropriate functional head.

checking.[4] This multiple-checking by T, we will argue, leads both to an Ergative case pattern and to the possibility of portmanteau morphology on the agreeing head T°. (There is an additional head involved in agreement, namely C°, a point to which we will return.)

An intransitive clause lacks an object, and thus there is only one instance of case-checking with T°. A special case of an intransitive derivation is the Antipassive, shown in (2b), in which the object does not raise out of the VP/*v*P into the functional domain, as shown in (5).

(5)   True Antipassive Clause
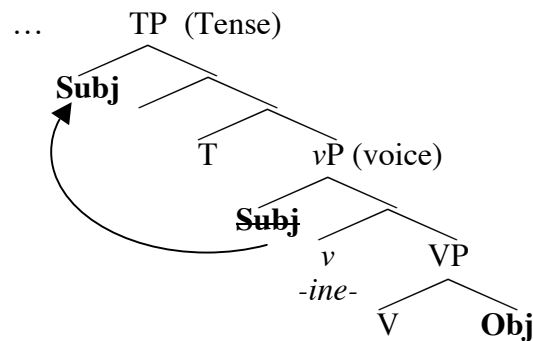
It is important to our account that morphology is post-syntactic and realizational, as in Distributed Morphology (Halle and Marantz, 1993). The overt antipassive morpheme *–ine-* does not cause the syntactic configuration in (5), rather the morpheme is introduced as a reflection of the antipassive syntax. One may think of *–ine-* as the *exponent* or *spell out* of the *v* head when there is an object in its local domain, the head being spelled out as Ø otherwise (e.g., when there is no object or when the object has raised out).

At this point, most of the pieces are in place for our analysis of the SAP, which we sketch in (6).

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[4] The schematization in (4) represents feature chains, either of feature movement or feature-copying via agree. We take no stand on how this relates to phrasal movement, but it is important that the lower members of the (feature-)chains be inactive at LF, which we have indicated with strikethrough.

(6)   Spurious Antipassive
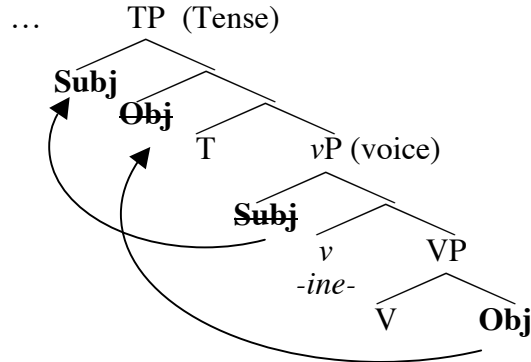
    In our view, the SAP is a normal transitive clause syntactically. Thus, it has a normal transitive

derivation, as the arrows indicate: both subject and object raise to T for case-checking, as in (4).

What "goes wrong" is in the morphological interpretation of such a clause. As pointed out above,

the SAP is obligatory with a subset of inverse constructions, defined as instances in which the

object outranks the subject on a person-number hierarchy. We propose that such inverse contexts

are computed locally, i.e., when the two arguments are in a checking relationship with the same

functional head. The offending configuration is resolved, in the mapping to the morphological

component, by deleting the features of one of the arguments (the lower one) at the checking

head. This is indicated by strikethrough of the top copy of the object in (6). This accounts for the

intransitive agreement morphology at the T head.

    Now, recent work in the syntax of chains has shown that the automatic consequence of the

deletion of a higher copy in a chain is the exceptional activation of a lower copy. This results, for

example, in arguments appearing to be pronounced in unexpectedly low positions, in response to

morpho-phonological conditions on the high position (see below). In the current context, this

means that the deletion of the object features at T° in the morphology predicts the "spurious"

activation of those features in a lower position of the object feature chain. This in turn makes the

vP look like an antipassive—defined as in (5) as a construction in which the object remains low;

the context for the insertion of the antipassive morpheme is thus met and the verb will surface in its antipassive form.

In the remainder of the paper we will set about fleshing out this analysis and motivating the component assumptions. Some of the benefits of this analysis are that it relates the SAP directly to other properties of Chukchi morphosyntax, and in particular, that it gives a clear reason why it is the antipassive morphology that is used spuriously, as opposed to, say, a spurious causative or a spurious iterative. The analysis also has the advantage that it is constrained, making fairly clear predictions about systems that cannot arise. In this last point, our treatment of the Chukchi SAP differs from the previous treatment of this construction in (Spencer, 2000) which invokes a rule of referral, in effect, directly stating the description of the construction as its analysis.

4. BASIC CHUKCHI MORPHOSYNTAX

Before developing the account of the SAP, there are a number of properties of Chukchi morphosyntax which any theory must capture. We have listed six of these properties in (7) as a descriptive adequacy checklist.

(7)   Descriptive Adequacy Checklist:

        a.   Ergative-Absolutive Case-Marking   (Ergative is marked)
        b.   Subject > Object (all prominence tests)
        c.   Complex Agreement (Prefix and Suffix; Subject and Object agreement)
        d.   intransitive verbs have "double agreement", subject agrees twice
        e.   suffixes (not prefixes) have portmanteau morphology
        f.   Antipassives are marked, derived intransitives

It is our contention that the minimal assumptions needed to capture the properties in (7) will bring us very close to having in place the assumptions needed for the analysis of the SAP.

4.1 Ergativity

We assume as a point of departure the commonly accepted view of the mapping from argument structure to syntax, and of case/licensing relations in a nominative-accusative system presented in (8).

(8)   Nominative / Accusative Case pattern
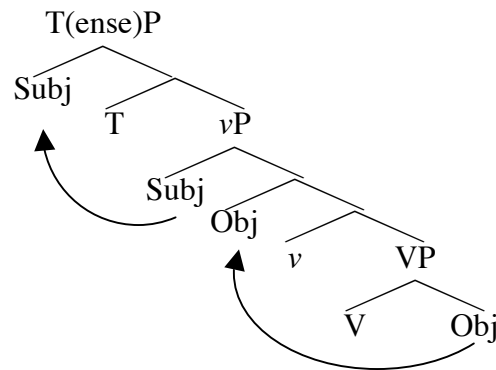
In this structure, the internal argument is base-generated as the complement of the verb. A higher head, v, is responsible for both the assignment of an external theta-role to the subject and for the checking of the object's case, in a now familiar manner (e.g., Chomsky, 1995). The subject in turn raises to check case with T.

Since (8) is, by hypothesis, the mechanism that underlies a nominative-accusative case array, something must be different in an ergative-absolutive array. It is not our intent to provide a general theory of ergativity (we suspect, with Johns, 1996, that ergativity may be no more a single syntactic phenomenon than is, say, verb-initialness), but we must nevertheless make some assumption about ergative case assignment in Chukchi. We propose that the minimal difference from (8) is that the head v in ergative languages is unable to check accusative case. As a consequence, in a transitive clause, the object will have to raise higher in an ergative language for case reasons. We propose that this raising targets T°, the only other case-related head in the structure, as shown in (9).

(9)   Ergative/Absolutive Case pattern in (Chukchi)
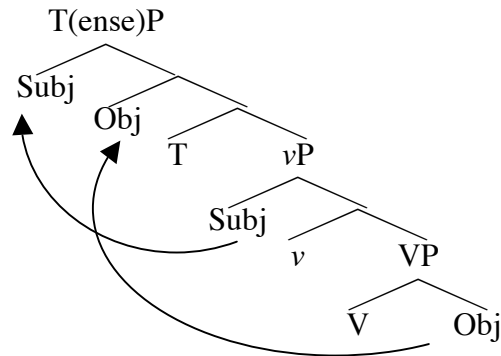
Note that we follow Richards (2001) in assuming a "Tucking in" derivation—a locality principle such as Attract Closest ensures that the first argument attracted to T° is the highest unchecked argument in T's c-command domain (the subject); subsequently attracted arguments are merged as close as possible to the checking head.[5] This preserves underlying hierarchical relations, ensuring that the subject c-commands the object in its case position, as we know to be the case from familiar diagnostics such as binding.[6]

Positing that *v* lacks an accusative case feature in ergative languages forces the object to check case with the next higher head, namely T. This provides an initial account of the basic property of an ergative system, namely the fact that the object bears the same case as the sole argument of an intransitive clause. Both check case against the same head. But this is clearly not the whole story, since the transitive subject also checks case against the same head, and (9) does not yield a double-nominative array. We propose that the ability of a single head to check distinct cases on multiple arguments is permitted by UG, but only as a marked option, when necessary for convergence. More specifically, we propose that the higher case (the first one checked) in such

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[5] We lay aside here the question of whether or not *v*P is a phase Chomsky (2000) when it assigns an external theta-role but has no case. The analysis would be unaffected if *v*P is a phase in this configuration, except that the object would have to move successive cyclically through a specifier of *v*P.

[6] We depart from Richards in that we take multiple-case-checking by a single head to underlie ergative systems (and dative-accusative interactions, see below), but for nominative-accusative arrays we maintain that case checking occurs in separate heads. So far as we can see, the relevant data in Richards 2002 is compatible with this position.

configurations will always be the more marked case (though this need not be visible on the surface).[7] In the system under investigation, this will be the ergative—below we will extend this proposal to certain dative-accusative configurations in Romance which we take also to instantiate a configuration like (9).

That the ergative case is more marked than the absolutive is clearly true for the Chukchi pronouns in (1), the ergative bears a suffix and the absolutive is zero-marked. According to Dixon (1994, p.58) this is one of few valid implicational universals surrounding ergativity, specifically, that "absolutive is always unmarked with respect to ergative."[8] There are according to Dixon no attested counter-examples where a language has bare ergative and non-zero marking for absolutive. There is no corresponding generalization for nominative systems—systems where the accusative is unmarked and nominative marked are "quite adequately attested" according to Dixon. Within the theory presented above, we may conjecture that this difference between systems arises as a consequence of multiple case-checking at a single head being invoked only for the ergative array. We will pick this conjecture up again in section 5.

Our approach to ergativity in terms of the absence of accusative case on *v* is thus similar to the family of unaccusative approaches to ergativity, as exemplified by Bok-Bennema (1991, Nash 1995). Nash proposes that ergative systems lack *v*P altogether, and that the ergative case is an inherent or lexical case (see also Mahajan, 1993 on Hindi). In our view, it is possible—indeed

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[7] The presentation in the text suggests a syntactic implementation of the requirement that the more marked feature be checked first. For example, while case checking heads are canonically associated with a singe uninterpretable feature, they may be assigned an "additional case" feature as necessary for convergence—if features on heads have structure, this additional feature will always be peripheral to the "regular" case feature: [[[T]case]extra-case]. If feature checking proceeds from the outside in, as suggested in Chomsky (1993), p.28, this will ensure that the marked case will be checked first. That the marked case is not checked when only one DP checks case arises since the internal ("regular") case feature would then remain unchecked, causing the derivation to crash. The markedness asymmetry may also be expressed in other views of case, for example in a morphological system like that put forward in Marantz (1991); the generalization would be that locally dependent cases are always "dependent down" in his terms.

[8] It is perhaps safer to state this as an implication: if one of the two direct cases is unmarked in an ergative system, it is always the absolutive.

preferable—to maintain a view under which ergative is a structural case and in which linking theory is not subject to parametrization in this regard. For Chukchi, at least, arguments in favour of treating the ergative as a structural case come from the fact that the ergative argument is an intimate part of the agreement system, and from evidence that the ergative is not tied to thematic roles or lexical properties of verb roots (contrast Quirky Case in Icelandic). Case in Chukchi is controlled by transitivity, not by theta-roles, and the external argument is a full participant in the system of case alternations in verbal diathesis in the language (see especially, Nedjalkov, 1976). Thus, agents in Chukchi (unlike Basque and Hindi) are obligatorily absolutive (not ergative) when there is no object requiring structural case. This can be seen in unergatives (Polinsky 1990), antipassives, unspecified object verbs such as *eat*, and noun-incorporation structures. Additionally, non-agent subjects such as (instruments, experiencers, causers, etc.) productively alternate in case, being marked ergative when they end up as the subject of a transitive clause.[9] The example in (10) illustrates one such alternation—as in English, instrumental causers may be expressed as an oblique (10a) or as an ergative subject (10b).[10]

(10) a. əʔtvʔet   jərʔet-ɣʔi   mimɫ-e
          boat-ABS   fill-3SG   water-INSTR
          'The boat filled with water.'

      b. əʔtvʔet   jərʔen-nin   mimɫ-e
          boat-ABS   fill-3SG>3.SG   water-ERG
          'Water filled the boat.'   Nedjalkov (1976) p.195

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[9] As we understand the literature, in some languages, such as Hindi, ergative does appear to be more lexical (see Anand and Nevins, this volume). In Hindi, ergative arguments do not participate in the agreement system, are more restricted in the thematic roles they can be associated with (experiencers are not ergative) and can occur with the agents of agentive intransitive (i.e., unergative) verbs. This is one reason why we feel that a unified account of ergative systems should not cover both Hindi and Chukchi.

[10] As mentioned in note 1, the instrumental case is syncretic with the ergative for common nouns—that the clause is transitive is unambiguously indicated by the agreement morphology on the verb in this example.

Experiencers also alternate productively between an intransitive verbal construction and a transitive light verb or auxiliary construction, in which case the experiencer bears ergative case. This alternation is illustrated in (11) (see also Dunn, 1999, pp. 322 ff.).[11]

(11)   a.   ətłəɣən   (pečɣ-etə)   korɣav-ərkən
             father.ABS   food-DAT   delight.in-PROG.3.SG
             'Father is happy about the food.'

       b.   ətłəɣ-e   pičɣə-pič   korɣ-o   łəŋ-ərkən-en
             father.ERG   food-ABS.SG   delight AUX-PROG-3.SG>3SG
             'Father is happy about the food.'   Nedjalkov (1976) p.194

To sum up, we have suggested a view of ergativity (property (7a)), as it plays out in Chukchi at least, which differs from a nominative derivation only minimally, specifically in the inability of *v* to check accusative case. We maintain a cross-linguistically uniform linking theory, where external arguments are introduced in the same position across systems, and we avoid positing lexical or inherent ergative for the reasons noted above. Nothing special needs to be said to account for the familiar hierarchical asymmetries between subjects and objects, as Tucking In preserves the underlying hierarchical relations in the case positions (property (7b)). Our system, as noted, has the potential to shed light on markedness asymmetries which arise only in ergative systems, and as we will see in the next section permits a straightforward integration with the morphological agreement facts of Chukchi. There is, however, one remaining systematic difference between ergative and nominative systems on which we have not yet commented, and that is in the absolute height of the case-checking position of the object. The case-position of an

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[11] In Inuit languages as well, the applicative affix -uti- adds an internal argument to otherwise intransitive verbs, promoting the original sole argument to transitive subject status where it receives Ergative case (cf. Fortescue, 1984, p.89 - the following example from M. Fortescue, personal communication, 6/2003):

(i)   Arna-p   angut   kama-ap-p-aa
       woman-ERG   man.ABS   be.angry-APPL-MOOD-3S>3S
       'the woman is angry with the man'

Contrast this with the Niuean examples discussed by Massam (this volume) where adding an applicative to a non-

object in an ergative language, while lower than the subject, is nevertheless higher than the case position of the object in an accusative language. As it turns out, there is in fact evidence to support this view in the literature (see especially Bittner, 1994) and we will return to this in the discussion of antipassives in section 6.

4.2 Agreement

While the Chukchi case system is unambiguously ergative-absolutive in alignment, the agreement morphology is much more complex (see Bobaljik, 1998, and on related Itelmen Bobaljik and Wurmbrand, 2002).[12] The first observation to be made is that agreement is reflected by combinations of prefixes and suffixes. The prefixes are always controlled by the subject argument, regardless of transitivity (and thus case). The suffixes are more complex. In intransitive verbs, the suffix is controlled by the subject (this leads to the characteristic property of Chukotko-Kamchatkan agreement systems that the verb agrees twice with an intransitive subject, once at the prefix and again at the suffix). When the verb is transitive, the suffix reflects the object or a combination of subject and object features. For example, the suffixes for third person singular transitive objects are as in (12):

(12)   Portmanteau marking for object agreement:

  a.   Subj [3SG] / Obj [3(PL)]   -nin(et)
  b.   Subj [2PL] / Obj [3SG]   -tke
  c.   other subj / Obj [3SG]   -(ɣʔe)n

Independent properties of Chukchi morphology suggest that the prefixes are associated with a C-like head while the suffixes are associated with the Tense/Aspect morphology. That is, the prefixes are adjacent to (and sometimes coalesce with) a morpheme which reflects the features

agentive intransitive yields a construction with two absolutives.

[12] We will treat in this chapter only the verbal tense-aspect combinations. Certain tense-aspect combinations are expressed by participial forms of the verb. The SAP arises in those conjugations as well, with a slightly different

indicative, conditional and irrealis/hortative. The morpheme which immediately precedes the suffixes reflects a distinction between progressive and neutral (with allomorphy for future).[13] Thus, we agree with Spencer (2000) (contra Hale, 2002) in positing a structure in which the prefixes are hierarchically superior to the suffixes.[14]

(13)   The place of agreement morphemes.

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        CP
       /  \
      C    TP  (Tense/Aspect)
   Agr1-   / \
          T   vP (voice)
       -Agr2  / \
             v   VP
             |
             V
```
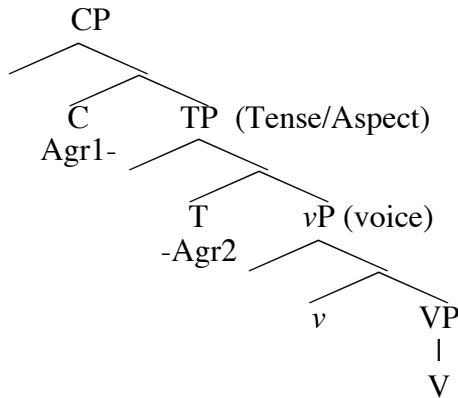
Let us consider now how the structure suggested by the distribution of agreement morphology meshes with the analysis of Chukchi syntax (case) presented in section 4.1. To begin with, the role of C was not considered in that section. The fact that both C-agreement and T-agreement reflect the features of the subject in intransitive clauses can be implemented by adding a CP to the top of the tree in (9) and stipulating that C must check features with the closest argument. This will force an intransitive subject to raise to T and then on to C, checking agreement features twice. For the transitive derivation we have proposed, both subject and object check case at T—tucking in leaves the subject as the highest argument and it will then be attracted by C. From

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distribution. We see no reason why our account will not extend to those conjugations directly.

[13] There is an additional prefix occurring between what we are calling C and the verb root which marks future tense. It is therefore perhaps more accurate to refer to the suffix as Aspect alone, and thus the head it is associated with should be Asp, not T. For the analysis to be presented here, this affects nothing other than labelling, though the cross-linguistic consequences for the theory of case have not been worked out.

[14] Additional phonological evidence to support this structure for the related language Itelmen is given in Bobaljik and Wurmbrand, 2001. Hale (see also Halle and Hale, 1997) associates the suffix with C°, though the motivation for this label is entirely internal to the theory of ergativity presented in Bittner and Hale (1996), under which "C" is responsible for nominative case assignment. Since the suffixes agree with the subject of an intransitive verb and

this perspective, the Chukchi finite verb construction looks somewhat less exotic, patterning

perhaps with the complementizer agreement phenomenon doubling subject agreement in some

varieties of German, for example. An example from Bavarian is given in (14).

(14) … ob-**st** noch Minga kumm-**st** Bavarian
whether-2sg to M. come-2sg
'whether you're coming to M.' [pronoun = du/Ø] Bayer (1984)

The derivations for Chukchi are given in (15). (The structure in (15b) conflates the derivations

for intransitive and unaccusative structures.)

(15) Chukchi clause structure and agreement/checking relations (= (9) + CP)

a. Transitive b. Intransitive
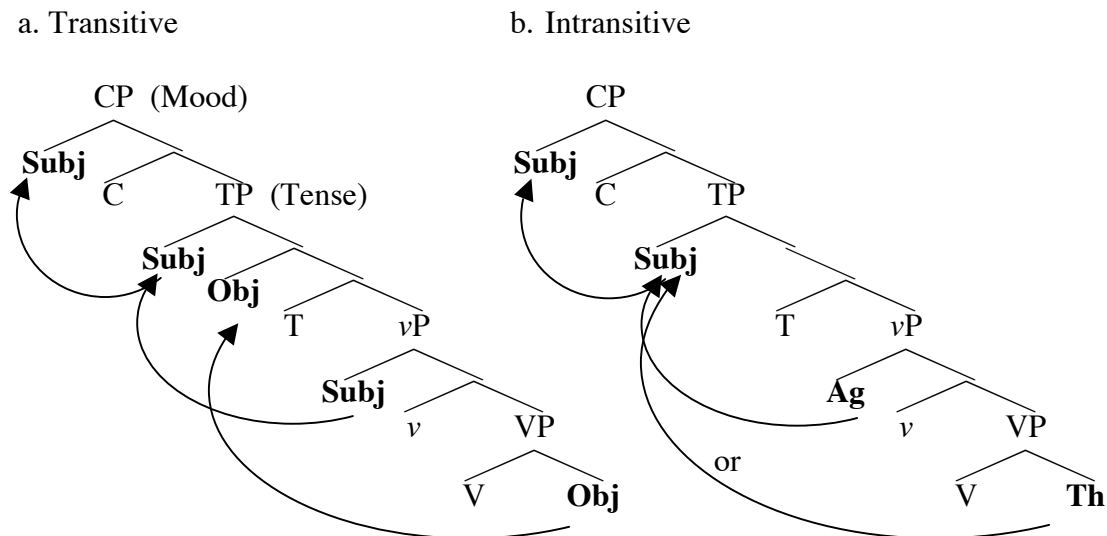
In addition to providing an account of the double agreement (7d), our proposal yields the

result that both subject and object are implicated in agreement at T, while only the subject moves

on to C. This converges with the observation that only T has portmanteau agreement

morphology, while C always agrees with the subject (7e). We take this convergence between the

distribution of agreement morphology motivated on morphological considerations and the

distribution of arguments based on syntactic configurations to be further support for the general

approach advocated here. We note, though, that this convergence rests on tying portmanteau

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with the object of a transitive verb, Hale treats the suffixes as a reflection of absolutive agreement.

morphology at a head (in this case T) to multiple case-checking at that head. While perhaps not implausible, pursuing this assumption on a broader scale constitutes a clear avenue for future research.

5. THE ERGATIVE PATTERN IN FRENCH CAUSATIVES

Let us open a parenthesis at this point. One claim which is central to our treatment of Chukchi ergativity is that T checks case twice, as a marked option, with a marked case (ergative) being checked prior to the unmarked (absolutive) case. If Universal Grammar provides this double Case-checking mechanism as an option, then we would expect to see its effects in other languages, and perhaps even in non-ergative languages, as well. And in fact, the same mechanism does seem to be found quite widely. In many structures in which dative case is used, it is necessary to posit a marked dative/accusative checking mechanism which is entirely parallel to the ergative/absolutive one. This phenomenon is most clearly visible in causative complements, such as the French (16).

(16) a. Luc a fait acheter un livre aux étudiants.
          L. has made buy a book (ACC) to.the students (DAT)
          'Luc made the students buy a book'

      b. Luc a fait travailler les étudiants
          L. has made work.INF the students (ACC)
          'Luc made the students work.'

   An analysis of this type of causative construction must answer several questions. The Case properties of the downstairs arguments are unlike those of arguments in simple clauses.   The position of enclitic pronouns is also different from that seen in other infinitival complements. And the word order is peculiar in the complement clause.   We will show that all three factors reflect, at least in part, the way the matrix verb checks Case features within the complement clause.

We restrict our focus to the core "V-incorporating" type of causatives, for which the downstairs verb can be shown to raise into the matrix clause (den Dikken, 1995, Guasti, 1993). (The "ergative" pattern does not arise in non-V-incorporating causative structures, as Guasti shows.) In such structures, a matrix quantifier may appear to the right of the raised infinitive:

(17) Mes amis   feront   manger tous de la salade   à ce garçon.
      My friends will-make eat   all of the salad   to this boy
      'All my friends will make this boy eat salad.'

Guasti's conclusion, which we accept here, is that the verb of the complement clause has raised into the matrix clause altogether, presumably as an incorporating operation which unites causative *faire* with the lower verb as a single complex causative verbal unit. (This unit may later be disrupted by movement of *faire* to a higher position, stranding the downstairs verb inside the matrix VP.)

As Guasti shows, the verb does not raise as high in causative complements involving reflexive *se*, or negation or auxiliary verbs. In such non-incorporating complements, moreover, the data is somewhat more delicate, and dative subjects do not appear to be possible.   We may safely set them aside as peripheral on both counts.

As has been clear since Kayne (1975) and Rouveret and Vergnaud (1980), the object in a transitive complement like (16a) has Case features checked by the matrix verb, as does the subject in an intransitive complement like (16b). Less clear has been the status of the *à*-marked dative DP. Kayne and Rouveret and Vergnaud both posit a special transformation to 'check' dative Case, but such a transformation is too powerful and too language-specific to be admitted into current (minimalist) models.   But the more recent literature offers no convincing alternatives, either. Burzio (1986) essentially adopts Kayne's rule, revising it to suit his own structures. Baker (1988) and Reed (1996) do the same, with a special P-insertion rule and a

special dative Case rule, respectively.   In each case, the solution is essentially stipulatory. (To be fair, the authors' primary concerns are elsewhere in these works, and their solutions to the dative Case problem are presented as a small part of an explicit theoretical package.)   Baker, in fact, acknowledges that his solution is incomplete Baker (1988, p. 461, fn. 25), because there is no particular reason why it should be the object which is accusative and the subject, dative, rather than the reverse.   Baker's observation is generally applicable to theories of this family.

The only other approach developed in the literature is presented, in slightly different forms, by Rochette (1988) and Guasti (1993), who maintain that the dative Case for subjects is inherent Case, assigned by the matrix complex verb in combination with a particular theta-role.   (It remains unclear why such an inherent Case would be available only with transitive complement clauses.)

One problem in coming to understand how the dative DP is licensed is that the surface word order is misleading. Since a full dative *à*-phrase always follows any accusative DP, it is natural to suppose that the accusative is closer to the matrix verb, and is structurally higher in the complement clause. But the intervention effects found in clitic placement indicate that the reverse is true.

First, note that clitic-climbing from the infinitival complement may be blocked by non-clitic subjects, where the clitic is argumental *y* or *en* (Rouveret and Vergnaud, 1980).

(18)   a.   Jean fera   comparer   cette sonatine   à Paul   à une symphonie
            J.   will.make compare.INF this   sonata   to P.   to a symphony
            'Jean will make Paul compare this sonata to a symphony.'

       b.   *Jean y   fera   comparer   cette sonatine   à Paul.
            J.   to.it   will.make compare.INF this   sonata   to P.
            'Jean will make Paul compare this sonata to it.'

       c.   Jean lui   y   fera   comparer   cette   sonatine.
            J.   to.him to.it will.make compare.INF   this   sonata
            'Jean will make him compare this sonata to it.'

(19) a.   Jean   a   fait   mettre   ce livre   à Pierre   sur l'étagère.
                      Jean has made put   this book   to Pierre   on   the   shelf
                      'Jean made Pierre put this book on the shelf.'

         b.   *Jean y   fera   mettre   ce   livre   à Pierre.
                      J.   there   will.make put   this   book   to P.
                      'Jean will make Pierre put this book there.'

         c.   Jean lui   y   fera   mettre   ce   livre.
                      J.   to.him there will.make put.INF   this   book
                      'Jean will make him put this book there.'

(20) a.   Jean a   fait   obtenir un permis à ses amis   de cette administration.
                      Jean has made get   a   permit   to his friends   of   this   department
                      'Jean made his friends get a permit from this department.'

         b.   * Jean en   a   fait   obtenir un permis à ses   amis.
                      Jean of-it has made get   a   permit   to his   friends
                      'Jean made his friends get a permit from it.'

         c.   Jean leur   en   a fait   obtenir un permis.
                      Jean to-them of-it has made get   a   permit
                      'Jean made them get a permit from it.'

The pattern holds equally for dative subjects and for accusative subjects:

(21) a.   *Celà y   a   fait   toucher   les   rideaux.
                      This   to-it   has   made touch.INF   the   curtains
                      'This has made the curtains touch it.'

         b.   Celà les   y   a   fait   toucher.
                      This   them   to-it   has   made touch.INF
                      'This has made them touch it.'

Despite the superficial resemblance between accusative subjects and accusative objects in the complement clause, a cliticised object from the complement clause does not license *y* or *en* to raise as well:

(22) * Jean l' y   fera   comparer   à Paul.
         J.   it to.it will.make compare.INF   to P.
         'Jean will make Paul compare it to it.'

Essentially the same constraint is seen with dative clitics, in (23).

(23)   Paul lui   fera   porter   ces   livres   à sa femme.
        Paul to-him will.make carry   these books   to his wife
        'Paul will make him carry these books to his wife.'
        not: 'Paul will make his wife carry these books to him.'

Although grammatical, this sentence lacks one interpretation which it might be supposed to have. The dative clitic *lui* can only be interpreted as the subject of the infinitive *porter*, and not as the indirect object. The excluded interpretation would be possible, however, if an indirect object could raise into the matrix clause past the (dative) subject via cliticisation.

In short, despite the superficial location of the accusative object at the left edge of the complement clause (with the incorporated downstairs verb situated in the matrix clause), it behaves as if it were lower than the dative subject of the complement clause. We take this split personality of the accusative object as evidence that a prior A-bar movement operation has displaced the accusative object from a lower A-position, and that the lower A-position is what counts for constraining clitic-climbing into the matrix clause.

Under this interpretation of the facts, the structure of (18) will be(24), where π is a phase category of some sort, presumably CP or vP, and where the head of π has attracted the accusative direct object to it's left edge, which counts as an A-bar position:

(24) Jean fera comparer [$_\pi$ cette sonatine$_i$ à Paul t_V t_i à une symphonie].

The derived A-bar status of the accusative object is confirmed by examining its behaviour in participle agreement.   Normally, a specific direct object which is raised by clitic placement or wh-movement may trigger agreement on its associated past participle. But movement of the accusative object in a causative complement can never trigger agreement with participial *fait(e)(s)* (Kayne, 1975).

(25) a.   la table   qu' il   a   fait(*e) repeindre   à Marc
           the table that he has made   repaint   to Marc
           'the table that he made Marc repaint'

b. Cette table, on l'a   fait(*e) repeindre à Marc.
    this   table, we it have made   repaint   to Marc
    'This table, we made Marc repaint.'

In this respect, the accusative argument patterns with wh-phrases which have undergone successive cyclic wh-movement, such as (26).

(26)   la lettre qu'il   a   dit(*e) que   Claire lui   a   envoyée
          the letter that he has said   that Claire to-him has   sent
          'the letter that he said that Claire sent to him

Once movement takes a *wh*-phrase into an A-bar position, subsequent movement towards a higher verb cannot trigger participle agreement. If the accusative DP in a causative complement occupies an A-bar position, then both cases fall together as structures in which the A-bar status of an DP prevents it from triggering agreement.

Matrix participle agreement is also lacking when the accusative subject of an intransitive complement to *faire* undergoes movement into the matrix clause:

(27) a.   * la petite fille qu' il a   fait(*e)   rire
             the little girl   that he has made   laugh
             'the little girl that he made laugh'

      b.   *Cette petite fille, Paul l' a   fait(*e)   rire.
             this little   girl,   Paul her has made   laugh
             'This little girl, Paul made her laugh.'

Once again, the data indicates that the accusative DP from the complement clause must be attracted to an A-bar position at the left edge of the phasal complement clause. Apparently this operation is equally obligatory for accusative subjects and accusative objects in the complement to *faire*. (It does not apply, however, to oblique DPs, including dative subjects.) Thus, the structure of (28) includes both the accusative subject *cette petite fille* in an A-bar position at the edge of π, and its trace in an A position further down in the complement clause.

(28)   Paul a fait rire [$_\pi$ cette petite fille$_t$ t_i t_V]

An important second consequence of the movement of accusative DPs—both subjects and objects—to an A-bar position at the left edge of the complement clause is that direct object clitics will be exempt from the intervention effects of non-clitic subjects. Unlike argumental *y* and *en*, which must raise past the subject to cliticize onto the matrix verb, a direct object is already in a higher position. In a sentence like (29), for example, the clitic object *les* raises directly from Spec-CP to its position in front of the matrix auxiliary.

(29) Pauline les   a   fait   lire   aux   étudiants.
      Pauline them has made read to-the students
      'Pauline made the students read them.'

So it is not necessary to stipulate any special exemptions for the direct object clitics. The generalisation concerning the intervention effects of the subject in *faire* complements is simply that non-clitic subjects block clitic-climbing of *all* argumental clitics.

Now that we have provided an account of the (misleading) surface position of accusative objects in the causative construction, we return to the central issue of Case checking in *faire* complements.

The constraint on argumental clitic-climbing seen in (18)-(20) is clearly sensitive to the grammatical function of the downstairs subject (as Rouveret and Vergnaud emphasize). Assuming that grammatical functions are defined by positions in a phrase marker, then both dative subjects and accusative subjects must occupy the same position in complements to *faire*. Stated rather more precisely, the trace of an accusative subject must occupy the same position as a dative subject occupies, given the fact that accusative subjects undergo an A-bar movement from which dative subjects are exempt. Several possibilities can be contemplated: if the complement to *faire* is CP, then both dative subjects and (the trace of) accusative subjects may occupy the Spec-TP position. If the complement to *faire* is no larger than vP, then dative and

accusative subjects might simply remain in the Spec-vP position from which they derive their θ-role. The exact details of the structure are not important for the present discussion. What is important is the relationship between structure and Case-checking. How can dative subjects and accusative subjects occupy the same position if they have distinct Case properties?

Our answer is that a matrix *faire* sometimes checks accusative Case alone on an accessible subject, while other times, it checks dative Case, and then accusative Case.   If we abstract away from the A-bar movement which raises accusative objects, then the structure of the complement clause for transitive complements will be (30), where the arrows indicate the case-checking operations (via Move or Agree). Compare (30) to the ergative pattern proposed for Chukchi in (9). (The trace of accusative phrases will be the only component of the accusative DP chain which participates in Case-checking, since A-bar positions cannot be involved in such checking operations in general.)

(30)   ... *faire*+infinitive [$_\pi$ DP^1 ... DP^2 ... (oblique DPs and PPs)]
          (DP^1 is the subject of the complement clause and DP^2 is the object.)
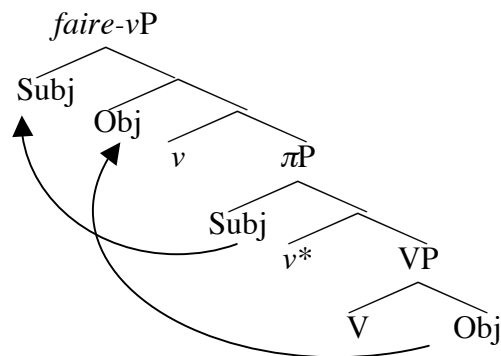
Incorporation of the downstairs infinitive into matrix *faire* has two consequences: the incorporated infinitive must be a verbal form which lacks independent Case properties, because otherwise incorporation would be impossible Baker (1988). Secondly, by virtue of incorporating the infinitive, *faire* gains access to material in the complement clause which would otherwise be inaccessible. (This follows the general pattern embodied in Baker's *Government Transparency*

Corollary (GTC). While the theoretical basis for the GTC is a matter of some dispute, the empirical basis for the generalisation is overwhelming. Although the GTC may ultimately be shown to follow from deeper principles, such as perhaps the *Principle of Minimal Compliance* (Richards, 1998), we assume that the proper formulation will not undermine our use of the GTC in the present work.)   The matrix *faire* should then be able to interact with material located beyond the π phase boundary of the complement clause.

Since the infinitive cannot check Case features on either the subject or the object of the complement clause, the derivation will fail unless another Case checker is available for both. (If there is a T head contained in the complement clause, it must also be unable to check accusative or dative Case, being infinitival or otherwise defective. (A substantive T would block incorporation of the verb by *faire*.)

Since *faire* can check material within π, it can check Case features on the downstairs subject. Suppose now that *faire* may check both structural dative and structural accusative Case features, as a marked option. Double Case-checking will be avoided if the derivation will converge without it, but is available to avoid a crash.   What is more, the dative Case, as the more marked one, is always checked before accusative Case, when both are to be checked, exactly parallel to the ergative-then-absolutive checking discussed in section 4.1. Then *faire* may check dative Case on the subject of the complement clause, and then it may check accusative Case on any more distant DP accessible to it.   Since both the subject and the object are accessible to *faire* under the GTC, *faire* can check the accusative features of the object as its second Case-checking operation.[15]

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[15] The claims we make about dative Case are limited. We do not believe that all uses of dative Case are to be analysed in this way, as reflecting double Case-checking operations. It is not clear whether these proposals should extend to normal double object verbs, for example (but see section 7.1).

When *faire* takes an intransitive complement clause, there is only a single downstairs DP which will need to have Case features checked by *faire*: the subject. Consider example (31):

(31)   Marie a fait aller [$_\pi$ Jean$_i$ t_i à Rome]]]

Again the infinitive raises from the downstairs clause to incorporate into *faire*. The accusative subject—being non-oblique—undergoes A-bar movement to the edge of π, and its trace remains with Case-features to be checked.   Incorporation of the infinitive ensures that *faire* can check Case features on the subject of the complement clause, so it checks accusative features on the subject *Jean*.

Nothing in the structure of (31) ensures that *faire* will check accusative Case instead of dative Case. Both are structural Cases which can be checked in this configuration. But the choice of the marked dative is permitted only when the derivation requires that double Case-checking take place. In (31), there is only the subject which needs Case checked by *faire*, so the marked option is excluded.

The same mechanism now can be seen to apply in Chukchi and French "ergative" structures. In both cases, something blocks checking of accusative Case features on a direct object by its verb. In Chukchi, this is because the setting of a parameter deprives all verbs from checking accusative Case; in French, the incorporation of the infinitive in *faire*-causatives ensures that it does not check anything. In both cases, the lack of accusative Case checking by the closest verb requires the object to have its Case features checked by the next higher head.   In Chukchi, the object raises to Spec-TP (perhaps via Spec-*v*P if the latter is a phase—see note 5), where the subject also checks case; in French, incorporation of the downstairs verb extends the domain of the higher Case-checking head, so that the object will be accessible to it. Finally, in both cases, a checking head external to vP (T/*faire*) exploits a marked option made available by Universal

Grammar, in which it checks Case twice, with a more marked Case (ergative/dative) checked first on the closest DP, and a less marked Case (nominative/accusative) checked on the more distant DP. The double checking option is permitted only when there are two DPs in the domain of the checking head, so that the marked Case (ergative/dative) is never used to check the subject in an intransitive clause.

6. VOICE: THE ANTIPASSIVE

In the preceding sections, we have developed a theory of ergative patterns, which we applied both to Chukchi active clauses and to the ergative-like pattern in French causatives. The core of the analysis is that these are both cases in which *v* fails to reflect Burzio's generalization, in the sense that this head assigns the external theta role, but fails to license object case. For the ergative array in Chukchi, we take this as a parametric property; for French, we take this as a consequence of verb incorporation. We have argued above that the remainder of the patterns follow from this move, coupled with the assumptions about double-checking of a marked case mentioned in the previous paragraph. At this point, we turn to another instance in which *v* licenses an external argument, yet does not check accusative case, specifically, the antipassive in Chukchi, a derived intransitive voice.

An example of the antipassive alternation was given in (2), above, repeated here.

(32) a. ʔaaček-a   kimitʔ-ən   ne-nɬʔetet-ən
          youth-ERG   load-ABS   3PL.SUB-carry-3SG.OBJ
          '(The) young men carried away the load'

      b. ʔaaček-ət   ine-nɬʔetet-ɣʔet   kimitʔ-e
          youth-PL(ABS)   AP-carry-3PL.SUBJ   load-INSTR
          '(The) young men carried away a load'   Kozinsky et al. (1988) p.652

The Chukchi antipassive bears the familiar characteristics of antipassives (see Dixon 1994). The antipassive is a derived intransitive (a derived unergative, to be precise). The antipassive morpheme (prefix *ine-*, or under certain conditions, suffix *–tku*) is added to the active verb root, internal to tense/aspect, mood, and agreement morphemes (as expected for a voice head in the structure in (13)). Morpheme order is obscured in (32) since the third person subject prefix is Ø in intransitives, but the order of the prefixes is clear in (33).

(33)   ɣəm   t-ine-tejk-ərkən   orw-əte
               1SG.ABS   1SG.SUB-AP-make-PRES   sled-ALL
               'I am making a sled'   Skorik (1977), p.117

Both verbal morphology and the case array indicate that the antipassives are intransitive (though they can be further transitivized by, e.g., causative formation or applicativization). The external argument bears absolute case and governs agreement at both prefix and suffix positions on the verb, and the internal argument (if expressed) is demoted to an oblique.

Following relatively standard views of antipassives generally (see, esp. Bittner, 1994, Wharram, 2003), we assume that the logical object remains low, within the *v*P or VP throughout the derivation, and importantly, does not participate in the structural case checking in the clause. As illustrated in (34) (=(5), above), this yields a derivation which is intransitive in having only a single DP in the functional domain, namely, the subject.[16]

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[16] As in fn. 5, it is of no consequence at this point if *v*P should be a phase—the antipassive logical object may raise to the Spec,*v*P position, perhaps for some feature checking with the head *v* (cf. Wharram, 2003). The important point for our concerns is that the object raises no further than *v*P and does not participate in the case-checking at T.

(34)   True Antipassive Clause
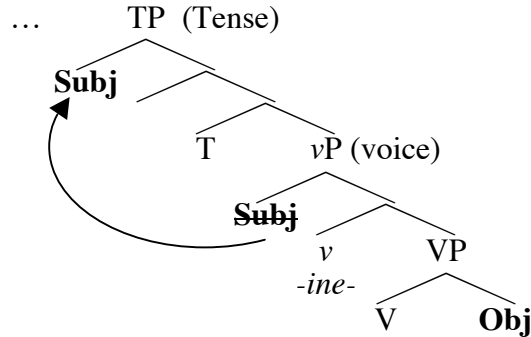
Note that it is important for us that the properties of the antipassive do not arise from the morpheme *ine-* as identified solely by its phonological form. Instead, they arise from the properties of a particular choice of the head *v*. This head may be realised as *ine-* or as *–tku* (as mentioned above), but the head is more abstract, the phonological form assigned via a post-syntactic vocabulary insertion rule, spelling out the head as *ine-* when the object remains in the domain of *v*. The assumption that vocabulary insertion is post-syntactic, as in Distributed Morphology, plays an important role in the next section.[17]

Before proceeding to discussion of the spurious antipassive, one further remark is in order, returning to a point that arose in our discussion of ergativity in section 4.1. In the antipassive, we treat the object as remaining "low" throughout the derivation. This leads to the expectation that it will have a "low" semantics, scoping under operators in the functional domain of the clause, such as negation. The absolutive objects of transitive clauses, though, occupy "high" positions, in fact, positions that are higher than their accusative-marked counterparts in nominative-accusative systems. Such a scopal contrast between absolutive and oblique logical objects in active versus absolutive constructions seems to be a recurring characteristic of antipassive constructions cross-linguistically (see especially Bittner, 1987, 1994, Wharram, 2003 on Inuit

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[17] If the antipassive oblique logical object undergoes short movement to Spec,*v*P as suggested in note 16, then the

languages), and the admittedly sketchy descriptions of Chukchi that are currently available are consistent with this.[18] Regarding the further expectation that absolutive objects will scope higher than accusative objects to the extent that interfering factors such as reconstruction and quantifier raising can be excluded, the facts are unclear. For Inuit varieties, where this question has been studied in detail, it is clearly the case that absolutive objects are obligatorily interpreted as if they take scope higher than all other clausemate operators, for example, obligatorily scooping over sentential negation. This is illustrated in (35),

(35)　　　taqqialu-up　　　tuktu　　　taku-lau-ŋŋit-t-a-(ŋ)a
　　　　　T.-ERG　　　　　caribou.ABS　　see-PAST-NEG-MOOD-TRANS-3SG>3SG

　　　　　# 'Taqqialuk didn't see a (single) caribou.'
　　　　　　'There is a (certain) caribou and Taqqialuk didn't see it.'　　　Wharram (2003) p.39

Unfortunately, it appears that this may not bear on the issue of the scope of absolutive expressions per se. Wharram argues that indefinites in Inuktitut not only take widest possible scope in their own clauses, but in fact take widest possible scope in the sentence, for example, obligatorily scoping out of islands.[19] Examples like (36) illustrate this property whereby absolutive indefinites scope outside of the conditional clause, which is presumed to constitute a syntactic island by analogy to *if*-clauses in languages like English.

(36)　　　miali　　　　　　kappiasuŋ-niaq-t-u-q
　　　　　M.ABS　　　　　be.frightened-NFUT- MOOD-INTR-3SG

　　　　　arvi-up　　　　　qajaq　　　　katja-kpagu
　　　　　whale.-ERG　　　kayak.ABS　　hit-COND.3SG>3SG　　　Wharram (2003) p.113

　　　　　# 'Miali will be frightened if the bowhead hits any kayak.'
　　　　　　'There is a kayak and Miali will be frightened if a particular bowhead hits it.'

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contextual allomorphy of *v* may be expressed as a form of Spec-Head agreement, though this is not necessary.

[18] For example, an unexpressed logical object of a transitive clause is obligatorily referential or specific, while that of an antipassive clause is existential (see Kozinsky et al., 1988, p. 669).

[19] The qualification "possible" is required since bound variables within an indefinite can force lower readings. See Wharram (2003) for discussion.

To account for this, Wharram proposes that indefinites in Inuktitut are always non-quantificational, the apparent scope properties arising from a choice-function interpretation assigned to them. If Wharram is correct, then the scope properties of indefinites *per se* does not bear directly on the question at issue. Whether or not absolutives differ from accusatives in any systematic way in their scope properties thus remains an important topic for further research for Chukchi and for the study of ergativity in general, In the meantime, all available evidence is consistent with the structure we have posited. The antipassive object remains low, and the antipassive allomorph of the *v* head reflects this position of the object.

7. THE SPURIOUS ANTIPASSIVE, REPRISE

To this point, we have provided analyses for basic Chukchi morphosyntax, accounting for the ergative-absolutive case array and for the structure of the true antipassive. Interestingly, "regular" transitive morphology is unavailable in certain inverse environments. A clause is in general said to be *inverse* if the object outranks the subject on the hierarchy $1 > 2 > 3$. In Chukchi, a subset of inverse configurations require the SAP. For the core (non-participial) tenses, these environments are given in (37).[20]

(37) Illicit subject-object agreement combinations (core tenses = non-participial)

     a. * 3 sg > 1 sg
     b. * 2 > 1

Although the relevant agreement morphology for these environments is available independently, the expected transitive agreement morphology fails to surface and instead an

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[20] In the participial tenses, the following combinations are excluded in addition to those listed above: * 1>2, *1,2>3, *3sg>3. In the Xatyrka/Vaegi dialet, which lacks the *–tku* antipassive, the combination 2>1pl does not trigger the SAP but is instead syncretic with 3>1pl.

antipassive verb form is used, while the verb-external morphosyntax remains transitive, as in (38), repeated from section 2.

(38) *Spurious AP* ə-nan   γəm   Ø-ine-ɬʔu-γʔi
                     he-ERG   I (ABS)   3SG.SUB-AP-see-3SG.SUBJ
                     'He saw me.'   Skorik (1977) p.44

We lay aside here any discussion of why it is only this particular subset of inverse configurations (and not all inverse environments) triggers the SAP. Especially given that there is dialect variation and variation according to mood, this appears to us be an irreducible language particular property. We argue, though, that it is only the filters in (37) which need be stipulated for Chukchi (and hence learned directly). In this, we reject the claim of Spencer (2000) that the Chukchi SAP requires the power of *Rules of Referral,* after Stump (1993), Zwicky (1985)—language particular stipulations of identity relating any two arbitrary forms. Thus, he states: "it is difficult to see any alternative to an account which simply states [the syncretism] baldly: the inverse forms are homophonous with the corresponding antipassive" (p.217). The essential part of Spencer's argument is the premise that a theory (such as Distributed Morphology) which restricts syntax-morphology mismatches to feature-deletion (Impoverishment) cannot accommodate spurious morphology, other than defaults, and thus that a feature deletion account could not take a transitive, active morphosyntactic structure as input and yield an antipassive form as output. In the remainder of this section we aim to provide exactly such an account, whereby feature deletion, interacting with independently attested principles, yields the SAP in this context. Importantly, we show that many of the properties of the SAP arise for principled, rather than arbitrary, reasons and in particular that there is a principled basis for the use of the antipassive morphology; a spurious imperative or conditional could not arise with the same distribution and other properties as the Chukchi SAP. Hence, where Spencer claims it

as a virtue of Stump's framework that "anything goes" (in this domain), we claim that the challenge to a more restrictive framework is thus far misplaced.

7.1 Conflict resolution via deletion

The first step of the analysis is straightforward. As noted above, we have assumed throughout a realizational theory of grammar, in which the morphology interprets the prior structures created by syntactic derivations. One part of the mapping to morphology is to resolve the sequences of copies that constitute chains, typically in favour of the deactivation (deletion) of all but one of the copies. A general assumption that suffices for present purposes is that it is normally the highest copy in a chain that is pronounced. For the chains of argument features entering into agreement relations with T in Chukchi, the normal case, for example, with a [1SG] subject and [3SG] object is illustrated in (39). Our concern here is with the chains of features entering into the agreement relations and not with the lexical argument themselves, perhaps along the lines of some version of the pronominal argument hypothesis, though we refrain from working this out here. [21]

(39)
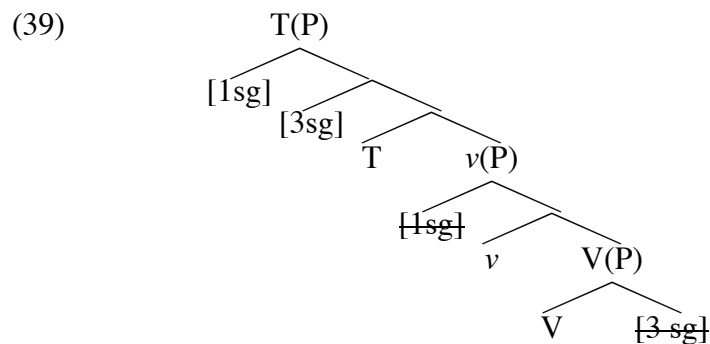
Now, exchanging the feature values for subject and object that were given in (39) would yield an inverse configuration known to be illicit in Chukchi. How is this resolved? We suggest that

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[21] Chukchi is one of the languages considered to be *polysynthetic* in this sense in Baker (1996).

language-particular feature conflicts at a single head are resolved by deletion. Unlike the Impoverishment rules of Distributed Morphology, however, we take deletion here to apply to the entire bundle of features that constitutes the object (more properly, the head of the object's agreement feature chain). This is shown in the partial structure in (40).

(40)

$$T''$$

[3sg]

[1sg] (struck through)

$T°$ …
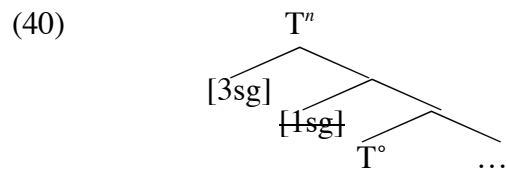
This deletion resolves the conflict at the head T. We conjecture that such deletion is confined to heads which are involved in multiple checking. This will allow an assimilation of our account to accounts of restrictions on particular combinations of clitics known from a variety of languages, for example, the Person-Case Constraints which restrict combinations of Dative and Accusative clitics in a wide variety of languages (see Bonet, 1994)). Such constraints systematically apply to combinations of argumental Dative and Accusative clitics, but not to Nominative and Accusative combinations. This had led authors such as Anagnostopoulou (2002) and Béjar and Rezac (to appear) to conclude that such effects are confined to instances of multiple agreement/checking with a single functional head, and that Dative and Accusaitve (but not Nominative) are checked at the same head. This converges quite neatly with our conclusion in section 5 that the Dative and Accusative in French causatives are checked at the same head.

The deletion of the object agreement features, post-syntactically, leaves the head T reflecting a configuration that looks intransitive, according with the facts at that head. We note that we must take this operation to apply only to the agreement features at T, and not to the actual object DP/pronoun, which participates in normal transitive syntax, including case-marking. Notice also that although no known principle of grammar would force the object features to be deleted instead of the subject features in a multiple-checking configuration, the subject in the Chukchi

SAP will always have raised to Spec-CP before feature deletion takes place, so that only the object features will remain as the head of a feature chain at T, an asymmetry which may perhaps be exploitable in accounting for this difference.

7.2 The consequences of deletion

In the preceding paragraph, we suggested that feature conflicts of the type illustrated in (37) and in the PCC environments in other languages are resolved by deletion of one copy of an agreement feature bundle. This has the local consequence (at the agreeing head) of resolving the conflict and yielding an intransitive-looking T°. The object agreement features are, though, considered to be a part of a chain—a sequence of copies of the relevant syntactic entity, in this case the agreement feature bundle. In the normal case, it is the higher copy of this chain that is morphosyntactically active, the lower copies being automatically deleted in the mapping to morphological form. In this, the agreement parallels instances of movement as analysed within the framework of a copy theory of movement. This is important for present concerns, since there is an emerging understanding regarding the consequences of late (post-syntactic) deletion of a normally-pronounced high copy. Late deletion of a high copy automatically triggers the spurious activation (i.e., pronunciation) of a lower copy which would otherwise remain inactive. This activation is spurious in the same sense as the Chukchi SAP is—the clause behaves syntactically and semantically for all intents and purposes as if the higher copy were indeed active, it is simply a morphological quirk that the element in question shows up in an unexpected position.[22] This conclusion has been reached on a variety of grounds in investigations of restrictions on Object Shift in Germanic Bobaljik (1995, 2002), on wh-*in situ* in English multiple questions Pesetsky

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[22] The activation of a lower copy in the morphology, triggered by a violation of a morphological constraint finds a parallel in covert syntax, as well. Lin (2001) shows that an A-movement violation of the Coordinate Structure constraint can be rescued by replacing the violating DP in the lower position from which it had moved, a syntactic

(1998), on "low" clitics in Slavic Franks (1998), and on exceptions to multiple *wh*-fronting in Slavic Bošković (2002). The last of these is perhaps the most straightforward, so we illustrate with that analysis here.

In certain Slavic languages, there is a syntactic requirement that all *wh*-words in a multiple question must front, as in (41). Failure to do so yields unacceptability, except perhaps under certain special interpretations such as echo questions. All examples are Serbo-Croatian, from Bošković (2002).

(41) a. Ko šta$_i$ kupuje t_i? b. $^?$*Ko kupuje šta?
          who what buys   who   buys   what
          'Who buys what?'   'Who buys what?'   (p.355)

The requirement that all *wh*-words front appears to be relaxed just in case the fronting would yield a sequence of homophonous *wh*-words, as in (42). In exactly this environment, the lower *wh*-word is pronounced in situ.

(42) a. *šta šta uslovljava t_i? b. šta uslovljava šta?
          what what conditions   what conditions what
          'What conditions what?'   'What conditions what?'   (p.364)

Bošković's account with subject traces/copies suppressed is given in (43). In a normal clause, all *wh*-words front, creating chains that sequences of copies of the moved item. In the normal case, all but the highest of these copies are deleted as in (43a), yielding the surface order in (41). The interpretation of (42b) as a regular multiple-question indicates that the representation which feeds semantic interpretation is that arising from movement. Post-syntactically, then, where highest-copy pronunciation is expected, a morphological anti-homophony filter applies, blocking pronunciation of the highest copy, and automatically triggering the pronunciation of the next lower copy, as in (43b).

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process which mirrors the morphological re-activation of a lower position in the Chukchi spurious anti-passive.

(43) a. Ko   šta_i   kupuje   ~~šta_i~~   Normal case – lower copy deleted
          who   what   buys   what
          'Who buys what?'

      b. šta   ~~šta_i~~   uslovljava šta_i?   Anti-homophony – higher copy deleted
          what what   conditions what
          'What conditions what?'

   Key to this analysis is the observation that to the extent that wh-words can remain in situ with special effects (echo questions), such special effects are conspicuously absent *just when* the anti-homophony constraint forces the lower pronunciation. This characterises quite neatly, in our view, the Chukchi SAP. The syntactic and semantic effects of true antipassivization are conspicuously absent, implicating the effects of a post-syntactic morphological filter. We have suggested that the relevant filter applies at the head T°, deleting the head of the object feature chain. Putting this together with the previous paragraphs, we predict that the consequence of the deletion of the top copy of the object features—in the morphology—will be the spurious activation of a lower copy of those features—again, in the morphology only. What is predicted by deletion, then, is not just the abbreviated structure in (40), but rather the fuller structure in (44).

(44)
```
          T(ense)P
         /      
     [3sg]     
        ~~[1sg]~~  
              T      vP
                   /   
              ~~[3sg]~~  
                     v      VP
                          /   
                         V    [1sg]
```
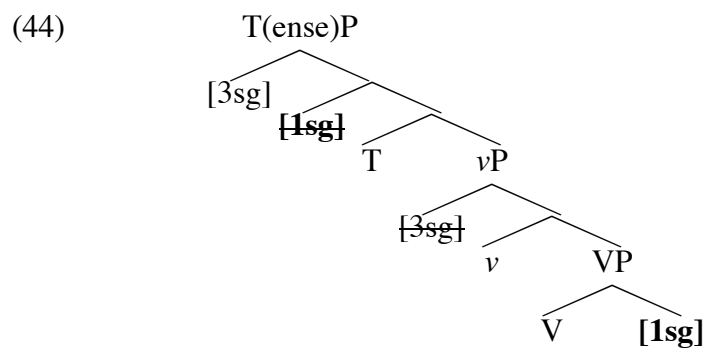
   The top part of the tree in (44) is as described above: syntactically transitive, but intransitive in the morphology, as a result of the inverse filter applying at the head T. The automatic consequence of this deletion is the non-deletion of the lower copy of the object's phi-features, a

copy which is normally inactive, see (39). This has a striking consequence, though—morphologically, the *v*P in (44) now looks exactly like the antipassive *v*P in (34). Thus, the morphology—but crucially not the syntax and semantics—interprets the *v*P in (44) as an antipassive. The result, of course, is the choice of vocabulary item for *v* that reflects an antipassive structure, despite the absence of apparent motivation from the syntax and semantics.[23]

8. CONCLUSION

We have focused our attention in this paper on an initially peculiar construction in a non-familiar language. The Chukchi SAP shows quite clearly that there are mismatches between morphology and syntax, and sets the accommodation of these within a restrictive theory of the syntax-morphology interface as a clear challenge. We hope to have shown that many of the initially peculiar properties of the SAP in Chukchi follow from a combination of well-motivated principles of UG, together with assumptions about Chukchi morphosyntax that posit the minimal assumptions needed to capture the basic descriptive adequacy checklist framed in (7). In particular, the fact that the SAP implicates spurious antipassive morphology as opposed to any other morphological form, turns out to fall out as an automatic consequence of the deletion of the top copy of the object agreement chain, set against an independently motivated understanding of the consequence of deletion in chains, and with a relatively common structure for antipassives (though crucially, within a theory that is realizational, and not lexicalist). The deletion, in turn, rests on the assumption that feature conflicts arise and are resolved (in the morphology) only in

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[23] Once again, the results are unchanged if *v*P is a phase, with appropriate modifications made. The copy of the object that is spuriously activated would then be an intermediate copy in Spec,*v*P. Note that the choice of antipassive morpheme in the SAP does depend to some degree on the features of the object, a [1PL] object requires the use of the *-tku* allomorph of *v*, while all others take the *ine-* allomorph.

configurations of multiple checking at a single head, as in analyses the Person-Case Constraint (discussed only briefly in section 7.1). That subject and object check against a single head arises as a consequence of our analysis of ergativity in Chukchi, and receives support from the distribution of portmanteau morphology in the language.

To be sure, there are promissory notes and conjectures among our assumptions. However, the intricate interactions among our assumptions that conspire to yield the properties of the Chukchi SAP are the more interesting precisely because they yield a variety of predictions about impossible situations. The kind of surface retreat to a "marked" form that the SAP instantiates can arise only when the interaction is across heads, and moreover arises only when the particular spurious morpheme is plausibly tied to the special activation of a lower copy. There can be no spurious conditional, for example. Likewise, morphology-syntax mismatches of this sort will can be triggered by illicit combinations of phi-features of more than one argument only when those arguments undergo multiple checking at a single head. For ergative languages, this is possible between subject and object, but in nominative-accusative systems such effects will be restricted to interactions with datives, correctly, it seems. Note importantly that this does not preclude transitivity mismatches in nominative-accusative languages—these are well attested, for example, in the *deponent* verbs of Latin and Greek with active syntax and case-marking, but passive morphology on the verb (see Embick, 2000 for discussion in a model compatible with ours). What we predict though is that Latin could not have deponence triggered by subject-object feature interactions, and indeed, it does not. Finally, we expect that the repair strategies used to avoid illicit combinations feature combinations should be deducible from the mechanism of activation of a lower copy. The full force of this prediction, especially within the well-studied area of PCC effects, remains to be exploited, a task we must leave for future work.

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