1. Introduction

Modern theories of case marking and agreement phenomena aim to correctly account for the case arrays in a given language, but seldom explore beyond the basic canonical paradigms. One area which can shed light on how to properly model the data is that of causativization and its effects on the case arrays. Joppen and Wunderlich (1995) present data on four-place predicates resulting from causativization of ditransitive verbs in Basque. In Basque, there are three structural cases, but no case doubling is allowed. Thus, the question arises as to which of the four arguments will be realized by structural case and which will be rendered oblique.

Joppen-Hellwig (2001) addresses this problem and proposes a solution which involves stipulating a feature and its importance in morphologically different languages. I propose an alternative solution which follows naturally if one considers causatives to be an instance of predicate argument composition. In this paper I first provide an overview of the basic Basque data. Following, I discuss two previous analyses of these data, before presenting my own analysis.

2. Basque case marking and agreement

This section will outline the relevant aspects of nominal case marking and verbal agreement in Basque before discussing the causative construction.

2.1 Nominal case marking

While syntactically accusative, Basque has ergative case marking morphology. Consider the examples in (1) below (please see Appendix A for a list of abbreviations and Appendix B for a list of all data sources).
(1) a. Mutil-a etorri da.
   boy-sA come TNS.be
   ‘The boy has arrived.’

b. Gizon-a etorri da.
   man-sA come TNS.be
   ‘The man has arrived.’

b. Gizon-ak mutil-a ikusi du.
   man-E boy-sA see TNS.have
   ‘The man saw the boy.’

The case markers occur at the right edge of the noun phrases. In (1) we can see that the transitive object in (1c), mutila, has the same morphological case marker as the intransitive subjects in (1a,b), while the transitive subject, gizonak, is case marked differently. Thus, Basque is morphologically ergative. The structural cases are given in table 1.1

Table 1. Nominal case suffixes in Basque.

<table>
<thead>
<tr>
<th>Nominal Cases</th>
<th>Definite Singular</th>
<th>Plural</th>
<th>Indefinite</th>
</tr>
</thead>
<tbody>
<tr>
<td>Absolutive</td>
<td>-a</td>
<td>-ak</td>
<td>Ø</td>
</tr>
<tr>
<td>Ergative</td>
<td>-ak</td>
<td>-ek</td>
<td>-(e)k</td>
</tr>
<tr>
<td>Dative</td>
<td>-ari</td>
<td>-ei</td>
<td>-(r)i</td>
</tr>
</tbody>
</table>

The dative is included in the case paradigm above as it can be a structural case in Basque. The structural datives are distinguished from the oblique dative NPs in that they are obligatory and are cross-referenced on the verb. In the sentence in (2) we see that the well-formed sentence must cross-reference the dative argument on the verb as well as the absolutive and ergative arguments.

(2) Zuek lagun-ei opari polit-ak ema-ten dizkiezue.
   you.pE friend-pD present nice-pA give-impf 3A.have.D.pA.3pD.2pE
   *dituzue/ *zaizkie/ *dira.
   PA.have.2pE/ 3A.be.D.pA.3pD/ 3A.be.pA
   ‘You (pl) always give nice presents to your friends.’

In (2), all the structural cases (whose morphological expression is shown in table 1) must be cross-referenced on the verb. Now, the canonical case arrays consist of the following:
Intransitive verbs: ABS
Transitive verbs: ERG ABS
Ditransitive verbs: ERG DAT ABS

2.2 Causativized canonical cases

A good way to expand our understanding of the principles behind case assignment is to see how case is assigned with causative constructions. Causatives add an argument, a causer, to the event. Morphological case marking typically follows the usual principles, such that a causativized intransitive verb will be marked as though it were a regular transitive verb. The case arrays of causativized transitive verbs typically mirror those of regular ditransitive verbs (if the language has a way to express the recipient argument with a structural case). However, there are no naturally occurring four-place predicates, so investigating causativized ditransitives pushes a theory of case to its limits. How languages respond to having more arguments than available structural cases can be very revealing of the principles of case licensing.

Basque has two kinds of causative constructions: a morphological causative which is indicated by some verbal morphology and results in an essentially monoclausal structure, and a syntactic causative, which comes from using a ‘causative’ verb and results in a biclausal structure. I will consider only the morphological causatives here, which can result in four-place predicates.

To form a morphological causative in Basque, the morpheme -araz/-eraz is suffixed to the stem of the verb and the causer always receives ergative case. Consider the plain and causativized example sentences below.

(3) a. Haurr-ak zopa jan du.
   child-sE soup.A eat-PRF TNS-have
   ‘The child has eaten the soup.’

   b. Ama-k haurr-ari zopa jan-eraz-i dio.
   mother-E child-sD soup.A eat-CAUS-PRF TNS.have.3sD
   ‘Mother has made the child eat the soup.’

The causee bears the dative case, and zopa ‘the soup’ bears the absolutive case in both the plain and causativized sentences.
The canonical case arrays, along with their causativized counterparts, are presented in table 3.2

Table 2. Causativized case arrays in Basque.

<table>
<thead>
<tr>
<th>Verb type</th>
<th>Base verb – case</th>
<th>Causative verb – case</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Intransitive verbs</td>
<td>ABS_i</td>
<td>ERG–ABS, or ERG–DAT_i</td>
</tr>
</tbody>
</table>

The subscript letters identify the referent arguments between constructions. The intransitive case array and its causativized counterpart are illustrated as follows:

(4) a. Mikel joan da.
    Mikel.A go-PRF TNS.be
    ‘Mikel is gone.’

b. Ama-k Mikel joan-araz-i du.
    mother-E Mikel.A go-CAUS-PRF TNS.have
    ‘Mother has made Mikel go.’

However, in some of the western dialects, the causee may also be linked to the dative argument. Deustoko Hizkuntzalaritza Mintegia (1989, quoted in Joppen and Wunderlich 1994) states that this is a means to express that the causee retains control over its action, while absolutive is used when the causee is seen as having no control.3

In the example below, the causee bears dative case in (5a) and (5b). This is because, regardless of apparent volition (see (5b)), they are human causees and thus capable of control. In (5c) however, the causee is problemak ‘problems’, and thus incapable of control, hence it is marked with the absolutive case.
   mother-E Mikel-D house-ALL go-CAUS-PERF TNS.have.3sD  
   ‘Mother has made Mikel go home.’

   convict-pD prison-GEN.LOC court-ABL walk-CAUS-PRF TNS.have.3pD.3pE  
   ‘They have made the convicts walk around/away from the prison court.’

c. Galdera horr-ek problem-ak/*ei sortu-eraz-i  
   question this-E problem-pA/*pD come.up-CAUS-PRF  
   TNS.3pA.have.PST TNS.have.3pD.PST  
   ‘This question made problems come up.’

Just as the case marking for a causativized intransitive works like that of a  
regular transitive verb (with the added possibility of absolutive/dative  
alternation), the case marking for a causativized transitive verb works like  
that of a regular ditransitive verb: the causer is marked ergatively, the  
causee, with the dative and the lowest role is marked with the absolutive.¹

(6) a. Soldadu-ek haur guzti-ak hil zituzten.  
   Soldier-pE child whole-pA kill.PRFL TNS.pA.have.pA.3pE.PST  
   ‘The soldiers killed all the children.’

b. Herodes-ek soldadu-ei haur guzti-ak hil-araz-i zikien.  
   Herod-E soldier-pD child whole-pA kill-CAUS-PRF TNS.pA.3pD.PST  
   ‘Herod made the soldiers kill all the children.’

Given that there are only three structural cases in Basque, it is not  
immediately predictable what the resulting case array for a causativized  
ditransitive will be. Consider the following:

(7) a. Ni-k pobre-ei diru-a eman-ten diet.  
   I-E poor-pD money-Det.A give-IMPF TNS.have.3pD.1sE  
   ‘I give money to the poor.’

b. Apaiza-k pobre-ei diru-a eman-araz-i zidan ni-ri.  
   priest-E poor-pD money-A give-CAUS-PRF TNS.have.1sD.PST I-D  
   ‘The priest made me give money to the poor.’

In (7b) the causee bears dative case, and the argument (pobre-ei) which was  
marked with the dative in (7a) is now realized as an oblique. As a non-core
argument, the NP may still bear dative case, but it will not be a structural dative, only a semantic dative and as such will no longer be able to be cross-referenced on the verb (8a). Moreover, the oblique argument also has the option of appearing in the destinative case (8b) or as an attributive phrase (8c). When the oblique is realized with the dative case, there is a strong dispreference for sentences in which the two dative NPs have identical agreement features as shown in (8d).

(8)


b. Ama-k Miren-i pobre-entzat diru-a eman-araz-ten dio. mother-E Miren-D poor-DEST money-A give-CAUS-IMPF TNS.have.3sD ‘Mother makes Miren given money for the poor.’

c. Ama-k Miren-i [pobre-entza-ko diru]-a eman-araz-ten dio. mother-E Miren-D [poor-DEST-GEN.LOC money]-A give-CAUS-IMPF TNS.have.3sD ‘Mother makes Miren give (the) [money to the poor].’

d. ? Alta-ri liburu-a eman araz-i diote Joxe-ri. father-D book-A give CAUS-PRF TNS.have.3sD.3pE Joxe-D ‘They have made father give the book to Joxe.’ ‘They have made Joxe give the book to father.’

2.3 Summary

In this section I have presented data illustrating the canonical case arrays in Basque and their behavior under causativization. The main reason for investigating causative constructions is to illuminate aspects of the case marking not immediately apparent in plain clauses. Indeed these data have illustrated a regular pattern in four-place predicates in Basque: the causee will bear structural dative case, while the original ‘recipient’ will be rendered oblique and marked by a semantic case. I will outline two previous studies which address the question of the correct modeling of these data before presenting a new proposal within the same general theoretical framework. First I briefly sketch the fundamentals of this particular case theory.
3. **Theoretical assumptions**

The case theory used throughout this paper is Lexical Decomposition Grammar (LDG; Kiparsky 1997 and elsewhere; Wunderlich 1997 and elsewhere). Unlike most case theories which focus on the mapping between grammatical functions and thematic roles, LDG is a theory of case licensing, capturing the ternary relation between thematic roles (arguments), grammatical functions or ‘abstract case’ and morphosyntactic (and morphological) case. LDG has constrained principles for relating levels of abstract case and morphosyntactic case by defining them both with the same two relational features [±H(ighest) R(ole)] and [±L(owest) R(ole)]. The theory captures generalizations and predications both about typologically diverse languages and highly complex phenomena within a specific language.

3.1 **Semantic form**

Following Bierwisch (1986 and elsewhere), LDG assumes a level of structure called semantic form (SF) which represents the grammatically relevant parts of a verb’s conceptual structure. It consists of minimally decomposed expressions formulated in predicate logic and expressed using lambda-categorial expressions. SF representations are thus constrained to two basic types: propositions, or *constants* and individuals, or *variables*. Consider the verb ‘show’.

(9) show: \( \lambda z \lambda y \lambda x [x \text{CAUSE} [y \text{SEE} z]] \)

In (9), the constants are the units of meaning into which the predicate is decomposed, and the variables are \( x, y, z \), representing the participants. The variables are lambda-abstracted out of the SF, and the resulting lambdas are equivalent to thematic roles, where the (inside out) depth of embedding represents the thematic hierarchy for a given verb.

3.2 **Abstract case**

Abstract case is defined using the same two given relational features. These are assigned to the ‘thematic roles’ according to their relative position in the semantic form. Once [±HR] and [±LR] have been assigned, the rest can be assigned implationally.
(10) show: \( \lambda z \lambda y \lambda x \ [x \text{CAUSE } [\text{CAN } [y \text{SEE } z]]] \)

\[
\begin{bmatrix}
-\text{HR} \\
+\text{LR}
\end{bmatrix}
\begin{bmatrix}
-\text{HR} \\
-\text{LR}
\end{bmatrix}
\begin{bmatrix}
+\text{HR} \\
-\text{LR}
\end{bmatrix}
\]

With the highest and lowest roles identified, all other roles must be marked as non-highest role and non-lowest role to complete the feature specification. Once the abstract case is defined, the morphosyntactic case is assigned through simple unification. The relational case features cross-classify to define four abstract cases:

(11) i. A: \[
\begin{bmatrix}
+\text{HR} \\
-\text{LR}
\end{bmatrix}
\]

ii. S: \[
\begin{bmatrix}
+\text{HR} \\
+\text{LR}
\end{bmatrix}
\]

iii. O: \[
\begin{bmatrix}
-\text{HR} \\
+\text{LR}
\end{bmatrix}
\]

iv. D: \[
\begin{bmatrix}
-\text{HR} \\
-\text{LR}
\end{bmatrix}
\]

3.3 **Morphosyntactic case**

These features \([\pm \text{HR}], [\pm \text{LR}]\) are also used to specify the morphosyntactic structural case (note that semantic case is *not* defined in this way). Typically the unmarked case nominative/absolutive is characterized by not having any specified features. The accusative is usually characterized as \([\pm \text{HR}]\) and the ergative \([\pm \text{LR}]\), while the dative is the most highly specified with a negative instance of both features. In Basque, as suggested above, the structural case inventory is taken to be:

Abs: \[
\begin{bmatrix}
\end{bmatrix}
\]

Erg: \[
\begin{bmatrix}
-\text{LR}
\end{bmatrix}
\]

Dat: \[
\begin{bmatrix}
-\text{HR} \\
-\text{LR}
\end{bmatrix}
\]

There are two conditions which govern the association of morphosyntactic case with abstract case. These are given in (12).

(12) i. Unification: Associated feature matrices must be non-distinct.

ii. Specificity: Specific rules and morphemes block general rules and morphemes in the same context.
Thus, feature matrices will only unify if they are non-distinct. For example, typically the dative is defined as $[-HR, -LR]$ and will unify with the middle role in a ditransitive verb:

$$\begin{align*}
\text{show: } & \lambda z \lambda y \lambda x \ [x \text{ CAUSE } [y \text{ SEE } z]] \\
& \begin{bmatrix}
[-HR] \\
+LR
\end{bmatrix}
\begin{bmatrix}
[-HR] \\
-LR
\end{bmatrix}
\begin{bmatrix}
+HR \\
-LR
\end{bmatrix}
\end{align*}$$

Dative morphosyntactic case $[-HR, -LR]$ thus unifies with $\lambda y [-HR, -LR]$. The less specific nominative case ([ ])$^5$ and ergative case ($[-LR]$) will not unify with this abstract case due to specificity: the more highly specified case available in the inventory $[-HR, -LR]$ will block the use of a more general morpheme in the same context.

4. Previous analyses of causatives in Basque

This section will outline an approach to the Basque causatives in a related framework and show how incorporating a key assumption about the way in which causatives are formed can make for a much more elegant analysis.

4.1 Joppen and Wunderlich

Joppen and Wunderlich (1995) examine Basque causatives in great detail within the LDG. They view causatives as flat structures which add an argument, but which have no internal structure. Thus, the argument structure of the following two clauses would be considered the same:

$$\begin{align*}
\text{a. make eat: } & \lambda y \lambda x \lambda q \ [q \text{ CAUSE } [x \text{ EAT } y]] \\
\text{b. give: } & \lambda z \lambda y \lambda x \ [x \text{ CAUSE } [y \text{ HAVE } z]]
\end{align*}$$

The causer argument is identified by a ‘q’, but the label of the variables in the semantic form is irrelevant. The two structures in (14) have the same basic SF and three arguments. In Joppen and Wunderlich’s view the two structures are equivalent.

These can capture the nominal case facts in Basque as I will show below, recalling the Basque examples from §2.
(15) make go: \( \lambda x \) \( \lambda q \) [q CAUSE [x GO]]
\[
\begin{align*}
\text{ms.case} & \\
\downarrow & \downarrow & \downarrow \\
\text{ABS} & \text{ERG} & \text{ERG} \\
\end{align*}
\]
\text{Ama-k Mikel jaon-araz-i du.}  \\
\text{mother-E Mikel.A go-CAUS-PERF TNS.have}  \\
\text{‘Mother has made Mikel go.’}

(16) make kill: \( \lambda y \) \( \lambda x \) \( \lambda q \) [q CAUSE [x CAUSE [y DIE]]]
\[
\begin{align*}
\text{ms.case} & \\
\downarrow & \downarrow & \downarrow \\
\text{ABS} & \text{DAT} & \text{ERG} \\
\end{align*}
\]
\text{Herodes-ek soldadu-ei haur guztì-ak hil-araz-i zikien.}  \\
\text{Herod-E soldier-pD child whole-pA kill-CAUS-PERF TNS-pA-3pD-PST}  \\
\text{‘Herod made the soldiers kill all the children.’}

(17) make give: \( \lambda z \) \( \lambda y \) \( \lambda x \) \( \lambda q \) [q CAUSE [x CAUSE [y HAVE z]]]
\[
\begin{align*}
\text{ms.case} & \\
\downarrow & \downarrow & \downarrow & \downarrow \\
\text{ABS} & \text{DAT} & \text{DAT} & \text{ERG} \\
\end{align*}
\]
\text{Apaiza-k pobre-ei diru-a eman-araz-i zidan ni-ri.}  \\
\text{priest-E poor-pD money-Det.A give-CAUS-PERF TNS-have-1sD-ps 1-D}  \\
\text{‘The priest made me give money to the poor.’}

The examples in (15)–(17) show that the same principles of unification between abstract case and morphosyntactic case apply, resulting in the indicated morphological cases.

Joppen and Wunderlich’s approach has many virtues. Thematic roles are derived from a semantic form and there is no need to refer to a thematic hierarchy directly. Moreover, simple unification underlies the entire linking theory. LDG correctly generates the morphological case patterns in Basque. However, there is a problem in that this approach does not distinguish between the two datives in the causativized ditransitive (17) and we have seen that it is \( \lambda x \) that receives structural case, while \( \lambda y \) is rendered oblique: it can no longer govern verbal agreement and may optionally appear in the destinative case. This problem is addressed in further work by Joppen-Hellwig (2001) that I will discuss next.
4.2 Joppen-Hellwig

Joppen-Hellwig (2001) is a cross-linguistic study which provides a typology of case arrays in four-place predicates (that are causativized ditransitives). Specifically, if a language allows four-place predicates through morphological causativization and does not allow case doubling, one of the arguments must be realized as an oblique. The chief observation is that which argument becomes an oblique is predictable based on whether or not the language is ergative or accusative, as illustrated below.\footnote{7}

(18) a. If the language is ergative, the lower middle role ($\lambda y$, Recipient) will be realized as an oblique.

   b. If the language is accusative, the upper middle role ($\lambda x$, Causee) will be realized as an oblique.

Languages with split ergativity pattern consistently with either accusative or ergative languages, regardless of the split in the case marking system.

Joppen-Hellwig accounts for this by suggesting that inherent control properties of the argument (animacy, etc.) play a role in the argument linking. For this she posits a feature [+C]. This is assigned cyclically to the arguments in the semantic form. For example:

(19) make go: $\lambda x \lambda q \ [q \ CAUSE \ [x \ GO]]$ 
    [+C]  [-C]

The assignment of [+C] starts in the innermost predicate and then extends outwards, such that the highest role typically has the most control in a clause, indicated by its lack of [-C] features. Consider the causativized ditransitive:

(20) make give: $\lambda z \lambda y \lambda x \lambda q \ [q \ CAUSE \ [x \ CAUSE \ [y \ HAVE \ z]]]$ 
    [+C]  [-C]   [-C]   [-C]  
    [+C]  [-C]  [-C]  [-C]  
    [+C]  [-C]  [-C]  [-C]  
    [+C]  [-C]  [-C]  [-C]  

The ‘best’ controller corresponds to the highest role, $\lambda q$, as $q$ has no [-C] features, and the ‘worst’ controller is the lowest role, which has only [-C] features.

From this, Joppen-Hellwig claims that the “relevant” feature for ergative languages is [+C]. In this way, $\lambda x$, having only one [-C] feature, in some sense ‘outranks’ $\lambda y$ and is thus deemed more of a controller. The structural dative is then assigned to the causee.
Conversely, in accusative languages \([-C]\) is said to be the relevant feature, and similar results in the recipient (\(\lambda y\)) being assigned the structural dative case, while the causee is rendered oblique.

This does capture the facts. However, it is stipulative and the definitions of control are vague. It is my goal to find an alternative way to predict the dative/oblique case assignment for Basque without having to refer to any stipulative features such as \([\pm C]\).

5. An alternative proposal

The alternative I am proposing is situated within the same general framework of Joppen and Wunderlich (1995) and Joppen-Hellwig (2001), and consists of only a minor alteration to the proposals just presented.

Instead of assuming the argument structures resulting from causativization are flat and monoclausal as in (21), I will instead adopt the relatively noncontroversial view that causatives are complex predicates, resulting from predicate argument composition (Alsina 1993). That is, the resulting structure recognizes that the causee is the subject of an embedded clause as in (22).

(21) \(\langle ., ., ., . \rangle\) (or, more mnemonically \(\langle q x y z \rangle\))
(22) \(\langle ., ., \langle ., ., . \rangle, . \rangle\) (or, more mnemonically \(\langle q ., \langle x, y z \rangle \rangle\))

In (22) we see that the causative has its own argument structure that consists of a causer and a causee and a following predicate, of which the causee is the subject. Although the causer is the subject of the sentence, the causee is recognized as a subject – an a-subject – and as such must receive structural case.

Let us return to the original examples from section 2. In (4), repeated here as (23), we see examples of an intransitive verb ‘go’, and its causativized counterpart ‘make go’.

(23) a. Mikel Joan da.
    Mikel.A go-P RF TNS. be
    ‘Mikel is gone.’
The examples in (23) do not pose a problem to case assignment as there are fewer arguments than there are structural cases. The case assignment would proceed just as it did for Joppen and Wunderlich:

(24) \[ \text{make go: } \lambda x \lambda q [q \text{ CAUSE } [x \text{ GO}]] \]
\[
\begin{array}{c|c|c}
  \text{ms.case} & - & + \\
\hline
  \text{HR} & + & - \\
  \text{LR} & - & + \\
\end{array}
\]
\[\text{ABS ERG}\]

b. *Ama-k Mikel Joan-araz-i du.*

mother-E Mikel.A go-CAUS-PRF TNS.have

‘Mother has made Mikel go.’

The examples in (23) do not pose a problem to case assignment as there are fewer arguments than there are structural cases. The case assignment would proceed just as it did for Joppen and Wunderlich:

(24) \[ \text{make go: } \lambda x \lambda q [q \text{ CAUSE } [x \text{ GO}]] \]
\[
\begin{array}{c|c|c}
  \text{ms.case} & - & + \\
\hline
  \text{HR} & + & - \\
  \text{LR} & - & + \\
\end{array}
\]
\[\text{ABS ERG}\]

b. *Ama-k Mikel Joan-araz-i du.*

mother-E Mikel.A go-CAUS-PRF TNS.have

‘Mother has made Mikel go.’

The same is true for the example of a causativized transitive verb given in (6), repeated here as (25). As the resulting number of arguments is the same as the number of available structural cases, case assignment proceeds as normal (26).


Soldier-pE child whole-pA kill,PRF TNS,pA.have,pA.3pE,PST

‘The soldiers killed all the children.’

b. *Herodes-ek soldadu-ei haur guzti-ak hil-araz-i zizkien.*

Herod-E soldier-pD child whole-pA kill-CAUS-PRF TNS,pA.3pD,PST

‘Herod made the soldiers kill all the children.’

(26) \[ \text{make kill: } \lambda y \lambda x \lambda q [q \text{ CAUSE } [x \text{ CAUSE } [y \text{ DIE}]]] \]
\[
\begin{array}{c|c|c|c}
  \text{ms.case} & - & + & - \\
\hline
  \text{HR} & + & - & + \\
  \text{LR} & - & + & - \\
\end{array}
\]
\[\text{ABS DAT ERG}\]

However, the key difference between my proposal and previous analyses is illustrated when considering the causativized ditransitive, as shown in (7) (now 27).
a. *Ni-k pobre-ei diru-a eman-ten diet.*
   I-E poor-pD money-Det.A give-IMPF TNS.have.3pD.1sE
   ‘I give money to the poor.’

b. *Apaiza-k pobre-ei diru-a eman-araz-i zidan ni-ri.*
   priest-E poor-pD money-A give-CAUS-PRF TNS.have.1sD.PST I-D
   ‘The priest made me give money to the poor.’

In (28), we can identify the causee as $\lambda x$ and see that the case features predict the same case as for the recipient ($\lambda y$). However, as the causee is an a-subject, it will necessarily receive the structural dative – the last structural case available that unifies with the given features.

This proposal improves on previous analyses by generating the observed case markers, including the semantic vs. structural dative cases on the two ‘middle’ arguments. The proposal also makes a couple of predictions. The first is that creating a four-place predicate through multiple causatives would be ungrammatical. If resulting from two applications of the causative, we would have two a-subjects in addition to the causer, and the theme as shown in (29).

In preliminary investigations with my consultants, multiply embedded causatives were not acceptable for transitive verbs. Rather, they opted to paraphrase with the syntactic causative.

A second prediction is that there may be some preferences for languages to recognize the causer as a special kind of subject and allocate a special case to the case of the causer, regardless of the resulting number of arguments in the causativized predicate. We see evidence of this in varieties of Western Basque which consistently mark the causee with the (structural)
dative case, even in causativized intransitives (the only situation where the causee would be marked with an absolutive in standard Basque):

(30) Asarre bixi-bixitt-an jarri erazo dauste ni-ri.
   fury alive-alive-LOC get CAUS AUX 1SG.DAT
   ‘They have made me get very furious.’

This approach shares the virtues of Joppen-Hellwig (2001) and Joppen and Wunderlich (1995) that come from using LDG. Moreover by assuming a little structure to the causatives in Basque, as is usually done for causatives in other languages, this approach captures the case marking facts in Basque without the need for stipulations, and makes predictions about other case marking possibilities that appear to be borne out.

6. Summary

The goal of this paper was to correctly account for the morphological case arrays in Basque complex clauses, focussing particularly on the problem of the causativized ditransitives. I have presented an analysis which captures the data by incorporating a simple assumption about the structure of causatives which has already been shown to be the correct way to model causatives in other languages. However, this assumption enables the analysis to correctly predict the structural case assignment in Basque without being stipulative, and thus appears to be an improvement on earlier work.
Appendix A

This appendix lists the abbreviations used throughout this paper.

1, 2, 3  first, second, third person  E, ERG  ergative
A, ABS  absolutive  GEN.LOC  genitive locative
ABL  ablative  IMPF  imperfect
ALL  allative  p, PL  plural
AUX  auxiliary  PERF, PRF  perfect
CAUS  causative  PST  past
D, DAT  dative  s, SG  singular
DEST  destinative  TNS  tense
DET  determiner

Appendix B

This appendix lists the sources for the Basque data.

(1) Donohue: own fieldwork  (5) Joppen and Wunderlich 1994: 25

Table 1  Ortiz de Urbina 1989:6/Saltarelli 1988:240-243
Table 2  Joppen and Wunderlich 1994: 24

Notes

1. Following Trask (1997) and others, I assume that the putative ‘third person’ absolutive prefixes are in fact markers of tense/aspect and not of third person.
2. I exclude Basque’s non-canonical case arrays as they do not bear on the issues arising from the four-place predicates that are the focus of this paper.
3. This phenomenon has been observed in other languages, like Japanese and Hungarian. My own investigations have not been able to reproduce conditioned dative marking of the causee. Rather, it appears that western Basque marks causees consistently with dative case. However, as it does not bear on the point of this paper, I present Joppen and Wunderlich’s data and do not discuss this further.
4. Note that the case marker appears at the right edge of the NP to which it is attached, hence the plural absolutive marker -ak is attached to guzti and not haur.

5. The featureless [ ] is used for the nominative/absolutive case, capturing the fact that this case is usually the unmarked case.

6. The HR and LR features that Wunderlich uses are written in lower case and are in fact reversed, such that (their) [+hr] reads “there is a higher role” and [+lr] reads “there is a lower role”. However, for consistency’s sake I maintain the use of Kiparsky’s features throughout the paper.

7. I take this to refer more properly to the morphological ergativity or accusativity of a given language, as Basque is listed as an ergative language (yet it is syntactically accusative).

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