Object-, animacy- and role-based strategies: a typology of object marking

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Abstract

The present paper discusses the marking of objects in ditransitive clauses. On the basis of the factors conditioning the marking, three strategies are distinguished. These are labeled as object-, animacy- and role-based strategies. In the first case, the mere objecthood (i.e. the contrast to the Agent) determines the marking of objects. In the animacy-based strategy, animate Themes and Recipients are encoded in the same way as animate Patients, while the marking of inanimate Themes corresponds to inanimate Patients. In the role-based strategy, Theme and Recipient are marked on the basis of the semantic roles they bear. All the types are examined in light of cross-linguistic data, in addition to which the rationale behind the types is also discussed. It is shown that the three strategies suffice to explain object marking in ditransitives and that the strategies can all be explained on the basis of the nature of three-participant events and the principles of economy and distinctiveness.

Keywords: animacy, ditransitives, objects, recipient, theme
1. Introduction

Canonical three-participant events involve an animate agent, an inanimate theme (i.e. the thing transferred) and an animate recipient (see e.g. Blansitt 1973:2, Sedlak 1975:125, Tuggy 1996:411, 419 and Newman 1998b:1). Canonical three-participant events are thus represented, for example, by ‘give’ and ‘send’, both of which involve transfer of a thing from an agent to a recipient. Formally, three-participant events are encoded by constructions with two object-like arguments, i.e. a Theme (or a Patient) and a Recipient, as in the English clauses *the mimic gave the book to the florist* or *the mimic gave the florist a book*. In the first of these, the two objects are morphologically distinct, while in the latter they are both encoded as direct objects (i.e. in the same way as the transitive Patient). The two objects do have features in common (both formal and semantic), even though there are also obvious differences. The theme is in many respects similar to the (transitive) patient. These roles are both typically borne by inanimate entities, which do not actively partake in events. The recipient, in turn, is usually animate and more actively involved in the event, since the recipient completes the event by accepting the thing transferred. The two objects are thus usually distinguished both on the basis of animacy and the semantic roles their referents bear. Both of these aspects can determine the object marking, as the examination below will show.

The present paper is concerned with object marking in ditransitive\(^1\) clauses. On the basis of what determines the marking, three strategies will be distinguished. These are labeled as object-, animacy- and role-based strategies. The marking of the objects may be governed by objecthood (i.e. the distinction from the Agent), animacy of the arguments and also the semantic roles borne by them. The three types are exemplified in (1)-(3) in the order they are mentioned here:

Fyem (Nettle 1996:30)

(1a) taa won aré
3SG:PERF  wash  clothes

‘She washed clothes’

(1b)  taa  ní  usmán  borám
3SG:PERF  give  Usman  maize

‘He gave maize to Usman’

Kinnauri (Sharma 1988:79ff)

(2a)  chan’s  kitab  hušeš  
boy:ERG  book  read:PAST:SG

‘The boy read the book’

(2b)  dekhracis  checac-u  khio  
boy:ERG  girl-ACC  see:PAST:SG

‘The boy saw the girl’

(2c)  amas  anu  chan-u  ane-pon  rano  
mother:ERG  she:REFL  child-ACC  maternal aunt-ACC  send

‘The mother sent her son to the maternal aunt’

(2d)  gəs  än  bapu-pon  cithi  cemigduk  
1SG:ERG  1SG:GEN  uncle-ACC  letter  write:SUBJ

‘I have to write a letter to my uncle’

Finnish

(3a)  agrologi  luk-i  kirja-n  
agrologist.NOM  read-3SG.PAST  book-ACC

‘The agrologist read the book’

(3b)  agrologi  antoi-i  kirja-n  poliisi-lle  
agrologist.NOM  give-3SG.PAST  book-ACC  judge-ALL

‘The agrologist gave the book to the police officer’
In Fyem, Theme and Recipient bear the same marking, or rather they are both morphologically zero-marked. Both arguments are marked identically to the transitive Patient. In Kinnauri, objecthood is relevant to the marking, but in addition animacy contributes to the encoding of objects. Animate and inanimate objects are marked differently in both transitive and ditransitive clauses (I only have examples to illustrate the marking of the Theme). This means that mere objecthood does not suffice for an object to be marked in a certain way, but animacy needs to be considered as well. In Finnish, neither mere objecthood nor animacy of the arguments suffices to explain the object marking in ditransitives, rather the semantic roles have to be taken account of. The Theme is marked in the same way as the Patient in the accusative, while the Recipient bears allative marking.

The strategies underlying the constructions illustrated in (1)-(3) may in a preliminary way be defined as follows (the definitions will be elaborated in sections 2-4):

An object-based strategy is a strategy in which Theme and Recipient are marked in the same way, and differently from the Agent.

An animacy-based strategy is a strategy in which the marking of Theme and Recipient is determined by the animacy of their referents.

A role-based strategy is a strategy in which the marking of Theme and Recipient is determined by the semantic roles they bear.

The purpose of the present paper is to examine the three strategies noted above in detail and to show that object marking in ditransitive clauses can be explained on the basis of three criteria, namely objecthood, animacy and the semantic roles associated with the objects. The paper is primarily concerned with the case marking of arguments, even though cross-
referencing of arguments will also be considered, when relevant. However, the effects of operations like passive mostly lie outside the scope of the present paper. With regard to case marking, the proposed typology is based on object marking in ditransitive clauses, but the marking of Patient is also of the utmost importance, since the marking of Theme and Recipient is always compared to that of the Patient for determining the underlying motivation of the marking. It should also be noted that the specific linguistic mechanisms employed in the object marking are per se not relevant, rather the typology is based on the conditioning factors of the marking. This means, for example, that constructions and underlying strategies will not be subdivided depending on whether the Recipient occurs in allative, dative, or locative etc.

Moreover, only ditransitives displaying basic (i.e. non-derived) verb morphology will be taken into account, i.e. applicatives and causatives are not considered. The reason for this is that applicativization or causativization often accommodates core arguments (i.e. direct objects), even if this is not possible otherwise. All of the examined strategies are understandable in light of the semantic nature of three-participant events, which involve two non-agent participants, which are usually distinguished on the basis of animacy, but which nevertheless bear distinct semantic roles. Thus, in addition to presenting the three object marking strategies, the rationale behind them will also be discussed. The principles of economy and distinctiveness are also relevant to the discussion here, as they are to argument marking in general (see e.g. Kibrik 1985:271).

Before proceeding any further, I should explain the employed terminology. First of all, labels with initial capitals refer to arguments, while the lack of capitals indicates semantic roles. This means that Agent, Patient, Theme and Recipient are used in reference to the linguistic expression of the semantic roles of agent, patient, theme and recipient. The arguments are usually overtly distinguished, but the term ‘object’ is, however, used, if the two objects (Theme and Recipient) are referred to at the same time, and if it is not necessary to distinguish between them overtly. The corresponding semantic roles, in turn, are defined rather ‘traditionally’ as below:
‘The dentist ate the cake’
agent  patient

‘The dentist gave the book to the teacher’
agent  theme  recipient

The organization of the paper is as follows. In sections 2-4, I will illustrate the three types under study in the order they appear in the title. The presentation starts with canonical cases, after which less obvious cases will be discussed. In section 5, different kinds of split constructions will be examined. Sections 2-5 only examine data, with no discussion of the rationale behind the attested types. The latter is discussed in section 6, which also includes a brief discussion why certain types are not attested. This is simply to avoid unnecessary repetition. Section 7 summarizes the most important findings of the paper.

2. Object-based strategy

The object-based strategy was above defined as a strategy in which the marking (or the morphosyntactic behavior in more general terms) of objects is determined merely by objecthood, i.e. the contrast to the Agent. As a result, both Theme and Recipient invariably bear the same marking. The brief definition given above can be elaborated as follows:

The object-based strategy is a strategy, which creates ditransitive constructions in which Theme and Recipient invariably bear the same morphosyntactic coding (like accusative case, for example). The marking corresponds to the marking of Patient, which is different from the marking of Agent. The strategy is labelled as ‘object-based’, since objecthood alone
(excluding animacy/definiteness and semantic roles) determines the marking of the two objects in ditransitive clauses.

The crucial feature of the object-based strategy is thus the identical encoding of the two objects in ditransitive clauses and their formal identity with the Patient. The strategy can be subdivided into two on the basis of how the two objects are distinguished from the Agent. Different instances are examined below.

2.1. Canonical cases

Canonical instances of the object-based strategy are illustrated by cases in which the objects are morphologically distinct from the Agent. In the purest instances, there is no marking on the verb, and the objects are case-marked in the same way. This is exemplified below, cf.

Martuthunira (Dench 1995:230f)

(4a) ngayu ngurnu kanyara-thathu-lalha nganaju-u
    1SG:NOM that:ACC man-ACC send-PAST 1SG:GEN-ACC
    kurntal-yu
    daughter-ACC
    ‘I sent that man to my daughter’

(4b) ngayu murnta-lalha murla-a ngurnu pawulu-u
    1SG:NOM take-from-PAST meat-ACC that:ACC child-ACC
    ‘I took the meat away from the child’

Shipibo-Konibo (Valenzuela 2001:420f)

(5a) e-n-ra ja jamá-ke
    1-ERG-EV 3:ABS kick-COMPL
‘I kicked him/her/it’

(5b) pena-n-ra bake-bo esé-bo meni-ai

PN-ERG-EV child-PL:ABS advice-PL:ABS give-INC

‘Pena gives advice to the children’

The ditransitive clauses in (4) and (5) have two arguments (Theme and Recipient) marked in the same way as the transitive Patient. The Agent is morphologically distinct from the two objects.

The languages above, however, differ from each other in whether the objects or the Agent represent the explicitly marked argument(s). In Martuthunira, the Agent occurs in the unmarked nominative case, and the two objects bear non-zero accusative marking (the form of the accusative marker varies due to the nature of the argument, but this is not relevant here, since the case is retained). In Shipibo-Konibo, in turn, objects are zero marked, which follows from the absolutive-ergative alignment attested in the language. We are, however, entitled to speak of the object-based strategy also here, since the two objects are clearly marked differently from the Agent, but identically to each other, so the underlying strategy of the marking is object-based. It should be noted that both Martuthunira and Shipibo-Konibo are very loyal to the object-based strategy, since most ditransitives employ this strategy. Moreover, both objects allow passivization in Martuthunira ((4b) is the only exception reported by Evans), while both objects in (5b) allow relativization and their order is free (Valenzuela: ibidem).

In (4) and (5), the object-based strategy is very clear, since case marking distinguishes between Agent and the two objects. A somewhat less straightforward case is illustrated in (6):

Northern Sotho (Louwrens et al 1995:55)

(6a) mosadi o-apea bogôbê

woman SAG-cook porridge

‘The woman cooks porridge’

(6b) mosadi o-fa bana bogôbê
At first sight, Northern Sotho appears to be very similar to Shipibo-Conibo in the marking of objects, since in both languages objects are represented morphologically as zero marked arguments. However, the distinction with respect to the Agent is exhibited differently in the two languages. In Sotho, case marking is not helpful here, since Agent also bears zero marking, but the primary morphological difference between Agent and the objects is found in the cross-referencing on the verb. In Sotho, only the Agent is cross-referenced in the verb, while the two objects cannot be. As a consequence, we can say that objecthood renders it impossible for an argument to be cross-referenced in the verb, and the objects thus share a feature that distinguishes them from the Agent. This makes the examples in (6) a rather typical manifestation of the object-based strategy.

2.2. Other cases

In Martuthunira, Shipibo-Conibo and Northern Sotho, the only mechanism employed in argument marking follows the object-based strategy. It seems that these kinds of languages are rather rare, and in many languages only case marking is object-based, while verbal cross-reference deviates from this. An example is illustrated below:

Hdi (Frajzyngier 2002:182)

(7a) vlá-n-vl-f tá xon tá kójú
    give-3-give-1SG OBJ 3PL OBJ money

‘I gave them money’

(7b) vlá-n-vlá mbitsá tá kójú tá mbáká
    give-3-give PN OBJ money OBJ PN
‘Mbitsa gave money to Baka’

In Hdi, both Theme and Recipient are marked with the object particle tá, in which respect Hdi employs the object-based strategy to encode objects. However, in contrast to the languages in (4)-(6), the object-based strategy is confined to the marking of nominals, while the verbal cross-reference distinguishes between the two objects in that only one object is cross-referenced in the verb. As a result, Hdi displays a split in this respect (see also sect. 5).

Examples (4)-(7) illustrate cases in which the differences between Agent and the two objects are clear, since the arguments are distinguished on the basis of case marking or some other morphological feature. There are also cases in which this crucial distinction is less clear. One example is examined in (8):

Ainu (Tamura 2000:42)

(8a) ekasi okaypo nukar
grandfather youth see
‘the elderly man saw the youth’

(8b) cáca weysisam icen kore
elder be:poor:Japanese money give
‘The elderly man gave the poor Japanese some money’

As noted at the beginning of this section, one of the crucial features of the object-based strategy is that the two objects of ditransitives are marked differently from the Agent. As can be seen in (8b), this criterion is not met in Ainu, so the strategy employed is not genuinely object-based. However, of the strategies employed here these kinds of cases are closest to the object-based strategies, since animacy and the semantic roles of the arguments are clearly irrelevant to the object marking in (8). Moreover, the two objects are marked identically to the transitive Patient,
which means that one of the crucial features of object-basedness is met, while none of the properties of the two other strategies can be said to determine the marking of objects in (8).

3. Animacy-based strategy

3.1. Preliminaries

It is received wisdom in linguistics that animate or definite Patients are marked differently from inanimate or indefinite ones in a number of languages. This phenomenon is labeled as differential object marking (henceforth DOM for short), and a canonical example of the phenomenon is illustrated in (9):

Camling (Ebert 1997b:46)

(9a) khu-wa lungto-wa pucho(*-lai) set-yu
    he-ERG stone-INSTR snake kill-3
    ‘He killed a snake with a stone’

(9b) khana khut(-lai) ta-set-yu
    you he(-DAT) 2-kill-3
    ‘You killed him’

As shown above, the marking of Patient is sensitive to animacy in Camling. The marking of animate Patients is more elaborate than the marking of inanimate Patients, since only the former potentially occur in an overtly marked (dative) case. One of the proposed reasons for this is that this aids us in disambiguating the semantic role assignment of two potential agents (see e.g. Foley 1999:119), which means that overt linguistic marking is needed in case the non-linguistic information does not render an unambiguous reading possible. It is typical of studies concerned
with DOM that in most (if not all) of these studies only the marking of Patient is considered. In
the present context, however, the effects of animacy on the marking of Theme and Recipient
will be taken into consideration as well.

In section 1, the animacy-based strategy was defined as an object marking strategy in
which the marking of Theme and Recipient is determined by the animacy of their referents.
This preliminary definition can be elaborated as below:

The animacy-based strategy constitutes an object marking strategy
in which the marking of animate Themes and Recipients
corresponds to that of animate Patients, while inanimate Themes
are marked in the same way as inanimate Patients. In the purest
manifestation of the type also the marking of Recipient is
determined by animacy (as opposed to the role of recipient), even
though the marking of animate Patients and Recipient usually
coincides invariably. 3

What distinguishes the animacy-based strategy from the object-based one is that not only does
the mere objecthood contribute to the marking of Theme and Recipient, but animacy (or
definiteness in more general terms) is also relevant to this. This has the consequence that unlike
the object-based strategy not all objects are marked alike. Identical marking is also possible, but
occurs only if the animacy of the objects coincides. In the object-based strategy, there are no
options. What also needs to be accounted for here (as also noted in the definition) is the
identical marking of Recipients and animate Patients. Even though the Recipient marker in
many cases appears as a marker of role in the examples that follow, its formal identity with the
Patient makes it a rather atypical role marker, since in typical role-based cases (see section 4)
the marking of the Recipient is distinct from the Patient. In what follows, different types of
animacy-based strategies will be examined. Subdivision of the strategy occurs on the basis of the significance of the contribution of animacy to the marking of objects.

3.2. The extreme case of Retuarã

The purest instances of the animacy-based strategy are, by definition, illustrated by cases in which the marking of Theme and Recipient is determined solely by animacy. This type seems to be very rare cross-linguistically and the only language that clearly employs this strategy that I have come across is Retuarã:

Retuarã (Strom 1992:118f, 114)

(10a) ernesto-te alvaro-te heyobaa-rape
      PN-TERM PN-TERM help-PAST
      ‘Ernest helped Alvaro’

(10b) wa▪ia pisarvka ki-hi▪a-ko▪o
      fish cat 3M:SG-feed-PAST
      ‘He fed the fish to the cat’

(10c) ko-re ki-re yi-bea-yu
      3F:SG-TERM 3M:SG-TERM 1SG-show-PRES
      ‘I show her to him’ (*I show him to her)

(10d) lui-re ki-re ba▪arika hī-rī eta-royi-re▪ka
      PN-TERM 3M:SG-TERM food give-PURP arrive-IMPF-PAST
      ‘Lui was coming to give him food’

As can be seen in (10), the marking of objects in Retuarã is determined solely by animacy of their referents. Whether the given argument bears the role of theme or that of recipient appears to be completely irrelevant. What can even be regarded as bizarre is that the marking of Agent
is also sensitive to animacy, and only animate Agents bear the -te- suffix. We are thus dealing with a genuine animacy marker, since the marking is not sensitive to the semantic role an argument bears. However, if we only consider the marking of objects, Retuarã represents the most evident manifestation of the animacy-based strategy.

3.3. Canonical cases

3.3.1. Animacy-based strategy

In Retuarã, the marking of the objects is unarguably determined only by animacy and the case was thus labeled as extreme. It is far more typical of animacy-based strategies that the marking of the Theme varies depending on the animacy of its referent, while the marking of Recipient is more stable and thus more role-like. This is not surprising given the nature of three-participant events in which the recipient is usually animate, while the theme may display variation in this regard. The marking of animacy is also regarded as a kind of role-marker exploiting the strong correlation of animacy and the role of recipient. What is crucial here is that the formal mechanism employed in the marking of Recipient is the same as the one used for animate Patients/Themes. Examples that illustrate this are given below:

Dolakha Newari (Genetti 1997:38, 41)

(11a) āle āmta bhānche=ta bir-ja
    then 3SG:DAT cook=DAT give-3SG:PAST

‘Then he gave her (in marriage) to the cook’

(11b) āpsin āmta wā hirā=e jā bir-ju
    3PL:ERG 3SG:DAT TOP diamond=GEN rice give-3SG:PAST

‘They gave him rice made out of diamonds’
Maithili (Yadava 1998:97f)

(12a) ahāa ham-raa ae aadami-k dia
    you me-DAT this man-ACC give
    ‘You gave me this man’

(12b) raam-Ø hari-k kitaab-Ø delak
    ‘Ram gave a book to Hari’

Animacy clearly makes a contribution to the marking of objects also in (11) and (12). The marking of Theme is genuinely animacy-driven, but in contrast to (10), I do not have data to show that the marking of Recipient would be determined solely by animacy. However, since the marker employed for encoding the Recipient is the same that encodes animate Patients and Themes, these cases correspond to the definition of animacy-based strategies given above. Moreover, the marking of objects above differs from the following kind of case:

Turkish (Comrie 1989: 132)

(13a) hasan öküz-ü aldı
    PN:NOM ox-ACC buy:PAST:3SG
    ‘Hasan bought the ox’

(13b) hasan bir öküz aldı
    PN:NOM an ox buy:PAST:3SG
    ‘Hasan bought an ox (non-specific)’

(Turkish, examples courtesy of Tülin Özen)

(13c) adam kitab-ı kadın-a verdi
    man:NOM book-ACC woman-DAT give:PAST:3SG
    ‘The man gave the book to the woman’

(13d) adam bir kitap kadın-a verdi
In Turkish, Themes and Patients are encoded on the basis of animacy/definiteness, as shown in (13). The Recipient invariably occurs in the dative. What distinguishes Turkish from Dolakha Newari and Maithili (in both of which dative is the case of Recipient as well) is that the marking of Recipient follows a role-based strategy. The affixes employed for the Theme and the Recipient are formally distinct and mutually exclusive, which means that the accusative marker used for encoding animate Patients cannot mark the Recipient. On the other hand, in (11) and (12) the relation to animacy is more obvious also with the Recipient, due to the identity of the markers used for animate Patients and Recipients.

3.3.2. Definiteness-based strategy

Animacy is intrinsically associated with a high degree of definiteness or topicality. It does not therefore come as a surprise that there are also languages in which definiteness in more general terms conditions the marking of objects. Languages below illustrate this:

Korku (Nagaraja 1999:46)\textsuperscript{5}

\begin{align*}
\text{(14a)} & \quad \text{Hemran} \quad \text{komba-ke} \quad \text{ma:-khe-nec} \\
& \quad \text{PN} \quad \text{cock-OBJ} \quad \text{kill-PAST-PERS} \\
& \quad \text{‘Hemran killed a cock’} \\
\text{(14b)} & \quad \text{Iñj} \quad \text{ga:Di(-ke)} \quad \text{sege-ba} \\
& \quad \text{I:NOM} \quad \text{cart(-OBJ)} \quad \text{bring-NONPAST} \\
& \quad \text{‘I will bring a (the) cart’} \\
\text{(14c)} & \quad \text{Raja} \quad \text{ra:ma-ke} \quad \text{sita-ke} \quad \text{ji-khe-nec} \\
& \quad \text{king:NOM} \quad \text{Ram-IO} \quad \text{Sita-OBJ} \quad \text{give-PAST-PERS}
\end{align*}
The king gave Sita to Ram

Iñj ra:ma-ke guru:ji-ke kokhoñj kul-khe-nec
I:NOM Rama-IO teacher-OBJ call:INF send-PAST-PERS

‘I sent Rama to call the teacher’

Udi (Harris 2002:24)

(15a) iš-en tängä peškañnebe äyel-ax
man-ERG money:ABS give (as a gift) child-DAT

‘The man gave money to the child’

(15b) iš-en tängin-ax peškañnebe äyel-ax
man-ERG money-DAT give (as a gift) child-DAT

‘The man gave the money to the child’

In (14) and (15), the mechanism of encoding definite Themes/Patients and Recipients is the same, i.e. the suffix -ke in Korku and the suffix -ax in Udi. The examples above are very similar to those in (11) and (12). The most prominent difference lies in the overt marking of definite, inanimate Themes in (14) and (15). The object marking is not determined solely by objecthood, but definiteness needs to taken account of as well. It should be noted that the distinction between animacy- and definiteness-based strategies is not always clear-cut, and the data may be too scarce to make the distinction. Moreover, the two strategies are not mutually exclusive, rather in languages in which definite Patients/Themes are marked differently from indefinite ones, it is very likely that this applies to animate vs. inanimate Patients/Themes as well.

3.4. Less clear cases

In cases illustrated thus far in this section (apart from the examples from Turkish), the contribution of animacy/definiteness is rather clear and animacy/definiteness in one way or
another affects the marking of both Theme and Recipient. In addition to these, there are cases in which the contribution of animacy is less direct. One such example is illustrated in (16):

Awa Pit (Curnow 1997:72ff)

(16a) Ishu=na pitikku ku-m
tiger=TOP sloth eat-ADJZR
‘Tigers eat sloths’

(16b) santos=ta=na m̪za pyan-a-ma-t
Santos=ACC=TOP almost hit-PL:SUBJ-COMP-PFPART
‘They almost beat up Santos’

(16c) Camilo=na santos=ta pala kwin-tə-zi
Camilo=TOP Santos=ACC plantain give-PAST-NONLOCUT
‘Camilo gave Santos a plantain’

(16d) Na=na kwizha=ta=na comida kwin-ta-w
1SG:NOM=TOP dog=ACC=TOP food give-PAST-LOCUT:SUBJ
‘I gave food to the dog’

(16e) Na=na santos=ta pashu m̪la-ta-w
1SG:NOM=TOP Santos=ACC daughter give-PAST-LOCUT:SUBJ
‘I gave my daughter to Santos’

Awa Pit displays a very typical DOM as the differences in the marking of Patient in (16a) and (16b) show (the variation is determined by humanness rather than animacy). Moreover, identically to Dolakha Newari and Maithili, the affix encoding animate Patients is also used to mark the Recipient, as in (16c). However, differently from (11) and (12), only Patient displays DOM, while Theme is invariably zero marked, regardless of the animacy of its referent. The contribution of animacy is thus more restricted in nature than in (11) and (12). We can perhaps say that the affix -ta is more like a genuine role marker in ditransitive clauses of Awa Pit, since
the marker can only be attached to Recipients. An identical marking of Theme and Recipient is precluded, irrespective of whether the arguments coincide in animacy or not. The only relation to animacy is the formal identity of the marker used for animate Patients and Recipients.

3.5. ‘Extended Differential Object Marking’ vs. ‘Shifted Differential Object Marking’

As noted above, languages in (11) and (12) and Awa Pit display differences with regard to effects of animacy on the marking of objects. The differences are so evident that the two strategies can and perhaps even should be overtly distinguished. As a consequence, the Dolakha Newari-type is here labeled as ‘Extended Differential Object Marking’ (EDOM) and the Awa Pit-type is regarded as ‘Shifted Differential Object Marking’ (SDOM). I have opted for using these labels, since both of these types exploit the notion of DOM, but in different ways. These differences will be discussed in more detail in what follows.

In EDOM, the association with the canonical DOM illustrated in (9) is obvious, since the marking of Theme also follows the same principle. This means that the Theme is marked in the same way as the Patient with regard to animacy, yielding differences between cases like ‘the florist showed the rock to the dentist’ and ‘the florist showed the baby to the dentist’. In addition, the use of the marker has extended to cover the marking of Recipient in ditransitive clauses. This means that the use of the given marker has extended to cover the function of coding the role of recipient in ditransitives. This extension has, however, not affected the use of this marker as a genuine DOM marker, since variation in the marking of Theme also occurs, and the function of marking animate objects (Theme/Patient) is thus retained. This means that the number of instances in which the marker can be used along with the number of functions expressed is higher in ditransitives. This is what distinguishes these cases from those in (13) in which only the marking of Theme/Patient is governed by animacy/definiteness, while the marking of Recipient originates from a different source and is not animacy-driven. The marker
thus only has one function in languages like Turkish. As a result, the label EDOM seems appropriate for the Dolakha Newari-type.

As noted above, the effects of animacy on the marking of objects are less thorough in SDOM. The primary difference between EDOM and SDOM is that in the latter, the function of coding differences in animacy completely fades into the background in ditransitives, in which the sole function of the marker is to encode the role of recipient. There is thus a shift in the function expressed by the marker in question (like the suffix -\textit{ta} in Awa Pit); in transitive clauses the function of the marker is to encode the difference between inanimate and animate Patients, while in ditransitives this function is lost and replaced with the function of marking the Recipient. The function thus changes from marking animacy of an object (typical DOM) to the marking of role. The given marker can no longer be regarded as a genuine animacy marker, since it cannot be attached to a Theme, regardless of animacy. It is irrelevant which of these functions is original (the marking of animate Patients/the encoding of the role of recipient), since a shift occurs irrespective of its direction. The Recipient is typically an animate argument, which makes this shift in function understandable. The shift is made possible by animacy, not by semantic role, since the roles of Patient/Theme and Recipient are in many ways different from each other. On the other hand, object marking in Turkish is more easily explained on the basis of role, since Theme and Patient share many features in common. Similarly to the Turkish-type, the number of arguments marked in ditransitives is one in SDOM, but the shift in function distinguishes between these two types.

4. Role-based strategy

4.1. Preliminaries
As the chosen label implies, neither the mere objecthood nor animacy suffices for explaining the marking of objects in the role-based strategy. In the languages of this type, the two objects are marked differently depending on the role they bear. The simple definition given in section 1 can be elaborated as follows:

In the role-based strategy, Theme and Recipient are marked on the basis of the (semantic) role they bear. This has the consequence that Theme and Recipient invariably carry formally distinct, mutually exclusive markers. One of the objects (typically Theme) bears the same marking as the transitive Patient, while the other object is marked distinctively from this.

As noted above, Theme and Recipient are always formally distinguished in the object-based strategy, which is different from the other two strategies examined here. This also means that the linguistic elements employed in object marking are mutually exclusive in the sense that the Theme marker can only appear on the Theme, while the Recipient marker exclusively encodes Recipients. From the definition above it follows that being an object is not a sufficient condition for object marking, and that animacy per se is also irrelevant to the marking. It needs to be noted that the notion of semantic role is here understood as referring to the macroroles of theme and recipient. Languages diverge with regard to the number of microroles they overtly distinguish, but this is not relevant to the division of strategies, since the strategy is retained regardless of the number of formally distinct microroles.

4.2. Canonical cases
As noted in the definition given above, either object of a ditransitive clause coincides in form with the Patient. In most cases, Theme has this property. Different instances of this are examined below:

Finnish

(17a) lääkäri anto-i kirja-n agronomi-lle

doctor:NOM give.3SG:PAST book-ACC agronomist-ALL

‘The doctor gave the book to the agronomist’

(17b) kielitieteilijä ost-i kirja-n (foneetiko-lle)

linguist:NOM buy-3SG:PAST book-ACC (phonetician-ALL)

‘The linguist bought the book (for the phonetician)’

Malay (examples courtesy of Foong Ha Yap)

(18a) dia beri buku itu kepada perempuan itu

3SG give book DEF to woman DEF

‘S/he gave the book to the woman’

(18b) lelaki itu beli buku itu (untuk dia)

man DEF buy book DEF (for 3SG)

‘The man bought a book (for him/her)’

Burushaski (examples courtesy of Bertil Tikkanen)

(19a) hîr-e gûs-mu-r kitáap

man-ERG woman-OBL-DAT book:ABS

mu-chhî-m-i

3SG.FEM.REC(DAT)-give.SG.Y.PAT(ABS)-PRET-3SG.MASC.XY.AG(ERG)

‘The man gave the book to the woman’

(19b) hîr-e gûs-mo gâne kitáap gâsh-ar
Finnish and Malay are both typical nominative-accusative languages, but they diverge with regard to the marked vs. unmarked status of the two objects in ditransitives. In Finnish, Theme and Recipient are both overtly marked arguments and they differ in this respect from the nominatively marked Agent. The Theme is marked in the accusative in the same way as the Patient. The Recipient bears the allative suffix. Both objects are genuinely role-marked, since they are formally distinct from the Agent. In Malay, the two objects are also marked distinctively, but in contrast to Finnish, the Theme is marked in the same way as the Agent with a zero form, while the marking of the oblique-like Recipient deviates from this. Despite this, the marking is best defined as role-based, since mere objecthood and animacy do not capture the real nature of the object marking in (18). Moreover, the marking of the Theme coincides with the Patient. Burushaski represents a typical absolutive-ergative language, but apart from the marked nature of the Agent, the marking of Theme and Recipient is very similar to Finnish, since both objects are marked distinctively from the Agent. The Theme occurs in the absolutive (which is also the case of the transitive Patient), while the Recipient bears dative or adpositional marking.

As briefly noted above, languages diverge in the number of roles they distinguish explicitly. This is per se irrelevant to the employed object marking strategy as long as Theme and Recipient are kept apart formally. I briefly illustrate, however, the variation attested in this regard:

Evenki (Nedjalkov 1997:67f, 154)

(20a)      Girki-v      min-du     omakta-va     purta-va
friend-1SG:POSS 1SG-DAT new-ACC:DEF knife-ACC:DEF
bu:re-n
give-NONFUT-3SG
‘My friend gave me a/the new knife’

(20b) Asi edy-vi amin-tyki-vi ung-che-n
woman husband-POSS:REFL father-LOCAL-POSS:REFL send-PAST-3SG
‘The woman sent her husband to her father’

(20c) Hunat hute-kle-vi mu:-je emev-re-n
girl child-LOC-DIR-POSS:REFL water-ACC:INDEF bring-NONFUT-3SG
‘The girl brought water to her child’

(20d) nungan purta-va girki-duk-vi ga-ra-n
he knife-ACC:DEF friend-ABL-POSS:REFL take-NONFUT-3SG
‘He took a knife from his friend’

Basque (examples courtesy of Agurtzane Elordui)

(21a) gizona-k emakume-ari liburua-Ø eman z-i-o-Ø-n
man-ERG woman-DAT book-ABS give PAST-ROOT-DAT-ERG-PAST
‘The man gave the book to the woman’

(21b) gizona-k emakume-ari liburua-Ø hartu z-i-o-Ø-n
‘The man took the book from the woman’

(21c) gizona-k emakume-ari liburu bat-Ø erosi z-i-o-Ø-n
man-ERG woman-DAT book one-ABS buy PAST-ROOT-DAT-ERG-PAST
‘The man bought a book for/from the woman’

(21d) gizona-k emakume-ari egin z-i-o-Ø-n
man-ERG woman-DAT do PAST-ROOT-DAT-ERG-PAST
‘The man did it for the woman’
Evenki and Basque illustrate very different languages with regard to the number of formally distinct Recipient arguments (understood in a very broad sense, here comprising also the Source). Evenki has a very elaborate system of distinguishing between the roles borne by the Recipient. What is interesting is that even different instances of the recipient are distinguished from each other morphologically. The events profiled in (20a-c) all involve a recipient, but the linguistic coding of the role varies. The source is encoded in the ablative, as in (20d). In Basque, on the other hand, even the roles of recipient and source are coded by identical linguistic elements. This makes Basque rather similar to Martuthunira with respect to formal identity of these roles, since in both languages the roles of recipient and source are encoded in the same way. This does not affect the employed strategy in any way, but in this regard Martuthunira and Basque are clearly distinct. This shows that the strategies and the formal distinctions between the roles do not necessarily correlate in any way.

4.3. Unorthodox cases

In (17)-(21), I have examined cases in which the marking of Theme and the transitive Patient coincides, and the Recipient is marked differently. These kinds of case can be said to illustrate the canonical cases, since they recognize the semantic similarities of theme and patient. Patient and theme (as semantic roles) clearly have more features in common than patient and recipient. It is thus expected that languages rather encode patient and theme identically (in role-based strategies). There are, however, also cases in which the roles of patient and recipient receive identical encoding, while the Theme is encoded distinctively. Two examples are given below:

Babungo (Schaub 1985:144f)

(22a) mə səŋ nə ʃə nə fəntə
I beat:PERF him with stick
I have beaten him with a stick

(22b) mə kʃ wùumbā ηwāa nə fá
I give:PERF friend my with thing

‘I gave something to my friend’

(22c) mə kʃ fá tə wùumbā ηwāa
I give:PERF thing to friend my

‘I gave something to my friend’

Paumarí (Chapman & Derbyshire 1991:165f)

(23a) maravi-ra namonaha-hi ida mamai
fan-OBJ make-THEME:FEM DEM:F mother

‘Mother made a fan’

(23b) ho-ra no’a-vini hi-ki ihai-a
I-OBJ give-DEP:TR AUX-NONTHEME medicine-DEMOT:O

‘She gave me medicine’

(23c) maria-ra o-no’a-vini hi-hi ida savaharo
Mary-OBJ 1SG-give-DEP:TR AUX-THEME:F DEM:F turtle
vadi-ni
arm-F

‘I gave Mary the turtle arm’

The examples above are purely formally (without any reference to semantic roles) identical to the examples in (17)-(21). However, as already noted above, differences arise, if we consider the semantic role of the argument encoded identically to the Patient. In (17)-(21), the role borne by this argument is theme, while in (22b) and (23b) it is recipient. Moreover, following from this, the oblique-like argument is a theme, and not a recipient in (22b) and (23b). Examples in (22b) and (23b) do, however, represent the role-based strategy at the level of ditransitives, since
the two objects are encoded distinctively based on the role they bear. What makes these constructions less role-based is that the semantically more distant roles of patient and recipient are accorded the same marking. Indirect evidence for the role-based strategy is provided by the fact that the demotion of Theme is only an option in both Babungo and Paumarí. Babungo also has a canonical role-based strategy illustrated in (22c). Similar variation in also found in Nyawaygi (Dixon 1983:76), Ostyak (Nikolaeva 1999:40ff), West Greenlandic (Fortescue 1984:88f), Yoruba (Rowlands 1969:83), and Mandak (Newman 1998b:3). In Paumarí, the variation is rather between a role-based and a kind of object-based strategy. The strategy illustrated in (22) and (23) cannot be object-based, since the two objects are coded distinctively, in addition to which animacy does not make any significant contribution to the marking of objects.

A rather unorthodox example of the role-based strategy is illustrated below:

Tobati (Donohue 2002:199f):

(24a) nti nehu roy yan-dok
    3SG 1SG money give-1SG

‘He gave me some money’

(24b) ntric ace fuk-re yan-dic
    3PL father betelnut-FOC give-3PL

‘Father gave them betelnut’

(24c) nehu adu-m hony-re hu
    1SG stone-INSTR dog-FOC throw

‘I threw a stone at the dog’

In Tobati, the marking is as a whole role-based, since the Recipient is cross-referenced in the verb, which is the only mechanism of object marking in cases like (24a). The object-based strategy is further manifested indirectly in two ways. First, the focal marker -re in (24b) and
(24c) can, according to Donohue (2002:200), only be attached to the Theme, and never to the Recipient (or Agent). This produces cases in which the Theme is the only overtly marked object, but on the basis of the formally distinct encoding of Theme and Recipient, the given construction cannot but be regarded as role-based. These cases are extremely rare cross-linguistically and the only other possible example of this I have come across is reported for Tahitian (see Sedlak 1975:153). Second, Recipient can be encoded in the instrumental, as in (24c), which produces a case similar to (22b) and (23b).

5. Splits/fluctuating languages

In the previous sections, the strategies scrutinized have been examined as constant, and the illustration has been based on clear cases. Languages do, however, display variation in the use of the given strategies. In this section, some of the most important ‘splits’ in this regard will be examined. These comprise splits between different linguistic mechanisms, splits caused by verbs/verb classes (or the profiled events), and functional splits. Only splits between the strategies will be discussed in what follows, which means that cases like (20) will not be considered.

5.1. Formally conditioned splits

As formal are labeled here splits in which different arguments or different facets of argument marking follow different strategies. The first kind of split relevant here is exhibited by cases in which Theme and Recipient follow different strategies. This split was illustrated above in (13) from Turkish. In Turkish, Patient and Theme follow the animacy-based strategy in their marking, while the Recipient is encoded on the basis of role. The marking of objects cannot
therefore be said to follow exclusively one of the examined strategies, but object marking in Turkish is best regarded as split between animacy- and role-based strategies.

Closely related to the splits noted above are splits in which different facets of argument marking employ different strategies. Canonical examples of this are illustrated by cases in which the marking on nominal arguments (or dependent-marking) and the verbal cross-referencing of arguments (head-marking) is split between two strategies. This split was briefly noted in section 2, where it was stated that in many languages object-based strategies are confined to marking on nominal arguments. A couple of further examples of this split are examined below:

Athpare (Ebert 1997:113, 115)

(25a) un-ci-ŋa thik suga u-nis-u-e
s/he-NONSG-ERG one parrot 3PL:A-see-3:U-PAST
‘They saw a parrot’

(25b) un-na khan yana ghari m-a-pid-e-n-i?
s/he-OBL you that watch 3A-2U-give-PAST-NML-Q
‘Did s/he give that watch to you’

Yimas (Foley 1991:212)

(26a) makaw wa-mpu-ŋa-r-mpun
‘They gave makau [a kind of fish] to them’

(26b) kacmpt anti i-kay-pul-c-mpun
‘We rubbed ground on the canoes’
In both Athpare and Yimas, the marking on nominal arguments is object-based, which in these cases means that the objects are zero marked. These two languages, however, differ from each other in the marking of the verb. In Athpare, maximally two arguments appear in the verb. In ditransitive clauses, this has the consequence that only one of the objects can be cross-referenced, which in (25b) is the Recipient. The two objects are thus treated differently with respect to verbal cross-referencing. Animacy makes an important contribution here, since it is explicitly stated by Ebert (1997:115) that the argument that ranks higher for animacy occurs in the verb (whether Athpare exhibits DOM in transitive clauses is not discussed by Ebert). In Yimas, the marking is split between an object-based and a role-based strategy. The latter is followed by verbal cross-reference, since Theme and Recipient are encoded in the verb with formally distinct affixes. The affix cross-referencing the Theme is the same as the affix that indexes the Patient, while the affix used for the Recipient differs from this in form.

5.2. Splits conditioned by verb semantics

The cases discussed so far are best regarded as formal, since arguments/facets of argument marking follow different strategies, and the split is grammatically required. In addition, there are numerous cases in which a single facet of argument marking (like the marking on nominals) displays variation in the strategy employed. As a consequence, a strategy as a whole is replaced by another one. Typical examples are illustrated by cases in which different verbs use different strategies:

(Pitjantjatjara, Bowe 1990:24f)

(27a) minyma-ngku tjitji mai u- ngu
woman-ERG child:ABS bread:ABS give-PAST

‘The woman gave the child some bread’

(27b) minyma-ngku tjitji tjukurpa wangka-ngu
woman-ERG child:ABS story:ABS tell-PAST

‘The woman told the child a story’

(27c) minyma-ngku tjitji-ngka tjukurpa wangka-ngu
woman-ERG child-LOC story:ABS tell-PAST

‘The woman told a story to the child’

Erromangan (Sye) (Crowley 1998:202f)

(28a) y-ovog-i nompwat nvag
3SG:DISTPAST-BR:give-CONST PN food

‘S/he gave the food to Nompwat’

(28b) *y-ovog-i nvat pog-kam
3SG:DISTPAST-BR:give-CONST money DAT-1PL:EXCL

‘S/he gave us money’

(28c) yi-tamul-i nvat pog-kam
3SG:DISTPAST-BR:send-CONST money DAT-1PL:EXCL

‘S/he sent us money’

In Pitjantjatjara and Erromangan, different lexical verbs govern different object marking strategies. In both languages, ‘give’ mandatorily follows an object-based strategy, since both objects are marked identically to the Patient with this verb. However, ‘give’ is formally an exceptional verb in both languages above, and most other ditransitive verbs are marked based on the semantic roles borne by the given arguments. In Pitjantjatjara, the marking of other verbs is also optionally object-based, but other ditransitive verbs like ‘tell’ allow the Recipient to be marked on the basis of role (in the locative), which is not possible with ‘give’. In Erromangan, there are no options in the marking, but ‘give’ governs an object-based strategy, while ‘send’ (along with almost all other ditransitive verbs in the language) follows a role-based strategy. In both cases above, the variation is between object- and role-based strategies. This kind of verb-
conditioned variation in the object marking in ditransitives is very frequent. We may perhaps say that the further a given verb is from the ditransitive prototype, the more probable a role-based strategy becomes, even though a language would employ an object-based strategy with some ditransitive verbs (see also Haspelmath 2003:9). We do not expect to come across a language with a reverse system, i.e. in which ‘give’ employs the role-based strategy, while other ditransitive verbs follow the object-based strategy.

5.3. Functionally motivated splits

In (25)-(28), the variation between the strategies employed follows either from formal requirements of a language, or the semantics of verbs denoting three-participant events. These cases lack evident (non-linguistic) functions due to their formally or semantically determined nature. The following example from Kikuyu exemplifies a more functionally conditioned split:

Kikuyu (Blansitt 1973:11)

(29a) mūthūri ūrā mukūrà nēanengerire mūtumēa ihūa
man he (?) old gave woman flower

‘The old man gave the woman the flower’

(29b) mūtumēa nēanengerire mwarī wake gwī kahīī
woman gave daughter her to boy

‘The woman gave her daughter to the boy’

In Kikuyu, the marking of Theme and Recipient follows the object-based strategy in the coding of canonical three-participant events, as in (29a). However, Kikuyu resorts to the role-based strategy if both objects have an animate referent, as in (29b). In this case the Theme retains its marking, while the Recipient surfaces as an oblique. The reason for this is the avoidance of ambiguity, since without an explicit (non-zero) marking of either argument, clauses like (29b)
would be ambiguous (see Blansitt 1973:11). In Kikuyu, ambiguity is resolved by changing the object marking strategies. The split can thus be said to be functionally motivated. It cannot be conditioned by verb semantics, since the verb remains the same.

6. The rationale

In the previous sections, I have examined three different object marking strategies. The presentation above has mostly concerned the formal manifestation of the strategies, and the rationale behind the attested types has not been discussed in any detail. As a result, a brief discussion of this follows in the present section. Features discussed comprise the principles of economy and distinctiveness (see e.g. Kibrik 1985:271) and the effects of the basic nature of three-participant events on the strategies employed. The latter refers to the fact that canonical three-participant events involve two non-agent participants that bear distinct roles and are in most cases distinguished on the basis of animacy. The three strategies emphasize different facets of three-participant events, in addition to which the contribution of the two principles varies.

6.1. The object-based strategy

The object-based strategy exploits the differences in animacy, which in the great majority of cases disambiguate the semantic role assignment of the two objects. Three-participant events involve the roles of theme and recipient, and if a profiled event only involves one animate participant, it (almost?) always bears the role of recipient, and the inanimate participant thus bears the role of theme by default. The situation is in many respects similar to the separation of Agent and Patient in typical transitive clauses, in which the argument that ranks higher on the animacy hierarchy is an Agent, while inanimate participants are typically patients. These
contextually retrievable features do not need to be highlighted linguistically (see also Sedlak 1975:125). On the other hand, some kind of overt disambiguation between the roles of agent and recipient is necessary, since agent and recipient are both animate participants, and in case the arguments referring to them are not distinguished in any way, ambiguity may arise. This distinction is usually absolute, since it is necessary also at the level of transitive clauses, where Agent and Patient are distinguished formally. However, since animacy usually distinguishes between the two objects in ditransitives, no further formal distinction is necessary, which results in the object-based strategy. The principle of economy is also mirrored in the object-based strategies, since differences that can be recovered non-linguistically are left unmarked. Further evidence for the significance of the economy principle is provided by languages like Kikuyu in which formal differences between the objects occur, if they both have an animate referent. As far as disambiguation is assured by non-linguistic information, linguistic marking is avoided.

6.2. The animacy-based strategy

The occurrence of object-based strategies is easily accounted for by referring to the economy principle, as discussed above. Animacy-based strategies illustrate a trickier and a more intriguing issue as regards the rationale behind the attested strategy. With regard to the encoding of canonical three-participant events, as briefly defined above, animacy-based strategies (not surprisingly) exploit the strong correlation of animacy and the semantic role of recipient. We know on the basis of our knowledge of the nature of three-participant events that they involve the roles of theme and recipient, and of these the role of recipient is borne by an animate participant. As a result, there is no need to develop a distinct role marker for marking the role of recipient, but a marker used for animate objects unambiguously marks the recipient of canonical three-participant events. On the other hand, we may say that the overt marking of animacy is redundant here, since the stressed feature is retrievable non-linguistically. Moreover, the animacy-based strategy appears as highly dysfunctional in case both objects have an
animate referent, since the overt marking of both arguments produces ambiguity rather than resolving it. The strategy thus clearly violates the principles of economy and distinctiveness. This, however, only applies to the EDOM-strategy, while SDOM is a more economical strategy in this regard. (Moreover, in some languages with EDOM, the marking of either Theme or Recipient may be dropped, if there is a risk of ambiguity, see e.g. Genetti 1997:52). If the marker used for animate Patients is invariably used for marking Recipients in ditransitives, it aids us in disambiguating the semantic role assignment of two animate objects, and it never results in ambiguity in this case. The function of the marker is very similar to DOM, but with the difference that in ditransitives the distinction is between Agent and Recipient, while the same marker is used for keeping Agent and animate Patients apart in transitive clauses (for the latter, see e.g. Foley 1999:119). The marking aids us in interpreting ‘who is transferring what to whom’ (as opposed ‘who is doing what to whom’ of DOM).

6.3. The role-based strategy

As has been noted numerous times in the present paper, canonical three-participant events involve two non-agent participants, which bear distinct semantic roles. The occurrence of the role-based strategies can thus be explained very much in the same way as any formal distinction between two different semantic roles. Moreover, the linguistic elements used for encoding the Recipient are in most cases employed for expressing location in more general terms. The semantic relation between these elements is thus evident, which makes this formal polysemy understandable. As opposed to the object-based strategy, the principle of (maximal) distinctiveness makes a contribution to the occurrence of role-based strategies. The strategy never produces ambiguity, even though in some cases it overtly marks differences which can be retrieved without any linguistic cues. However, being too explicit is better than being too sparse in marking, which also partly motivates role-based strategies. In a similar vein, many languages invariably distinguish between Agent and Patient irrespective of whether this has any
discriminatory function or not. The occurrence of role-based strategies can perhaps also be explained by formal requirements of languages. Some languages are simply reluctant to accept two direct objects, in which case a role-based strategy is the most suitable for coding three-participant events.

6.4. Non-existent strategies; what and why?

So far, I have discussed some factors that explain the occurrence of the object marking strategies examined in the present paper. In the remainder of this section, I will briefly discuss some of the reasons which explain the absence of other logically possible strategies. One of the strategies that is plausible in light of animacy is a strategy in which Agent and Recipient are marked depending on animacy, while Theme is left unmarked. Agent and Recipient are typically animate entities, which renders this kind of marking strategy intuitively possible. However, this strategy is utterly dysfunctional in many respects. First, as noted above, one of the functions associated with SDOM is to disambiguate the semantic role assignment of arguments, because of which it would be irrational to mark the two arguments that need to be distinguished on the basis of the feature that produces the ambiguity in question. This is a clear violation of both the principle of economy and, perhaps more importantly, the principle of distinctiveness. Second, agent and recipient can be said to constitute the starting point and the target of the energy flow of three-participant events, which makes their identical encoding very unnatural. Another logically possible strategy of ditransitive argument marking is represented by a type in which DOM marks Patient and Theme arguments, while Recipient is never marked depending on animacy. There are languages in which DOM has this function (see e.g. (13) from Turkish), but in these languages Recipient bears role-based marking. What should be noted here is that this strategy is fully capable of resolving ambiguity in ditransitives with two animate objects. The only difference to SDOM is that animate Themes would be marked in these cases. The question thus arises why this type is not attested (the only reported exceptions are Tobati
and Tahitian, see above). Perhaps one of the reasons is that in nominative-accusative languages with this kind of marking system Agent and Recipient would bear the same marking, which was labeled as highly dysfunctional above. A third type that is logically possible, but not attested, is presented by a role-based strategy that encodes both Theme and Recipient distinctively from the Patient. In all the languages examined above, one or other of these arguments bears the same marking as the Patient. The occurrence of this type is probably precluded on the basis of the semantic similarities of the roles of patient and theme, in addition to which the identical marking of Patient and Recipient in some cases follows animacy/definiteness. Employing different mechanisms in the marking of all these arguments would thus be highly uneconomical.

7. Summary

The present paper has discussed three strategies that condition the marking of objects in ditransitive clauses. Transitive clauses served primarily as a basis of comparison in studying the object marking in ditransitives. I hope to have shown that the three strategies discussed in detail in the present paper suffice to explain the marking of the objects in all the languages. There are, however, also splits or variation in the use of these strategies, and many languages (perhaps even the great majority of them) employ more than one strategy in the encoding of objects. Even in these cases, the strategies as such are maintained, but they vary.

The object-based strategy was in the present paper regarded as a strategy which accords Theme and Recipient the same linguistic coding. In object-based strategies the mere objecthood determines the marking of Theme and Recipient, and animacy and semantic roles are irrelevant in this regard. In the purest instances of the type, the two objects are treated alike in all respects, which means, for example, that both of them allow passivization in addition to bearing identical coding. Animacy-based strategies, on the other hand, explicitly mark the
animacy of the objects in ditransitives. Animacy-based strategies can be divided into two types depending on whether the marking of both objects or only the marking of Recipient is conditioned by animacy. The subtypes were labeled “Extended Differential Object Marking” and “Shifted Differential Object Marking” in section 3. In the former, animacy affects the marking of both objects in ditransitives, while in the latter only the marking of Recipient is determined by animacy. The EDOM strategy is in some cases rather dysfunctional, since it overtly marks the two objects only in cases in which this causes ambiguity. In role-based strategies, the semantic roles of Theme and Recipient determine the marking of the corresponding arguments. Role-based strategies never produce ambiguity.

As was discussed in section 6, the strategies examined in the present paper can be explained by referring to the nature of canonical three-participant events, in addition to which the principles of economy and distinctiveness make a contribution here. Object-based strategies exploit the obvious differences in animacy between the two objects, which makes overt linguistic marking redundant (see also Sedlak 1975:125). Animacy-based strategies, in turn, appear as somewhat more dysfunctional in many respects, especially the strategy which was labeled as EDOM above. Role-based strategies may violate the principle of economy, since they explicitly mark differences that are retrievable non-linguistically. However, being too explicit is not necessarily bad, which explains the occurrence of role-based strategies.

The present study has focused on illustrating the strategies per se, which unavoidably has the consequence that some of the interesting facets of the strategies are only touched upon, or not studied at all. One such feature is illustrated by the splits examined in section 5. The section only briefly illustrates some of the possible splits attested cross-linguistically, but does not discuss their distribution or semantic motivation in any way. Especially interesting in this regard are the lexically or semantically conditioned splits, such as those in (25)-(29).

Ditransitive verbs display huge semantic variation, and it is thus expected that they behave differently with regard to the linguistic encoding of their arguments. It would be very interesting to study cross-linguistically, which verbs are coded by object-based strategies, and
which employ role-based strategies in languages in which this kind of variation is attested. We may predict that the further we proceed from the ditransitive prototype, the more probable the use of the role-based strategy becomes. This is, however, merely a hypothesis, which needs to be verified (or rejected) by a more careful study. Languages may thus be classified on the basis of which of the possible strategies is the dominant one, which is not possible on the basis of the presentation above, and a detailed study of this clearly falls outside the scope of the present paper. It would also be interesting to study whether the morphological nature of a language favors object-based strategy, which also seems plausible. If a language lacks morphological means to mark case, the marking of objects in ditransitive clauses cannot be very strongly role-based, while a rich case system intuitively favors role-based strategies.

**Abbreviations**

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
<th>Abbreviation</th>
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<td>A</td>
<td>Actor</td>
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<td>DROP</td>
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<td>F/FEM</td>
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</table>
References:


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1. The label ‘ditransitive’ is in the present context used in a functional domain way, which means that all possible ways of encoding three-participants events will be considered ditransitive, regardless of their formal transitivity.

2. The variation in the form of the object markers is allomorphic.
3. In most sources of data I have used, the marking of inanimate Recipients is not discussed, so it cannot be argued that the marking of Recipients is fully animacy-driven.

4. The variation of the dative marking affix follows from the nature of the argument; pronouns receive -raa, while human nouns are marked with -k in object function.

5. Nagaraja does not cite a ditransitive clause with a definite inanimate Theme, but on the basis of (17b) it is rather safe to assume that they are marked as well.

6. This means that definite inanimate objects may also be marked in some of the cases illustrated in (12)-(15).

7. This refers to these notions as semantic roles. The feature of animacy, on the other hand, makes the relation of recipient and animate patients understandable.