# DIFFERENTIAL OBJECT MARKING IN (KHALKHA)-MONGOLIAN\*1

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# 1. Introduction

Differential Object Marking (DOM) is a cross-linguistic phenomenon that in some languages certain objects are overtly marked and others not. Some factors which trigger DOM cross-linguistically have been reported in the literature, including referentiality, animacy and topicality.

Mongolian also exhibits DOM. In this language, the direct object of a transitive clause can be either overtly marked with accusative case or it can occur without any case suffixes. This phenomenon in Mongolian has not been discussed very much until now. In this paper, I will deal with the following questions and try to give answers to them:

- (i) Do the cross-linguistic factors also play a role for DOM in Mongolian?
- (ii) Are there any other factors which trigger DOM in Mongolian?

The structure of this paper is as follows. Firstly, I will introduce the typological characteristics of Mongolian and its DP structure, because it is important for the later discussion of DOM. Secondly, each factor relevant for DOM will be illustrated with examples, based on my native speaker intuition. Some hypotheses concerning unclear cases are also proposed and I discuss an empirical acceptability survey which was compiled to test them. The results of this empirical survey will be discussed in section 5.

Summarizing conclusions will be drawn in the last section.

<sup>\*</sup> I am grateful to Klaus von Heusinger for his useful comments on earlier drafts of this paper and to Udo Klein for helping to make the empirical survey and to analyze it. An earlier version of this paper was presented at the workshop "The structure of DP in Altaic languages" in Stuttgart and I would like to thank the audience and in particular Jaklin Kornfilt and Marcel Erdal for their valuable comments.

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# 2. Preface to Mongolian

# 2.1 Typological Characteristics of Mongolian

Mongolian is spoken by an estimated 6 million speakers in Mongolia, Buryatia (an area around Lake Baikal) and in the autonomic province of Inner Mongolia in China. This paper investigates Khalkha Mongolian, the main dialect of Mongolian and also the official language in Mongolia.

In the linguistics literature and encyclopedia, Mongolian is usually assigned to the Altaic language family along with the Turkic and Mandji-Tungusic languages. Japanese and Korean are also assigned to this language family. Although there are many common typological characteristics among these languages, this genetic relation is not definitely confirmed. They are also often referred to as the Altaic Sprachbund, because of their regional language contacts.

Mongolian shares with other Altaic languages some typological characteristics such as vowel harmony, agglutinated morphology, SOV-structure and the lack of a gender system. There are several features of Mongolian that are different as compared with, for example, the Turkic languages. Some features which are important for this paper are the following:

**Personal suffixes.** There are no personal suffixes on finite verbs.

- (1) a. (Ben) bu kitab-1 oku-du-m. *Turkish*I this book-Acc read-Pst-**1Sg**'I read this book.'
  - b. (Sen) bu kitab-1 oku-du-**n**you this book-Acc read-Pst-**2Sg**'You read this book.'
- (2) a. **Bi** ene nom-ig unsh-san. *Mongolian*I this book-Acc read-Pst
  'I read this book.'
  - b. **Chi** ene nom-ig unsh-san. you this book-Acc read-Pst 'You read this book.'

Mongolian uses the same verb form, irrespective of the subject, as shown in (2), whereas in the Turkish examples in (1) the verb form is different according to the subject feature of the clause.

**Pro drop.** There is no pro drop in Mongolian. In the Turkish examples in (1), the subject can be omitted, whereas in the corresponding Mongolian examples in (2), this omission of subject is not possible.

**The order of suffixes.** In Mongolian, the possessive suffixes appear after the case suffixes, whereas in Turkish they appear before the case suffixes, as illustrated in (3) and (4). Kornfilt (1997) assumes that these possessive suffixes are agreement markers in Turkish.

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<sup>&</sup>lt;sup>2</sup> For details see Kornfilt, J. & von Heusinger, K. "Specificity and Partitivity in Some Altaic Languages" in this volume.

- (3) (Sen) ben-im kitab-im-1 oku-du-n. *Turkish* you I-Gen book-Poss.1Sg-Acc read-Pst-2Sg 'You read my book.'
- (4) Bold naiz ohin-ig-oo uns-sen. Mongolian Bold friend girl-Acc-Poss. kiss-Pst 'Bold kissed his girlfriend.'

## 2.2 The DP Structure in Mongolian

The phenomenon DOM is expressed structurally on noun phrases. Therefore, I will introduce firstly the structure of the DP in Mongolian in this section.

The DP-structure can be very complex in Mongolian as shown in Table 1. This table shows the different syntactic positions in the Mongolian DP and the possible arguments which can fill these positions.

		le	xical item	S			suffixes / particles	
Dem./Poss.	prenom.	Num.	attribut.	Adj.	head	postnom.	PL/case	poss. suff./
Pronouns	Quant.		Items		Noun	Quant.	suffixes	particles

Table 1. The DP structure in Mongolian

In the following, I will describe each slot with its potential expressions.

**Demonstratives.** Most grammars of Mongolian (e.g. Poppe 1951) claim that there are no definite articles. However Mongolian shows a complex system of marking definiteness. The demonstratives *ene/ter* 'this/that' are used to indicate definiteness, and have different uses such as deictic or anaphoric ones and so on. This is further discussed in section 3.2.

**Quantifiers**. The quantifiers in Mongolian can occur either before the head noun or after it. Therefore, I call these prenominal quantifiers, which are *buh/zarim* 'all/some' in example (5), and postnominal which are *bur/bolgon* 'every/each' in (6).

- (5) Bi buh nom-ig unsh-san.
  I all book-Acc read-Pst
  'I read all books.'
- (6) Bi nom bolgon-ig unsh-san.
  I book each-Acc read-Pst
  'I read each book.'

**Numerals**. The preferred position of numerals is before the attributive and adjectival clauses as in (7). The numeral *neg* 'one' can also be used to indicate indefiniteness (see section 3.3).

(7) Bi **neg** goyo duul-dag sain jujigchin-g tani-na. I a/one beautiful sing-Hab good actor-Acc know-Prs 'I know a good actor, who sings beautifully.'

**Attributive NPs.** The genitive noun phrases and the relative clauses can be found in this slot. They are always before the head noun.

**Adjectives.** There is no congruence between the adjectives and the head noun.

**Head noun.** It is generally phrase final, therefore case and possessive suffixes attach to it, except for postnominal quantifiers. In cases such as in example (6), the case suffix must occur on the quantifier and not on the head noun.

Case/possessive suffixes. These morpho-syntactic markers attach to the right edge of a nominal phrase.

# 3. DOM in Mongolian

# 3.1 Referentiality Scale

The phenomenon that DOM denotes is that in certain languages objects can be marked differently morpho-syntactically. In other words, some objects can be overtly case marked, and others not. In the literature (Bossong, 1985; Aissen, 2003), it is assumed that differential object marking is triggered by three main factors: referentiality (or definiteness), animacy and topicality. Furthermore, in von Heusinger & Kaiser (2007) the influence of verb classes is discussed. These factors are variable among the languages. The way in which DOM is realized differs across languages. One example from Turkish is illustrated in (8).

(8) a. (Ben) bir kitap oku-du-m.

I a book read-Pst-1Sg
'I read a book.'

indefinite non-specific

b. (Ben) **bir** kitab-ı oku-du-m.

I **a** book-**Acc** read-Pst-1Sg
'I read **a certain** book.'

indefinite specific

In Mongolian the direct objects of transitive clauses can occur either with the accusative suffix -(i)g or in unmarked nominative form.<sup>3</sup> This phenomenon of DOM is discussed only marginally in the Mongolian grammars. Poppe (1951, p.62) describes the lack of an accusative suffix on the direct objects as an indefinite case. The newer Mongolian grammar of Kullmann & Tserenpil (2001, p. 87) explains it as follows (emphasis by the authors):

"Until recently, Mongolian scholars believed that the Mongolian language did not distinguish between definite and indefinite nouns because the articles which western European languages have are not present in the Mongolian language. However, linguists have now discovered how to determine definite and indefinite nouns in Mongolian: they are clarified with the help of accusative suffixes ..."

It is correct that all definite noun phrases must take the case suffix. However, there are also combinations of indefinite noun phrases — marked with neg — and the case suffix as in the

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<sup>&</sup>lt;sup>3</sup> Mongolian also exhibits another type of case alternation. The subjects of the embedded clauses can occur in different cases depending on the type of embedded clauses. This case alternation is discussed in Klein, U., Guntsetseg, D. & von Heusinger, K. (submitted).

example (8) from Turkish and in (9) from Mongolian. Therefore, the accusative suffix -(i)g cannot mark definiteness but must indicate some other properties.

(9) Bi neg ohin-ig har-san. I a girl-Acc see-Pst 'I saw a girl.'

I will propose that the above-mentioned main factors (see section 1) also play a role in DOM in Mongolian. Most importantly, they work not at the same time but rather stage to stage. In the following, these stages will be investigated in detail.

Firstly, differential object marking in Mongolian patterns according to the Referentiality Scale in (10), which is suggested by Aissen (2003).

(10) Referentiality scale of Aissen (2003, p. 437):

### pers. pronouns > proper names > def. NPs > indef. spec. NPs > indef. non-spec. NPs

Each point of this scale will be discussed in conjunction with DOM in the following sections.

If the direct objects are realized as personal pronouns, as in example (11), or as proper names (12), the accusative marking is obligatory.

(11) Bi chama\*(ig) har-san.
I you.Acc see-Pst
'I saw you.'

personal pronouns

(12) Bi Bold\*(-ig) har-san.
I Bold-Acc see-Pst
'I saw Bold.'

proper names

#### 3.2 Definite Noun Phrases

Most grammars of Mongolian claim that there is no definite article. However, Mongolian shows a complex system of marking definiteness. Demonstrative, anaphoric and possessive determiners are used to indicate definiteness, even though in different uses of definiteness. The definite noun phrases are obligatorily accusative case marked as direct objects.

Unique and generic expressions are expressed by bare nouns. As direct objects they must be marked with an accusative suffix, as illustrated in (13) and (14). Note, however, that some bare nouns may also function as weak indefinite or incorporated noun phrases, and therefore they do not take accusative case. This will be discussed later.

(13) Bi yerunchiilegch\*(-ig) har-san.
I president-Acc see-Pst
'I saw the president.'

(14) Dugui\*(-g) ankh 1817 on-d butee-sen. bicycle-acc firstly 1817 year-Dat develop-Pst 'Bicycles were developed in 1817.'

Demonstrative noun phrases with *ene/ter* 'this/that' are used deictic contexts as in (15). In this case, the object *nom* 'book' is locally visible. The context to this case would be such that the speaker of (15) answers to the question "Which of these books did you read?"

(15) Bi ene/ter nom\*(-ig) unsh-san.

I this/that book-Acc read-Pst
'I read this/that book.'

The demonstrative *ter* 'that' and *nuguu* are used in anaphorically. In other words, they indicate discourse familiarity. There is an interesting meaning difference between *ter* and *nuguu*. *Ter* is used for close context familiarity, as in (16).

- (16) A: I read his new book.
  - B: Bi bas ter nom\*(-ig) unsh-san.
    I also the book-Acc read-Pst
    'I also read it.'

In (17) the situation is that two students talked about reading a certain book. So a few days later the one asks the other if he has finished the book and (17) would be the answer. This is a case of discourse familiarity where the discourse took place at some earlier point in time.

(17) Bi nuguu nom-ig unsh-aad duusga-san. I the book-Acc read-Cvb end-Pst 'I finished reading the book.'

As the examples show, these noun phrases with *ene/ter/nuguu* are obligatorily marked with an accusative suffix as direct objects.

Furthermore, possessive noun phrases are also definite and obligatorily case marked as direct objects (see example in (4)).

#### 3.3 Indefinite Noun Phrases

Indefinite noun phrases can be marked with accusative case, in other words, overt accusative marking is optional for these instances. Before I deal with this optionality, I will show first how the indefinite noun phrases are structured in Mongolian. Again, grammars of Mongolian claim that there is no indefinite article in Mongolian. But it seems that the numeral *neg* for 'one' functions as an indefinite article; it is even developing to become an indefinite article, located at least in stage 1 of the development of indefinite markers as discussed by (Givon 1981): the earliest developing stage of indefinite markers is referential-indefinite in which the numeral one is used to introduce a new referent into the discourse.

(18) Bi neg ohin(-ig) har-san.
I a girl-Acc see-Pst
'I saw a girl.'

As already mentioned, the case marking of indefinite direct objects is optional, but sometimes not very acceptable. The optionality of accusative marking of indefinite noun phrases seems, at first glance, to depend on the specificity of direct objects, similar to Turkish (Enç 1991, von Heusinger & Kornfilt 2005).

(19) a. Bold neg ohin uns-sen. Bold a girl kiss-Pst 'Bold kissed a girl.'

specific or non-specific

b. Bold neg ohin-ig uns-sen. Bold a girl-Acc kiss-Pst 'Bold kissed a (certain) girl.'

specific

We see that in (19b) the accusative marking intends a specific reading; it is a certain girl who is kissed by Bold, whereas in (19a) the unmarked form of direct object shows neutrality in terms of specificity. It can have both readings: specific or non-specific.

However, there are other examples where accusative marking is hardly acceptable for some indefinite noun phrases. For example:

(20) Bi neg nom(²-ig) unsh-san. I a book-Acc read-Pst 'I read a book.'

Here, accusative marking on *neg nom* 'a book' is less acceptable, despite having a specific reading. This fact will be discussed in detail in section 4.

In Mongolian, there are also bare nouns with very weak indefiniteness sometimes called semantically incorporated nouns. Incorporated noun phrases are defined in the literature as nouns that fill the syntactic argument positions, but semantically do not introduce discourse referents. One example of this is in (21) from German.

(21) Gestern bin ich Rad<sub>i</sub> ge-fahr-en. \*Es<sub>i</sub> ist rot. yesterday Aux I bicycle Ptcp-drive-Ptcp it be.Prs red 'Yesterday I did cycling. It is red.'

These nouns build a semantic unit together with the verb, and are generally realized by bare nouns (see Dayal, 2003 for Hindi and Öztürk, 2005 for Turkish). In Mongolian, there is no clear distinction between non-specific indefinites and incorporated nouns, so that it is very difficult to distinguish them. Discourse transparency is a good criterion for German, since it is not possible to pick up the incorporated noun in the next sentence by an anaphoric pronoun. However, this criterion does not apply equally well to Mongolian, as shown in (22), and awaits further research:

(22) Bi uchigdur nom<sub>i</sub>(\*-ig) unsh-san. <sup>?</sup>Ter<sub>i</sub> ikh sonirkholtoi bai-san. I yesterday book-Acc read-Pst it very interesting be-Pst 'Yesterday I read a book / did book-reading. It was interesting.'

The use of accusative marking on such bare nouns is ungrammatical, as one sees in (22).

All the relevant points relating to the referentiality scale discussed above are summarized in table 2 below.

	pers.	proper	definite	indefinite NPs		weak	indefinite
p	ronouns	names	$NP_s$	+spec	-spec	/incorporat	ed NPs
	+	+	+	+/-	-		-

Table 2. DOM in Mongolian according to the Referentiality Scale

# 4. Animacy and Further Factors

As the examples (19) and (20) in 3.3 have shown, there are some restrictions for accusative marking on indefinite noun phrases. My first assumption was, as discussed, that the accusative case marking of indefinite noun phrases depends on the specificity feature of direct objects.

However, we have seen that the accusative marking of a direct object, such as *neg nom* 'a book' in (20) is hardly acceptable, despite having a specific reading. Therefore, I will argue that the optional accusative marking of indefinite direct objects does not only depend on specificity, but also on further factors such as animacy. By comparing (19) and (20), we see that the accusative marking on [+human, +specific] objects is fully acceptable, whereas the accusative marking on [-animate, +specific] object is hardly acceptable. There is also no problem with the animate direct objects; they allow marking with an accusative suffix when specific.

For this reason, I will propose that DOM of indefinite direct objects depends firstly on animacy and secondly on specificity. Table 2 can now be expanded to table 3. The feature of animacy does not play a role for either definite or for weak indefinite and incorporated noun phrases. It is only important for indefinite noun phrases.

definiteness	pers. proper defini		definite	indefinite NPs		weak indefinite/
scale	pro	names	NPs	+spec	-spec	incorporat. NPs
animacy scale	n.					
+ human				+/-		
+ animate	+			+/-	_	
- animate				(+)/-		

Table 3: Animacy for DOM of indefinite noun phrases

However, the optionality of case marking has still not been fully explained. The overt case marking indicates that the direct object is specific, but direct objects without an accusative suffix can also be specific. That is, the optionality shown in the highlighted box in table 3 was to depend on

further factors. Therefore, I propose the following hypotheses in conjunction with some different semantic and pragmatic aspects of DOM:

#### **Hypothesis of animacy:**

The probability of overt accusative marking is higher if the indefinite direct object is higher in animacy.

#### **Hypothesis of discourse prominence:**

The accusative suffix on an indefinite direct object shows up if that direct object is referred to by an anaphoric expression in the following sentences, i.e., when the object is high in discourse prominence

#### **Hypothesis of verb semantics:**

The overtly accusative marking of indefinite direct objects depends on the semantics of the verb. For example:

- a. Verb types, whose objects are different in animacy
- b. Intensional verbs such as search
- c. Verbs with incremental themes as direct objects
- d. Verbs which cause changes to direct objects

### **Hypothesis of scope**:

The scopal circumstances cause the overt accusative marking of indefinite direct objects.

In order to test these hypotheses, I made an empirical survey in the form of a written questionnaire in Mongolia in summer 2007. Some parts of the analysis and the results of this questionnaire will be discussed in the next section.

# 5. Questionnaire

The questionnaire consisted of 75 test sentences relating to DOM and about 100 filler/control sentences. These sentences were divided into 4 different questionnaires. The informants judged 18 or 19 sentences for DOM. 320 informants (160 students and 160 employees who have a graduate degree) were asked and so there are 80 judgements per sentence.

This empirical survey was made in the form of a written questionnaire. The informants had to read one test sentence and fill in their judgement as to how good the sentence sounded on a scale from 1 (very bad) to 6 (very good). Given the size of the whole survey, I have decided to discuss in this paper only some parts of its results, namely those relating to discourse prominence, verb semantics and scopal specificity.

#### **5.1 DOM** and Discourse Prominence

During my investigation of DOM in Mongolian, I constructed different example sentences as a native speaker. Sentences with accusative marked direct objects express a higher discourse prominence than direct objects without case marking. I understand discourse prominence to be

the property of an expression which serves as an antecedent in discourse. An expression with high discourse prominence is easily referred to by an anaphoric expression, while one with low discourse prominence is not so easily accessible.

As mentioned in relation to example (20), the accusative suffix is very questionable with indefinite inanimates, but not necessarily ungrammatical. If I add an accusative suffix on *neg nom* 'a book', it indicates that I want to tell more about this book in the next sentence, as in (23):

(23)Bi uchigdur unsh-aad duusga-san. Teri neg nom-ig<sub>i</sub> vesterday a finish-Pst I book-Acc read-Cvb it ikh sonirkholtoi bai-san. very interesting be-Pst 'Yesterday I finished a book. It was very interesting.'

On the basis of this intuition, I propose the following **hypothesis of discourse prominence**:

The accusative suffix on an indefinite direct object shows up if that direct object is referred to by an anaphoric expression in the following sentences.

For testing this hypothesis, I constructed three main clauses whose direct objects are marked with an accusative suffix. To find out whether the anaphoric relation played a role for overtly case marking the test sentences were built in 3 different structures as follows:

- 1) Coordination: the anaphoric expression to the direct object is in the same clause, e.g. "John kissed a girl <u>and</u> she slapped him."
- 2) Next sentence: the anaphoric expression to the direct object is in the next sentence, e.g. "John kissed a girl. She slapped him."
- 3) No anaphoric: There is no anaphoric expression in the following sentences, e.g. "John kissed a girl. James did not come to the school today. ..."

The informants saw and judged only one of these three sentences. The direct objects of the main clauses were also different in animacy, so the test sentences in structure 1 are as follows:

- Bold kissed a girl and she slapped him.
- I stroked a dog and it bit me.
- I read a book and it was interesting.

The result of this analysis is shown in figure 1. The judgement means decrease if the direct objects are lower in animacy, is in both the coordinated structure as in the structure where the anaphoric expression is in the next sentence. The last line of no anaphoric relation does not conform to this interpretation, because inanimates are judged better than animates and humans. I guess that the test sentence was not well chosen. The judgement means relating to the different structures also decrease from the coordinated to no anaphoric relation, except the last point about inanimate direct objects.

# Interaction between animacy and type of anophoric relation

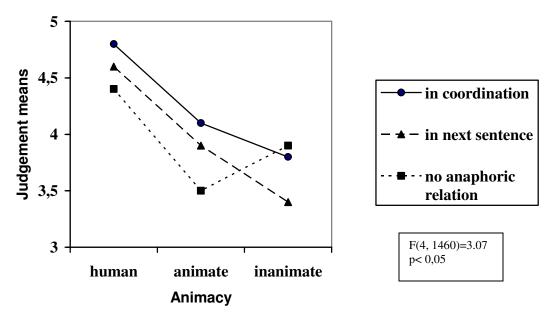


Figure 1: The result of the analysis of discourse prominence

In summary, the direct object of a transitive clause is more likely to be marked by an accusative suffix if the speaker wants to tell more about it in the following discourse.

#### **5.2 DOM and Verb Semantics**

Von Heusinger & Kaiser (2007) discussed that verb semantics also play a role in DOM. I wanted to investigate whether verb semantics influences DOM in Mongolian as well and proposed the following hypothesis:

#### **Hypothesis of verb semantics:**

The overtly accusative marking of indefinite direct objects depends on the semantics of the verb.

For testing this hypothesis I constructed test sentences for the following different verb types:

- a. Verb types whose objects are different in animacy
- b. Intensional verbs such as to search
- c. Verbs with incremental themes as direct objects
- d. Verbs which cause changes to direct objects, such as to repair

In this paper, I will show only one contrast, namely the contrast between the verbs 'to read (a book)' and 'to write (a letter)'. The difference in these verbs is the affectedness of their direct objects: the verb 'to read' does not trigger any affectedness on 'a book', whereas the verb 'to write' affects 'a letter' in the sense that the letters comes into being incrementally by writing.

Such incremental themes are expected to occur as direct objects with accusative suffixes, rather than in unmarked nominative form. In the questionnaire, the direct objects 'a book' and 'a letter' occur in two forms: one in unmarked form and one in accusative marked form. Each informant judged only one form. The result of this analysis is illustrated by figure 2. There is a big difference in judgement means between the two verbs with accusative direct objects: the accusative form of the clause 'to read a book' is rated at 3.6, whereas the accusative form of the clause 'to write a letter' is rated at almost 4.5.

# Interaction between verb type and case Case — nominative — accusative F(1, 1460)=7.36 p< 0,01

#### Figure 2: The result of the analysis of verb semantics

To sum up, if a verb triggers affectedness of its direct object, as in the case of incremental themes, the accusative marking on direct objects is more common. Therefore, we can say that the hypothesis of verb semantics is confirmed.

Verb

# **5.3** DOM and Scope

As mentioned above in (19), the overt case marking of indefinite direct objects depends on its specificity. More specifically, it depends on a kind of epistemic specificity, where the speaker has a specific entity in mind. There are also contexts where indefinite direct objects can show different behaviour in terms of their scope with respect to an operator such *every day*. Clauses like *I read a book every day* can have either narrow scope or wide scope. For narrow scope, the speaker reads a different book every day, whereas for wide scope, the speaker reads the same book every day. If the book has a wide scope over the clause, it has a scopal specific nature and it should be marked in Mongolian with the accusative suffix as a direct object. For this reason I propose the following hypothesis.

#### **Hypothesis of scope:**

The scopal circumstances cause the overt accusative marking of indefinite direct objects.

In order to test this hypothesis, I constructed test sentences with a quantificational phrase *udur bolgon* 'every day', while the direct objects occur in two forms: in both nominative and accusative. Each test sentence was given in two contexts, one with narrow and one with wide scope. For example, the informants had to judge sentences such as "Bold wants to see a movie every day." in two different contexts: i) He wants to see different movies every day, and ii) He wants to see the same movie every day. In other words, the informants read a sentence with either a nominative or accusative direct object (but not both forms), and then judged it to each context.

The results (drawn by figure 3) show that in a sentence with an extensional operator such as 'every day', the indefinite direct object with an overtly accusative suffix has a significant preference for wide scope. The nominative form of direct objects, on the other hand, shows, neutrality with respect to scope.

# Case nominative accusative F(1, 1460)=53.6 p< 0,001 F(1, 1460)=53.6 p< 0,001

Figure 3: The result of the analysis of scopal specificity

# 6. Summary

On the basis of the discussion about what factors play a role for DOM in Mongolian, and also of the results from the empirical survey, the following conclusions can be drawn:

1. DOM in Mongolian depends primarily on the Referentiality Scale: if the direct objects are realized as personal pronouns, proper names and definite noun phrases, accusative marking is obligatory. Accusative marking of weak indefinites or semantically incorporated bare nouns is ungrammatical. Indefinite noun phrases with *neg* as direct object show optionality of accusative marking which depends on further factors.

2. DOM of indefinite direct objects depends primarily on animacy and secondly on specificity. The factor of specificity plays a role in a different way because of its different kinds, namely epistemic and scopal specificity.

- 3. There are also further factors which trigger DOM: discourse prominence and verb semantics.
- 4. These factors do not function or work independently of each other; instead they interact with each other.

Table 4 summarizes all factors for DOM in Mongolian.

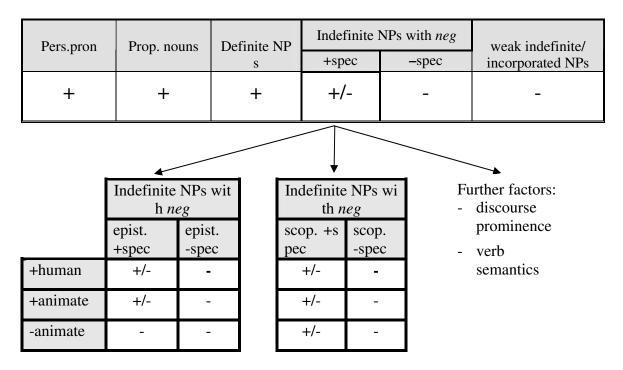


Table 4. The factors for DOM in Mongolian

# **Appendix: List of Abbreviations (Glosses)**<sup>4</sup>

- 1 first person
- 2 second person
- 3 third person

Acc accusative

Aux auxiliary

Cvb converb Dat dative

Dem demonstrative

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<sup>&</sup>lt;sup>4</sup> I followed the Leipzig Glossing rules.

Fut future Gen genitive habitual Hab Inf infinitive instrumental Ins negation Neg Nom nominative Ρl plural Poss possessive Prs presens Pst past Ptcp participle question particle Q Sg singular

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