



# **Differential object marking: A cross-linguistic study**

**Kaius Sinnemäki**

(kaius.sinnemaki@helsinki.fi)

University of Helsinki

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## Background 1/2

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- Differential object marking (DOM) has been studied a lot during the last 30 years.
  - The focus on DOM in single languages:
    - **Spanish** (Leonetti 2004), **Guaraní** (Shain 2008), **Mongolian** (Guntsetseg 2008), **Korean** (Kwon & Zribi-Hertz 2008), **Yongren Lolo** (Gerner 2008), **Turkish** (Kornfilt 2009).
  - Or on the factors that affect DOM (e.g. animacy, definiteness, topicality, etc).

## Background 2/2

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- Little attention has been given to DOM from a **cross-linguistic perspective**.
  - “...we are not aware of a world-wide and sufficiently sampled database on differential case-marking...”  
(Bickel & Nichols 2009)
- Yet, Jäger (2007: 102) states: “Almost all accusative languages have DOM.”
  - Compare to Maslova and Nikitina (2007), who sampled 400 languages: **41% of accusative languages had DOM** (cf. McGregor (2009, in press) for recent typological work on ergativity).



## Purpose of study 1/2

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- A preliminary typological study on DOM in relation to 1) **areas** and 2) **word order types**.
  - Known that case correlates with **verb-final** order and **Eurasia** as a linguistic area (e.g. Bickel 2008).
- Focus on **overt case marking of direct objects** (O; the more patient-like argument of a transitive verb) in transitive clauses. Included marking by affixes, tonal or morphophonological alternations, or isolating formatives. Only **non-pronominal arguments** studied.



## Purpose of study 2/2

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- No attention given to the **semantic, pragmatic, and syntactic** factors that affect DOM.
  - A cross-linguistic study of these factors would require at least some corpus studies in each language.
  - I simply noted what the sources mentioned about case marking of O and possible restrictions to it.
- I merely contrast **1) differential marking** with **2) consistent/split marking**. (Note: this is not about alignment, but about overt marking.)



## Definitions 1/3: DOM

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- Differential marking: some objects unmarked while others marked.
  - In Kannada (Lidz 2006), object case is optional for inanimate nouns (1), but obligatory for animates (2).

(1) Naanu pustaka(-vannu) huDuk-utt-idd-eene.  
1SG.NOM book(-ACC) look.for-NPST-be-1SG  
'I am looking for a book.' (p. 11)

(2) Naanu sekretari-yannu/\*sekretari huDuk-utt-idd-eene.  
1SG.NOM secretary-ACC /\*secretary look.for-NPST-be-1SG  
'I am looking for a secretary.' (p. 11)



## Definitions 2/3: “consistent”

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- Consistent marking: all objects are marked with the same marker.
  - Imbabura Quechua (Cole 1985) uses object case regardless of the object being e.g. proper noun (3) or indefinite mass noun (4).

(3) Juzi Marya-ta juya-n-mi.  
José María-ACC love-3-VAL  
'José loves María.' (p. 98)

(4) Ñuka-ka aycha-ta miku-ni ñuka wawki tanda-ta miku-j-shna.  
1-TOP meat-ACC eat-1 1 brother bread-ACC eat-NMLZ-as  
'I eat as much meat as my brother eats bread.' (p. 66)



## Definitions 3/3: “split”

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- For split marking different case markers are used depending on the context.
  - Evenki uses *-βa* to case-mark (roughly) definite objects (5), while it uses *-jə* to case-mark (roughly) indefinite objects (6) (Bulatova & Grenoble 1999: 8-9).

(5) Bii asii **-βa** əəri-m.  
1SG woman-ACC call-1SG  
'I call the woman.' (p. 8)

(6) žəβgəə-**jə** gamii, aja bi-mčə.  
food -ACC.INDF take good be-COND  
'It would be good to get some (any) food.' (p. 9)



## Data and sampling 1/2

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- Languages classified into **genera** (e.g. Celtic): counts based on counting distinct values in genera to control for the most obvious genealogical bias (Dryer 1989).
  - No particular sampling method: **aiming at maximum genealogical coverage.**
  - Data from language descriptions, sources dealing with DOM, and *The World Atlas of Language Structures* (WALS, Comrie 2005 and Dryer 2005).
- Languages classified into six macro-areas (Dryer 1992).

## Data and sampling 2/2

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- **678 languages** from **371 genera** (77% coverage).

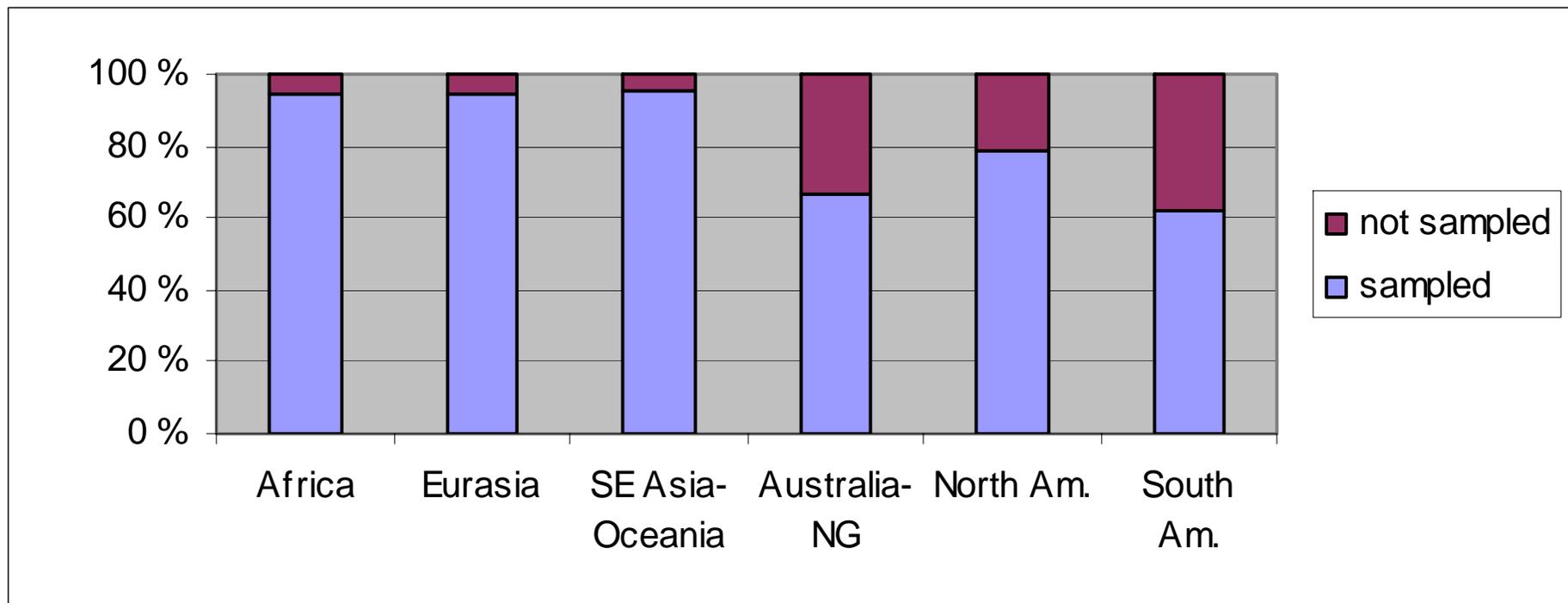


Table: Genealogical coverage of the sample by macro-area.

## Results 1/5: descriptive

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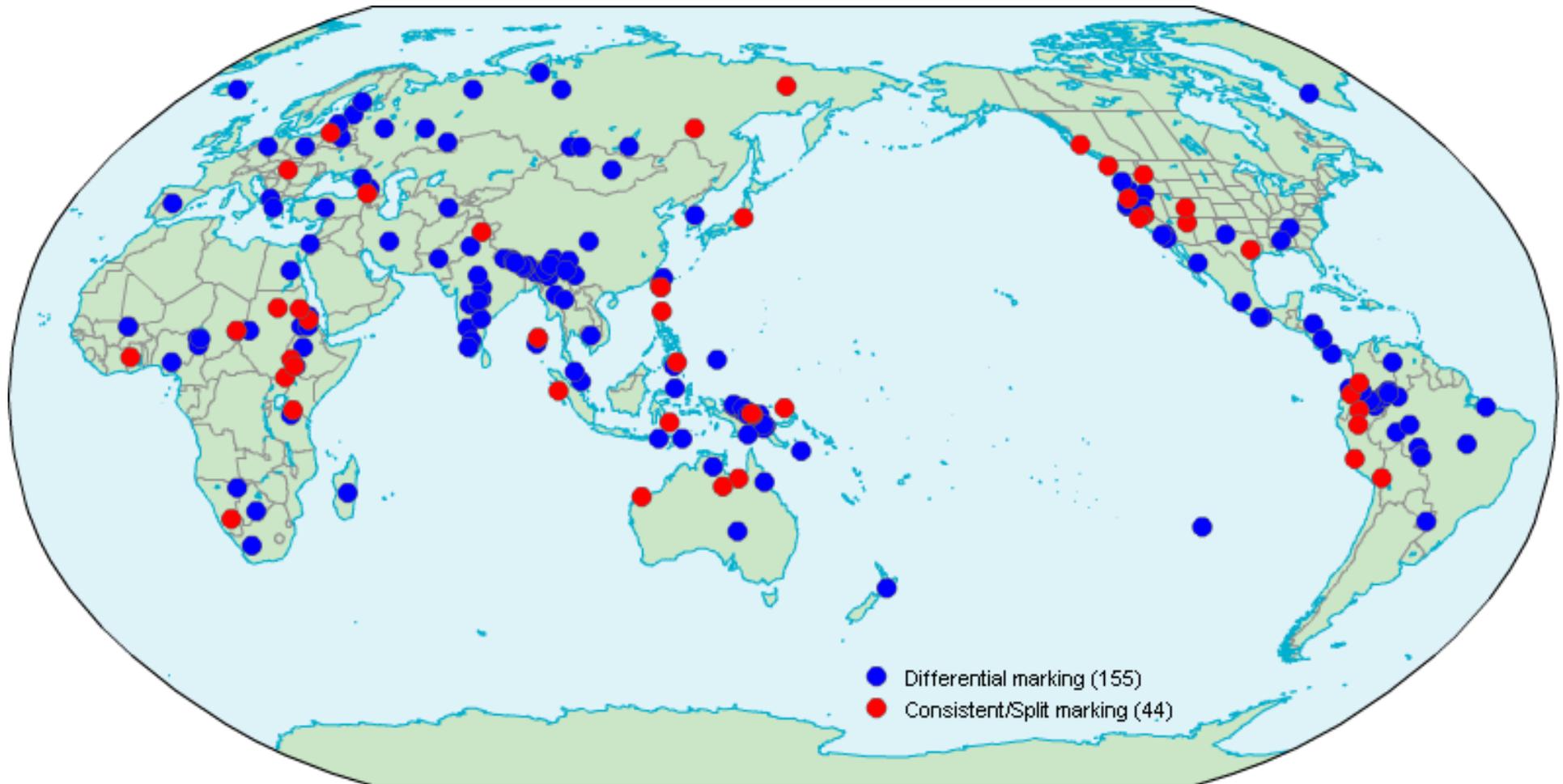
Case marking of O	N	%	% of O-case
None	272	65	
Differential	104	25	72
Consistent/Split	41	10	28
Total	417	100	100

- **35% of languages had case marking of O** (cf. 36% in Maslova & Nikitina 2007), **>70% of these had DOM** and less than 1/3 had consistent/split marking.

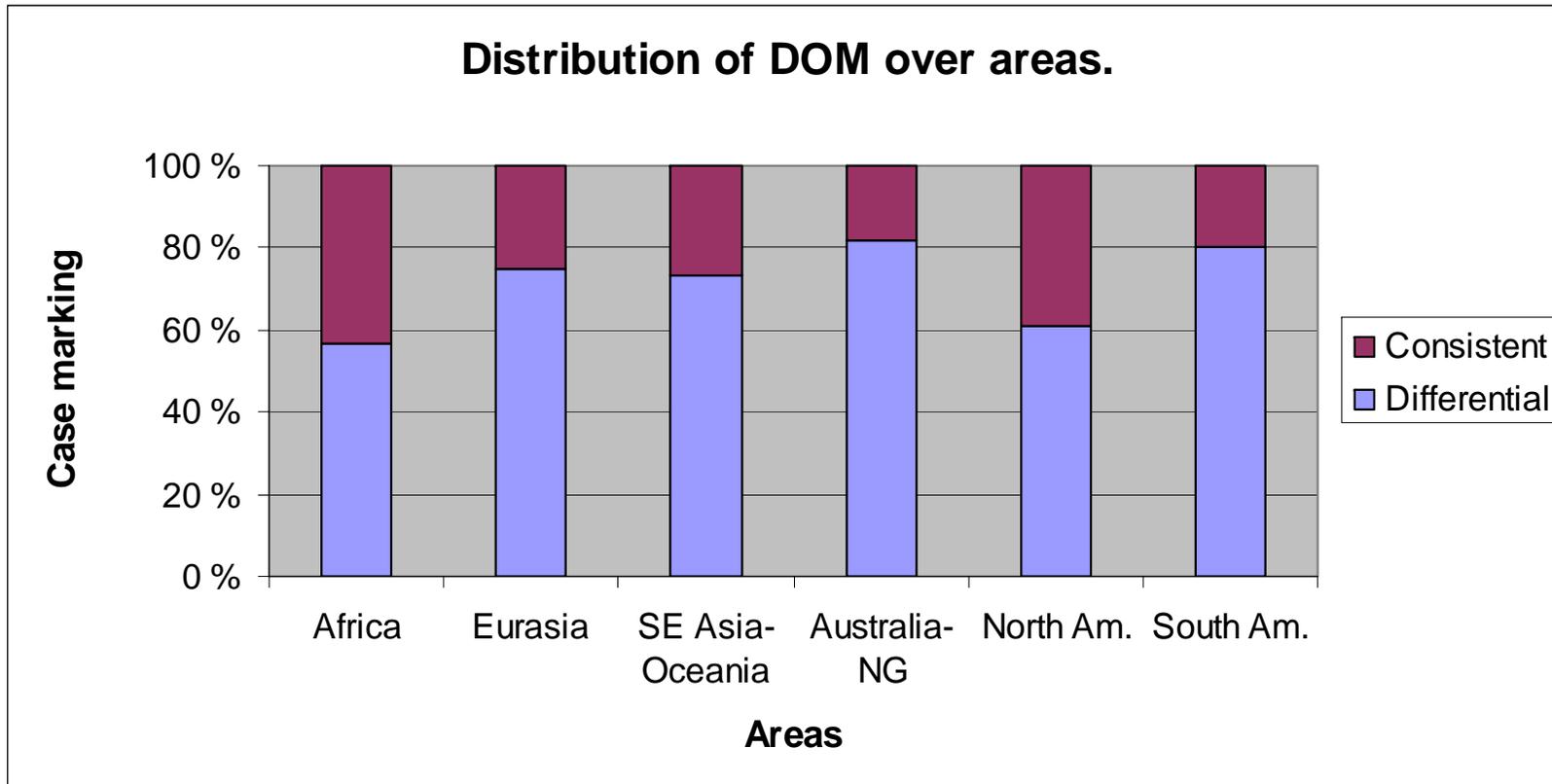


## Results 2/5: map

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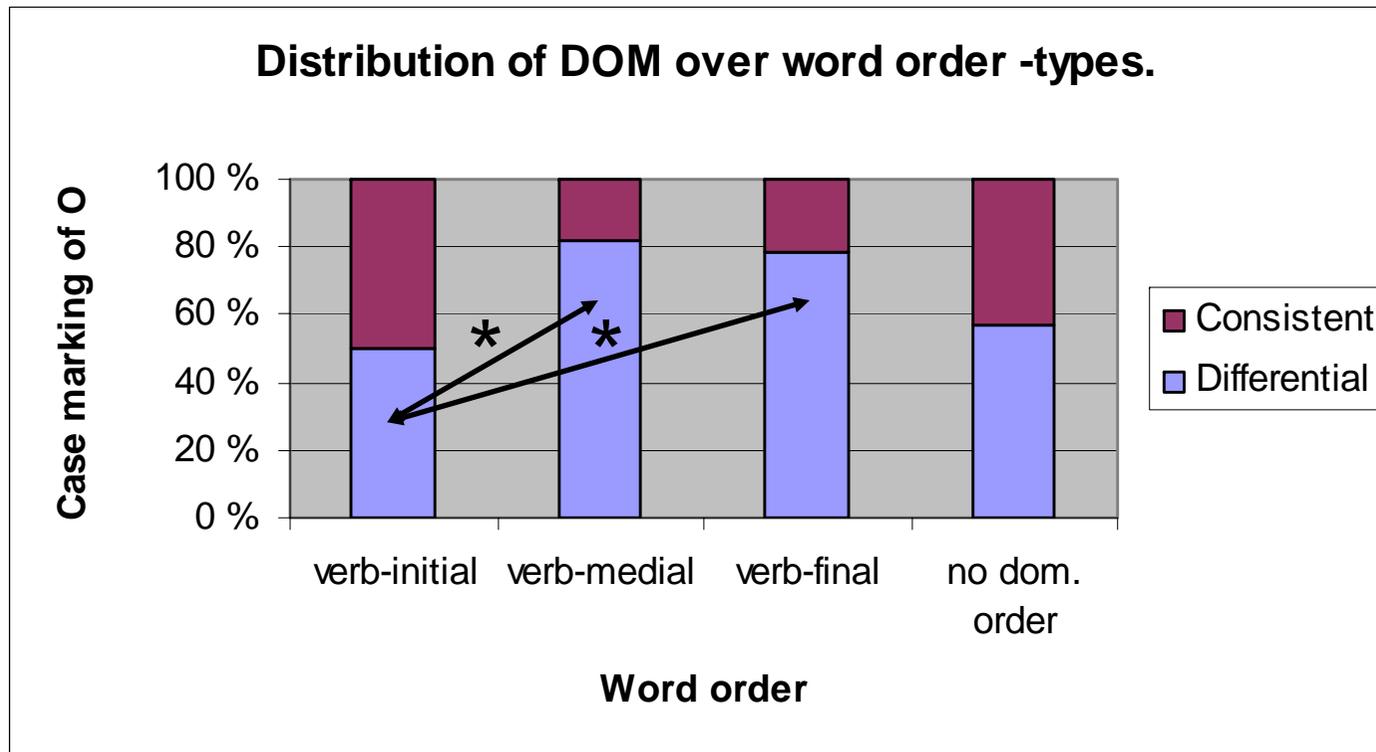


## Results 3/5: areas



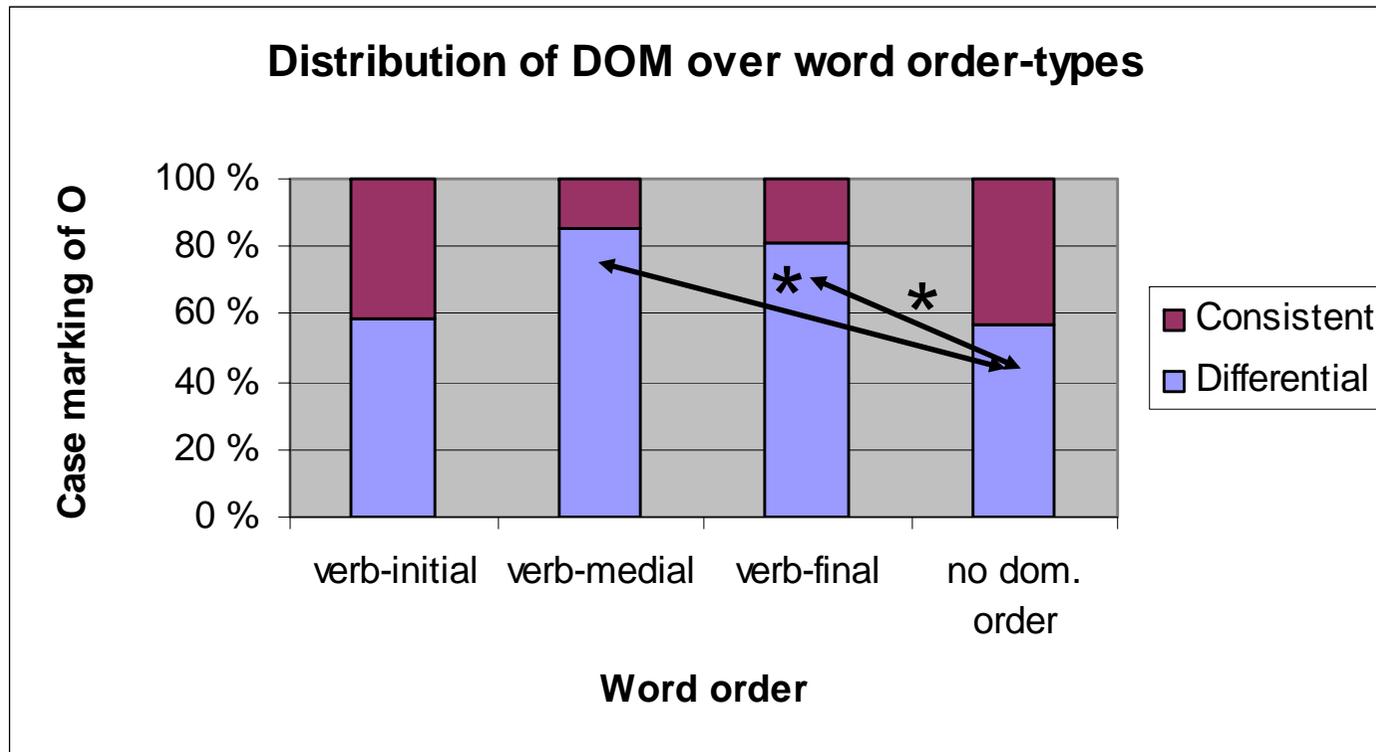
- **No statistical effect for areal distribution** ( $p = 0.329$ , tested with randomized chi-square).

## Results 4/5: word order



- **A significant effect for word order** ( $p = 0.0135$ ), mostly caused by verb-initial languages.

## Results 5/5: word order



- **Split-type removed:** A significant effect for word order ( $p = 0.0278$ ), mostly caused by **no dom. order type**.

## Discussion

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- Case marking of O is likely to be differential.
  - Why is consistent marking so rare?
  - Why do some languages mark all Os?
- DOM clustered in Eurasia, Meso-America, and the Amazon - no statistical effect.
  - Differential and consistent marking may be equally (un)likely to diffuse areally.
- A small statistical effect for verb-initial order.
  - This was a consequence of including languages with splits. If splits excluded, an effect for no dom. order: free word order well-motivated by consistent marking.



## Future research

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- Design a typology for DOM with a smaller sample (cf. McGregor (in press) for a typology for ergativity).
- Investigate the cross-linguistic distributions of DOM properties.

Thank you!



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