Uncovering variation in classifier assignment in Oceanic

Michael Franjieh[1], Greville G. Corbett[1], Alexandra Grandison[2]
[1]Surrey Morphology Group, University of Surrey, UK
[2]School of Psychology, University of Surrey, UK

Abstract

We discuss the results of a video vignettes experiment that uncovers the variation of noun-classifier assignment in the possessive classifier system of six Oceanic languages. The results show that languages vary in their noun-classifier assignment, with some languages displaying relatively fixed assignment, similar to a grammatical gender system.

Keywords: classifiers, gender, grammaticalisation, Oceanic, video vignettes

Motivation

In typical Oceanic possessive classifier systems, a noun can occur with different classifiers, depending on how the possessed item is used by the possessor (Lichtenberk, 1983). For example, *oei* 'water' in Vatlongos (Vanuatu) occurs with either the DRINK (1a) or the GENERAL classifier (1b). The ability of a noun to occur with different classifiers is termed overlap.

1a. mu   oei   **man**
    3sg.drink   water   DRINK.CL.3SG
    'he drank his water'

b.   mikas   vatin   ni   oei   **nan**
    3SG.wash head.3SG PREP water GENERAL.CL.3SG
    'he washed his head with his water'

In marked contrast, North Ambrym's (Vanuatu) cognate for water – *we* – occurs only with the DRINK classifier, not the GENERAL classifier, whether drinking is involved (2a), or not (2b):

2a. *mamnu*   **man**   *we*
    3SG.drink DRINK.CL.3SG water
    'he drank his water'

b.   *mwehagwo* *boton*   *ne*   **man**   *we*
    3SG.wash head.3SG   PREP DRINK.CL.3SG water
    'he washed his head with his water'

We argue that North Ambrym's innovative system shows some properties of a gender system: a noun occurs with a particular classifier regardless of contextual interactions. What is more, example 1b from Vatlongos shows a match between the general semantics of the verb 'wash' and the GENERAL classifier, whereas in North Ambrym there is a mismatch between the general semantics of the verb 'wash' and the semantics of the DRINK classifier (2b). We expect more gender-like systems to display more mismatches between the verb and the classifier. We ask whether gender systems can indeed emerge from classifiers in this way.

Methodology

We designed a suite of experiments to compare possessive classifier systems in six representative Oceanic languages: Merei, Lewo, Vatlongos, North Ambrym (Vanuatu), Nêlêmwa and Iaai (New Caledonia). Each has a different inventory of classifiers, from a simple two-way distinction (Merei) up to a more complex inventory of 23 (Iaai). Table 1 shows the languages, classifiers and participants.

Table 2. The sample languages, number of classifiers and number of participants.

Language	Classifiers	Participants
Merei	2	21
Lewo	3	23
Vatlongos	4	23
North Ambrym	5	23
Nêlêmwa	19	11
Iaai	23	16

Table 2. The nouns tested, typicality of interaction, context and classifier.

Noun	Typical interaction	Atypical interaction
green coconut	drink (DRINK) / eat (FOOD)	sit (general)
dry coconut	eat (FOOD) / drink (DRINK)	sit (general)
paper	draw on (GENERAL)	eat (FOOD)
eggs	eat (FOOD) / sell (GENERAL)	drink (DRINK)
mango	eat (FOOD) / drink (DRINK)	
coffee	drink (DRINK)	eat (FOOD)
milo	drink (DRINK)	eat (FOOD)
coconut oil	rub on skin (GENERAL)	eat (FOOD) / drink (DRINK)
washing liquid	wash with (GENERAL)	drink (DRINK)

We focus on the methodology and results from a video vignette experiment. Participants of the different languages watched the same 24 video vignettes; these were designed to investigate the use of classifiers when the items depicted in the vignettes are used in different interactional contexts.

Participants were asked to describe in one simple sentence what the actor was doing with their possessions, thus evoking a possessive classifier. Since the classifier inventories vary across the sample languages, we tested their three main classifier categories – GENERAL, DRINK and FOOD. In Table 2 we give the noun for the item depicted, the typical and atypical interactions along with their expected classifiers.

This method allowed us to investigate three key criteria (i) the amount of overlap between noun and classifier, (ii) the semantic (mis)match between verb and classifier, and (iii) the typicality of contextual interaction.

Results

ANOVAs were calculated using the *rstatix* package (Kassambara, 2020) in R (R Core Team, 2020). There was a significant main effect between languages for the overlap scores, $F(5, 111) = 7.55$, $p < .001$, $\eta_p^2 = .25$. Pairwise comparisons comparing individual languages indicated that North Ambrym and Merei both had significantly lower overlap scores than Lewo, Vatlongos, Nêlêmwa and Iaai (largest $p < .02$).

There was a significant main effect between languages for the semantic mismatch scores between verb and classifier, $F(5, 111) = 9.301$, $p < .001$, $\eta_p^2 = .3$. Pairwise comparisons comparing individual languages found that North Ambrym had significantly more semantic mismatches between the verb and classifier than all other languages (largest $p = .005$). Furthermore, Iaai had significantly fewer semantic mismatches than all other languages bar Merei (largest $p = .018$). Additionally, Vatlongos had significantly more semantic mismatches than Merei ($p = .043$).

When accounting for the difference between typicality of contextual interaction, there was a main effect between languages for semantic mismatches between verb and classifier for typical interactions, $F(5, 111) = 5.863$, $p < .001$, $\eta_p^2 = .209$. Pairwise comparisons revealed that North Ambrym had significantly more semantic mismatches than all other languages (largest $p = .02$). Furthermore, Lewo had significantly more mismatches than Vatlongos ($p = .031$) and Iaai ($p = .025$). There was also a main effect between languages for semantic mismatches between verb and classifier for atypical interactions, $F(5, 111) = 6.213$, $p < .001$, $\eta_p^2 = .219$. Pairwise comparisons revealed that North Ambrym had significantly more semantic mismatches than all other languages bar Nêlêmwa and Vatlongos (largest $p = .001$). Furthermore, Iaai made significantly fewer mismatches than Vatlongos and Nêlêmwa (largest $p = .018$). Additionally, both Lewo and Merei made significantly fewer mismatches than Vatlongos (largest $p = .022$).

A significant negative correlation was found between the overlap score and semantic mismatch score ($r = -.468$, $p < .001$) showing that participants who used more overlapping constructions between a noun and a classifier displayed less semantic mismatches between verb and classifier.

Discussion

The video vignette experiment has demonstrated different ways to compare classifier systems, by comparing systems based on the degree of noun-classifier overlap, typicality of interaction and semantic (mis)match between verb and classifier. The results reveal that some innovative systems do indeed function more like a gender system, in having a more fixed assignment system.

In terms of noun-classifier assignment, North Ambrym shows the most fixed assignment, and so its system is the one which comes closest to a gender system; at the other extreme, Vatlongos displays the most overlap, and has the most classifier-like assignment system. Furthermore, North Ambrym also has the largest amount of semantic mismatch between verb and classifier, in both typical and atypical interactions.

All six languages display higher amounts of semantic mismatch between verb and classifier for atypical interactions, revealing that the peripheries of the classifier systems function similarly. Speakers use a more gender-like fixed assignment system with atypical interactions than with typical interactions. The core typical interactions display lower amounts of mismatch, showing that languages display more overlap between noun and classifier in these contexts.

The significant negative correlation between overlap score and semantic mismatch reveals that when speakers use a system that is more classifier-like and displays more overlap between noun and classifier, they are more likely to have fewer semantic mismatches between the verb and classifier.

Finally, the results for Merei display a more gender-like system. However, this is partly due to Merei only having two classifiers – a GENERAL and a CONSUMABLE classifier. The CONSUMABLE classifier includes nouns that refer to both drink and food entities. As the vignettes were designed to investigate three main classifiers – FOOD, DRINK and GENERAL, there is more likely to be less overlap in Merei, due to the combination of two semantic categories.

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References

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