

Understanding differential object marking through the behavior of substance mass

This paper presents an empirical generalization regarding the distribution of nominals in Differential Object Marking (DOM) in Northern Galilee Arabic (NGA). DOM in NGA contains a pronominal element and the differentially marked object must co-refer with it. Building on Zarka (2024), comparing non-DOM anaphoric contexts and DOM contexts, I demonstrate that while in non-DOM anaphoric contexts, substance mass (SM) nominals can have both kind-level and object-level interpretations, the distribution of SM nouns in DOM is strict; In DOM, SM nominals cannot establish anaphoric relations, irrespective of their interpretation. I further present novel data showing that when a set of SM nominals have the plural counterpart dubbed as *halibāt* plurals (Brustad 2008), DOM is possible. I refine Zarka’s analysis by stating that DOM in NGA is sensitive to formal markedness of atomicity and is not sensitive to morphosyntactic countability.

RESEARCH QUESTION: Why do certain nominals in NGA establish anaphoric relations in non-DOM contexts but not in DOM contexts, and what is the determining factor for this restriction?

DATA: SM nouns can participate in an anaphoric relation when they are interpreted as kinds (1) and objects (2).

(1) ANAPHORIC NON-DOM: SM ✓KIND READING

Context: Mom said to her daughter: “Basmati rice is better than Jasmine rice.” While pointing to Basmati rice, the daughter said:

le btstʕmli haða **al-roz**, bħbb-o-š ktiir
 why PRS-use-you this the-rice.SM love.1SG-3M.SG.OBJ-NEG very
 ‘Why do you use this rice? I don’t really like it.’

(2) ANAPHORIC NON-DOM: SM ✓OBJECT READING

Context: sisters went to buy groceries together. When they went home, one said:

ħt̤it **al-roz** fi-l-xzane taħt al-joren ʕʕan teg’dar-i t̤ol-ih
 put.1SG the-rice.SM in-the-cupboard under the-sink so able-you grab-3M.SG.OBJ
 ‘I placed the rice in the cupboard under the sink, so you can grab it.’

DOM in NGA (similar to Lebanese, Aoun 1999, and Syrian Arabic, Brustad 2000) involves clitic doubling: The clitic attaches to the verb and must co-refer with its associate (the DP it doubles). While in general SM nominals denoting kinds and objects can establish an anaphoric relation with a pronoun (1-2), in DOM (under the same scenarios from above), SM nominals cannot hold an anaphoric relation with the clitic irrespective of whether interpreted as kinds (3) or objects (4).

(3) DOM: SM *KIND READING

* bħbb-o-š **la-haða** **al-roz**
 love.1SG-3M.SG.OBJ-NEG DOM-this.M.SG the-rice.SM
 Intended: ‘I don’t like this kind of rice.’

(4) DOM: SM *OBJECT READING

* ħt̤et-o **la-l-roz** fi-l-xzane
 put.1SG-3M.SG.OBJ DOM-the-rice.SM in-the-cupboard
 Intended: ‘I put the rice in the cupboard.’

In contrast to SM nouns, non-mass nominals (e.g., count nouns) can participate in DOM only when they have the object-level interpretation (5). Compare: count nouns with both readings can participate in non-DOM contexts (6).

(5) šarit-on **la-arbaʕ** t̤-tawl-āt
 bought.1SG-3PL.OBJ DOM-four the-table-F.PL
 ‘I bought the four tables.’

(6) šarit **arbaʕ** t̤-tawl-āt
 bought.1SG four the-table-F.PL
 ‘I bought the four tables.’

In (5), the only possible interpretation is ‘I bought exactly 4 individual tables (4 total)’ and cannot have the interpretation ‘I bought exactly 4 kinds of tables (e.g., if 2 of each kind, then 8 tables total)’; both readings are possible with count nouns in non-DOM contexts.

In NGA, SM nouns e.g., *roz* ‘rice’ can have the plural form *rozz-āt* (dubbed *halibāt* plurals in Brustad 2008). This plural is formed by suffixation of the plural marker *-āt*, however, unlike count nouns but similar to SM nouns, SM-*āt* nouns **cannot be directly modified by numerals** (7) and by Stubbornly Distributive Adjectives (Schwarzschild 2011), i.e., they **cannot refer to individuals** (8).

(7) *arbaʃ rozz-āt

four rice-F.PL

Intended: ‘four grains of rice’

(8) *rozz-āt kbaar

rice-F.PL big.PL

Intended: ‘large/big grains of rice’

While SM nouns are illicit in DOM (3,4,9), the plural SM-*āt* form is possible (10).

(9) * DOM + SM

*gasl-i-eh

la-l-roz

wash-2F.SG-3M.SG DOM-the-rice.SM

‘Intended: ‘Wash the rice!’

(10) ✓ DOM + PLURAL SM-*āt*

gasl-i-hon

la-l-rozz-āt

wash-2F.SG-3PL.OBJ DOM-the-rice-PL

‘Wash the rice!’

The use of the SM-*āt* form is solely pragmatic; the interpretation of (10) is to emphasize the smallness of the object and thus soften its tone. The smallness of the quantity is exaggerated to enhance the appeal to the listener to *wash the rice* as if the speaker were using a diminutive (Brustad 2008). Crucially, the SM-*āt* form can be used anaphorically in both DOM and non-DOM contexts.

(11) gasl-i l-rozz-āt w ḥoṭṭi-hon ʃla n-nar ANAPHORIC NON-DOM: PLURAL SM-*āt*

wash-2F.SG the-rice-PL and put-them on the-stove

‘Wash the rice and put it on the stove!’

ANALYSIS: Building upon Zarka’s (2024) analysis, I suggest that the restriction on the distribution of SM nominals is sensitive to the property of individuation, particularly in terms of atomicity. While SM nouns do not have an atomic reference (e.g., Chierchia 2010; Deal 2017) and are banned in DOM, count nouns refer to individuals i.e., atoms (e.g., Bale and Barner 2009; Rothstein 2010), and are acceptable with DOM. Although atomicity appears to be the right dimension for characterizing the nominal distribution of DOM, the data with plural SM-*āt* presents a challenge to Zarka’s analysis. This is because plural SM-*āt* nouns are still licit with DOM even though they do not denote individuals. To solve this puzzle, I argue that DOM in NGA is sensitive to formal marking of atomicity. I propose that DOM is allowed in a structure where atomicity is syntactically encoded. Certain nominals are marked with a feature [+atomic]. Specifically, while count nouns are specified as [+atomic], SM and plural SM-*āt* are specified as [-atomic]. Building on Kouneli (2019), with SM-*āt*, the categorizer to which the roots adjoin to form a complex head is specified as [PL]. I demonstrate that Borer’s (2005) system cannot account for the distribution of nominals with DOM where Division (DIV projection) is responsible for both atomicity and morphosyntactic countability. [Further data on DOM with object mass nouns will be discussed in this talk].

While I argue that the contributing factor is atomicity, I provide evidence supporting Zarka’s proposal that countability is not the appropriate dimension for characterizing the distribution of nominals with DOM. Specifically, plural SM-*āt* are licit with DOM, yet they are non-countable, thereby ruling out countability as a determining factor. Further, SM nominals are illicit with DOM under both kind and object-level interpretations, suggesting they lack the syntax, as kinds are countable.

Selected references:

Aoun, Joseph. 1999. Clitic-doubled arguments. In *Beyond principles and parameters*, pages 13–42. Springer.

Brustad, Kristen. 2008. -āt Drink Your Milks! āt as Individuation Marker in Levantine Arabic. In *Classical Arabic Humanities in Their Own Terms* (pp. 1-19). Brill.

Aya, Zarka. 2024. *Differential Object Marking in Levantine Arabic*. PhD thesis, McMaster University and Ben-Gurion University.