There is no MEAS, only MUCH: the case of *3kg of NP*

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The ‘counting’ vs. ‘measuring’ debate

- Measure and container nouns such as *kilo* and *glass* are found in (pseudo-)partitive constructions like (1) (Selkirk 1977; Jackendoff 1977; Schwarzschild 2006, a.o.)

  (1) a. two kilos of apples
  b. two glass of water

- These nouns display an ambiguity between a *counting* and a *measuring* interpretation.

  (2) There are two glasses of water in the soup.
  a. A plurality of glasses with cardinality 2. IND(ividuating)
  b. A quantity of water which measures 2 glasses worth. MEAS(uring)

- The IND/MEAS ambiguity has been tied to a syntactic ambiguity (Landman 2004; Rothstein 2009, 2017; Wilson 2018, a.o.).

(3) a. [$_{DP}$ three [$_{NumP}$ Num [$_{NP_1}$ glasses [$_{NP}$ (of) wine]]]] IND

b. [$_{DP}$ D [$_{NP}$ [$_{MP_1}$ three glasses] [$_{N'}$ (of) wine]]]] MEAS

- (3a) → *glasses* is the head of the extended projection and takes the substance NP as its complement.
- (3b) → *glasses* is a semi-lexical element, similar to a classifier. The head of the extended projection is the substance NP.
- The different syntactic structures map to different interpretations at LF.

Goals for today

- After careful consideration of some of the diagnostics for the syntactic ambiguity account, I show that...

1. The different constituencies are not motivated by the data; and
2. there is only compelling evidence for (3b) regardless of the I or M interpretation.

- Finally, I raise some skepticism about lexical ambiguity approaches to container noun and sketch a *very* tentative proposal.

Just a note

- The same IND/MEAS ambiguity has also been observed in simple Numeral Noun constructions (Rett 2014; O'Connor and Biswas 2015; Snyder 2021).

(4) There are four oranges in the punch. (adapted from Snyder 2021)

a. A plurality of oranges whose cardinality is 4 and is in the punch.

b. A quantity of orange which measures 4 oranges worth and is in the punch.

(5) a. Four pizzas {*is/ are} vegetarian.

b. Four pizzas {is/ *are} enough. (Rett 2014)

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  b. Four pizzas {is/ *are} enough. (Rett 2014)

- I won't focus on these during the talk.

Agreement

- Subject-Verb agreement has been used to motivated the syntactic ambiguity.
- The syntactic ambiguity account predicts plural agreement iff IND interpretation, but singular agreement iff MEAS interpretations.

Table 1: Predictions of Agreement

	meas	**ind**
Plural Agr	*	✓
Singular Agr	✓	*

- The example below is from Rothstein (2011, 17: ex.28):

  (6) *Agreement*

  a. The 2 bottles of wine that we carried here {were/ *was} heavy. IND

  b. The 2 teaspoons of wine we added to the sauce {gives/ ?give} it an extra flavour MEAS

- PL → `Agr(v,glasses)`
- SG → `Agr(v,water)`

- If morpho-syntactic agreement tracks the underlying structure of the NP, we should also expect the agreement facts to hold under passivization.
- The active sentence in (7) is ambiguous.

(7) Mary added four glasses of water to the punch. IND/MEAS

- If morpho-syntactic agreement tracks the underlying structure of the NP, we should also expect the agreement facts to hold under passivization.
- The active sentence in (7) is ambiguous.

  (7) Mary added four glasses of water to the punch. IND/MEAS

- This is not borne out: only PL-agreement is allowed despite the measuring context (8).

  (8) *[Bill is making punch and the recipe calls for 4 glasses of worth of water. So he adds 4 glasses of water. Minutes later, Mary noticed that someone had added that amount and says:]*

  a. Four glasses of water **were** added to the punch.

  b. * Four glasses of water **was** added to the punch.

- The predictions from agreement do not align with the actual observations:

Table 2: Observations from Agreement

	meas	**ind**
Plural Agr	✓	✓
Singular Agr	✓	✓

- In addition, agreement-ambiguity is not really a propietary feature of pseudo-partitives.
- We see that ambiguity elsewhere.

- Outside of partitives we find similar instances of SG/PL agreement, i.e. coordination (Brasoveanu 2009).
- In (9) and (10), either agreement is compatible with either argument regardless of whether the predicate denotes a degree or an individual.

(9) Scrambled eggs and bacon...
  a. **is** {too much/ my favourite food}
  b. **are** {too much/ my favourite food}

(10) John and Mary...
  a. **is** {enough to paint the wall/ my favourite couple}
  b. **are** {enough to paint the wall/ my favourite couple}

- Other languages with morphologically richer agreement systems show that the agreement is controlled by the measure noun in measuring contexts.
- (11) is an example from Spanish passives:
- Subject-verb agreement is plural.
- and there is number and gender agreement with the the measure noun.

(11) dos vas-**os** de agua {fueron vertid-**os**/ *fue vertid-a} en
two glass-M.PL of water.F.SG was.3PL poured-M.PL/ was.3SG poured-F.SG in
la sopa.
the soup
'2 glasses of water were poured in the soup'

Agreement is not reliable

- Agreement facts are not consistent with the predictions of the syntactic ambiguity.
- There is a lot of variability in the agreement patterns. The agreement choice can be influenced by different sets of semantic features on measure or substance noun (Smith et al. 2018).
- Outside of English, languages with richer agreement systems suggest that the measure noun preferentially controls agreement on the verb and other predicates/modifiers (Spanish Appendix I).

Adjective Modification and movement

- Rothstein (2009); Wilson (2018) note that certain APs can modify pseudo-partitives:

  (12) She added three $\left\{\begin{matrix}\textbf{generous}\\\textbf{strong}\end{matrix}\right\}$ teaspoons of molasses. (Wilson 2018)

- Despite the position between the numeral and the measure NP, there is a difference:

  (13) a. *generous* → *teaspoons*
  b. *strong*→ *molasses*

- Rothstein (2009) and Wilson (2018): this difference correlates with a constituency difference:

  (14) a. [[3 generous *teaspoons*] [*molasses*]]
  b. [3 strong [*teaspoons molasses*]]

- The constituencies in (14) make the predictions in Table3:

Table 3: Predictions of AP modification

	Movement	**Coordination**
[3 generous teaspoons]	✓	✓
[3 strong teaspoons]	*	*

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	Movement	**Coordination**
[3 generous teaspoons]	✓	✓
[3 strong teaspoons]	*	*

(15) a. It was [three generous teaspoons of molasses]$_1$ that she added t_1

b. It was [three generous teaspoons]$_1$ that she added [t_1 of molasses].

(16) a. It was [three strong teaspoons of molasses]$_1$ that she added t_1

b. # It was [three strong teaspoons]$_1$ that she added [t_1 of molasses].

- **Note: failure to pass a constituency test is not evidence against constituency!**

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- In languages that show concord with the modifying noun, we can determine what the AP is really modifying in the syntax.
- For example, in Spanish '*sabroso*' (*savory*) must agree in ϕ-features with the measure NP:

(17) a. Ash añadió tres (sabros-**as**) cucharad-**as** (sabros-**as**) de sirope.
Ash added three savory-F.PL teaspoon-F.PL savory-F.PL of syrup.M.SG

b. * Ash añadió tres (sabros-**o**) cucharad-**as** (sabros-**o**) de sirope.
Ash added three savory-M.SG teaspoon-F.PL savory-M.SG of syrup.M.SG
'Ash added three savory teaspoons of syrup'

- We can also move it:

(18) ? [tres (sabros-**as**) cucharad-**as** (sabros-**as**)] añadió Ash [t_1 de sirope].
three savory-F.PL teaspoon-F.PL savory-F.PL added Ash of syrup.M.SG

Coordination

- A more reliable test for constituency is coordination (Champollion 2017).
  Prediction
  - $\text{IND} \rightarrow$ Numeral [NP_{MEAS} NP_{SUBS}] & [NP_{MEAS} NP_{SUBS}]
  - $\text{MEAS} \rightarrow$ [Numeral NP_{MEAS}] & [Numeral NP_{MEAS}] NP_{SUBS}.

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  - $\text{MEAS} \rightarrow$ [Numeral NP_{MEAS}] & [Numeral NP_{MEAS}] NP_{SUBS}.

  Facts

  (19) *[Kelly comes into the room and sees a tray with several items on it. She tells Ash:]*

  a. There are [2 glasses] and [3 cups] of wine on the tray.

  b. * There are 2 [glasses of wine] and [cups of water] on the tray.

  (20) *[Kelly is making soup and the recipe calls for a certain amount of liquid. She tells Ash:]*

  a. I added [2 glasses] and [2 cups] of water to the soup.

  b. * I added 2 [glasses of water] and [cups of wine] to the soup.

- In fact, when we apply coordination to Wilson's *strong teaspoons* example in (14), we observed the same pattern:

(21) a. She added [three strong teaspoons] and [two fat cups] of molasses.
b. */?? She added three [strong teaspoons of molasses] and [fat cups of sugar].

- The findings are summarized in Table 4:

Table 4: Summary of diagnostics for pseudo-partitive syntax

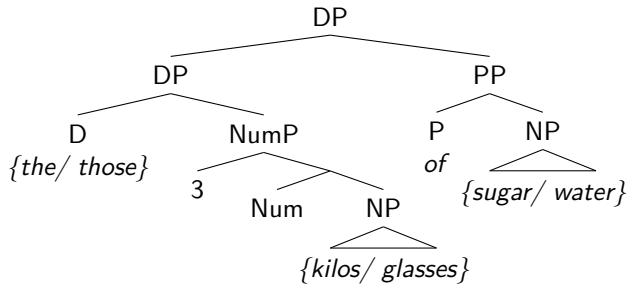
	AP modi.	**Movement**	**Coordination**	**Interpretation**
Num NP_{MEAS}	%	✓	✓	IND & MEAS
NP_{MEAS} NP_{SUBS}	%	*	*	#

- These are also consistent with the patterns found in other languages (Appendices I-II).

The proposed syntax

- I propose the structure in (22):

(22)



- Hankamer and Mikkelsen (2008); Adger (2013) arrive at the same conclusion based on independent evidence of the syntax of nominals: complements (and PP modifiers) are structurally high.

What now?

- This syntax is incompatible with Landman's-Rothstein's style semantics.
- It also casts doubt on accounts based on lexical ambiguities:

(23) a. $[\![\text{glass}]\!]^{meas}$ b. $[\![\text{glass}]\!]^{ind}$

  - The complement of *glass* occupies the same position as the complement of other nominals (Adger 2013).
  - These NPs can serve as restrictors of quantifiers over individuals (Brasoveanu 2009):

(24) a. The Allies massed 3091 guns, or one to *every six yards of an eleven mile front*.
b. There was a policeman *every two yards*, on both sides of the road.

- The same goes for those that consider $[\![\text{6 kilos}]\!]$ on the M-interpretation to be of type $\langle dt, t\rangle$ (Solt 2009, 2015; Rett 2014; Pasternak and Sauerland 2021).

The question

- **How does the grammar then distinguish between ‘measuring’ and ‘counting’?**

A very tentative proposal

- The conclusions are consistent with Wellwood (2015, 2019): no lexical item encodes degree semantics.
- Wellwood (2015, 2018, 2019):
  - *much* and *many* are surface forms of MUCH.
  - MUCH + PL ⇔ *many*
  - MUCH introduces a measure function.
  - MUCH is underlyingly present in a great amount of degree constructions including gradable adjectives (25), (Bresnan 1973; Corver 1997; Wellwood 2015):

(25) Lexi is tall but I wonder how *much* so.

- The hypothesis:

(26) **All measurement is introduced by** MUCH **in those languages where there is independent evidence for such a morpheme**.

Motivating the proposal

- If pseudo-partitives involve MUCH, we would expect to see it surface in some of these environments, such as degree questions, differentials, ellipsis.
- This is borne out as the English data in (27)-(29) indicate:

(27) {How **much**/ how **many** glasses of water} did Ash add to the punch?

(28) Ash added 2 glasses of water to the punch.

a. Kelly added that **much** too. — 2 glasses worth

b. Kelly added that **many** too. — two individual glasses

(29) Ash bought 3 kilos of apples.

a. Kelly bought **much** more (kilos). — the total amount ≥ 3kgs.

b. Kelly bought **many** more (kilos). — individual 1kg bags ≥ 3.

Resolving μ

Following Wellwood (2015, 2018):

- The value of μ is underspecified for the dimension of measurement.
- The value of μ is resolved by what is being measured .
- What is being measured is determined by the syntactic position of MUCH (Wellwood et al. 2012; Toquero-Pérez 2022; Cleani and Toquero-Pérez 2022).

(30) a. IND ⇒ MUCH > PL > NP

b. MEAS ⇒ (PL) > MUCH > NP

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(30) a. IND ⇒ MUCH > PL > NP
b. MEAS ⇒ (PL) > MUCH > NP

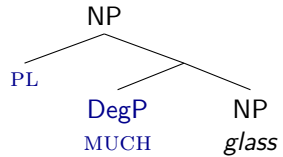
At PF,

- If the NP is plural MUCH will surface as *many*.
- MUCH must be covert in the presence of a numeral (Hackl 2000).

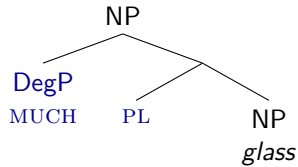
Two syntactic positions for MUCH

Schematically this would look like (31) for measuring, and (32) for counting.

(31) *glasses of wine* → MEAS



(32) *glasses of wine* → IND



$[\![(31)]\!]$ = "Being a plurality every atom of which is constituted by glass-stuff whose volume is d-large"

$[\![(32)]\!]$ = "Being a plurality of glasses whose cardinality is d-large, and every atom of which is constituted by glass-stuff"

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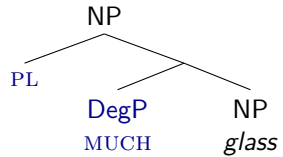
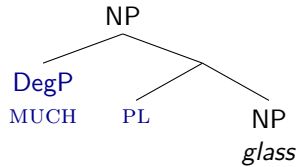


(32) *glasses of wine* → IND



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$[\![(32)]\!]$ = "Being a plurality of glasses whose cardinality is d-large, and every atom of which is constituted by glass-stuff"

The compositional semantic details are yet to be fully worked out.

Conclusion and further questions

- We cannot endorse a syntactic ambiguity account for pseudo-partitives (at least for English).
- The findings here do not bode well with lexical ambiguity accounts or those that treat measure/container nouns as measure expressions or degree quantifiers.
- I have offered a new way of looking at the IND/MEAS ambiguity based on Wellwood's decompositional account.
- Only MUCH introduces a measure function whose value is resolved via what's in its scope in the syntax.
- While parsimonious and empirically motivated, the semantic details of the account need to be worked out.

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Appendix I: Spanish

Agreement

- When talking about the predictions of agreement, I noted that it was not a reliable diagnostic in less impoverished languages either.
- I gave the example in (11).
- In (33), the phrase *dos vasos de vino* "two glasses of wine" also triggers plural agreement on the active verb.

(33) Los dos vas-os de vino que vertimos en la sopa la
the.M.PL two glass-M.PL of wine.M.SG that poured in the soup it.ACC.F
{*da/ dan} un sabor estupendo
gave.3SG./ gave.3PL a flavor fantastic
'The two glasses of wine that we poured into the soup {*gives/ give} it a fantastic flavor.

- In Spanish, the measure Noun always controls DP internal agreement regardless of IND/MEAS interpretation.
- Even in Clitic Left Dislocation Configurations, the measure Noun controls the ϕ-features on the clitic:

(34) [**Los** tres { vas-**os**/ litr-**os**} de vino], {* lo/ **los**}
the.M.PL three glass-M.PL/ liter-M.PL of wine it.M.SG.ACC/ it.M.PL.ACC
añadió Ash después de la cebolla
added Ash after of the onion
'The 3 {glasses/ liters} of wine, Ash added {*it/ them} after the onion'

Movement/Pronominalization

- One reliable test for argument constituency is cliticization:
- Spanish can cliticize the argument of a transitive verb.

(35) Juan compró **anacardos**. ⇒ Juan **los** compró
Juan bought cashews Jaun it.M.PL.ACC bought
'Juan bought cashews ⇒ Juan bought them'

- Cliticization can sometimes target sub-constituent DPs (**??**Homer and Bhatt 2020).
- We can cliticize the [Numeral Measure-NP] to the exclusion of the partitive-PP.

(36) Ash compró **tres kilos** de anacardos ⇒ Ash {**lo**/ **los**}$_1$ compró
Ash bought 3 kilos of cashews Ash it.M.SG.ACC/ it.M.PL.ACC bought
[t_1 de anacardos]
of cashews
Int. 'Ash bought {it/them} of cashews'.

- The Measure DP [3 kg] is really the direct object of the verb *buy*.
- There is no difference regarding the choice of matrix predicate or measure word.

Coordination

- Spanish is like English with respect to coordination patterns:

(37) *[Kelly comes into the pantry and sees several items. She tells Ash:]*

a. Hay [dos botellas] y [3 cántaros] de vino en la despensa.
there.is two bottles and three jugs of wine in the pantry
'There are 2 bottles and three jugs of wine in the pantry'

b. * Hay dos [botellas de aceite] y [cántaros de vino] en la despensa.
there.is two bottles of oil and jugs of wine in the pantry
'There are 2 bottles of oil and (2) jugs of wine in the pantry'

- The same holds for the MEAS context:

(38) *[Kelly is making soup and the recipe calls for the amount of water contained in 2 glasses and the wine contained in 2 cups. She tells Ash:]*

a. Vertí [dos vasos] y [dos tazas] de vino en la sopa.
poured two glasses and two cups of wine in the soup
'I poured 2 glasses and 2 cups of wine in the soup'

b. * Vertí dos [vasos de agua] y [tazas de vino] en la sopa.
poured two glasses of water and cups of wine in the soup
'I poured 2 glasses and (2) cups of wine in the soup'

Conclusion

- The syntactic ambiguity cannot be at stake in Spanish either.
- The underlying syntactic structure is as proposed in §3.

Appendix II: Alasha Mongolian

Some background

- Alashan Mongolian is a variety of Mongolian spoken in the Alxa League region located in west inner Mongolia.
- Like other languges in the Altaic family (Turkish, Sakha, Buriat a.o.), Alasha Mongolian is head final: the canonical order is SOV (39a), it has postpositions (39b) and adjectives precede the noun they modify (39c).

(39) a. bi batVr xar-sVn
I Batar see-PST
'I saw Batar'

b. xol-ni tuxai
food-GEN about
'about food'

c. tam nom (*tam)
big book big
'big book'

- In AM, the IND/MEAS difference is correlated with a particular case-marking on the measure/container noun:
  - *-te* 'comitative' (COM) → IND, i.e. CARD(inality).
  - *-(i)n* 'genitive' (GEN) or no case (-Ø) → an MEAS-interpretation, i.e. dense measurement.

(40) a. dürüv-Vn devir-**te** tsaə
four-ATTR pot-COM tea
'Four (individual) pots of tea' [CARD, #VOL]

b. dürüv-Vn devr-{**in**/ -Ø} tsaə
four-ATTR pot-GEN tea
'Four pots (worth) of tea' [#CARD, VOL]

Core data

- AM pseudo-partitives can be introduced by the measure/container nouns listed on (41-43)

(41) ***Container Nouns***
   a. nangxo – *thermos*
   b. devir – *pot*
   c. ajek – *bowl*
   d. longx – *bottle*
   e. xertsiG – *box*

(42) ***Measure units***
   a. kilogram – *kilo*
   b. meter – *meter*
   c. tsak – *hour*

(43) ***Counting Nouns***
   a. müxliG – *grain*
   b. büliG – *group*

- Pseudo-partitives always have the order in (44):

(44) [Numeral > N_{MEAS} > N_{SUBS}]

- Numerals (and other prenominal modifiers) are inflected for 'attributive' (ATTR) case *-(V)n* (Janhunen 2012, ch.6)
- Like in Turkish (Scontras 2013), Numerals require the Noun they modify to be singular (or unmarked for number) as in (45).

(45) a. bi Gorov-Vn { devr-in/ devir-Ø} tsaə ob-sVn
I three-ATTR pot-GEN/ pot tea drink-PST
'I drank three pots (worth) of tea'

b. * bi Gorov-Vn devr-u:d(-in) tsaə ob-sVn
I three-ATTR pot-PL-GEN tea drink-PST
'I drank three pots (worth) of tea'

- The N_{SUBS} can be marked for number: (46).
- And if countable and animate, it must be overtly plural (46b).

(46) a. xoir xertsiG nom(**-o:d**-ig) ben
two box book-PL-ACC COP
'There are two boxes (worth) of books'

b. niG büliG xütʃ-**ü:d** ben
one group boy-PL COP
'There is one group of boys'

- The N_{SUBS} can bear accusative (ACC) case *-ig* regardless of the I/M-interpretation.

  (47) batVr dürüv-Vn devir-te tsaəg-**ig** abtʃir-gwa
  Batar four-ATTR pot-COM tea-ACC bring-PST
  'Batar brought four (individual) pots of tea'

- As in other Altaic languages, ACC is tied to specificity and definiteness (see von Heusinger and Kornflit 2017).

The internal structure of the DP

- The IND/MEAS ambiguity has been associated with different underlying structures (for English, Landman 2004; Rothstein 2009; Sağ 2020, for Turkish).

  (48) $[_{DP}$ three $[_{NumP}$ Num $[_{NP_1}$ glasses $[_{NP}$ (of) wine]]]] Individuating

  (49) $[_{DP}$ D $[_{NP}$ $[_{MP_1}$ three glasses] $[_{N'}$ (of) wine]]]] Measuring

- If this is true for Alasha Mongolian, we expect:
  - GEN-marked ⇒ (49).
  - COM-marked ⇒ (48).

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- If this is true for Alasha Mongolian, we expect:
  - GEN-marked ⇒ (49).
  - COM-marked ⇒ (48).

⇒ **Not the case! They are are both as in (49)**

Constituency diagnostics

1. Numerals and number restrictions

- The numeral only requires the N_{MEAS} to be unmarked for number.
- Numeral and N_{MEAS} stand in a local relation, whereas numeral and N_{SUBS} do not.

2. Coordination

- The sequence [numeral N_{MEAS}] can be coordinated to the exclusion of the $_{SUBS}$.

(50) *Coordination*

a. batVr [dürüv-Vn devir-te tsaə] bolin [xoir ajek-te tsaə] abtʃir-gwa
Batar four-ATTR pot-COM tea and two bowl-COM tea bring-PST
'Batar brought [4 pots of tea] and [2 bowls of tea]'

b. batVr [dürüv-Vn devir-te] bolin [xoir ajek-te] tsaə abtʃir-gwa
Batar four-ATTR pot-COM and two bowl-COM tea bring-PST
'Batar brought 4 pots and 2 bowls of tea'

c. * batVr dürüv-Vn [devir-te tsaə] bolin [ajek-te tsaə] abtʃir-gwa
Batar four-ATTR pot-COM tea and bowl-COM tea bring-PST
'Batar brought 4 pots and (4) bowls of tea'

2. Coordination

- The sequence [numeral N_{MEAS}] can be coordinated to the exclusion of the $_{SUBS}$.

(51) *Coordination*

a. batVr [dürüv-Vn devr-in tsaə] bolin [xoir ajeg-in tsaə] ov-sVn
Batar four-ATTR pot-GEN tea and two bowl-GEN tea drink-PST
'Batar drank [4 pots of tea] and [2 bowls of tea]'

b. batVr [dürüv-Vn devr-in] bolin [xoir ajeg-in] tsaə ov-sVn
Batar four-ATTR pot-GEN and two bowl-GEN tea drink-PST
'Batar drank 4 pots and 2 bowls of tea'

c. * batVr dürüv-Vn [devr-in tsaə] bolin [ajeg-in tsaə] ov-sVn
Batar four-ATTR pot-GEN tea and bowl-GEN tea drink-PST
'Batar drank 4 pots and (4) bowls of tea'

3. Right-dislocation/ Base generation

- The sequence [numeral N_{MEAS}] can appear separated from the N_{SUBS}.
- The sequence [N_{MEAS} N_{SUBS}] cannot.

(52) *Right dislocation/ generation*

a. batVr [tsaəG-(ig)] abtʃir-gwa, {[dürüv-Vn devir-te]/ [dürüv-Vn devr-in]}
Batar tea-ACC bring-PST four-ATTR pot-COM/ four-ATTR pot-GEN
'Four pots, Batar brought of tea'

b. * batVr [dürüv-Vn] abtʃir-gwa, {[devir-te tsaəG-(ig)]/ [devr-in
Batar four-ATTR bring-PST pot-COM tea-ACC/ pot-GEN
tsaəG-(ig)]}
tea-ACC
'Pots of tea, Batar brought four'

- Constituent *only* patterns the same way.

Other properties

- If there is an AP modifying the N_{SUBS}, the AP immediately precedes it.

(53) (* xagart-sVn) niG xertsig (xagart-sVn) ündig
shatter-PST.PART one box shatter-PST.PART egg
'one box of broken eggs'

(54) niG (ebdir-x-Vn) xertsig-te (xagart-sVn) ündig
one break-INF-PST.PART box-COM shatter-PST.PART egg
'one broken box of broken eggs'

- Consistent with the PP-Peripherality generalization (Adger 2013):

✓ $N > AP > PP$ or $PP > AP > N$

* $N > PP > AP$ or $AP > PP > N$

- When there is a PP dependent on the N_{SUBS}, the order with respect to the [numeral N_{MEAS}] is variable.

(55) a. batVr [Gorov-Vn xertsiG] [xol-ni tuxai] nom on-sVn
Batar three-ATTR box food-GEN about book read-PST

b. batVr [xol-ni tuxai] [Gorov-Vn xertsiG] nom on-sVn
Batar food-GEN about three-ATTR box book read-PST
'Batar read three boxes (worth) of books about food'

- This is common cross-linguistically (see Adger 2013, for Romance, Hawaiian, Gaelic, a.o.)

- The possessor is higher than the [numeral N_{MEAS}] (a common fact cross-linguistically Adger 2013).

(56) a. batr-in dürüv-Vn { devir/ devir-te} tsaə
Batar-GEN four-ATTR pot pot-COM tea
'Bater's four pots of tea' [[Poss Num N_{MEAS}] N_{SUBS}]
'Four pots of Batar's tea' [Poss [Num N_{MEAS}] N_{SUBS}]

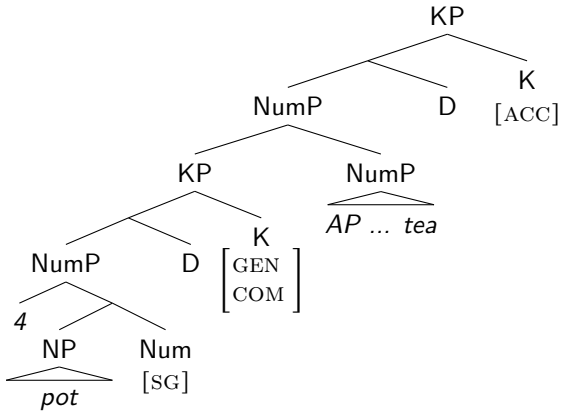
b. * dürüv-Vn { devir/ devir-te} batr-in tsaə
four-ATTR pot pot-COM Batar-GEN tea
'Bater's four pots of tea'
'Four pots of Batar's tea'

The proposed structure

- The [numeral N_{MEAS}] forms a constituent to the exclusion of the N_{SUBS}.
- The [numeral N_{MEAS}] cannot be in the "canonical" object position inside a nominal.
- It has to be more peripheral and higher up in the structure.
- The N_{SUBS} has to project the whole DP, though. It bears the external case marking.

- Following insights from Bylinina and Podobryaev (2020) analysis of Buriat and Bale and Khanjian (2014) analysis of Western Armenian, I propose the structure in (57):

(57) *The syntax of pseudo-partitives in AM*



Conclusion

- With the only difference of head directionality, pseudo-partitives in Alasha Mongolian behave like English or Spanish with respect to constituency.
- The Numeral and Measure-NP always form a constituent to the exclusion of the substance-NP.