

SOLVING MIDDLE SYNTAX WITH TAGALOG MORPHOLOGY*

JILLIAN LOUSE MILLS
MIT
jillymae@mit.edu

0. OVERVIEW

The Middle Muddle

The ‘core’ English middle is shown in (1):

(1) Ikea bookshelves assemble quickly/effortlessly/in no time.

This talk, however, focuses primarily on the past-tense middle in (2), which is ambiguous between the readings loosely paraphrased in (2a) and (2b):

- (2) My Ikea bookshelf assembled quickly.
- a. There was an event that was an assembling of my Ikea bookshelf, and this assembling was quick. *episodic reading*
 - b. My Ikea bookshelf *had* the property that, in general, in the event of an assembling of it, the assembling is quick. *generic reading*

This talk addresses the following questions:

Q: *What is the source of this event-property ambiguity?*

Q: *What can it tell us about the syntactic structure of English middles?*

Q: *What can we learn from ‘be able to’ and Tagalog ‘maka-’ predicates?*

and the larger picture,

Q: *How are notions of cause, control, ‘forces,’ volitionality etc. encoded in natural language?*

Roadmap...

- ☞ Examine properties of past-tense middles (such as (2))
- ☞ Show similarity to *be able to* (Bhatt 1999), suggest parallel analysis
- ☞ Introduce Tagalog ‘maka-’ predicates¹
- ☞ Suggest direction for solution and future research

* I am indebted to my honours thesis supervisor Lisa Travis, my Tagalog consultant Raphael Mercado, as well as my professors, classmates and colleagues (far too many to list) from McGill, MIT, the 3rd Annual Harvard Undergrad Linguistics colloquium, and the 2005 LSA Summer Institute, for inspiring discussion, documents, and support.

¹ Key for glosses: 1S – first person singular; 3S – third person singular; ACC – Accusative Case; AIA – ‘ability or involuntary action’ (*maka/naka*) morphology; AT/AV – actor topic voice morphology; COMP – complementizer; CONTP – contemplative aspects; DAT – Dative Case; GEN/CASE – genitive=default/Oblique Case; IMP – imperfective aspect; N – neutral aspect; NEG – negation; NOM – Nominative Case; OV – oblique topic voice morphology; PERF – perfective aspect; TT/DV – theme topic voice morphology (the inconsistencies are due to examples taken from different sources).

1. MIDDLES AT THE PERIPHERY

Core-Middle Properties

The generic interpretation of past-tense middles share all the properties commonly attributed to core-middles in the literature:

- (3) a. The **logical object** of a middle is in **subject position** (like unaccusatives)
- b. This subject (*logical object*) is said to be ‘responsible’ or in a certain ‘causal’ role for the quality of event described by the middle.
- c. Middles are **generic statements** that generalize over events of the logical object’s being V-ed
- d. English middles often allow an **experiencer in a for-phrase** (but no agent in a by-phrase)
 - ex. This book reads easily *for Imogen*/**by Imogen*.
- e. In English, they require **modification** by an appropriate adverbial, negation, modal, or focus

→With regards to (3a), Linguists are divided (from tests on English and related languages) on whether the subject is projected as a direct object (Spec VP) and raises to its surface position as subject (ie. behaves as an unaccusative), or is projected directly into subject position (ie. behaves as an unergative).

→With regards to (b) and (c), English does not mark either of these properties overtly in middles, unlike other languages which mark for genericity in at least one tense (like French with the *imparfait*²), or have overt stativizing morphemes (in this construction) like Tagalog.³

→These facts make identifying the underlying structure of English middles an uncertain and difficult enterprise.

Some New Observations

As shown in (2) above (repeated here as (4)), in the simple past tense English middles have both an episodic and generic interpretation. The episodic reading, in particular, has received little to no mention in the literature. The contexts in (4a) and (4b) help to disambiguate between the episodic and generic readings, respectively:

- (4) My Ikea bookshelf assembled quickly.
 - a. Yesterday, after returning from Ikea I assembled the bookshelf I’d bought, and this took no time at all. *episodic reading*

² Lekakou (2004) discusses the cross-linguistic characteristics of middles quite thoroughly. She concludes that middles are defined by their semantic interpretation, and that “...any attempt to define syntactically the ‘middle construction’ in a cross-linguistically coherent way is doomed to fail; the ‘middle construction’ as a syntactic animal does not exist.” (p4)

³ Travis (2000).

- b. I used to have an Ikea bookshelf that I could put together in minutes every time I moved; recently a few pieces got warped and it can't be assembled at all anymore. *generic reading*

The two readings also differ in terms of *actuality entailment* (borrowed from Bhatt 1999): (4a) asserts that the bookshelf assembling is actualized. (4b), as many generic past-tense middles, implies actualization. Given the right context, as in (5), we see that this implied actualization is defeasible:

- (5) Since I'm always on the move, I need furniture that's easy to take apart and transport. I asked a friend of mine who works for Ikea to design a bookshelf for me. I concluded from his (sketched) design that the bookshelf assembled quickly, but Ikea never ended up building it.

Most notably, while the episodic middle describes an individual event, the generic middle describes a property attributed to the subject, and that generalizes over events.

2. BHATT (1999) ON GENERICITY AND 'WAS ABLE TO'

The observations made above for past-tense middles are paralleled by Bhatt's (1999) analysis of the English predicate 'be able to,' as shown in (6); the sentence in (6) is ambiguous between the same two readings, as demonstrated by the disambiguating contexts in (6a) and (6b):

- (6) John was able to eat five apples in an hour.
 a. Yesterday, John was able to eat five apples in an hour. (past episode)
 b. In those days, John was able to eat five apples in an hour. (past generic)
 (Bhatt 1999:173)

→(6a) entails actualization, ie. that the event occurred, and culminated, yesterday.

→(6b), implies actualization, but does not entail it. Since John has a large stomach and a powerful jaw, we might just conclude that if he tried, he would succeed in eating five apples in an hour; this is an *ability* that John has.

Bhatt's analysis:

- (7) a. Past (Perf(ABLE) [VP]) = *managed-to*
 b. Past (GEN (Impf(ABLE) [VP]) = *had-ability-to*
 (Bhatt 1999:177,185)⁴

⁴ I've combined two of Bhatt's representations into one for facility of exposition.

⇒According to (7), **ABLE** is an implicative verb most basically (like ‘manage to’). When combined with the generic operator **GEN** yields an ‘ability’ reading. Note, the effect of **ABLE** in both instances seems to be that the subject is not in full-control of her ability/outcome of the described event.

⇒**GEN** is restricted from perfective environments, and can only co-occur with imperfective aspect.

⇒This predicts that perfective ‘was able to’ does not necessarily require the subject to be attributed an ‘ability’ or ‘property,’ which is borne out in (8):⁵

- (8) a. Yesterday, Brown hit three bulls-eyes in a row. Before he hit three bulls-eyes, he fired 600 rounds, without coming close to the bulls-eye; and his subsequent tries were equally wild.
 b. Brown was able to hit three bulls-eyes in a row.
 c. Brown had the ability to hit three bulls-eyes in a row.

(Bhatt 1999:180, taken from Thalberg 1969)

Middles also:

- (9) a. Last Bloom’s Day, 50 enthusiasts participated in a read-off of a selection from Ulysses. 49 of the participants struggled through at a snail’s pace, but one speed-reader, Judy, finished the entire section in no time.
 b. Ulysses read quickly (for Judy).
 c. *Ulysses reads quickly.

3. MAKА-FORMS AS THE TAGALOG MIDDLE...

Tagalog ‘Ability and Involuntary-Action’ (maka-prefixed) Predicates

The Tagalog prefix *maka-*, when affixed to a transitive predicate, most saliently “demotes” the agent to a position of non-volitionality; the agent is somehow no longer in full-control of the event’s result. (10) gives the neutral form of ‘take,’ contrasted with the *maka-*-prefixed form in (11):

- (10) a. *kinunan ni Ben ng litrato si Luisa.*
 N.PERF.take CASE Ben CASE picture NOM Luisa
 “Ben took a picture of Luisa.”

- (11) *nakunan ni Ben ng litrato si Luisa.*
 AIA.PERF.take CASE Ben CASE picture NOM Luisa
 a. “Ben managed to take a picture of Luisa.”
 b. “Ben involuntarily took a picture of Luisa.”

(Dell 1983-4:177)

⁵ Piñón (2003) argues an alternative account to Bhatt, and observes that we can separate two types of ‘abilities,’ intentional and extensional (Bhatt’s ‘abilities’ are the intentional kind). I leave the interested reader to look into this distinction for herself.

Some Properties of Tagalog

A quick note on Tagalog aspect—two kinds of morphological aspect:

‘outer aspect’ = an affixed ‘n-/-in’ = event/state has started

‘inner aspect’ = reduplication = event/state is incomplete.

And Tagalog syntax—any argument can be promoted to subject, correlating with changes in voice-morphology, and which argument is subject-marked by preceding ‘ang’

‘Maka’ with agent-subject; [Verb [_{Subject} Agent] [Theme]]

- (12) a. **nakakakain** ako [ng lamok].
 AT.AIA.IMP.eat 1S.NOM CASE mosquito
 “I am able to eat a mosquito.”
 b. **nakakain**⁶ ako [ng lamok].
 AT.AIA.PERF.eat 1S.NOM CASE mosquito
 “I accidentally ate/managed to eat a mosquito.”

‘Maka’ with theme-subject [Verb [_{non-vol.} Agent] [_{Subject} Theme]]

- (13) a. **nakakain** ko [ang lamok]
 TT.AIA.IMP.eat 1S.CASE NOM mosquito
 “I am able to eat the mosquito”
 (or literally, “the mosquito is edible by/for me”)
 b. **nakain** ko [ang lamok]
 TT.AIA.PERF.eat 1S.CASE NOM mosquito
 “I managed to eat/accidentally ate the mosquito”

And if we leave out the agent... [Verb [_{non-vol.} GEN/arb. Agent] [_{Subject} Theme]]

- (14) a. **nakakain** [ang lamok]
 TT.AIA.IMP.eat NOM mosquito
 “ANYONE is able to eat this mosquito/Mosquitoes are edible”
 b. **nakain** [ang lamok]
 TT.AIA.PERF.eat NOM mosquito
 “SOMEONE managed to eat/accidentally ate this mosquito”

→The ‘maka’ forms in (14) bear all the properties of middles—logical object in subject position and interpreted as ‘responsible’ for potential events of its being V-ed (being eaten, in this case); agent, and possible events interpreted generically in (14a), and existentially in (14b).

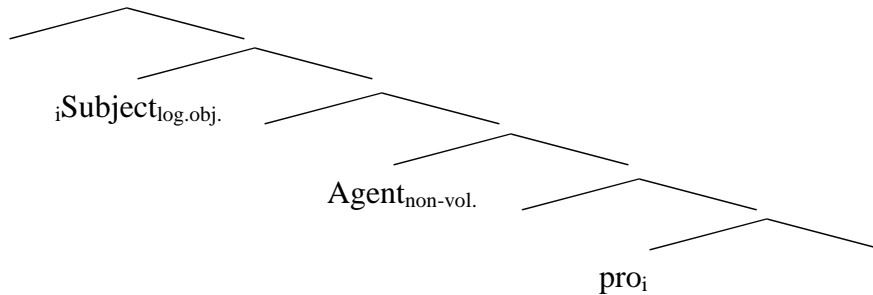
⁶ Theoretically, the ‘ka’ in the ‘nakakain’ of (9b) is not the same ‘ka’ of (10a&11a). The former is the ‘ka’ proper of ‘maka,’ while the latter is the aspectual reduplication of the first syllable of the root ‘kain’/to eat.

→From (12) and (13) (ie. when agent is overt), we observe that what ‘maka’ seems to do is ‘demote’ the agent from position of volitionality, to one which is no longer in full-control, or non-volitional in the result of the event. This can also be said for middles!

Some Morphosyntax of Use

Tagalog morphosyntactic phenomena (that I come to presently) suggest a syntactic structure of ‘maka’ theme-subject constructions as in (15):

(15)



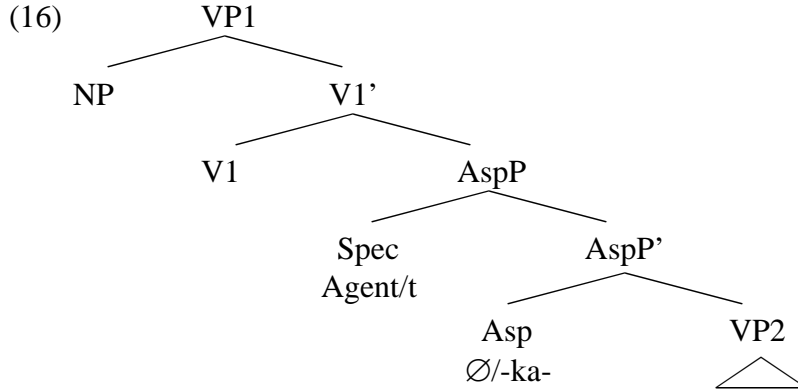
→the subject (logical object) is projected high and above non-volitional agent, which has been ‘demoted’ from its usual causer/initiator role. An anaphoric pro fills the underlying object position, and takes as antecedent the highest argument, which is the theme-subject.

→Travis (2000a) uses morphological deletion facts in Tagalog to argue that the non-volitional agents of ‘maka’-forms are projected in SPEC of the AspectPhrase headed by inner aspect.⁷ She follows Phillips (1996) in analyzing ‘maka’ as composed of three morphemes:

- ‘ka’ = +/- incomplete aspect
- ‘a’ = stative morpheme (also used to turn nouns into adjectives)
- ‘m’ = part of voice morphology

Travis gives us a tree for ‘maka’ as in (16) with the morphemes labeled:

⁷ It is beyond this talk to go into the specifics of her argument, but I invite the audience to consult Travis (2000a) directly, or else ask me about her account during questions, or otherwise.



(Travis 2000:179)

Claim A→in theme-subject constructions, theme is **projected in SPEC VP1** (vP in other terms), licensed by the stative morpheme, and therefore middle logical objects also.

Empty Anaphors...

del Pilar (1994), Travis (2000b):

Tagalog has an *empty anaphor* that is licensed by overt causative morphology (‘pag’ in the cases they examined), and takes as antecedent the argument in subject position:

- (17) [cause to persuade A > B > K]
- a. nagpahikayat si A kay B ng K na bumili ng bahay
 AT.PERF.pagpa.persuade NOM A OBL B ACC K comp AT.buy ACC house
 “A caused/let B persuade K to buy a house”
- [cause to persuade A_i > B > pro_i]
- b. nagpahikayat si A kay B na bumili ng bahay
 AT.PERF.pagpa.persuade NOM A OBL B comp AT.buy ACC house
 “A caused/let B persuade A PRO to buy a house”
- c. [IP nagpahikayat [NP si A]_i kay B [NP pro]_i [CP na [IP bumilli PRO_i ng bahay]]]

(Travis 2000b:186)

→In (17b), the null controllee of ‘nagpahikayat’/persuade is interpreted as referring back to the causer, A, and this pro controls the PRO in the lowest clause, as in (16c). Unlike pro-drop, the antecedent *must* be found within the sentence.

Claim B→the **stative morpheme** in V1 can also **license this anaphoric empty category** in ‘maka’ theme-subject constructions, which links the object position with the argument projected in SPEC VP1.

Massam (1988) on middles:

→Massam argues independently that middles involve a null reflexive in subject position also, based on Recipe Context Null Object Constructions (RCNOCs), as in (18):

- (18) Take the cake mix, 1 cup water and 3 eggs. Mix ___ well and beat ___ for five minutes. Pour ___ into a well-greased cake pan and bake ___ for 20 minutes. Remove ___ from oven and cool ___.

(Massam 1988:327)

→The missing objects cannot receive an arbitrary interpretation, but always refer to the ‘discourse topic.’

→If we try to add in an imperative subject, as in (17), we only get a middle interpretation:

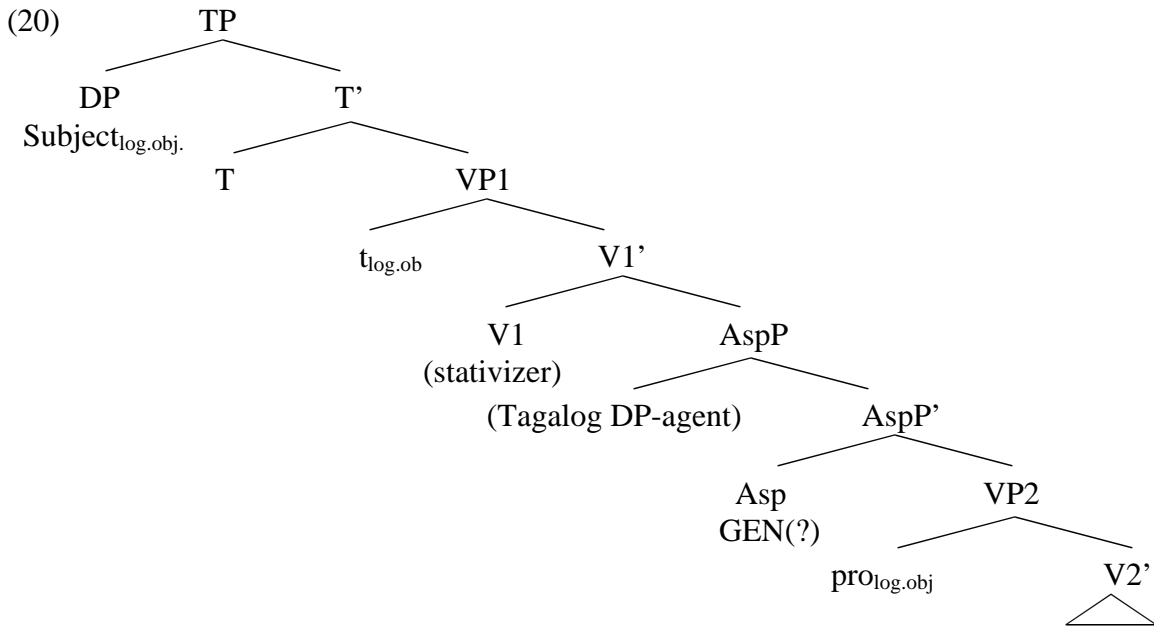
- (19) First, you take two eggs, ½ cup of flour, and 3 tsp. sugar. *You must beat ___ well and cook ___ for 5 minutes. *You then serve ___ while still warm.

(Massam 1988:328)

4. ASSEMBLY

Taking the parallel between Tagalog ‘maka’ theme-subject forms and English middles literally, the pieces of the structure = root + anaphoric pro in object position + inner aspect + Generic agent (present in Tagalog syntax, but not in English?) + stative morpheme + logical object.

This suggests a syntax in the direction of (20):



SOME REMAINING QUESTIONS

→why are syntactic agents acceptable with ‘maka’ theme-subject constructions and not English middles?

→what parallel in function (if any) is there between ‘able,’ ‘maka’ and the necessary modification in middles?

→what parallel (if any) is there between the reflexive in languages with reflexive middles, and anaphoric pro?

References

- Bhatt, R. 1999. *Covert Modality in Non-Finite Contexts*. Ph.D. dissertation, University of Pennsylvania.
- del Pilar, N. 1994. "pro in Tagalog causative sentences." unpublished ms., McGill University.
- Embick, D. 2004. "On the structure of resultative participles in English." In *Linguistic Inquiry* 35.3. 355-392
- Lekakou, M. 2004. "Middles as disposition ascriptions." to appear in the Proceedings of the 8th Sinn und Bedeutung.
- Massam, D. 1988. "Middles, tough and recipe context constructions in English" In J. Blevins and Julie Carter, eds. *NELS 18: UMass at Amherst*. 315-332.
- Phillips, V. 1996. *Up-rooting the prefix maha- in Malagasy*. MA, McGill University.
- Piñón, C. 2003. "Being able to." In *WCCFL 22 Proceedings*. Garding, G. & M. Tsujimura. eds. Somerville, MA: Cascadilla Press. 384-397.
- Schachter, P. & F.T. Otnes. 1972. *Tagalog reference grammar*. Berkeley: University of California Press.
- Terry, M. 2004. *On the Articulation of Aspectual Meaning in African-American English*. Ph.D. dissertation, UMass at Amherst.
- Travis, L. 2000a. "Event structure in syntax." In *Events as Grammatical Objects*. Tenny, C. & James Pustejovsky. eds. Stanford: CSLI pubs. 145-185.
- Travis, L. 2000b. "The l-syntax/s-syntax boundary: evidence from Austronesian." In *Formal Issues in Austronesian Linguistics*. Paul, Ileana, Vivianne Philips and Lisa Travis. eds. Dordrecht: Kluwer. 167-193.

Jillian Louise Mills
Massachusetts Institute of Linguistics
77 Massachusetts Avenue, D32-808
Cambridge, MA 02139

jillymae@mit.edu
jillian.mills@gmail.com