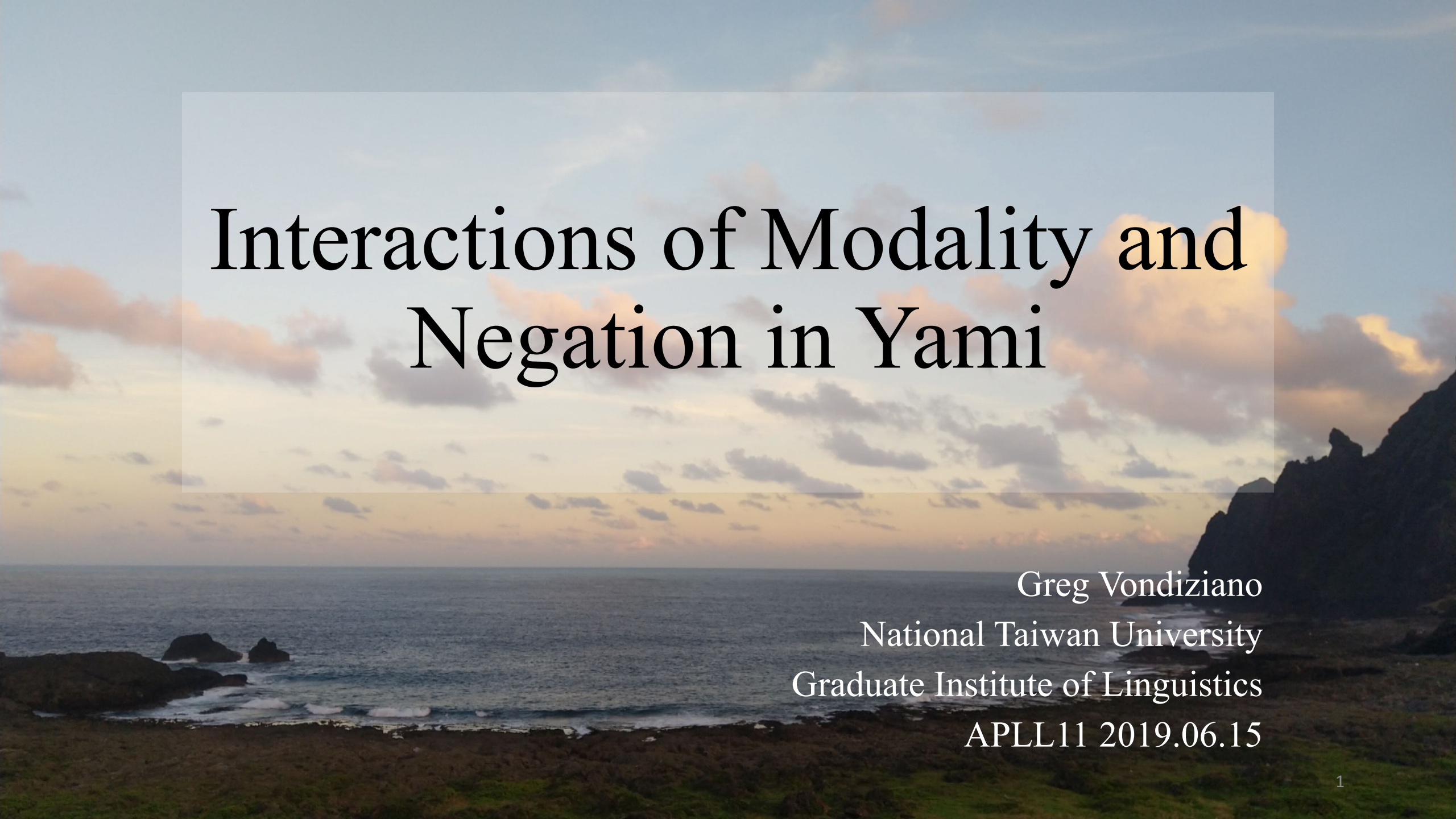

Interactions of Modality and Negation in Yami

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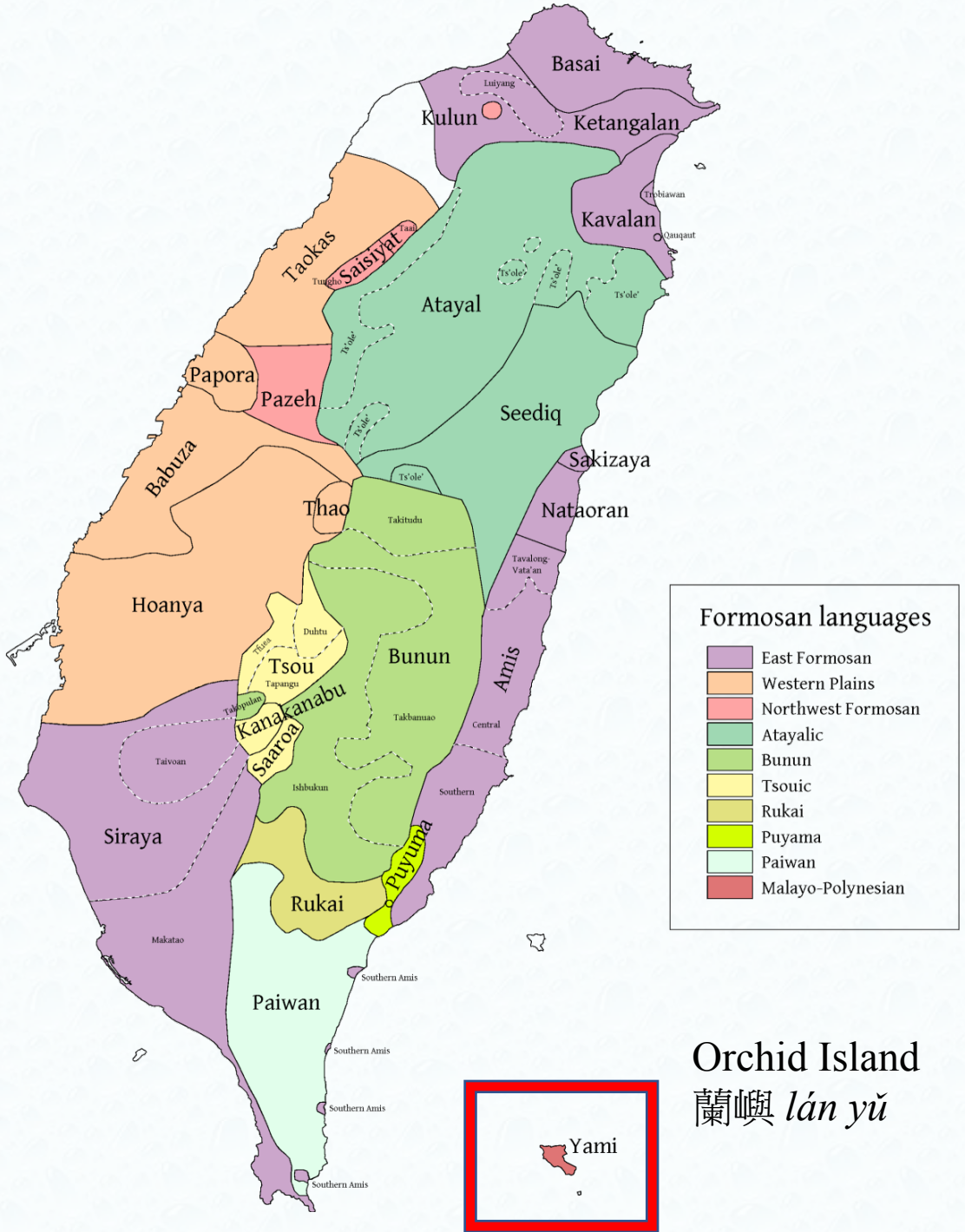
Yami (*Ciriciring no tao)*

- Ethnic population of appx. 4600
  Estimated 4400 native speakers
  (of varying proficiency)

- Malayo-Polynesian - Batanic
  Philippine-type language
  - V(S)O/ VO(S)
  - 4 Voices (symmetrical voice language)

- Descriptive grammars
  (Zhang 2000; Rau & Dong 2005; Rau & Dong 2018)



Orchid Island
蘭嶼 *lán yǔ*

Basic phrase structure

1. **ya** k<om>an so kasi **o** **alikey** **a** **mehakay**
   3SG.NOM <AF>eat OBL candy **NOM** **small** **LK** **male**
   'The little boy is eating candy.'

2. **na** i-akan **no** **alikey** **a** **mehakay** o among ya.
   1SG.GEN IF-eat **GEN** **small** **LK** **male** NOM fish DEM
   'The little boy is eating this fish.'

Expressions of Modality in Yami

Expressions of Modality in Yami

(Vondiziano, 2019)

System of modal verbs in Yami

Modal category	term	Modal meaning
Propositional modality	*ala*	weak epistemic: possibility
	manoyong	asserted epistemic: veridicality
	akmey	medium-weak evidential: inference
Event modality	*apia*	weak deontic: permission
	apiaen	weak P-INT: volition

3. **ala** (a) ya (ra)na ni-m-oli
   MOD (LK) 3SG.NOM already PFV-AF-return.home,
   'He **might** have returned home.'

4. **(ya*)** **(ni-*)m-anoyong** (o) ko **ka**-ni-ma-vozow do takey.
   (3SG.NOM*) **(PVF*-)AF-true.MOD** (NOM) 1SG.GEN **NML**-PFV-AF-lost LOC mountain
   'I **really** got lost in the mountain.'

5. **apia** (o) **ka**-inom ko so ranom ya?
   may.MOD (NOM) **NMZ**-drink 1SG.GEN OBL water DEM.PROX
   'May I drink this glass of water?'

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Systems encoding modality on the main verb

Modal Category	System	Structure	Modal meaning
Event modality	Voice system	*ma-, maka-*	P-INT/EXT: potentive/abilitative
	Imperative mood	*(jya)….ø- / –i / -an*	asserted deontic: commands, demands, requests
	Realis/irrealis mood system	[VERB-PRO]	strong P-EXT: necessity medium P-EXT: suggestion medium P-INT: desire

6. **ko** **k<om>an** so kasi.

1SG.NOM **<AF>eat** OBL candy

‘I’m eating candy.’ (present tense/progressive aspect)

7. **k<om>an** **ko** so kasi.

<AF>eat **1SG.NOM** OBL candy

‘I want/am going to eat candy.’ (future tense/intention)

8. **na** **i-akan** o among ya.

1SG.GEN **IF-eat** NOM fish DEM

‘He’s eating this fish.’ (present tense/progressive aspect)

9. **i-akan** **na** o among ya.

IF-eat **1SG.GEN** NOM fish DEM

‘He must eat this fish.’ (necessity)

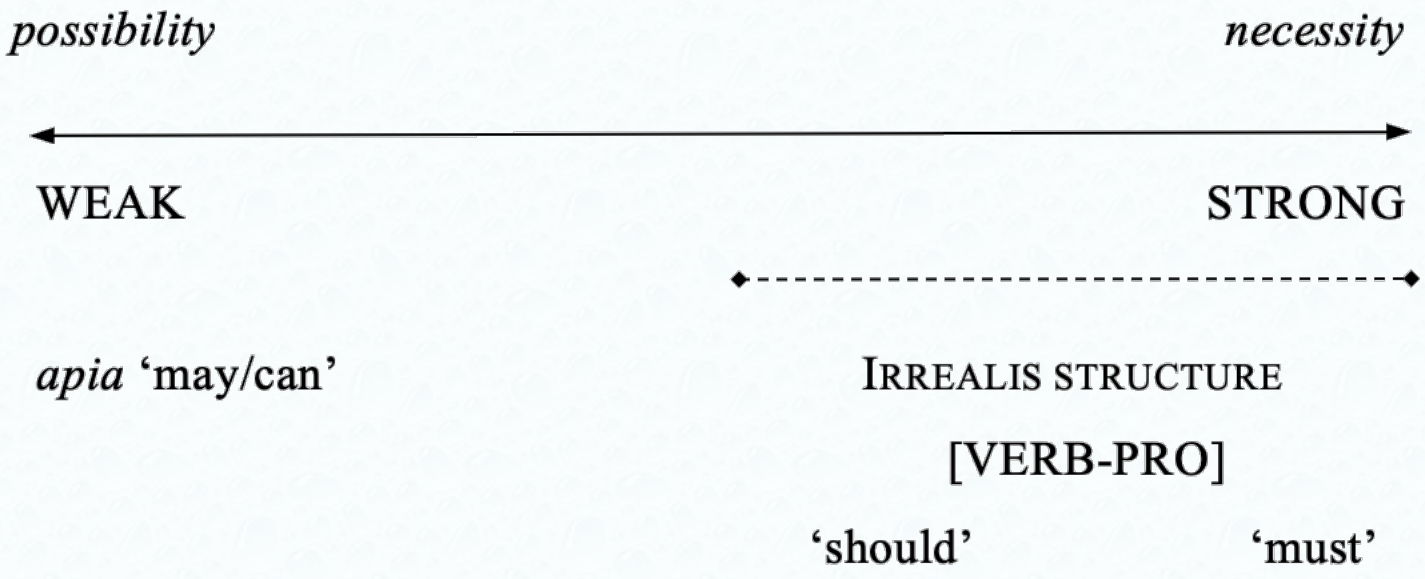
Realis structure

[PRO-VERB]

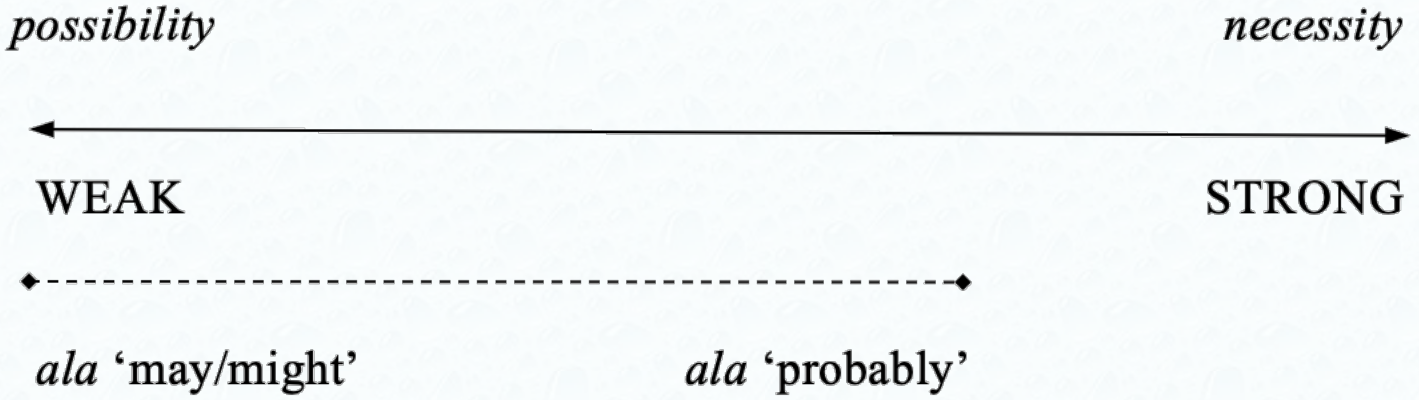
Irrealis structure

[VERB-PRO]

Deontic continuum



Epistemic continuum



Negative or affirmative?

10.	ya	**ji**	N-ian	si	kaka	do	vahay	namen!
	3SG.NOM	**NEG**	AF-exist	NOM	older.sibling	LOC	house	1EPL.GEN

‘My brother is not home’ (negative declarative)
OR
‘my brother IS home!’ (strong assertion – veridical modality)

Research questions

- How does Yami syntactically manage relative scope relations between negation and modality, how systematic or predictable are these structures?

- How does this help characterize modality as an internally coherent system in Yami and to what extent are negation and negative forms utilized to encode affirmative modal meanings?

Negative forms in Yami

Verbs		**Nouns**	**Sentences**		
Declarative	Imperative		Existential, possessive, locative	Propositional negative	Simple response
ji EMP *ji*	*jya*	*beken*	*abo*	*ta*	*beken, tosya, ji abo, taon, cyaa*

Adapted from Rau & Dong (2018:149)

Negative forms in Yami

11. i.) **ya** **ji** a-ngay do ilaod.
3SG.NOM **NEG** AF-go LOC PN
'He's not going to Taiwan.' (negative declarative)

ii.) **ji** **ya** a-ngay do ilaod.
NEG **3SG.NOM** AF-go LOC PN
'He can't go to Taiwan.' (negative weak deontic modality = prohibitive)

12. **ya** **abo** o nirzpi ko .
3SG.NOM **NEG.exist** NOM money 1SG.GEN
'I have no money'

13. **ta** namen mi-walam.
NEG.MOD 1PL.NOM AF-rest
'We're not taking a vacation.' (Rau & Dong 2018:160)

Negation

- Reversal of the truth value of a proposition
  - (p) → (NEG (p))
  - (p) ‘Students love linguistics’
  - (NEG (p)) ‘Students do NOT love linguistics’
- Narrow-scope negation (MOD (NEG (p)))
  - Possible-not
  - Necessary-not
- Wide-scope negation (NEG (MOD (p)))
  - Not-possible
  - Not-necessary

Logical semantic equivalencies

- Possible-not = not-necessary
- Necessary-not = not-possible

- Double negation
  - Not-possible-not = necessary
  - Not-necessary-not = possible

De Haan (1997)

- Modal suppletion strategy
  - He must leave — necessary — (MOD (p))
  - He must not leave — necessary-not — (MOD (NEG (p)))
  - He **need** not leave — not-necessary — (NEG (MOD (p)))
- Negative placement strategy
  - Tā [kěyǐ] líkāi — possible — (MOD (p))
  - Tā [kěyǐ] ***bù*** líkāi — possible-not — (MOD (NEG (p)))
  - Tā ***bù*** [kěyǐ] líkāi — not-possible — (NEG (MOD (p)))

Weak deontic modality - permission

14. **apia** ka-ngay na.
MOD NML-go 3SG.GEN
'He may/can go.' (MOD (p)) possible

15. **apia** ka-**ji** na ngay-an.
MOD NML-**NEG** 3SG.GEN go-NML
'He may not/can not go.' (MOD (NEG (p))) possible-not

16. **marahet** ka-ngay na.
NEG.MOD NML-go 3SG.GEN
'He may not/can't go.' (NEG (MOD (p))) not-possible

17. **ji** ya a-ngay do ilaod.
NEG 3SG.NOM AF-go LOC PN
'He may not/can't go to Taiwan.' (NEG (MOD (p))) not-possible [irrealis structure]

18. **ji** **apia** ka-angay mo!
MOD MOD NML-go 2SG.GEN
'You **can definitely** go!' (MOD (MOD (p)) very possible

Strong deontic modality - obligation

19. pi-vazay-in na.
    CAU-work-PF 3SG.GEN
    ‘He must do it.’ (MOD (p)) necessary

20. [**ji** na] pi-vazay-a.
    [**NEG** 3SG.GEN] CAU-work-PF
    ‘He must not do it.’ (MOD (NEG (p))) necessary-not [irrealis structure]

21. **ala** **ji** na pi-vazay-a.
    MOD **NEG** 3SG.GEN CAU-work-PF
    ‘He needn’t do it.’ (NEG (MOD (p))) not-necessary

Strong deontic modality - obligation

22. [**apia** ka-**ji** na] ngay-an.
[**MOD** NML-**NEG** 3SG.GEN] go-NML
'He may not/can not go.' (MOD (NEG (p))) possible-not
('He's permitted to not go.')

23. [**ala** **ji** na] pi-vazay-a.
[**MOD NEG** 3SG.GEN] CAU-work-PF
'He needn't do it.' (NEG (MOD (p))) not-necessary
('It's possible that he must not do it.')

Weak epistemic modality - possibility

24. **ala** ya m-ian do vanwa.
MOD 3SG.NOM AF-exist LOC beach
'He may be at the beach.' (MOD (P)) possible

25. **ala** ya **ji** N-ian do vanwa.
MOD 3SG.NOM **NEG** AF-exist LOC beach
'He may not be at the beach.' (MOD (NEG (p))) possible-not

26. **ta** iyan na do vanwa.
NEG.MOD PF.exist 3SG.GEN LOC beach
'He can't be at the beach.' (NEG (MOD (p))) not-possible

27. ya **ji** N-ian do vanwa.
3SG.NOM **NEG** AF-exist LOC beach
'He's **not at** the beach.' (NEG (p)) negative declarative

Strong epistemic modality - necessity

28. ya **ji** N-ian do vanwa ori ya.
    3SG.NOM **MOD** AF-exist LOC beach DEM.MED DEM.PROX
    ‘he must be at the beach.’ (MOD (p)) necessary

29. **ji** **abo** **ka**-ian do vanwa.
    MOD **NEG.exist** **NML**-exist LOC beach
    ‘He must not be at the beach.’ (MOD (NEG (p))) necessary-not

30. N/A (NEG (MOD (p))) not-necessary

Double negation – deontic necessity, commissives

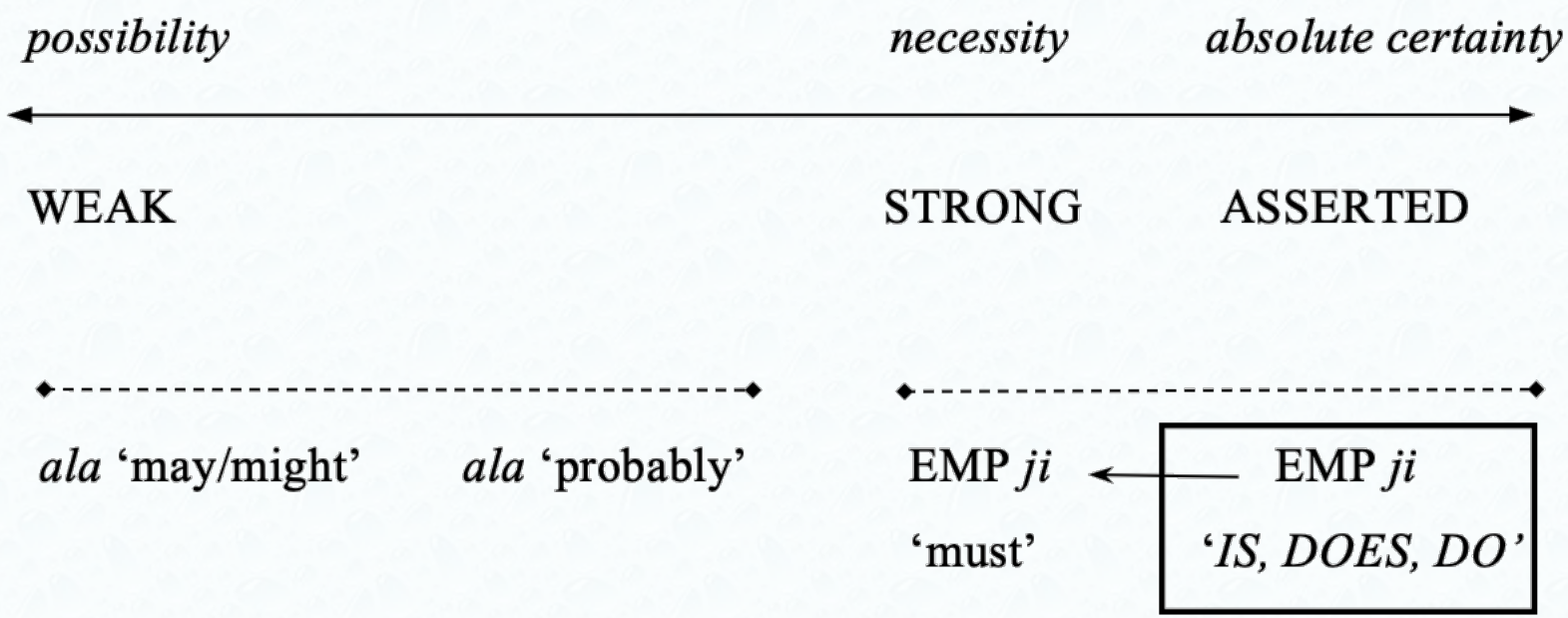
31. no m-ai do Pongso am ya **abo** ka-**ji** mi-yakan so libangbang a.
when AF-come LOC PN TOP 3SG.NOM **NEG.exist** NML-**NEG** AF-eat OBL flying fish FSP
'When you come to Lanyu, you **can't not** eat fish.'
(not-possible-not = must)

32. **marahet** ka-**ji** na ngay-an.
NEG.MOD NML-**NEG** 3SG.GEN go-NML
'He **can't not** go.' (not-possible-not = must)

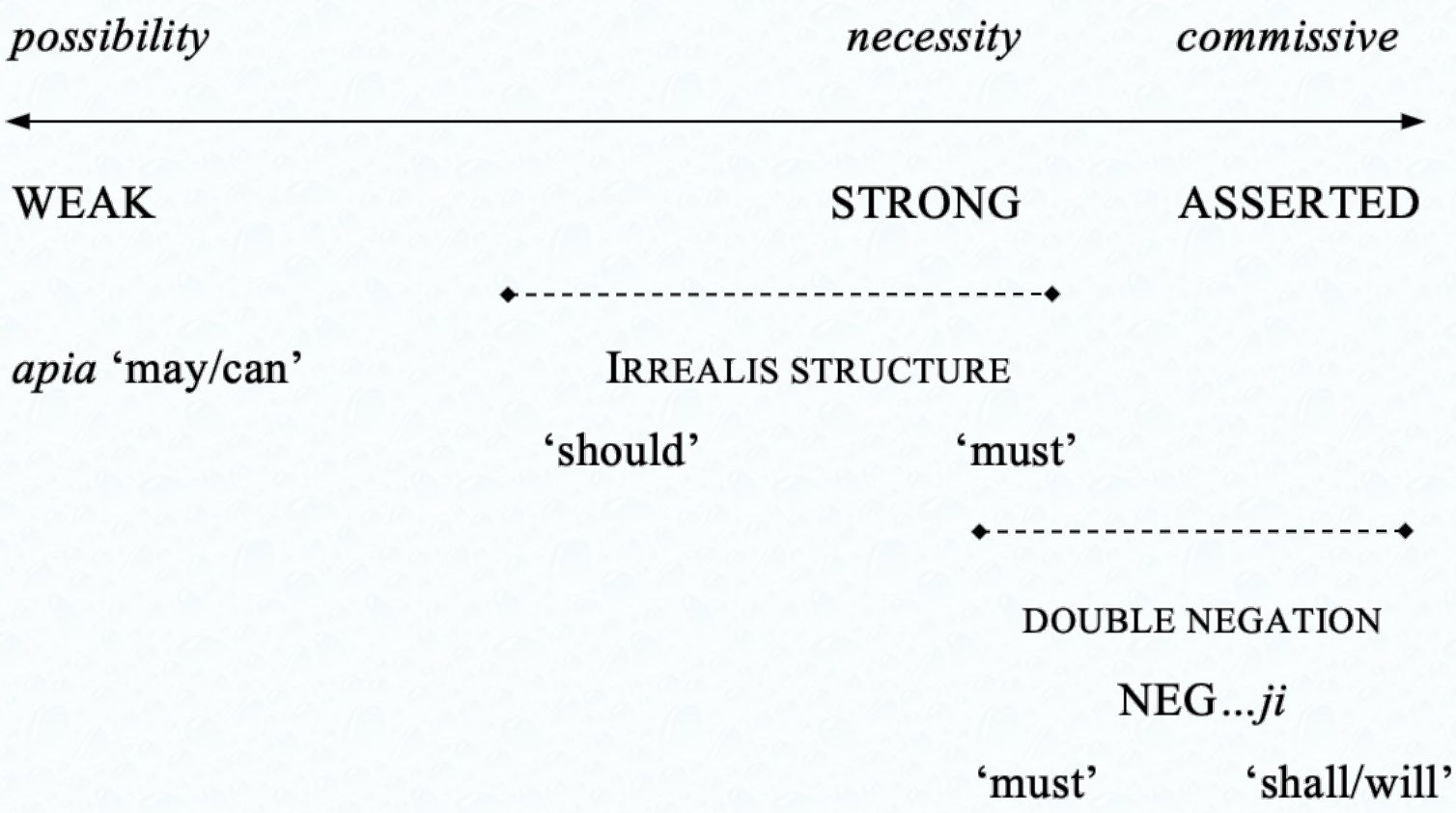
33. ji **abo** ka-**ji** na ma-pivaray-an sia.
MOD **NEG.exist** NML-**NEG** 3SG.GEN AF-do-NML 3SG.NOM
'He definitely **won't not** do it.' (necessary-not-not = shall - promise)

34. ji **abo** ka-**ji** ko angsem-an so mata mo.
MOD **NEG.exist** NML-**NEG** 1S.GEN raw.neat-NML OBL eye 2S.GEN
'I **will** definitely eat your eyes raw.' (necessary-not-not = will - threat)
(Rau 2005:84)

Epistemic continuum in Yami



Deontic contiuum in Yami



Conclusion

- Strict MOD-NEG ordering in VP – must rely on modal suppletion to manage scope.
- Weak ends of the modal spectrum are more predictable and systematic than the strong ends.
  - Narrow-scope follows linear order
  - Wide-scope employs semantically negative modal
  - Strong deontic borrows from weak deontic patterns via semantic equivalence
  - Strong epistemic borrows from the assertion end of the spectrum
- Yami encodes affirmative, strong modality using negative morphosyntax (emphatic *ji* and double negation).

Future research

- Restricted interpretation of EMP *ji*
- Beyond the sentence level – discourse and pragmatic expressions of modality.
- Cross-linguistic comparison of modal systems in other Philippine languages – working towards a typology of modality in Philippine.

Selected References

2017. *Online Dictionary of Aboriginal Languages*. http://e-dictionary.apc.gov.tw/Index.htm.

2019. *NTU corpus of Formosan languages*. http://corpus.linguistics.ntu.edu.tw/index_zh.php.

BYBEE, JOAN & SUZANNE FLEISCHMAN (eds) 1995. *Modality in grammar and discourse*. Amsterdam/Philadelphia: John Benjamins.

BYBEE, JOAN, REVERE PERKINS & WILLIAM PAGLUCIA. 1994. *The evolution of grammar: Tense, aspect, and modality in the languages of the world*. Chicago: The University of Chicago Press.

DE HAAN, FERDINAND. 1997. *The interaction of modality and negation: A typological study*. New York/London: Garland Publishing

—. 2006. Typological approaches to modality. *The expression of modality*, ed. by W. Frawley, 27-70. Berlin: Mouton de Gruyter.

MIESTAMO, MATTI. 2013. Symmetric and asymmetric standard negation. *The World Atlas of Language Structures Online*, ed. by M.S. Dryer & M. Haspelmath. Leipzig: Max Planck Institute for Evolutionary Antrhopology.

MITHUN, MARIANNE. 1995. On the relativity of irreality. *Modality in discourse and grammar*, ed. by J. Bybee & S. Fleischman, 367-88. Amsterdam/Philadelphia: John Benjamins.

PALMER, F.R. 2001. *Mood and Modality*. Cambridge Cambridge University Press.

PAYNE, JOHN R. 1985. Negation. *Language typology and description: Clause structre*, ed. by T. Shopen, 197-242. Cambridge: Cambridge University Press.

RAU, D. VICTORIA & MAA-NEU DONG. 2018. *Dawuyu yufa gailun (達悟語語法概論)*. New Taipei City: Council of Indigenous Peoples.

VAN DER AUWERA, JOHAN & VLADIMIR A. PLUNGAIN. 1998. Modality's semantic map. *Linguistic Typology*. 2(1).79-124.

Ayoy!

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