



# Modal notions in Daakie – first results with storyboards

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# Daakie a.k.a. Port Vato [ptv]



- ◆ one of five major languages of Ambrym
- ◆ ca. 1000 speakers
- ◆ a West Ambrym language
- ◆ closely related to Daakaka (Kilu von Prince. 2015. *A grammar of Daakaka*. Berlin: Mouton de Gruyter.
- ◆ more distantly related to North Ambrym (Michael Franjeh, Possessive classifiers in North Ambrym..., SOAS London)



# Research background



- ◆ 2009 – 2013, DOBES Project *Languages of Southwest Ambrym*, funded by Volkswagen Foundation, with Kilu von Prince, Soraya Hosni, Susanne Fuchs, Abel Taho, Zentrum Allgemeine Sprachwissenschaft Berlin (ZAS)
- ◆ 2016 – 2019, DFG Project Tense, Aspect, Modality and Negation in Languages of Melanesia (MelaTAMP), with Kilu von Prince, Ana Krajinović Rodrigues, Stefan Druskat, Humboldt-Universität zu Berlin
- ◆ Research on Daakie 2010 – present,
  - about 8 hours of transcribed audiovisual recordings
  - Book with local stories, dictionary
  - translated texts (European tales and fables, childrens' bible, childrens' primer)



# Modal markers of Daakie



◆ Modal markers combine with subject agreement markers:

- (1) *temat ngyee la-m vehe ngye lan sili*  
 demon 3PL 3PL-RE carry 3SG LOC road  
*the demons carried him on/to the road*

◆ Modal markers:

- *-m* RE realis
- *-p* POT potentialis (irrealis) underlying *b*, final devoicing to *-p*
- *-a- -p* FUT POT future
- *-re* RNGrealis negation
- *-t* DST distal
- *-n* DNGdependent negation

◆ Examples of agreement forms

- 1SG: *na-m na-re na-p na-t na-n*
- 3PL: *la-m la-re la-p la-t la-n*
- 3SG: *m(w)e te-re b(w)e te ne* dependent on CV- of following verb:  
*m(w)i b(w)i ti ni* – labiovelar *mw-/bw-* basic  
*ma ba ta na* – *m-/b-* before C(labial) V(e/i)  
*mu bu tu nu* – *a* before V(a), *u* before V(u)

# Person / number features



Person	singular	dual	paucal	plural	Forms
1	<i>ngyo</i> <i>na-</i>	<i>komoo</i> <i>komo-</i>	<i>kidyee-</i> <i>kidye-</i>	<i>kemem</i> <i>keme-</i>	pronoun agreement
1+2		<i>adoo</i> <i>ado-</i>	<i>adyee</i> <i>adye-</i>	<i>et</i> <i>da-</i>	pronoun agreement
2	<i>ngyak</i> <i>ko-</i>	<i>kamoo</i> <i>ka-</i>	<i>kamdyee</i> <i>kamdye-</i>	<i>kimim</i> <i>ki-</i>	pronoun agreement
3	<i>ngye</i> <i>--</i>	<i>koloo</i> <i>kolo-</i>	<i>ki(l)yee</i> <i>kiye-</i>	<i>ngyee</i> <i>la-</i>	pronoun agreement

# Distribution of modal markers

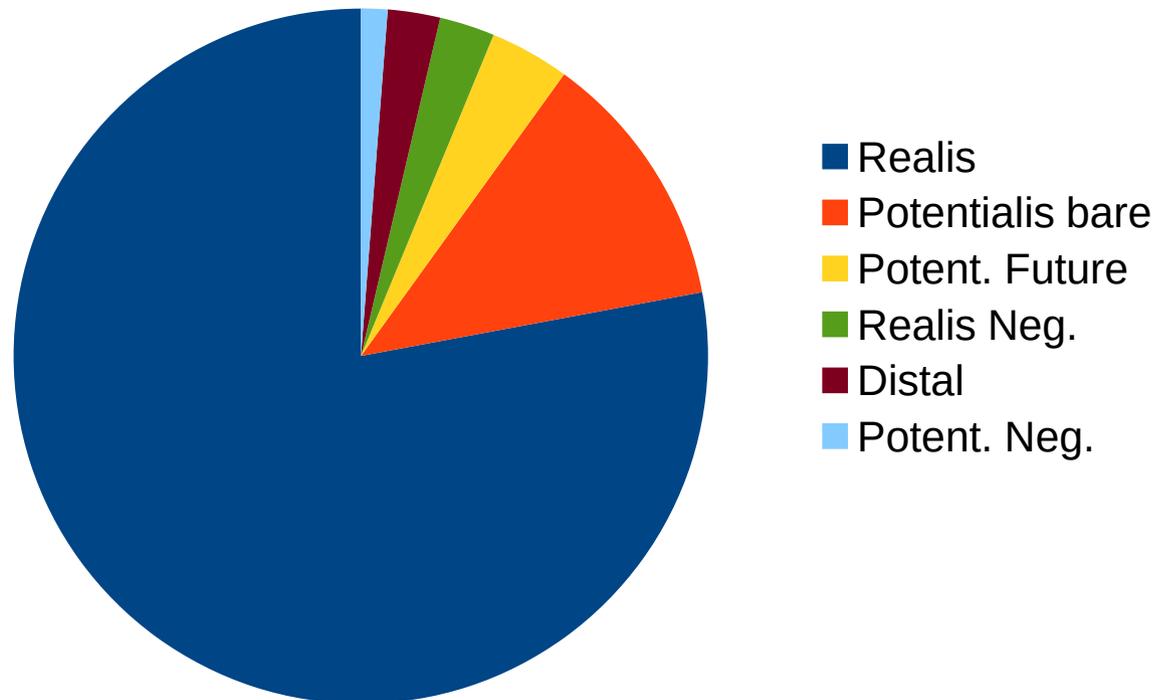


- ◆ Modal markers in the transcriptions of the spoken corpus, all genres; 12,651 instances (July 16, 2017)

- ◆ Frequencies:

- Realis: 78,9%
- Potentialis: 15,8%
  - bare potent.: 12,1%
  - future potent.: 3,7%
- Realis Neg. 2,6 %
- Distal 2,4 %
- Potent. Neg. 1,2 %

Distribution of modal markers, spoken texts



# The uses of modality – corpus data



Some usage types established from the Daakie corpus

- ◆ Realis in main clauses:
  - Assertion of present and past events and states,
  - also in fictional and generic / habitual statements
- ◆ Potentialis in main clauses:
  - Directive, commissive, adhortative clauses
- ◆ Future potentialis in main clauses:
  - Assertion (or: prediction) of future events and states
- ◆ Realis negation in main clauses:
  - Assertion of negated propositions expressing past or present events and states, or exclusion / denial of past or present events and states
- ◆ Dependent negation: With complementizer *saka* for future non-realis ev./st.  
(1) *saka wele-m ne nek ne tiri kingyee-ye*  
C.INEG skin-2SG DNG afraid TR something DEM.PL-DIST  
'Don't be afraid of these things', lit. 'Your skin should not be afraid of those things'

# The uses of modality – corpus data



◆ Realis for factive dependent clauses, e.g. under ‘know’, reason clauses, etc.

- (1) mwe kiibele ke vanten musyoo la-m du oke-le  
RE know C.RE man RE-some.PL 3PL-RE stay LOC-PRX Jemis3.029  
‘He knew that some men were there’
- (2) na-m pwet hospital byen ke popat mwe te ye-k  
1SG-RE stay hospital because C.RE pig RE cut leg-1SG Boa1.079  
‘I stayed in the hospital because the pig cut my leg’

◆ Potentialis for non-factive dependent clauses

- (1) na-m longbini ka na-p pune pune-n soo  
1SG-RE want C.IR 1SG-POT tell tell-NOM IDEF Andri2.002  
‘I want to tell a story’
- (2) mo-nok, ko-m kiibele ka ko-p bá meleh pon  
RE-finish 2SG-RE know C.IR 2SG-POT plant food now Jemis2.010  
‘So, you know how to plant food now’
- (3) a-na-p ane sówe bili ka ot bi mitmyet?  
FUT-1SG-POT eat.TR what time C.IR place POT dark JoAlvi.028  
‘What will I eat when it is dark?’

# The use of modality – corpus data



## ◆ Distal for setting a temporal anchor

(1) meerin temát la-t pwee  
before demons 3PL-DST be.many

Boa3.025

'In the old times, there were many demons'

(2) yaa te van te pwet ti piipili, mwe kuoli-mee tyenem  
sun DST go DST PROG DST be.red 3SG return-come home

Ilsong2.021

'When the sun was getting red, he returned home'

# Corpus data: Habituals in realis or potentialis



## ◆ Habitual action in a story

- (1) kevene wobuong kolom kahe koloo mo-nok, kolo-m kuo morone koloo betontenok  
every day 3DU-RE wash 3DURE-finish3DU-RE run away 3DU evening

'Every day, after they (the parents) had washed them (their children),  
they (the parents) ran away from them (the children) in the evening.'

kolo-m van lon kemee s-aa báp-en kiye  
3DU-RE go to (filler) POSS-3PL dance-NOM DEM.DIST

'they ran to their dance'

kolo-p du van peete ka ot bo lóp, kolo-p kuoli-mee tyenem  
3DU-POT PROG go.on close C.IR place POT light, 3DU-POT return-come home Apia.017-18

'they would go on there until the day would come, then they would come home'

## ◆ Description of customs

- (1) na-m longbini ka na-p pune pun usilii selere ne peap-en ne soló  
1SG-RE want C.RE 1SG-POT tell story about customs TR carry.cloth-NOM TR wedding

'I want to tell a story about the custom of carrying cloths at a wedding ceremony.'

bili kaga la-p gone solo desoo, vale s-an man bwe neknak, ...  
time C.IR 3PL-POT make ceremony NONSPEC, village POSS-3SG man POT ready

'When they made a wedding, the village of the bridegroom would be ready, ...

tiny-an ngyee la-p neknak ka la-p peap  
aunt-3SG 3PL 3PL-POT ready C.IR3 PL-POT carry.cloth

'her (the bride's) paternal aunts would be ready to carry cloths (over the bride's head)'

# Corpus data: further epistemic notions



- ◆ Expressing intention with complementizer *ka* as verbal predicate, dependent clause in potentialis modality

(1) mwe ka be van bwe ta beleyo  
RE C.NRE POT go POT cut bamboo  
'He wanted to go to cut bamboo'

Bong5.002

- ◆ Expressing wishes with verb of saying

(1) na-m kie ka na-p tili  
1SG-RE say C.NRE 1SG-POT poke  
'I wanted to spear it' (a wild pig, no other person was present)

Jemis6.014

- ◆ Expressing disjunction, epistemic possibility

(1) mwe pwet mwe tangale dom be worosyee o worovyet  
RE stay RE reach year POT three or four  
'it stayed there for three or four years'

Bong5.010-011

- ◆ Conditionals – here: negated antecedent

(1) na-p van, ka saka na-t kuoli wobuong songavi, ka-m kiibele mo-nok  
1SG-POT go C.IR C.NEG 1SG-DST return day ten 2DU-RE know RE-finish  
'I go, and if I do not return in ten days, then you know it is finished (i.e. I am dead) JPaul.072

# Elicitation for subtle semantic phenomena



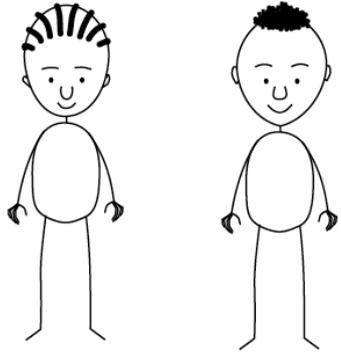
- ◆ Semantic phenomena of interest might be rare (e.g., potentialis negation  $-n < 2\%$  of all modal markers in spoken corpus)
- ◆ In the corpus of 2010 / 2011: no instance of a counterfactual conditional
- ◆ Requires elicitation, with a careful setup of the context:
  - Here is a coconut, here is a banana. You choose one of them.  
**In case you choose right, then you get a pig.**
- (1) ko-t pyak soro ka tu wuo, a-ko-p idi popatde-soo  
2SG-DST chose to C.RE DSTgood, FUT-2SG-POT take pig NSPEC-IDEF
  - The hearer chooses the banana. Unfortunately, this is not the winner.  
**If you had chosen the coconut, you would have received a pig.**
- (1) ka ko-t pyak ne vyoh, a-ko-t idi popat  
C.IR2SG-DST choose TR coconut, FUT-3SG-DST take pig
  - The combination FUT+DST did not occur so far in the corpus!
- ◆ Goal:
  - Have „standard“ contexts and examples to elicit such rare cases
  - if possible, across languages and speakers
  - STORYBOARDS!
    - Cf. Burton, Strang & Lisa Matthewson, Targeted construction storyboards in semantic fieldwork, In *Methodologies in Semantic Fieldwork*. M. Ryan Bochnak and Lisa Matthewson. Oxford University Press 2015.

# Example: Storyboard „Lafet wantaem“



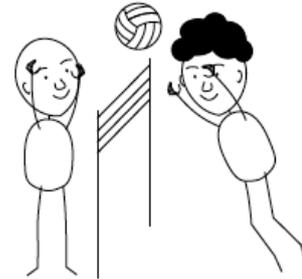
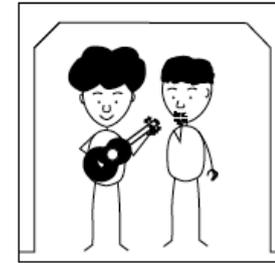
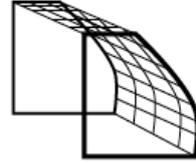
- ◆ Designed by Kilu von Prince
- ◆ Goal: Elicit past and future hypothetical (counterfactual) conditionals
- ◆ One of nine storyboards, with 11 (10) participants from Port Vato
- ◆ Procedure (not quite like the ideal):
  - Participants looked at the storyboards, I read the stories.
  - Participants should retell the stories
  - I found it helpful to read the text of each picture in Bislama, which then was translated in Daakie
  - Retelling was recorded
  - Transcription with ELAN
  - Analysis with Toolbox

# Storyboard „Lafet“



Hemia Sam, hemia Luk. Tufala i fren.

[1]



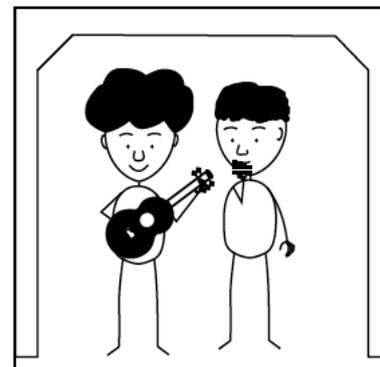
Long ples blong tufala i gat tri de blong lafet wetem ol pleple.

[2]



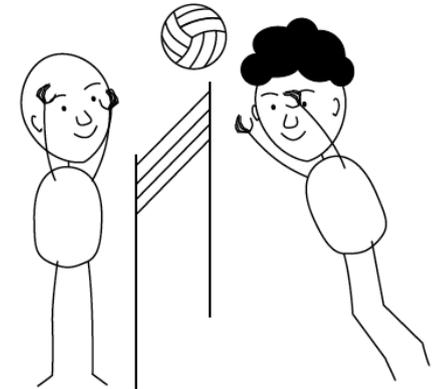
Long fes de i gat wan gem blong futbol.

[3]



Long seken de i gat wan konset.

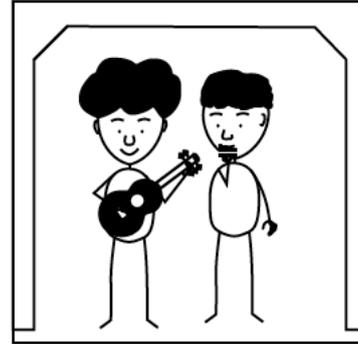
[4]



Long ted de i gat wan gem blong volibol.

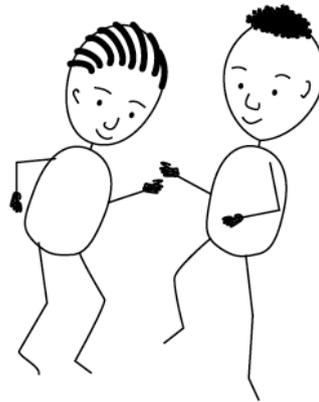
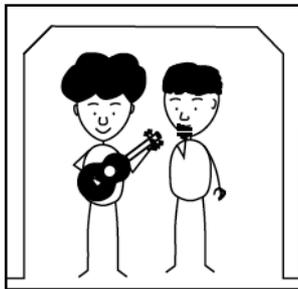
[5]

# Storyboard „Lafet“



De blong futbol i go finis. Tede hem i seken de blong lafet, we i gat konset.

[6]



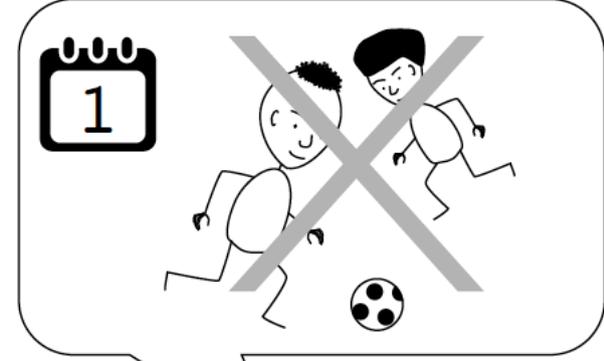
Luk mo Sam tufala i stap danis long konset ia. Tufala i stap tokbaot lafet.

[7]

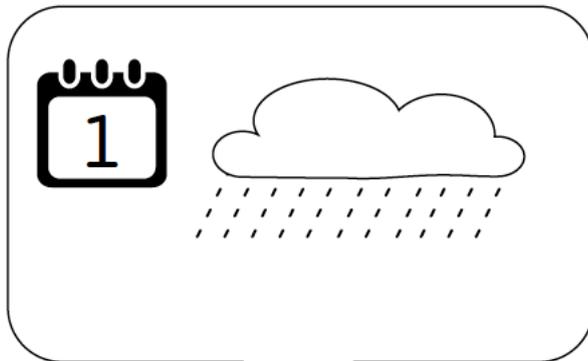
# Storyboard „Lafet“



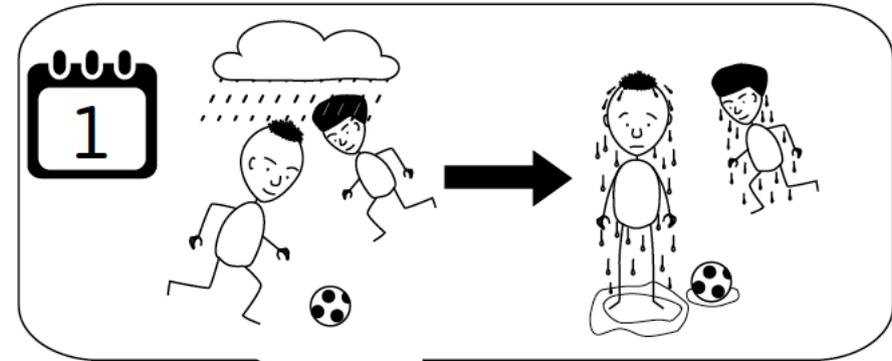
Nao ia, Sam i stap askem Luk, hem i se: “Yestede yu ple futbol?”  
[8]



Ale Luk hemi se: “No, yestede mi no bin ple.”  
[9]



Hemi se: “Yestede, ren i ren.”  
[10]



Hemi se: “Sapos mi bin ple futbol yestede, bae mi wetwet.”  
[11]

# Past counterfactual conditional



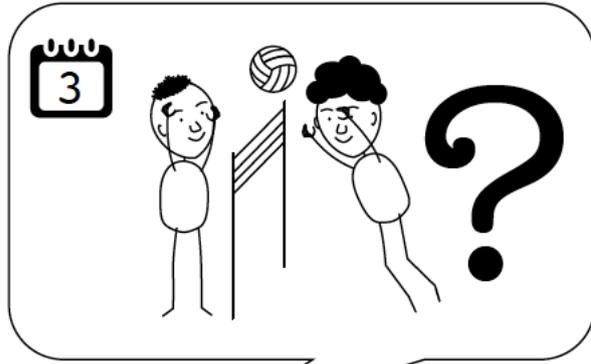
- (1) ka na-t(-p?) ta woup nunyo, a-na-t mihmih  
C.IR 1SG-DST (-POT?) kick ball yesterday FUT-1SG-DST be.wet Lafet-Abel.13
- (2) besówe ka na-t ta woup nunyo, a-na-t mihmih  
presumably C.IR 1SG-DST kick ball yesterday FUT-1SG-DST be.wet Lafet-Apia.13
- (3) ka na-t bwengbang ne woup nunyo, a-na-t mihmih ke na-t mihmih  
C.IR 1SG-DST play TR ball yesterday FUT-1SG-DST be.wet C.RE 1SG-DST be.wet  
Lafet-Bong.13
- (4) bili kaga nap... na-m bwengbang ne futbol nunyo, a-na-t mihmih  
time C.IR 1SG-POT 1SG-RE play TR football yesterday FUT-1SG-DST be.wet  
Lafet-Elvina.12
- (5) ka na-p ta woup nunyo, a-na-p mihmih  
C.IR 1SG-POT kick ball yesterday, FUT-1SG-RE be.wet Lafet-Ilsong.13
- (6) ka na-t ple futbol nunyo, a-na-t mihmih  
C.IR 1SG-DST play football yesterday FUT-1SG-DST be.wet Lafet-Jack.13
- (7) kaga na-t ple fubol nunyo, a-na-t mihmih  
C.IR 1SG-DST play football yesterday FUT-1SG-DST be.wet Lafet-Lissing.13
- (8) na-m deme ka na-t ta woup nunyo, a-na-t mihmih ke na-t mihmih  
1SG-RE think C.IR 1SG-DST kick ball yesterday FUT-1SG-DST be.wet C.RE 1SG-DST be.wet  
Lafet-Paul.13
- (9) ka ngyo na-t ple futbol nunyo, a-na-t yong  
C.IR 1SG 1SG-DST playfootball yesterday, FUT-1SG-DST wash Lafet-Tukun.13



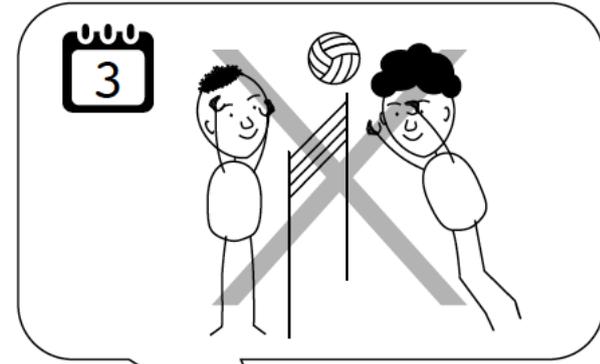
# Past counterfactual conditional

- ◆ There is a grammaticalized form / construction for past counterfactual conditionals:
- ◆ protasis:                      apodosis:  
[*ka*... DST ...] [... FUT-DST ...]
- ◆ When introduced by *ka*, distal has a modal meaning: state of affairs expressed by protasis cannot be realized (anymore)
- ◆ The future marker *a-* in the apodosis expresses a relative future with respect to the protasis
- ◆ The distal in the apodosis expresses that the state-of-affairs cannot be realized
- ◆ The corresponding „factual“ conditional (a past temporal clause, cf. German *als*) lacks the complementizer *ka*, can be expressed with distal, can be expressed with *bili* / *taem* + *realis*

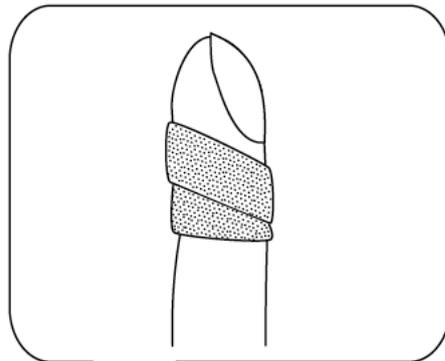
# Storyboard „Lafet“



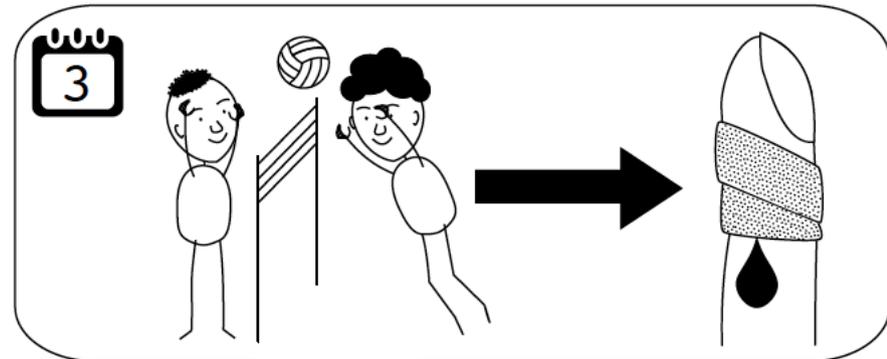
Afta Sam hemi askem se: "Ale, tumoro, bae yu ple volibol?"  
[12]



Ale Luk hemi se: "No, bae mi no ple."  
[13]



Hemi explenem: "Mi bin katem finga blong mi."  
[14]



Luk hemi se: "Sapos bae mi ple volibol tumoro, bae soa blong finga blong mi bae brok bakegen."  
[15]

# Future counterfactual conditional



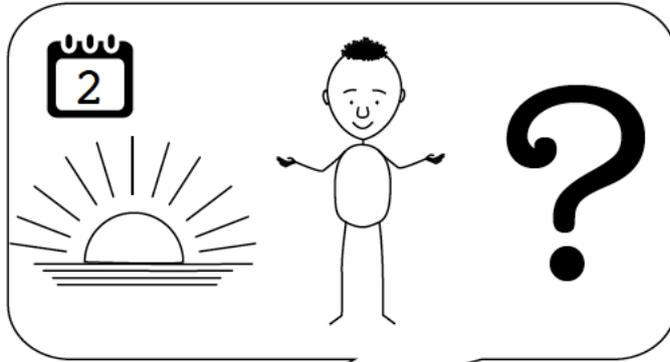
- (1) ka na-p ple volibol palen, s-ok manok ke mwe pwet lon baakon velo-k a-bwe léé teteh  
 C.IR 1SG-POT play v.b. tomorrow POSS-1SG wound C.RE RE stay LOC finger.TR hand-1SG FUT-POT break again  
 Lafet-Abel.18
- (2) ka na-p lebá volibol palen, na-m deme s-ok manok (...) a-bwe setop teteh  
 C.IR 1SG-POT slap v.b. tomorrow 1SG-RE think POSS-1SG wound FUT-POT break again  
 Lafet-Apia.18
- (3) ka na-m (?) na-p (?) bwengbang ne volibol palen, mwe ka, manok (...) a-bwe top teteh mon  
 C.IR 1SG-RE 1SG-POT play TR v.b. tomorrow, RE say wound FUT-POT break again also  
 Lafet-Bong.18
- (4) bili ka na-p bwengbang ne volibol palen, s-ok manok ne baakon velo-k a-bwe setop teteh  
 time C.IR 1SG-POT play TR v.b. tomorrow POSS-1SG wound TR finger.TR hand-1SG FUT-POT break again  
 Lafet-Elviral.17
- (5) ka na-p ple volibol palen, s-ok manok ke mwe pwet lon baakon velo-k a-bwe léé teteh  
 C.IR 1SG-POT play v.b. tomorrow POSS-1SG wound C.RE RE stay LOC finger.TR hand-1SG FUT-POT break again  
 Lafet-Abel.18
- (6) ka na-p bwengbang ne volibol palen, manok ne baakon velo-k a-bwe top teteh  
 C.IR 1SG-POT play TR v.b. tomorrow wound TR finger hand-1SG FUT-RE break again Lafet-Ilsong.18
- (7) ka na-p ple, ka na-p bwengbang palen, so-k manok, baakon vel-ok, a-bwe laa  
 C.IR 1SG-POT play C.IR 1SG-POT play tomorrow POSS-1SG wound finger.TR hand-1SG FUT-POT be.sore Lafet-Jack.15
- (8) kaga na-p ple volibol palen, s-ok manok a-bwe pwet baakon vel-ok, a-bwe seku  
 C.IR 1SG-POT play v.b. tomorrow POSS-1SG wound FUT-POT stay finger hand-1SG FUT-RE ? Lafet-Lissing.17
- (9) na-m deme a-na-p lebá woup palen, a s-ok manok a-bwe mee ta teteh  
 1SG-RE think FUT-1SG-POT slap ball tomorrow, and POSS-1SG wound FUT-POT come hack again Lafet-Paul.16
- (10) ka ngyo na-p ple volibol palen, baakon velo-k a-bwe laa teteh  
 C.IR 1SG-POT 1SG-POT play v.b. tomorrow finger.TR hand-1SG FUT-POT be.sore again Lafet-Tukun.18

# Future counterfactual conditional

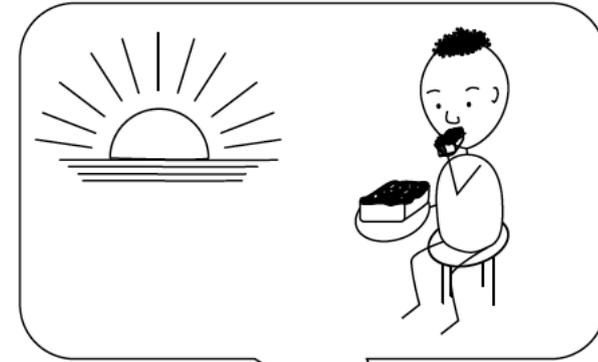


- ◆ There is a grammaticalized form / construction for future conditionals:
- ◆ protasis:                      apodosis:  
[*ka* ... POT ...] [... FUT-POT ...]
- ◆ Difference with future conditional not obvious, further research necessary; possibly [*bili ka* ... FUT-POT ...] [... FUT-POT ...]

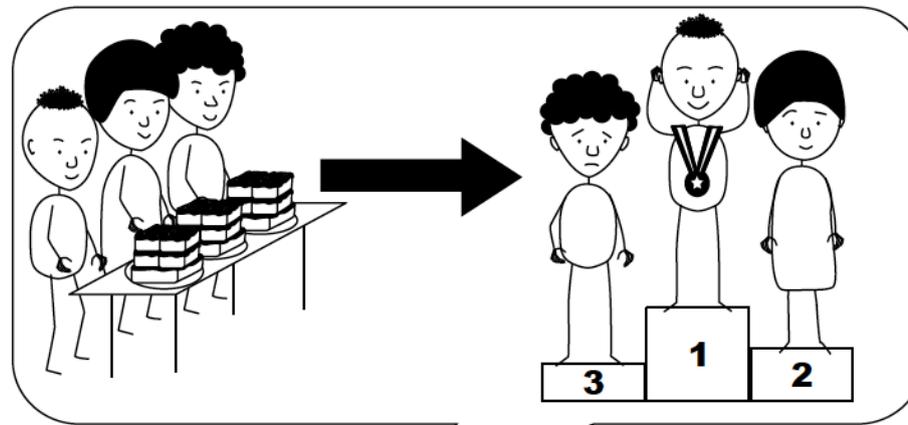
# Storyboard „Lafet“



Afta Sam hemi askem Luk: "Tede long naet bambae yu mekem wanem?"  
[16]



Luk hemi talem se: "Long naet bae mi kakae plante laplap!"  
[17]



Ale Sam hemi se: "Sapos i gat kompetesen blong kakae laplap, bae yu winim wantaem!"  
[18]

# Present (future?) counterfactual conditional



- (1) ka la-p koko byen en lók na-m deme nyaka-ko-p e mone tiri ke kevene  
C.IR3PL-POT compete for eat laplap 1SG-RE think 2SG FUT-2SG-POT COP in.front everyone  
Lafet-Abel.21
- (2) na-m deme kompetisen ka bwe pwet ne ka la-p ane lók,  
1SG-RE think competion C.IRFUT-RE stay TR C.IR 3PL-POT eat.TR laplap  
na-m deme nyakko-p save vanten ngyee toot  
1SG-RE think 2SG 2SG-POT exceed man 3PL 'bush' Lafet-Apia.23
- (3) ka ko-t gone kompetisen ne ka ko-t ane lók, a-ko-t winim sówe  
C.IR2SG-DST make kompetisen TR C.IR 2SG-DST eat.TR laplap FUT-2SG-DST win.TR what Lafet-Bong.22
- (4) na-m deme lon kompetisen a-ko-p ane lók, a-ko-p sóosave kevene  
1SG-RE think in competision FUT-2SG-POT eat.TR laplap FUT-2SG-POT surpass everyone Elvina
- (5) ka la-p gone koko-en byen en lók en, a-ko-p muo en gon  
C.IR3PL-POT make compete-NOM for eat laplap DEM FUT-2SG-POT first NOM FOC Lafet-Ilsong.22
- (6) ka la-p gone bwengbang ne en-en, na-m deme ka nyaka-ko-p win  
C.IR 3PL-POT make play TR eat-NOM 1SG-RE think C.IR 2SG FUT-2SG-POT win Lafet-Jack
- (7) kaga na kompetisen ne lók ka bwe pwet, a-ko-p winim  
C.IR? competition TR laplap C.RE POT stay FUT-2SG-POT win.TR Lafet-Lissing.21
- (8) ka la-p góóte byen en lók en, nyak nge a-ko-p ane bwe pwee  
C.IR 3PL-POT exceed in eat laplap DEM 2SG FOC FUT-2SG-POT eat.TR POT many LPaul.20
- (9) ka da-p kukuo byen a-dap en, ko-p win  
C.IR1 DU.INC-POT run for FUT-1DU.INC-POT eat 2SG-POT win Lafet-Tukun

# Present (future?) counterfactual conditionals



- ◆ Similar to future counterfactuals:
- ◆ protasis:                      apodosis:  
[*ka* ... POT ...] [... FUT-POT ...]
- ◆ But in the context, this is presumably a future counterfactual:  
'In case they will do a competition of eating laplap tonight,  
you would win'



# Conclusion

- ◆ Storyboards as a valuable addition to work with corpora
- ◆ Cannot replace work with corpora:
  - real usage data in spontaneous speech
  - different types of uses (narration, instruction, casual speech, public speech)
  - surprising usages
- ◆ But can complement corpus data:
  - rare constructions with controlled scenarios
  - data by multiple speakers, reduction of idiosyncracies
- ◆ But one should consider these points:
  - storyboard elicitation is (also) time-consuming
  - storyboards should be culturally adapted (no snow please), can be adapted from corpus data (narratives, e.g. banana story)
  - storyboards should not be too complex
  - storyboards should elicit a „paradigm“, e.g. past / present / future counterfactual conditionals, counterfactual and indicative conditionals, conditionals and temporal clauses
  - there are difficulties with eliciting storyboards in the field (other speakers present, some participants do not perform well)