

Modals in Khmer

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“Revised modal questionnaire for cross-linguistic use”)

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|--------------------------|--|
| Language name: | Khmer |
| ISO 639-3: | khm |
| Glottolog: | cent1989 |
| Consultant demographics: | A speaker of Siem Reap Khmer, who has lived in Scotland for 5-6 years. |
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BODY OF THE QUESTIONNAIRE

A. EPISTEMIC

[A1](#) Epistemic Necessity

Target: epistemic vs. deontic necessity.

(3) and (4) target only epistemic necessity.

(1) Ben goes swimming every day. Ben is not obliged or required to go swimming; it is just a habit of his. It is now time for Ben to be swimming... so **Ben must be swimming** (right now).

| | | |
|------------|------------------|------------------|
| <i>Ben</i> | <i>treuh.tai</i> | <i>ta-haitək</i> |
| Ben | MOD | CONT-swim |

(2) You know that John goes to school at 9am every day. You look at the clock and see it is 9am, therefore **John must be at school**.

| | | | |
|-------------|------------------|-------------|-------------|
| <i>John</i> | <i>treuh.tai</i> | <i>neuh</i> | <i>sala</i> |
| John | MOD | LOC | school |

(3) (Adapted from von Fintel & Gillies 2007). The math teacher says: There are 3 boxes. The ball is in box 1 or in box 2 or in box 3. It is not in 1. It is not in 2. So, **it [the ball] must be in 3 [the third box]**.

Bal treuh.tai neu.h.knong kroʔop ti bəy
 ball MOD inside box NUM three

(4) Tim is calling for his dog. The dog is not coming. Tim looks for the dog in the kitchen, bedroom, living room, (in every room in the house) but the dog is not in any of those rooms. Therefore, Tim concludes that **the dog must be outside**.

Chəkai treuh.tai neu.h.kral pətɛ:h
 dog MOD outside house

A2 Epistemic Weak Necessity

Target: epistemic weak necessity vs. deontic weak necessity

(6) is also compatible with testing for epistemic possibility.

(5) You know that Ann goes hiking from 7am until 8am every day. Most of the time Ann goes to the lake, but sometimes she goes to the mountains. It is now 7:30am and your friend asks where Ann is. You say to your friend: **Ann should be at the lake right now**.

Ann kuə.tai neu.h.ai tuən.le: neu.h.peə.nih
 Ann MOD at lake right.now

(6) (Imagine that) you used to live in Goa. You are not living in Goa anymore. You notice how different the weather is in the UK, where you live right now. You know that it often rains in Goa, especially in the afternoon, but not necessarily every day. Now it's the afternoon in Goa, so you think **it should be raining now** in Goa.

Kuə.tai pliəng neu.h.peə.niç neu.h.ai Goaa
 MOD rain now at Goa

(7) When the light is on at Mary's house, it usually means that she is home. You want to visit Mary. You walk past Mary's house and notice that the light is on. You think to yourself: **Mary should be at home**.

Mary kuə.tai neu.h.ai knong.teəh
 Mary MOD at home

A3 Epistemic Possibility

Target: epistemic possibility vs. epistemic necessity

(11) targets epistemic possibility vs. deontic possibility

(8) The teacher is not consistent. The students never know if he's going to come or not to teach class. Today, it's time to start class and the students are waiting again. **He might be coming to school today**.

Koat pro.hai [ciə] mawk salarien təngay.niç
 he MOD COMP? come school today

(9) Grace is looking for her necklace. She looks in her wardrobe and on top of the wardrobe. It's not there. She looks on top of the TV. It's not there. She looks in her backpack. It's not there. However, she has not checked two other places. She knows that sometimes her sister borrows her jewelry, and she hasn't checked her sister's wardrobe yet. She hasn't checked the car either. **Grace's necklace might be lost.**

Grace *kəsai.ko* *pro.hai* [ciə] bat.
Grace necklace MOD COMP? lose

(10) Charles is looking for his pet cat, but cannot find it. He knows that his cat is very elusive and mysterious. Charles tells his sister:

The cat may be inside. The cat may also be outside.¹

Cəma: *pro.hai ciə* *neuh.kang knong.* Cəma: *pro.hai ciə* *neuh.kang kral p^hong.dai.*
cat MOD COMP? inside house. Cat MOD COMP? PREP outside also

(11) Daniel lives in London and his friend has recently moved to New York. Daniel's parents told him that he is not allowed to go and see his friend in New York because it is too far away. You heard that Daniel is leaving London next week but you don't know where he will go. Daniel usually does things that he is not permitted to do. You think **Daniel might go to New York.**

Daniel *pro.hai ciə* *təy* NY
Daniel MOD COMP? go NY

Additional elicited sentence:

Ben *ac* *neuh pteh*
Ben MOD PREP home

"He may be at home." (also seems to be felicitous with epistemic context)

A4 Epistemic Non-necessity

(7') When the light is on at Mary's house, it usually means that she is home. You want to visit Mary. You walk past Mary's house and notice that the light is on. However, there is no car in the driveway. You think to yourself: **Mary may not be at home.**

Mary *pro.hai ciə* *mən-nəw* *pteh*
Mary MOD COMP? NEG-PREP home

¹ (The task is not only to translate these two sentences individually, but to keep in mind the sequencing i.e., these sentences are not to be used in isolation).

A5 Epistemic impossibility

(1') Ben goes swimming every day. Ben is not obliged or required to go swimming; it is just a habit of his. It is now time for Ben to be swimming... so **Ben can't be at home**.

Ben mən-ac neuh pteh
Ben NEG-MOD PREP home

Ben pro.hai mən neuh pteh
Ben MOD be not-at-home

(3') The math teacher says: There are 3 boxes. The ball is in box 1 or in box 2 or in box 3. We opened box 1, and the ball is there. There is only one ball. So, **it can't be in 3**.

Wiə mən-ac neuh.knong kroʔop ti bəy
it NEG-MOD be.in box NUM three

B. DEONTIC

B1 Deontic Necessity

Target: deontic necessity

(12) In Indonesia, the law states that when you ride a motorbike... **You must wear a helmet**.

Neʔ treuh.tai peaʔ muə ka-piə
you MOD wear CLF helmet

Neʔ cham.bac peaʔ muə ka-piə
you MOD wear CLF helmet

Neʔ treuh.kaa peaʔ muə ka-piə
you MOD wear CLF helmet

(13) You are going to visit your friend in the hospital. When you enter the hospital, you stop at the information desk to inquire what room your friend is in. But the woman at the information desk tells you that you can't visit your friend now because it's already 8pm. She says, "I'm sorry, the hospital regulations say that... **Visitors must leave by 6pm.**"

Neʔ suə.sok.tôk treuh.tai caʔ.cən mo:n mau pra.muəj
You visitor MOD leave by hour six

Neʔ suə.sok.tôk cham.bac caʔ.cən mo:n mau pra.muəj
 You visitor MOD leave by hour six

B2 Deontic Weak Necessity

Target: deontic weak necessity

(16) Your friend is having a birthday party. She tells you that she would like it if everyone invited wore formal clothes, but that it is not necessary to wear formal clothes to attend. You think to yourself... **I ought to wear formal clothes** to the party.

Kjong kuə.tai pe:ʔ khaw.al prə.pəj.ni
 I MOD wear clothes traditional

(17) Your friend tells you that the rules of the restaurant state that employees must wash their hands after going to the bathroom. You reply to your friend:... **Customers ought to wash their hands too!**

Kniəw kuə.tai liəŋ dai rop.bôh puəʔ.ke: pʰong.dai
 customer MOD wash hand POSS they COMMENT

(18) In England, it is recommended that face coverings be worn in stores, but it is not a legal requirement. You plan on going shopping, and you think to yourself... **I ought to wear a mask.**

Kjong kuə.tai peaʔ mas
 I MOD wear mask

B3 Deontic Possibility

Target: deontic possibility vs. deontic necessity

(22) and (23) target deontic possibility vs. circumstantial possibility

(19) The ferris wheel ride is only for children under 12 years of age. Martin is 10 years of age. It is not obligatory for Martin to go on the ride if he doesn't want to, but **Martin may ride the ferris wheel.**

Martin ac-ciç kon.trôʔ.vəl (baan)
 Martin MOD-ride ferris.wheel PRTCL²

* *Martin trəl-ciç kon.trôʔ.vəl*

?? *Martin pro-hai ciç kon.trôʔ.vəl*

Comment:

- Only epistemic

² Gloss for "particle"

(20) According to the rules of the hospital, only family members are allowed to enter the patient's room during visiting hours. You came to visit your sister after visiting hours. But the really nice nurse says...

You may enter.

Ne? *ac-choo* *tau* *baan*
 you **MOD**-come in PRTCL

Ne? *ac-choo* *tau*
 you **MOD**-come in

?? *Ne?* *trel-choo tau*

?? *Ne?* *pro-hai choo tau baan*

Comment:

- Again seems to have an epistemic sense.

(21) You are making plans for tomorrow night to meet up with your friend. Your friend says:

You can stay overnight or you can go home.

You can stay overnight. You can also go home.

Ne? *ac* *sna?neuh* *penhmujup* *reu* *ne?* *ac* *teu* *pteh*
 you **MOD** stay overnight or you **MOD** go home

(22) Alice fell down the stairs and broke her arm a while ago. She hasn't been lifting her baby while her arm was hurt because the baby is heavy. Finally, she recovered, and she went to the doctor for a final check-up. The doctor gave her permission to lift her baby. But when she got home after her visit to the doctor, Alice found that she is still too weak to lift her baby, although according to the doctor's orders

Alice can lift her baby.

Alice *ac* *lə:g* *koon* *rokbôh nieng* *baan*
 Alice **MOD** pick.up baby POSS woman PRTCL

(23) Beth's teacher told her class that it was okay to go swimming, but Beth doesn't want to because she has never learnt to swim! However, as far as the teacher's directions are concerned...

Beth can go swimming.

Ben *ac* *teuh* *haitək* *baan*
 Ben **MOD** go swim PRTCL

B4 Deontic non-necessity

(16') Your friend is having a birthday party. She tells you that she would like it if everyone invited wore formal clothes, but that it is not necessary to wear formal clothes to attend. You think to yourself... I ought to wear formal clothes to the party, but **I don't have to wear nice clothes.**

Knjom mən-cham.bac peʔ koʔal səʔat
I NEG-MOD wear clothes nice

(18') In England, it is recommended that face coverings be worn in stores, but it is not a legal requirement. You plan on going shopping, and you think to yourself... I ought to wear a face covering, but **I don't have to wear a mask.**

knjom mən-chambac peʔ mah (tej)
I NEG-MOD wear mask (NEG)

B5 Deontic impossibility

(12') In Indonesia, the law states that **you mustn't ride a motorbike without a helmet. (Must not ride motorbike without helmet)**

*Mən-ac ciç moto: döykhəmiən muə kapiə (*baan/tej)*
NEG-MOD ride motorbike without CLF helmet (TEJ)

(13') You are going to visit your friend in the hospital. When you enter the hospital, you stop at the information desk to inquire what room your friend is in. But the woman at the information desk tells you that you can't visit your friend now because it's already 8pm. She says, "I'm sorry, the hospital regulations say that... **Visitors mustn't stay after 6pm.**"

neʔ suə.sok.tōk [mən-ac // mən-treuh] snaʔneuh [ləs // hoəh] (pi)maĩ pra.muəi (tej)
visitor NEG-MOD stay [after // past] HOUR six TEJ

C. TELEOLOGICAL

C1 Teleological Necessity

Target: teleological necessity

(24) There is only one main road from Location A to Location B... If you go from Location A to Location B, **you have to take this road.**

Ne? *trəuh.tai* *teuh* *pleuh* *niç*
 you **MOD** go road this

Ne? *cham.bac* *teuh* *pleuh* *niç*
 you **MOD** go road this

(25) Scotland are playing in a tournament. In order to advance... **Scotland has to beat England.**

Scotland *trəuh.tai* *chəneh England*
 Scotland **MOD** win England

Scotland *cham.bac* *chəneh England*
 Scotland **MOD** win England

(26) The best pizza in town is sold at Gino's. You have invited your sister for dinner, and you decide to order pizza. You tell your sister: **We have to order from Gino's** to eat the best pizza.

Jeung *trəuh.tai* *kamông* *pi* *Gino*
 we **MOD** order from Gino

Jeung *cham.bac* *kamông* *pi* *Gino*
 we **MOD** order from Gino

C2 Teleological Weak Necessity

Target: teleological weak necessity

(27) There are different ways to get to the shopping centre. You can go by foot, by bus, or drive yourself. You are not sure how to go. Your friend advises you to get the bus because it is cheaper... To get to the shopping centre, **you should take the bus.**

Ne? *kuətai* *chəreuh.reuh* *teuh.tam* *lan.krong*
 you **MOD** selection.from.multiple.options take bus

(28) There are 3 ways to get to the seaside: a direct road, taking smaller roads, or a combination. Your friend says that taking the smaller roads is very beautiful. According to him, **you should take the smaller roads.**

Ne? *kuətai* *chəreuh.reuh* *pleuh* *toj*
 you **MOD** select.from.multiple.options road smaller

(29) Your friend wants to buy a new shirt for her job at a reasonable price. There are many nice shops for professional clothes in the area, and you work at one of them and think it offers good prices. You say: **You should go to my shop to buy a new shirt.**

Ne? *kuətai* *teuh* *hang* *rop.bôh* *kənjôm* *teuh.tinh* *al* *təməj*
 you **MOD** go buy POSS I buy shirt new

C3 Teleological Possibility

Target: teleological possibility

(30) There are two different ways to get to the mountains from the city centre. Way 1 is inland and way 2 goes around via the coast. Both take around 7 hours by bus and they are equally beautiful... **You can take the first way.**

Ne? *ac-chəreuh.reuh* *pleuh* *ti* *muəj*
 you **MOD-select.from.multiple.options** road NUM one

(31) There are two swimming pools in the town with the exact same design and both are an equal distance from your house. You plan to go swimming later on but have no specific desire for which pool to go to. You tell your sister... **We can go to the swimming pool to the west.**

Jeung *ac* *teuh* *anghaitək* *khang.ləc*
 we **MOD** go swimming.pool to.the.west

(32) Your friend wants to buy a new shirt for her job. Since there are many nice shops for professional clothes in the area, you say... **You can go to this shop.**

Ne? *ac* *teuh.tinh* *neuh* *hang* *niç*
 you **MOD** go.buy in shop this

C4 Teleological non-necessity

(27') There are different ways to get to the shopping centre. You can go by foot, by bus, or drive yourself. You are not sure how to go. Your friend advises you to get the bus because it is cheaper... To get to the shopping centre, you should take the bus, but **you don't need to take the bus.**

Ne? *mən-chambac* *chiç* *lankrong* *te:*
 you **NEG-MOD** take bus TE

C5 Teleological impossibility

(24') There is only one main road from Location A to Location B... If you are going from Location A to Location B, **you can't take another road.**

Ne? *mən-ac* *teuh* *pleuh* *pəsejn* *te:*
 you **NEG-MOD** go road other TE

(25') Team A are playing in a tournament. In order to advance... **Team A can't lose to Team B.**

Grup A mən-ac canh grup B te:
team A NEG-MOD lose.to team B TE

D. CIRCUMSTANTIAL

D1 Circumstantial Necessity

Target: circumstantial necessity; (35) with inanimate subject

(33) You are on a bus. You have not had a chance to go to the toilet for 4 hours, and your bladder is full. You text your friend // think to yourself... **I have to pee** so badly!

knjom (chambac) treuh(.kaa) teuh bəntupteuk
I MOD go bathroom/toilet

Comment: chambac is optional but preferred

chambac alone

knjom treuh.tai teuh bəntupteuk

(34) In the middle of a conversation, you feel a sneeze coming on... Excuse me! **I have to sneeze.**

knjom treuh.kaa konʔtas
I MOD sneeze

knjom treuh.tai konʔtas

- This is grammatical but dispreferred

(35) Water is entering a pipe, which has two outputs: the left output and the right output. You block the left output so that **the water must come out from the right side // output.**

Teuk treuh(.tai) cənh mauk kang sədam
water MOD come.out from side right

D3 Circumstantial Possibility

Target: (36) & (37) circumstantial possibility vs. epistemic possibility

(38) circumstantial possibility

(39) & (40) circumstantial possibility vs. deontic possibility

(36) Ani came to visit a small island in the Philippines. She noticed that the climate and many of the plants are similar to some places she visited in Indonesia, where *duku* trees grow. The temperature is the same, the rainfall is the same, the types of rocks and the soil are the same. But when she looked around, she didn't find any *duku* trees anywhere. But because the temperature, rainfall, and soil are the same, she thinks that... **duku trees can grow here.**

Dam duku ac-dam neuh tih niç baan
tree duku MOD-grow in place this PRTCL

(37) Amy was in Italy and learned how to make traditional Italian pasta. Now Amy is back in the country she lives in, and she wants to make traditional pasta, but the right kind of ingredients are not sold where she lives. So, she is unhappy because she wanted to show her parents how to make traditional pasta... **Amy can make (traditional Italian) pasta** (but she does not have the ingredients).

Amy ac-təveuh (məhop) pasta baan
Amy MOD-make (CLF) pasta PRTCL

(38) Ben was in a motorbike accident 3 weeks ago, and he sprained his ankle. Ben is able to walk now. However, the doctor told Ben that he is not allowed to walk until 5 weeks after the accident... **Ben can walk now.**

Ben ac-da: baan (e-leuh niç)
Ben MOD-walk PRTCL (now)

(39) Paul is quite old now, but he is still strong. His children are scared he will hurt his back if he does any intense labour, so they told him that he is forbidden to lift heavy things. But one day, his friend Rob asked to help him in the field, because Rob knows Paul is still strong. So when Rob saw a large rock that had to be moved, he asked Paul straightaway for help (but he didn't tell Paul's children!). Rob knew that... **Paul can lift that rock.**

Paul ac-leug kəmo: nup baan
Paul MOD-lift rock that PRTCL

(40) The travel vans have a limit of 13 people by law. But the drivers don't care, and stop for more than 13 people. Also, the vans are bigger than you think... **Travel vans can fit 20 people.**

Van ac-da? muʔnus baan məpəj ne?
van MOD-fit people PRTCL twenty CLF

D4. Circumstantial non-necessity

(44) Given the way this volcano has been active in the past 100 years, it is likely but not certain that it will erupt in the next 5 years. **The volcano doesn't have to erupt.**

| | | |
|--------------------------------|-------------|--------------|
| <i>Ph_nom.pleunk mən-treuh</i> | <i>baan</i> | <i>pətuħ</i> |
| volcano | NEG-MOD | PRTCL erupt |

D5. Circumstantial impossibility

(34') Ben was in a motorbike accident 3 weeks ago. He sprained his ankle and is in a lot of pain.

Ben can't walk.

| | | | | |
|------------|---------------|------------|--------------|-----------|
| <i>Ben</i> | <i>mən-ac</i> | <i>da?</i> | <i>(ban)</i> | <i>te</i> |
| Ben | NEG-MOD | walk | PRTCL | TE |

(35') Water is entering a pipe, which has two outputs: the left output and the right output. But, you know that the left output is blocked. And the water is coming out from the right output. You say: **the water can't come out of the left side.**

| | | | | | |
|------------|---------------|------------|-------------|-------------|---------------|
| <i>Tək</i> | <i>mən-ac</i> | <i>cən</i> | <i>mauk</i> | <i>kang</i> | <i>chwenh</i> |
| water | NEG-MOD | come.out | from | side | left |

(36') Ani came to visit a small Caribbean island. She noticed that the climate and many of the plants are very different to the places she visited in Indonesia, where *duku* trees grow. The types of rocks and the soil are different as well. She doesn't know whether or not there are *duku* trees on the island. But because the temperature, rainfall, and soil are so different, she thinks that... ***duku* trees can't grow here.**

| | | | | | | | |
|------------|-------------|---------------|---------------------|-------------|------------|------------|------------|
| <i>Dam</i> | <i>duku</i> | <i>mən-ac</i> | <i>[dam // doh]</i> | <i>neuh</i> | <i>tih</i> | <i>nih</i> | <i>te:</i> |
| tree | duku | NEG-MOD | grow | LOC | place | here | TE |

E. BOULETIC

E1 Bouletic Necessity

Target: bouletic necessity

(42) targets bouletic necessity vs. deontic necessity

(41) You love handbags. You see a really nice handbag in a window and you say... **I must buy it.**

| | | |
|--------------|----------------------------|-------------|
| <i>knjom</i> | <i>treuh(.tai // ?kaa)</i> | <i>tenh</i> |
| I | MOD | buy |

Comment:

- *treuh.tai* is preferred
- *treuh.kaa* would be suitable if you are saying to the shop attendant "I would like to buy this"

(42) Your friend asks you what you want to do today since it is a holiday and you both are not required to do any tasks today. However, you absolutely want to see this new movie that everyone is talking about- You say... **I must go to the cinema.**

knjom treuh.tai teuh meuh kon
I **MOD** go see cinema

(43) A daughter tells her parent... **My friend wants to come visit me.**

pu?.ma? knjom.cjong maok lenh knjom
friend I.POSS **want** come visit

Table of Khmer Modals

| MODALS | EPISTEMIC | ROOT/NON-EPISTEMIC | | | |
|---------------------------|---------------------------------------|---------------------------------|---------------------|---|------------------------|
| | | PARTICIPANT-EXTERNAL | | PARTICIPANT-INTERNAL | |
| | <u>Epistemic</u> | <u>Deontic</u> | <u>Teleological</u> | <u>Circumstantial</u> | <u>Bouletic</u> |
| Necessity | treuhtai | treuhtai chambac treuhkaa | treuhtai chambac | treuhkaa (participant internal) treuhtai | treuhtai maok(want) |
| Weak Necessity | kuətai | kuətai | kuətai | ... | n/a |
| Possibility | prohai | ac | ac | ac | n/a |
| Non-necessit y | pro.hai + ciəa(COMP) + mən(NEG) | mən chambac | mən chambac | (mən treuh) – possible misinterpretatio n of context | |
| Impossibility | mən + ac | mən ac mən treuh | mən ac | mən ac | |