#### **MODAL QUESTIONNAIRE for CROSS-LINGUISTIC USE**

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#### Notes for using this questionnaire.

- This questionnaire is designed to be a fieldwork tool to help establish a modal system in a given language, looking at the lexically specification of modal expressions. Does a given modal expression lexically specify both modal force and modal flavour? for only modal force? for only modal flavour? for neither modal force or modal flavour? Of course, it is best to pair this method with other fieldwork tools such as elicitation, interviews, naturalistic recordings, or storyboards (totemfieldstoryboards.org), etc. to corroborate the results of the questionnaire.
- This questionnaire presents a number of contexts that target one cross-section of modal force (e.g. necessity, weak necessity, or possibility) and modal flavour (e.g. plain epistemic, deontic, circumstantial, teleological). It does not test for evidential, future, or bouletic modals.
- I have created most of the contexts; some contexts are adapted from the literature on modality. These are indicated below.
- The advantage of using a questionnaire is to obtain results from a larger, diverse set of speakers that is representative of a dialect or language as a whole (contrary to elicitation, which is usually focused on one or two speakers, and has its own advantages).
- The questionnaire contexts are given in English; depending on your fieldwork situation, it will be necessary to translate the contexts into the object language. It is very important that the translation is culturally specific to the language being studied (see e.g., Matthewson 2004). As this questionnaire was originally designed for Javanese (Austronesian), you will have to change a number of lexical items (proper names, times, etc.) to make the contexts culturally relevant. If you have translated the contexts, it is also important to conduct pilot tests beforehand to ensure that the main points of the contexts were not lost in translation.

#### Versatility of questionnaires

- The following are examples of the ways in which this questionnaire can be used.
  - $\circ$  elicitation with only one or a small group of speakers
  - translation exercise (cf. Dahl 1985 'Tense and Aspect')
  - o fill-in-the-blank (this requires knowledge of the syntax of the object language)
  - o truth-value judgment task
  - felicity judgment task
    - semi-forced choice
    - forced choice
    - rating task
- I have implemented this questionnaire as a semi-forced task and a rating task (see Vander Klok 2012 for details).
- Following standard practices in experimental methodology, it is best to have fillers and practice examples in the implementation of the questionnaire.
- Some contexts might not be as clean as possible; I would be very happy to hear of other construals, additional contexts, or comments on your experience in using these contexts.

#### **TEST ITEMS**

- Each context is intended to target one cross-section of modality and be contrasted with one type of modality or modal force. The target cross-section is indicated in square brackets at the beginning of the context. Some cross-sections have more example contexts than others; the number is arbitrary.
- The target sentence is indicated in brackets at the end of the context with the modal expression in capital letters; where appropriate for English, I have indicated the infelicitous English modal expression.

### A. NECESSITY DEONTIC VS. NECESSITY EPISTEMIC

(1) [Target: necessity deontic] In Indonesia, the law states that when you ride a motor bike... (You MUST wear a helmet)

(2) [Target: necessity deontic] (Adapted from von Fintel 2006, von Fintel & Gillies 2007) You are going to visit your friend in the hospital. When you enter into 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.)

(3) [Target: necessity epistemic] Ramadon routinely has coffee at Lisa's warung everyday. Even if he's sick, he doesn't miss a day! It's not obligatory for Ramadon; he just goes for coffee there all the time. It's coffee time now, so...(Ramadon MUST be at Lisa's warung.)

(4) [Target: necessity epistemic] (from Rullmann et al 2008:321) Context: You have a headache that won't go away, so you go to the doctor. All the tests show negative. So, (it MUST just be from tension/stress.)

(5) [Target: necessity epistemic] You know that Mida goes to the market every morning after *subuh* (first prayer)/dawn, even though she is not required to. Right now, you wonder where Mida is. You check the clock: it's 5:30am. (Mida MUST be at the market)

### B. NECESSITY CIRCUMSTANTIAL VS. NECESSITY EPISTEMIC

(6) [Target: necessity circumstantial] You are on a bus to Yogya. You have not had a chance to go to the toilet for 6 hours, and your bladder is full. You text your friend: (I HAVE to pee so badly!)

(7) [Target: necessity circumstantial] Normally at ngaji (Holy Qu'ran reading), it is time to be serious. But then we saw bu Yeni fell asleep in a funny position /with her mouth wide open. (Our friend Bu Siti HAD to laugh.)

(8) [Target: necessity circumstantial] (adapted from Kratzer 1991, von Fintel 2006, von Fintel & Gillies 2007) Excuse me! I have to sneeze.

(9) [Target: necessity epistemic] Ahmad has an allergy to dust, and it's unfortunate for him when he visits his friend Mohammad because Mohammad's house is so dirty. You know that Ahmad is visiting there right now. (Ahmad must be sneezing / #Ahmad has to sneeze)

## C. POSSIBILITY EPISTEMIC VS. NECESSITY EPISTEMIC

(10) [Target: possibility epistemic] Professor Farihi is not consistent. The students never know if he's going to come or not to give a lecture. Today, it's time to start class and the students are waiting again. (He MIGHT be coming to the university today.)

(11) [Target: necessity epistemic] Mas Hakim is calling for his cat. The cat is not coming. Mas Hakim looks for the cat in the kitchen, but the cat is not there. Then he looks in the living room, and in the bathroom, and in his sister's bedroom. The cat is not in any of those rooms. He looks all over the house again, but the cat is nowhere to be found in the house. Mas Hakim thinks...(The cat must not be in the house.)

(12) [Target: possibility epistemic] Dewi is looking for her necklace. She's not sure if she lost it or if it is still somewhere in the house because she doesn't remember the last time that she wore the 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. Wait! She didn't check her sister's wardrobe yet...(Dewi's necklace MIGHT / #must be lost.)

(13) [Target: necessity epistemic] (adapted from von Fintel & Gillies 2007; see also Peterson 2010:129 on evidential component and logical inference) The math teacher says: The ball is in A or in B or in C. It is not in A. It is not in B. So, (it must be in C)

## D. NECESSITY DEONTIC VS. WEAK NECESSITY DEONTIC

(14) [Target: weak necessity deontic] Rima is not yet used to riding a motorbike, she just started learning to ride 1 month ago. Her friend suggests that/gives her advice to: (Rima should drive slowly.)

(15) [Target: necessity deontic] When Agus went to the hospital, he was confused at first because he tried to get a doctor's appointment, but he couldn't! But then, the nice lady at the information desk explained that he didn't yet have a hospital ID card to be a patient here, and if you don't have one, there are no exceptions. This is because the regulations at the hospital state: (Patients must/#should have a hospital ID card to use the hospital services.)

## E. POSSIBILITY DEONTIC VS. NECESSITY DEONTIC

(16) [Target: possibility deontic] The ferris wheel ride at WBL is only for children under 15 years old. Tutus is 12 years old. It is not obligatory for Tutus to go on the ride if she doesn't want to. (Kana MAY/#must ride the ferris wheel)

(17) [Target: possibility deontic] 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, but it was after visiting hours. But the really nice nurse says...(You MAY/#MUST enter.)

(18) [Target: necessity deontic] (adapted from Horne 1961:269) A pound of rice usually lasts for three days, and there are two pounds left now. I don't have time to go to the market because it's far away... (So I HAVE to make the remaining rice last for six more days.)

(19) [Target: possibility deontic] (adapted from Rullmann et al 2008) You are going for a job interview and the receptionist outside the office tells you that.... (You can leave your bag there, or you can bring with you when you go in.)

(20) [Target: possibility deontic] (format from Rullmann et al 2008) You are making plans for tomorrow night to get together with your friend. Your friend says: (You can stay overnight or you can go home.)

### F. NECESSITY VS. WEAK NECESSITY TELEOLOGICAL

(21) [Target: weak necessity teleological] (adapted from von Fintel & Iatridou 2008) There are different ways to get to the market in Blimbing. You can go by horse-carriage, rickshaw, public van, or just go by motorcycle by yourself. Cak Patrus and also Yu Dur think that the best way is to go is by horse-carriage, because it is the most traditional, and also the cheapest way. So, according to Cak Patrus and Yu Dur,...(To get to the market in Blimbing, you SHOULD take a dokar.)

(22) [Target: weak necessity teleological] (adapted from von Fintel & Iatridou 2008) There are three ways to get to Yogya: the Semarang Route, the Bojonegero route, and the Surabaya route. Cak Khuluq says that the Bojonegero route is the best. So according to him, (If you go to Yogya, you SHOULD take the Bojonegero route.)

(23) [Target: necessity teleological] (adapted from von Fintel & Iatridou 2008) There is only one main road, Deandles, along the northern coast of Java to get to Semarang from Paciran. (If you go to Semarang from Paciran, you HAVE TO/ #SHOULD take this road)

### G. WEAK NECESS. DEONTIC VS. WEAK NECESS. EPISTEMIC

(24) [Target: weak necessity deontic] Waiq is the oldest child, and he is not yet married. His younger brother, Hakim, wants to get married. But according to tradition,... (the oldest OUGHT TO marry first.)

(25) [Target: weak necessity deontic] Diki's parents are really concerned about how well he does in school. They want him to succeed in all the subjects. But Diki wants to play football all the time instead of doing schoolwork. His parents order him: (You OUGHT TO finish your homework before playing football.)

(26) [Target: weak necessity epistemic] You know that Pak Sari works from 8am – 12pm every morning. He usually doesn't miss a day of work. It is now 9am. You say: (Pak Sari SHOULD be at the office now.)

(27) [Target: weak necessity epistemic] You are not living in Yogya anymore. You notice how different it is with the weather in Malang, where you live right now. You know that in Yogya it's the rainy season now, and there's often rain every afternoon. Now it's 3pm., so...(It SHOULD be raining now in Yogya.

(28) [Target: weak necessity epistemic] When the light is on at Bu Alisma's house, it is usually a sign that she is home. You want to go visit Bu Alisma, and walking by her house, you see that the light is on right now. You think to yourself: (Bu Alisma SHOULD / #OUGHT be at home.)

## H. POSSIBILITY DEONTIC VS. POSSIBILITY EPISTEMIC

(29) [Target: possibility deontic] Dewi's parents are very strict, but they realize that Dewi is getting older and needs more space. They know that Dewi has not ever dated someone yet, but they know that she likes this one guy from school. They decided that: (Dewi MAY go out on dates.)

(30) [Target: possibility epistemic] Amin's parents told him that he is not allowed to go to see his friend in Jakarta because it is too far away. You heard that Amin is leaving Paciran next week, but you don't know where he will go. Amin is a daring type of guy that usually does things that he is not permitted to do. You think: (Amin MAY go to Jakarta. (might, #allow)

## I. POSSIBILITY CIRCUMSTANTIAL VS. POSS. EPISTEMIC

(31) [Target: possibility circumstantial] (Adapted from Kratzer 1991) Context: Jennifer came to visit a small island in Indonesia. She noticed that the climate and many of the plants are similar to some places she visited in Papua. For example, 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 tempature, rainfall, and soil are the same, she thinks that: (Duku can/#might grow here)

(32) [Target: possibility circumstantial] Jozi knows how to make dudoh menir. Now she is back in Canada, and she wants to make dudoh menir, but the right kind of ingredients are not sold where she lives! So she's unhappy because she wanted to show her parents how to make dudoh menir. (Jozina can / #might make dudoh menir.)

# J. POSSIBILITY DEONTIC VS. POSS. CIRCUMSTANTIAL

(33) [Target: possibility deontic] Ria 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 has 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, Ria found that she is still too weak to lift her baby. (Ria CAN lift her baby)

(34) [Target: possibility deontic] Kana's teacher told her class that it was okay to go swimming, but Kana doesn't want to because she cannot swim! (Kana CAN go swimming)

(35) [Target: possibility circumstantial] Budi was in a motorbike accident 3 weeks ago, and he sprained his ankle. Budi is able to walk now. However, the doctor told Budi that he is not allowed to walk until 5 weeks after the accident. (Budi CAN walk now)

(36) [Target: possibility circumstantial] (adapted from Kratzer 1991:640) Pak Diki is quite old now, but he is still strong. His children are scared that 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 Diki's friend Roshid asked to help him in the field, because Roshid knows Diki is still strong. So when Roshid saw a large rock that had to be moved, he asked Diki straightaway for help (but he didn't tell Diki's children!). Roshid knew that... (Diki CAN lift that rock)

(37) [Target: possibility circumstantial] 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.)

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