# Modals in Mandarin Chinese

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(created for the UKRI FLF project "Logic in Semantic Universals" based on Vander Klok 2021 "Revised modal questionnaire for cross-linguistic use")

Language name: Mandarin Chinese

ISO 639-3: cmn

Glottolog: mand1415

Consultant demographics: A male speaker of Mandarin Chinese from the Guangxi area.

Elicitation dates: 8 Jun 2022

Note: In addition, this questionnaire has been reviewed by a native speaker specialist

#### **BODY OF THE QUESTIONNAIRE**

#### A. EPISTEMIC

#### A1 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 go swimming... so **Ben MUST be swimming (right now)**.

```
本 现在 一定 在 游泳

Ben xianzai yiding zai youyong

Ben now MOD at 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**.

```
约翰 一定 在 学校
Yuehan yiding zai xuexiao
John MOD at school
```

(3) 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. Adapted from von Fintel & Gillies 2007.

(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 thinks/concludes that the dog MUST not be in the house.** 

| 蒂姆   | 认为     | 那只       | 狗   | 一定     | 不在      | 房子     | 里面     |
|------|--------|----------|-----|--------|---------|--------|--------|
| Dimu | renwei | i na zhi | gou | yiding | buzai   | fangzi | limian |
| Tim  | think  | that CL  | dog | MOD    | no more | house  | in     |

#### A2 Epistemic Weak Necessity

(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. You say to your friend: **Ann SHOULD be at the lake right now.** 

| 安娜   | 应该      | 现在      | 在   | 湖边       |
|------|---------|---------|-----|----------|
| Anna | yinggai | xianzai | zai | hubian   |
| Anna | MOD     | now     | at  | lakeside |

(6) You are not living in Location C anymore. You notice how different the weather is in the UK, where you live right now. You know that it often rains in Location C, especially in the afternoon, but not necessarily every day. Now it's the afternoon, so you think it **SHOULD be raining now in Location C.\*** maybe try and make this a familiar location for consultants? i.e. location in their home country.

(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/there is a pair of sandals by the door that could be someone else's. You think to yourself: **Mary SHOULD be at home, but it's not certain.** 

#### A3 Epistemic Possibility

#### Target: epistemic possibility vs. epistemic necessity

- (11) targets epistemic possibility vs. deontic possibility
- (8) The teacher is unreliable. His students never know whether he is going to come to class. Sometimes he turns up and sometimes he doesn't. It is now two hours before his class is meant to begin, and his students do not know whether he will turn up. They think...

He MIGHT / #must be coming to school today.

#### Not tested

Reviewer's suggestion:

```
学校
他
         今天
                                    可能
                                                     在
                     有
        iintian
                                                           xuexiao
Ta
                    vou
                                  keneng
                                                 zai
Не
       today
                   have
                                 MOD
                                                          school.
                                               at
He might be at school today.
```

(9) Grace is looking for her necklace. She can't remember where she last saw it. She has checked her jewelry box, but it is not there. She thinks she might have worn it in the car, but she hasn't checked the car yet.

Grace's necklace MIGHT / #must be lost.

#### Not tested.

Reviewer's suggestion:

Grace's necklace might be lost.

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

The cat MAY be inside. The cat MAY also be outside.

```
那只
            猫
                   (有) 可能
                              在
                                    里面
                                           11
                                                  可能 在
                                                              外面
Nazhi
                 you keneng zai
                                  limain ye
                                               keneng zai
                                                           waimian
            mao
that.one
                  have MOD at
                                   inside also
                                               MOD at
                                                           outside
             cat
```

(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 MAY / MIGHT / #is allowed to go to New York**.

丹尼尔可能去纽约DanierkenengquniuyueDanielMODgoNew York

#### **B. DEONTIC**

#### **B1** Deontic Necessity

(12) In Indonesia, the law states that when you ride a motor bike... You MUST wear a helmet

你 必须 要 戴 头盔 Ni bixu yao dai toukui you MOD MOD wear 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."

游客 一定 要 在 6点 之前 离开 Fangke yiding yao zai 6dian zhiqian likai visitors MOD MOD at 6pm before leave

(14) A pound/(kilogram) of rice usually lasts for three days, and there are two pounds/(kg) left now. I don't have time to go to the market because it's (too) far away... So I HAVE to live off the remaining rice for six days.

把 剩下的 米饭 保持 至少 我 必须要 6天 Wo ha shengxiade mifan baochi zhishao 6tian hixu vao leftover I MOD MOD BA rice keep at least 6days

Comment: Here we have a modal concord *bixu* (strong necessity) + *yao* (unspecified necessity)

### **B2** 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.** 

```
我
      应该
            要
                         正式的
                                      服装
                                                  去
                                                        派对
Wo
                  chuan zhengshide
                                    fuzhuang
                                                      paidui
     yinggai yao
                                                qu
I
     MOD MOD
                        formal
                                    clothing
                  wear
                                                      party
                                                go
```

Modal concord between yinggai and yao

(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:... Non-employees OUGHT TO wash their hands too!

```
非 雇员 也 应该 要 洗手
Fei guyuan ye yinggai yao xishou
non- employee also MOD MOD handwashing
```

Modal concord between yinggai and yao

(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.** 

```
我 应该 要 戴 口罩
Wo yinggai yao dai kouzhao
I MOD MOD wear face.mask
```

Modal concord between yinggai and yao

### **B3** Deontic 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. Martin MAY / #must ride the ferris wheel.

```
马丁 可以 坐 摩天轮

Mading can zuo motianlun

Martin MOD ride ferris.wheel
```

(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, but it was after visiting hours. But the really nice/kind nurse says... You MAY / #must enter.

```
你 可以 进入
Ni keyi jinru
you MOD enter
```

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

You can stay overnight and you can go home.

```
你 可以 过夜 或者 回家
Ni keyi guoye huozhe huijia
you MOD stay.over or go.home
```

You can stay overnight. You can also go home.

```
你
      可以
            过夜。
                         你
                                쎉
                                      可以
                                             回家
Ni
      kevi
            guove.
                        ni
                                      kevi
                                            huijia.
                              ye
you
      MOD
             stay.over
                          you
                                also
                                      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 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, Alice found that she is still too weak to lift her baby... Alice CAN lift her baby.

```
爱丽丝 可以 举起 她的 宝宝
Ailisi keyi juqi tade baobao
Alice MOD lift her baby
```

- (23) Beth's teacher told her class that it was okay to go swimming, but Beth doesn't want to because she cannot swim! B CAN go swimming.
- i.e. **Beth COULD go swimming, Beth is ALLOWED/PERMITTED to go swimming**, but she can't swim.

Reviewer's comment: this sentence sounds weird.

#### C. TELEOLOGICAL

#### C1 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.

```
你
      必须
                          这条
             要
                   走
Ni
      bixu
            yao
                         zhetiao lu
                   zou
you
      MOD
            MOD
                   go
                         this
                                road
```

Modal concord between bixu and yao

(25) Team A are playing in a tournament/competition/championship. In order to advance... **Team A HAS TO beat Team B.** 

```
BL
             必须
                   要
                          打赢
                                       BL
A
                                 В
A
                         daving B
                                      dui
      dui
            bixu
                   vao
A
      team
            MOD MOD
                          win
                                В
                                      team
```

Modal concord between bixu and yao

(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**.

```
要
                   Ж
                                      下单
                                                  最好的
我们 必须
                         基诺
                                那里
                                                               披萨
Women bixu
           vao
                  cong
                        jinuo
                               nali
                                     xiadan
                                                  zuihaode
                                                              pisa
      MOD MOD from
we
                         Gino
                               there
                                      place.order
                                                   the.best
                                                               pizza
```

Modal concord between bixu and yao

#### C2 Teleological Weak Necessity

(27) There are different ways to get to Location X. You can go by foot, by tram/horse-carriage/truck/train/bus/public van, or drive/motorcycle/bicycle yourself. You are not sure how to go. Person Z advises you to take Y method of transport because it is traditional... To get to Location X, you SHOULD take Y method of transport.

```
你
      应该
            要
                   用
                         交通
                                      Y
                                            去
                                                  到达
                                                        X
                                                              地点
                                      Y
Ni
     yinggai yao
                        jiaotong
                                                  daoda X
                                                             didian
                  yong
     MOD MOD
                        transportation
                                           go
                                                 get.to X
                                                             place
you
                  use
                                    Y
```

Modal concord between yinggai and yao

(28) There are 3 ways to get to Location C. Person A says that way 3 is very beautiful. According to him, you SHOULD take way 3.

```
你 应该 坐 三 号线
Ni yinggai zuo san haoxian
you MOD travel.by three number.line
```

(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.

```
你
     应该
             去
                   我的
                        店里
                                     新的 裙子
                               买
Ni
     yinggai qu
                  wode dianli mai
                                   xinde qunzi
     MOD
                       shop
                            buy
                                        shirt
you
                 my
                                  new
            go
```

## C3 Teleological Possibility

(30) There are two different ways to get to Location A from Location B. Both take around 7 hours by bus and they are equally beautiful... You CAN take way 1.

```
你可以坐 — 号线
Ni keyi zuo yi haoxian
you MOD travel.by one line.number
```

(31) There are two swimming pools in the town with the exact same design and both are 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.

```
我们 可以 去 西边的 游泳池

Women keyi qu xibiande youyongchi
we MOD go west swimming.pool
```

(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 X's boutique.

```
你 可以 去 X的 精品店
Ni keyi qu X de jingpindian
you MOD go X DE boutique
```

#### D. CIRCUMSTANTIAL

#### **D1 Circumstantial Necessity**

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

```
我 一定 要 去 尿尿
Wo yiding yao qu niaoniao
I MOD MOD go pee
```

Reviewer's comment: here 必须 bixu or 不得不 budebu sounds more natural than 一定要 yiding yao.

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

```
我
      不得不
                  打喷嚏
Wo
     budebu
                 dapenti
     MOD
I
                sneeze
我
      得
              打个喷嚏
Wo
              da.CL.penti
     dei
     MOD
                sneeze
```

#### D3 Circumstantial Possibility

(37) 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. 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 / #might grow here.

```
    Duku
    树
    可以
    种
    在
    这里

    Duku shu
    keyi
    zhong zai
    zheli

    duku
    tree
    MOD
    plant
    at
    here
```

(38) X knows how to make Y. Now X is back in the country she lives in, and she wants to make Y, 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 Y... X CAN / #might make Y.

```
X 可以 做 Y
X keyi zuo Y
X MOD make Y
```

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

```
B 现在 可以 走路 了
B xianzai keyi zoulu le
B now MOD walk SFP
```

(40) 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.

```
P可以举起那个石头PkeyijuqinageshitouPMODliftthatrock
```

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

```
旅游 巴士 可以 搭载 20 人
Lvyou bashi keyi dazai 20 ren
travel bus MOD carry 20 people
```

#### E. BOULETIC

#### **E1** Bouletic Necessity

(42) You love handbags. You see a really nice handbag in a window and you say... I WANT/NEED TO buy it.

```
我
                  买
                        它
      需要
            去
Wo
     xuyao
           qu
                 mai
                       ta
I
     MOD
            go
                 buy
我
      必须
                           它
                买到
Wo
      bixu
               buy.arrive
                          ta
I
      MOD
                  buy
                        it
                           È
我
                买下
     必须
```

Wo bixu buy.down ta
I MOD buy it

(43) 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. You say... I WANT to go to the cinema.

我 想 去 电影院
Wo xiang qu dianyingyuan
I MOD go cinema

(44) A daughter tells her parent... My friend WANTS to come visit me.

的 朋友 想 拜访 我 我 来 Wo lai de pengyou xiang baifang wo I DE friend **MOD** come visit me

# Table of Chinese Modals:

| MODALS            | EPISTEMIC  | ROOT/NON-EPISTEMIC   |  |  |  |  |
|-------------------|--|--|--|--|--|--|
|                   |  |  | PANT-EXTER<br>NAL  | PARTICIPANT-INTERNAL   |  |  |
|                   | Epistemic  | Deontic  | Teleological   | Circumstantial   | Bouletic   |  |
| Necessity         | yiding (一定) biran (必然; modal adverb) juedui (绝对, adverb, not necessarily modal origin) %bixu (perhaps possible in certain varieties) | bixu<br>(必须)<br>yao (要)<br>dei 得<br>(colloqui<br>al,<br>perhaps<br>dialectal<br>more<br>prevalen<br>t in<br>Northern<br>China) | bixu<br>(必须)<br>yao (要)<br>dei 得<br>(colloquial,<br>perhaps<br>dialectal<br>more<br>prevalent in<br>Northern<br>China) | bixu yao (要)  dei 得 (colloquial, perhaps dialectal more prevalent in Northern China)  budebu (不得不) | bixu yao (要) dei 得 (colloquia l, perhaps dialectal more prevalent in Northern China) yiding yao/yidin g dei xuyao (需要) xiang (想) |  |
| Weak<br>Necessity | yinggai<br>(应该)  | yinggai<br>(应该)  | yinggai<br>(应该)  | -  | -  |  |
|                   | Dagai<br>(大概,lit.<br>Big<br>likelihood,  | yao<br>dei<br>(colloqui<br>al,   | yao<br>dei<br>(colloquial,<br>dialectal)   |  |  |  |

|             | likely/proba<br>ble)                 | dialectal   |   |                    |   |
|-------------|--------------------------------------|---|---|--------------------|---|
| Possibility | keneng (可能)<br>能)<br>yexu (也许adverb) | keyi<br>(可以)<br>neng<br>(能)<br>(only<br>possible<br>in<br>non-upw<br>ard<br>entailing | keyi (可以)  neng (能) (only possible in non-upward entailing context? E.g., polarQ and negation are fine) | keyi (可以) neng (能) | - |
|             |                                      | context?  |   |                    |   |

#### Modal concord

According to Liu (2015), modal concord is possible when two modal elements match in flavors (both epistemic or both non-epistemic), and their forces are compatible.

Here, compatible forces are the following combinations:

- Strong Necessity + SN -> SN
- Weak Necessity + WN -> WN
- SN/WN + Unspecific N -> SN/WN
- Possibility + Possibility -> Possibility

Here, unspecified necessities are yao and dei.

According to Liu (2015), a concord reading of two possibility modals is available and preferred when both are of the same modal type

### References

- Liu, T. 2015. Modal concord in Mandarin. MA thesis [University of British Columbia]