

# Modals in Turkish

Wataru Uegaki, James Engels, Ella Hannon, Anne Mucha, & Fred Whibley

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

Language name: Turkish  
ISO 639-3: tur  
Glottolog: nucl1301  
Consultant demographics: A male speaker of Modern Standard Turkish from Ankara.  
Elicitation dates: 5 July 2022, 18 July 2022, 20 July 2022

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

*Ben şu an-da yüz-üyor ol-**malı***

Ben dem moment-loc swim-pres be-MOD

Ben must be swimming right now.

*Ben yüz-üyor.*

Ben swim-ipfv.pres

Ben is swimming/swims.

*#Ben yüz-er.*

Ben swim-AOR

a) If X happens, Ben will swim.

b) Ben habitually swims.

*#Ben yüz-**meli**.*

ma = me

Ben swim-MOD

Ben is under the obligation to swim.

*Ben'in bu saat-te yüz-üyor ol-ma-sı **lazım/gerek**.*

Ben-gen this time-loc swim.ipfv be-inf-3s.poss **lazım.cop.3s/gerek**

Ben is supposed to be swimming right now. ("be supposed to" a natural translation that comes to mind)

(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.

*Ben okul-da ol-**malı***

Ben school-loc be-MOD

Ben must be at school. (preferred)

*Ben okul-da-**dır***

Ben school-loc-DIR

Ben is likely at school.

*Ben okul-da ol-acak(-**tır**)*

dır = tır

Ben school-loc be-fut-**DIR**

Ben will be at school. (more formal/literary/...)

(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.

*C'de ol-**malı(-dır)***

C-loc be-MOD-DIR

Comment: Preference for the "-DIR"less version. Intuition: "-DIR" somehow weakens the statement and this clashes with the certainty that the ball is in C.

*Top-un C'de ol-ma-sı **şart**.*

Ball-gen C.loc be-nmz-3s.poss **ŞART.cop.3s**

The ball has to be in C.

The consultant's comment: I tend to accept 'şart' in an epistemic necessity context. I feel like its deontic use might be more common? Another speaker tells me that he doesn't like it as an epistemic.

*Topun C'de olması **lazım/gerek**.*

Comments: The consultant thinks this is possible. Perhaps a slight dispreference for 'gerek.'

Consultant's comment: *Dir* may be weakening the claim or indicating that it is an inference.

(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.

(Therefore...)

*Ev-de ol-ma-malı.*

House-loc be-NEG-MOD

It must be that the dog is not in the house.

*Ev-de değil-dir*

House-loc predicate.negation-DIR

The dog is probably not in the house.

Comment: DIR is weaker than MA. And therefore it is dispreferred in (4).

## 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.

*Ann şu an-da göl-de ol-malı-dir / #ol-abil-ir (be-ABIL-AOR)*

Ann dem moment-loc lake-loc be-mod-dir / be-abil-aor

Ann must probably be at the lake right now. / #Ann might be at the lake right now.

*Ann şu anda göl-de olmalı* (slightly dispreferred to *olmalıdır*)

Ann must be at the lake right now.

*Ann şu an-da göl-de-dir.*

Ann dem moment-loc lake-loc-DIR

Ann is probably at the 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, so you think it SHOULD be raining now in Goa.

*Şu an-da yağmur yağıyor#(-dur)*

Dem moment-loc rain precipitate-pres-DIR

It must be raining right now. (Without 'dir': it is raining right now.)

*Şu an-da yağmur yağıyor ol-malı(-dur)*

Dem moment-loc rain precipitate-pres be-MOD-DIR

It must be raining right now.

Comment: The consultant slightly prefers the first sentence over the second one.

#*Şu an-da Goa'da yağmur yağıyor ol-ma=sı şart.*

DEM moment Goa.loc rain precipitate be.nmz.3s ŞART.cop.3s

Intended: It should be raining right now in Goa.

Available: It's necessarily raining in Goa right now.

Comment: 'şart' feels too strong here.

(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 SHOULD be at home, but it's not certain.

*Ev-de ol-malıdır.*

House-loc be-MOD-DIR

Comment: Just "-malı" feels too strong in this context.

*Ev-de-dir (herhalde).*

house-loc-DIR probably

### A3 Epistemic 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 / #must be coming to school today.

*Okul-a hâlâ gel-ebil-ir*

School-dat still come-ABIL-AOR

*Okul-a gel-me-yebil-ir.*

School come-neg-MOD-aor

He might not come.

the morpheme "ABIL" (citation form: -(y)AbIl) can also be used to express abilitative modality

(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. Wait! She didn't check her sister's wardrobe yet. Grace's necklace MIGHT / #must be lost.

*Grace'in kolye-si kayb-ol-muş ol-abil-ir.*

Grace-gen necklace-poss.3s lost-be-perf be-MOD-aor

Grace's necklace might have gotten 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.

(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).

*Kedi içeride ol-abil-ir, (ya da) dışarıda ol-abil-ir.*

Cat inside be-MOD-aor or outside be-MOD-aor.

*Kedi içeride de ol-abil-ir dışarıda da ol-abili-r.*

*Cat inside conj be-abil-aor outside conj be-abil-aor*

(*da...da* is conjunction )

(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.

*Daniel New York'a gid-iyor ol-abil-ir.*

Daniel New York-dat go-ipfv be-MOD-aor

*Daniel'in New York'a gid-iyor ol-ma-sı mümkün.*

Daniel-gen new york-dat go-ipfv be-NMZ-poss.3s possible.COP.PRES

It's possible that Daniel is going to New York.

This periphrastic construction using *mümkün* can be used in the other A3 contexts as well (with syntactic adjustments)

*Benim gidiyor ol-ma-m mümkün*

1s-gen go be-NMZ-1s.poss possible

## 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 should be at home, but it is NOT NECESSARILY THE CASE THAT she is / she MAY NOT be / it is NOT CERTAIN that she is.

*Mary'nin ev-de ol-ması {?gerek, lazım} değil.*

Mary-gen house-loc be-MOD-3s.poss necessary.cop.pres.3s neg.cop.3.pres

It's not the case that she must be at home.

### Comments:

- Negation on top of modality (*gerek, lazım*) seems to disfavor the epistemic reading. (The deontic reading comes to mind for the above example.)

- The reason "gerek" might be odd here is because it's not a copular predicate, but "degil" is copular negation.

(7'') An additional context provided by the consultant: Alice and me, we're lost. Alice points to a location on a map and says "we're here!." But I disagree:

*Hayır. Orada ol-ma-mız şart değil.*

No there be-inf-1p SART neg.cop.pres.3

No. We're not necessarily there.

Some additional tests to consider whether the relevant modal elements (*gerek* and *şart*) are necessity:

*#Mary evde olmalı ama evde olması gerek değil*

Mary must be at home but it's not necessarily the case that she must be at home.

Contradiction.

Comment: Actually this is independently degraded because ?*gerek değil* is degraded

*#Mary'nin evde olması gerek ama evde olmamalı.*

Mary must be at home but it's not the case that she must be at home...

Comment: This is pretty weird when both modals are read as epistemic. I'm pushed to repair the contradiction by reading at least one of them as deontic. (This should suffice to suggest that "gerek" is necessity, while avoiding the negation problem.)

*Mary evde olmalı ama evde olması şart değil*

Mary home.loc be.MA.aor but home.loc be.ma.3s.poss condition neg.cop.3.pres

Not contradictory/less contradictory than above.

"Mary should be at home, but I leave open the possibility that she is not" (the second part with *şart* seems to weaken the force of MA in the first conjunct)

*Mary evde olabilir ama evde olması şart değil.*

Mary home.loc be.abil.aor but home.loc be.ma.3s.poss condition neg.cop.3.pres

Mary could be at home but it's not necessarily the case that she's at home.

## 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 ev-de ol-ama-z.*

Ben home-loc be-ABIL.neg-aor.3s

Ben can't be at home.

Comment: This is the negation of "*ol-abil-ir*" be-ABIL-aor. The modal suffix ABIL is contained in *ola.ma-z*. *Ol-ma-z* is "be-neg-aor" without the modal. So the "a" in "olamaz" is coming from the modal

suffix (Note also that the shape of agreement is also conditioned by negation... *gel-ir* “come-aor.3s” but *gel-me-z*, “come-neg-aor.3s”.)

The negation is quite transparently there in the “ma” part. Compare with a regular negated sentence:

*Ben koş-ma-dı-m.*  
I run-neg-pst-1s  
I didn't run.

The -a part contributes the modal meaning, but the form doesn't correspond to a modal that occurs standalone.

(3') The math teacher says: The ball is in A or in B or in C. We opened box A, and the ball is there. There is only one ball. So, it MUST NOT / CAN'T be in C.

*Top C'de olamaz.*  
Ball C-loc be-abil.neg-aor  
The ball can't be in C.

*Topun C'de olması mümkün değil.*  
Ball.gen C.loc be.nmz.3s MÜMKÜN NEG  
The ball can't be in C.

## B. DEONTIC

### B1 Deontic Necessity

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

*Motosiklet-e bin-er-ken, kask tak-ma-n*                      ***gerek/lazım.***  
Motorcycle-dat ride-aor-when helmet wear-inf-2s              gerek.cop.3s

# ...*kask tak-malı-sın*  
Helmet wear-MOD-2s  
(the modal MA seems infelicitous in this context)

Because I'm in Indonesia, and the law says that one has to wear a helmet on a motorcycle...

#*Kask takmalıyım.*  
Helmet wear-MOD-with-1s  
Comment: feels too weak in the context

*Kask takmam **gerek/lazım**.*

Helmet wear-INF-1s gerek/lazım

(13) 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."

*Ziyaretçilerin saat 6'dan önce ayrıl-ma-ları **lazım/gerek**.*

Visitor-pl-gen time 6-abl before leave-INF-PL.3s lazım/gerek [maybe preference for 'lazım']

Visitors must leave before 6.

*Ziyaretçiler saat 6'dan önce ayrıl-**ma**-lı-lar.*

Visitors time 6-abl before leave-MOD-with-pl

(seems slightly unnatural in the context; but can imagine someone uttering this in 13; can be an announcement over the PA when it is close to 6pm)

## 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.

*Belki şık giyin-meli-y-im.*

Maybe fancy dress-MOD-with-cop-1s

Maybe I should dress up.

*Şık giyinsem iyi ol-**abili**-r.*

Fancy dress-cond-1s good be-MOD-aor

It might be good if I dressed up.

*şık giyinmeliyim*

I have to dress up.

(perhaps natural in 16 but feels like the speaker is imposing a requirement that is stronger than what the host required to themselves)

(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!

*Burada çalış-ma-yan-lar da ellerini yıka-**malı**-lar.*

Here work-neg-subj.rel-pl too their.hands wash-MOD-pl

People who don't work here should wash their hands too.

[imposing requirement that may be stronger than what the actual requirement is]



*Burada çalış-ma-yan-lar da ellerini yıka-sa-lar iyi ol-ur.*

Here work-neg-rel-pl too their.hands wash-cond-3pl good be-aor

It would be good if people who don't work here also washed their hands. [weaker than the first]

(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.

*Maske tak-sa-m iyi olur.*

Mask wear-cond-1s good be-aor

It would be good if I wore a mask.

*Maske tak-malı-yım.*

Mask wear-MOD-1s

I have to wear a 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. Martin MAY / #must ride the ferris wheel.

*Martin dönmedolab-a bin-ebil-ir.*

Martin ferris.wheel-dat get.on-MOD-aor.3s

Martin may go on the ferris wheel.

*#Martin'in dönmedolab-a bin-me-si mümkün.*

Martin.gen ferris.wheel.dat get.on-nmz-3s MÜMKÜN

Intended: Martin is allowed to go on the ferris wheel.

Comment: Can't be used to report on what's allowed, I don't think. Let's assume that he's allowed to go on the ferris wheel, but he's unable to for some other reason, maybe his legs are injured or something.

Then, the sentence is false.

(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 nurse says... You MAY / #must enter.

*Gir-ebil-ir-sin*

Enter-MOD-aor-2s

You can enter.

(21) You are making plans for tomorrow night to meet up with your friend. Your friend says: You can stay overnight and you can go home.

You can stay overnight. You can also go home.

# You ought to stay overnight and you ought to go home.

# You have to stay overnight and you have to go home.

Not tested

(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.

Not tested

(23) Beth's teacher told her class that it was okay to go swimming, but Beth doesn't want to because she cannot swim! Beth CAN go swimming.

i.e. Beth COULD go swimming, Beth is ALLOWED/PERMITTED to go swimming, but she can't swim.

Not tested

## 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 / NEEDN'T wear formal clothes.

Şık giyin-me-m {***lazım*** değil. / ??***gerek*** değil}

Fancy dress-nmz-1s lazım neg

*gerek* is dispreferred under the *değil* negation. But:

(Benim) şık giyin-me-m-e {***gerek*** yok/\****lazım*** yok}

1s.gen Fancy dress-nmz-1s-dat gerek neg.existential

I don't have to dress up.

Şık giyin-me-m-e ?***gerek*** var/\****lazım*** var.

Fancy dress-nmz-1s-dat gerek pos.existential

I have to dress up.

(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 / NEEDN'T.

Not tested.

## B5 Deontic impossibility

(12') In Indonesia, the law states that when you ride a motor bike... You MUST NOT / MAY NOT ride a motor bike without a helmet.

*Motosiklete kask-sız bin-il-m-iyor.*

Motorcycle-loc helmet-without get.on-pass.neg-pres

One does not ride a motorcycle without a helmet.

*Motosiklete kasksız bin-emez-sin.*

Motorcycle-loc helmet.without get.on-abil.neg.aor-2s

You're not allowed to ride a motorcycle without a helmet.

*#Motosiklete kasksız binmen **mümkün** değil.*

Motorcycle-loc helmet.without get.on.nmz.2s MÜMKÜN NEG

Intended: You're not allowed to ride a motorcycle without a helmet.

Available: It is not possible (circumstantially?) for you to ride a motorcycle without a helmet. <- Sentence false under this interpretation.

(13') 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 NOT / MAY NOT stay after 6pm."

Not tested

## 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.

*A'dan B'ye git-mek ist[e]-iyor-sa-n...*

A-abl B-dat go-inf want-pres-cond-2s

If you want to go from A to B

*Bu yol-u kullan-ma-n **gerek/lazım**.*

This road-acc use-nmz-2s gerek/lazım

You have to take this road.

*#Bu yol-u kullan-malı-sın.*

This road-acc use-MOD-2s [feels like a suggestion]

You should take this road. / I recommend that you take this road.

Comment: feels too weak in the context

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

Not tested.

(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.

Not tested.

## C2 Teleological Weak Necessity

(27) There are different ways to get to the shopping centre. 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. Your friend advises you to get the bus because it is cheaper... To get to the shopping centre, you SHOULD take the bus.

*Daha ucuz ol-duğ-u için...*

More cheap be-nmz-3s because

*Bence otobüs ile git-meli-sin*

According.to.me bus with go-MOD-2s  
you should take the bus.

*otobüs ile git-meli-sin*

bus with go-MOD-with-2s  
you should take the bus.

Comment: Both of these sentences are OK in context.

*otobüs ile git-me-n #gerek/#lazım*

Bus with go-nmz-2s gerek/lazım

Comment: This is too strong.

*Bence otobüs ile git-me-n #gerek/lazım*

I.think bus with go-nmz-2s gerek/lazım

Comments:

- Here: it could be that the force of *lazım* is hedged by *bence*

- However, the contrast between “gerek” and “lazim” isn’t that crisp. They can both be hedged by “bence.”

(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 go via the smaller roads.

Not tested.

(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.

Not tested.

### C3 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 way 1.

*Birinci yol-dan gid-ebil-ir-sin*

First road-abl go-MOD-aor-2s

You can take road 1.

*#Birinci yoldan gitmen mümkün.*

First road.abl go.nmz.2s MÜMKÜN

Intended: You can take road 1.

Comment: No teleological possibility reading.

(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.

Not tested.

(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 boutique.

Not tested.

## C4 Teleological non-necessity

(27') There are different ways to get to the shopping centre. 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. 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 / NEEDN'T do so.

Tabi ki de...

But of course

*Otobüse binmene **gerek** yok.*

Bus-dat ride-inf-2s-dat gerek neg.exist

*?Otobüse binmen **lazım** değil.*

Bus-dat ride-inf-2s lazim neg

*Otobüse binmelisin diye bir şey yok.*

Bus-dat ride-MOD-2s C one thing neg.exist

Lit. "There's no such thing as 'you have to ride the bus.'"

*Otobüse binebilirim diye bir şey yok.*

Bus-dat ride-MOD-aor-1s C one thing neg.exist

"There's no such thing as 'I'm allowed to ride the bus.'"

I don't allow you to ride the bus.

## 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.

*A'dan B'ye gidiyorsan...*

A-from B-dat go-pres-cond

If you're going from A to B

*Başka bir yoldan gidemezsin.*

Other one road-abl go-ABIL.neg.aor-2s

You can't take another road

(25') Team A are playing in a tournament/competition/championship. In order to advance... Team A CAN'T lose to Team B.

Not tested.

## D. CIRCUMSTANTIAL

### D1 Circumstantial Necessity

(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... I HAVE to pee so badly!

*Çok fena işemem **lazım/gerek***

Very badly pee-nmz-1s لازم/gerek

*#Çok fena işemeliyim.*

Very badly pee-MOD-1s

Comment: feels too weak in the context

*İşemeliyim.*

Oh... I have to pee. ~ External perspective on self.

Context: You're babysitting a child, you don't know what the markers of a full bladder is. You guess:

*İşemelisin galiba*

(maybe ok)

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

Not tested.

(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 must come out from the right output.

*Suyun zaten sağ taraf-tan çıkması **lazım/gerek***

Water.gen already right side.abl exit-nmz-3s لازم/gerek

*#Su zaten sağ taraftan çıkmalı*

Water already right side.abl exit-MOD-with

### D3 Circumstantial 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. 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 ağac-ı burada yetiş**ebilir**.*

Duku tree-noun.compound here grow-MOD-aor

Duku trees can grow here.

*#Burada duku ağac-ı yetişiyor ol**abilir**.*

Here duku tree-NC grow-ipfv be-abil-aor

Duku trees could be growing here.

(37) Amy knows 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 / #might make traditional Italian pasta (but she does not have the ingredients).

Comment: For some reason, *mümkün* is not possible in the Italian food context, but acceptable in the 'lift the piano' context.

*#Amy'nin italyan yemeği yapması **mümkün**.*

Amy.gen italian food make.inf.3s MÜMKÜN

Intended: Amy's able to make Italian food.

*Amy'nin piyanoyu kaldırması **mümkün**.*

Amy.gen piano.acc lift.inf.3s MÜMKÜN

Amy can lift the piano.

Amy geleneksel italyan yemek-ler-in-i yap**abiliyor**.

Amy traditional Italian food-pl-NC-acc make.abil.pres

Amy can make traditional Italian foods.

*#Amy geleneksel italyan yemeklerini yapıyor ol**abilir**.*

Amy traditional Italian foods.acc make.ipfv be..abil.pres

Amy could be making traditional Italian foods.

(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.

Not tested.

(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 P straightaway for help (but he didn't tell Paul's children!). Rob knew that... Paul CAN lift that rock.



Not tested.

(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.

Not tested.

#### 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.

*Bu volkan beş sene içinde patlayabilir.*

This volcano five years within explode-MOD-aor.3s

This volcano could explode within five years.

*Bu volkanın beş sene içinde patlaması **mümkün***

This volcano-gen five years within explode-inf-3s.poss possible.cop.3s

It's possible that this volcano might explode within five years.

#### D5. Circumstantial impossibility

(34') In the middle of a conversation, you feel a sneeze coming on... Excuse me! I **CAN'T** help sneezing!

*Kendi-m-i hapşır-mak-tan tut-am[a]-ıyor-um.* (cf. the positive 'tut-abil-iyor-um')

Self-1s-acc sneeze-inf-abl hold-abil.neg-pres-1s

I can't keep myself from sneezing.

*#Hapşır-ma-ma-m **mümkün** değil.*

Sneeze-neg-nmz-1s possible neg

It's not possible for me not to sneeze.

(The first sentence implies that the subject is trying to not sneeze, the second one doesn't. It's more like an objective impossibility to not sneeze.)

(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 from the left output.

*Su soldan çıkamaz (zaten).*

Water left-abl exit-MOD.neg.aor anyway

The water can't come out of the left anyway.

*Su-yun[?] soldan çıkması **mümkün** değil.*

Water-gen left-MOD exit.inf.3s possible neg

It's not possible for the water to come out of the left.

‡irregular genitive

## E. BOULETIC

### E1 Bouletic Necessity

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

*Bu-nu (mutlaka) al-ma-m lazım/gerek.*

this-acc definitely buy-nmz-1s lazım/gerek

I need to buy this.

*Bu-nu (mutlaka) al-malı-yım.*

This-acc definitely buy-MOD-1s

I need to buy this.

[I think “malı” isn’t that bad here?]

(42) Your friend asks you what you desire/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.

*Sinema-ya git-mek ist[e]-iyor-um.*

Cinema-dat go-inf want-pres-1s

I want to go to the movies.

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

*Arkadaş-ım ben-i gör-me-ye gel-mek ist-iyor.*

Friend-my 1s-acc see-inf-dat come-inf want-pres.3s

My friend wants to come to see me.

MODALS	EPISTEMIC	ROOT/NON-EPISTEMIC			
		PARTICIPANT-EXTERNAL		PARTICIPANT-INTERNAL	
	Epistemic	Deontic	Teleological	Circumstantial	Bouletic
Necessity	-malı- suffix Citation form:	gerek/lazım m	gerek/lazım	gerek/lazım	gerek/lazım

	<p>-mAlI (everywhere in this table)</p> <p>-dir (adjectival suffix) Citation form: -Dİr (consultant's comment: -dir is weaker than -mali-)</p> <p>Şart gerek/lazım</p>	-malı-		? -malı (ok only with animate subject if the speaker takes an external perspective)	-mali-  lexical verb is 'want'
<b>Weak Necessity</b>	<p>-malı- (dispreferred)</p> <p>malı-dır</p> <p>-dir</p>	<p>belki (adverbial: "maybe") + malı</p> <p>malı</p> <p>iyi olabilir/olur</p>	-malı-	—	—
<b>Possibility</b>	<p>-abil, Citation form: -(y)Abil</p> <p><i>mümkün</i> in periphrastic construction</p>	abil	abil	abil  <i>mümkün</i> in periphrastic construction	—
<b>Non-necessity</b>	<p>periphrastic gerek/lazım + negation şart + negation</p>	lazım/gerek + negation	gerek + negation		—

<b>Impossibility</b>	negated form of <i>-abil</i> , surfaces as -ama-  mümkün değil	negated form of <i>-abil</i> , surfaces as -ama-	negated form of <i>-abil</i> , surfacing as -eme-	negated form of <i>-abil</i> , surfacing as -ama- or -am-  mümkün değil	—
----------------------	---	--	--	---	---

Preliminary table of modals for Turkish.