# Modals in Russian

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: Russian

ISO 639-3: rus

Glottolog: russ1263

Consultant demographics: A female speaker of Standard Russian.

Elicitation dates: 10 Jan 2023, 16 Jan 2023, 23 Jan 2023

# **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 **navernoje** plavaet Ben **probably** swim

Ben dolžno bit' plavaet
Ben MOD.3sg.neut be.inf swim

#### Comments:

- Adverbial variant (*navernoje*) sounds more natural over *dolžno*.
- #Ben prixoditsja
- (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**.

John dolžen biť v škole.

```
John MOD be.inf prep school

John navernoje v škole.

John probably prep school
```

• **Dolžen** is preferred

(3) (Adapted from von Fintel & Gillies 2007). The math teacher says: There are 3 boxes. The ball is in box A or in box B or in box C. It is not in A. It is not in B. So, **it must be in C**.

```
Togda on
                      dolžen bit
                                             tretjej / C.
Then
       he.nom
                      MOD be.inf
                                             third / c
                                     prep
                                             tretjej / C
Togda on
                      navernoje
Then
                      probably
       he.nom
                                             last / C
                                     prep
```

- Modal variant more preferable
- (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 not be in the house**.

```
Sobaki ne dolžno bit' v dome
Dog.gen neg MOD.neut be.inf prep home
```

#navernoje

• Neither are that usable in this context (would prefer an indicative statement without any modal element), but translation would use *dolžno* 

## **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 and your friend asks where Ann is. You say to your friend: **Ann should be at the lake right now.** 

```
Ann dolžna sejčas bit' na ozere
Ann MOD.3rd.f now be.inf on lake
```

- navernoje didn't initially come to mind, but is felicitous
- (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.

```
Sejčas navernoje
                      idjot
                             dožď'
                                            Goa.
                                    na
       probably
                             rain
                                            Goa
                                     on
                      go
Sejčas dolžno bit
                                            Goa.
                      idjot
                             dožď'
                                    na
Now
       MOD be.inf go
                                            Goa
                             rain
                                     on
```

- Both are as preferable as each other.
- (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 dolžna bit' doma.

Mary MOD.3rd.fem be.inf home

Mary navernoje doma.

Mary probably home
```

• \**byl by* 

### **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 be coming to school today**.

```
On
       vozmožno
                     prijdjot v
                                    školu
                                           segodnja
He
       possibly
                     come in
                                    school today
On
                                    segodnja
       možet prijti
                            školu
He
       MOD come
                            school today
                     in
```

• Adverbial variant preferable, but both are felicitous

# On navernoje prijdjot v skolu segodnja

- This means that it is probable that he's coming, you're pretty sure of it.
- (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. She hasn't checked her sister's wardrobe, yet, but **Grace's necklace might be lost**.

```
Grace vozmožno poterjala koltso.
Grace possibly lost ring

Grace možet bit' poterjala koltso.
Grace MOD be.inf lost ring
```

• Adverbial form preferable (more natural), but both felicitous and normal.

(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.<sup>1</sup>

```
Kot možet biť v dome, a možet i na ulitse.
Cat MOD be.inf in house but mod and on street
```

• vozmožno also fine

(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	možet	poexat'	v	New York.
Daniel	MOD	go	to	New York
Daniel	vozmožno	poedet v	New	York.
Daniel	possibly	go.3rd to	New	York

• Both are fine

### 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 vozmožno net doma.

Mary possibly NEG home

Mary možet ne bit' doma.

Mary MOD NEG be.inf home
```

<sup>&</sup>lt;sup>1</sup> (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).

```
#Mary dolzno bit' net doma
```

```
#Mary ne dolzno bit' doma "Mary mustn't be 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 ne možet bit' doma.
Ben NEG MOD be.inf home
```

#Ben ne dolžen bit' doma

- Ben ne dolžen bit' doma "...but his lights are on." Equivalent to something like: "shouldn't be at home"
- #vozmožno
- \*nel'zja
- (3') The math teacher says: There are 3 boxes. The ball is in box A or in box B or in box C. We opened box A, and the ball is there. There is only one ball. So, it can't be in C.

#### ne možet

\*Nel'zja

### **B. DEONTIC**

### **B1** Deontic Necessity

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

```
Vy dolžny /objazani nosit' šlem.
You MOD.2nd.pl /required wear helmet
```

- *Objazan* = required to
- (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**."

Posetiteli dolžny pokinut' bol'nitsu do 6 večera. Visitors mod.pl leave hospital until 6 evening

### **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.

```
Mne sleduet nadet' narjadnuju odeždu na večerinku.
I.dat MOD put.on dressy clothes prep party
```

(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!

```
Ne sotrudniam tože sleduet mit' ruki.
Neg employees.dat also MOD wash hands
```

(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.

```
Mne sleduet nadet' masku.
I.dat MOD put.on mask
```

- byl by indicates a past-tense obligation, not usable for present tense dwn

```
#mne dolzen byl nadet' masku.
#On dolzen byl nosit' masku
```

## **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, but **Martin may ride the ferris wheel.** 

```
Martin možet prokatitsja na kolese obozrenija.
Marin MOD ride on ferris-wheel
```

# vozmožno - (opportunity to ride it, up to him to take the opportunity [circumstantial])
# Navernoje

(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.

Vy **možete** vojti. You.pl **MOD** enter

(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.

Ty možeš ostat'sja nočevat' a možeš poexat' domoj. You MOD stay sleep.over conj 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, although according to the doctor's orders **Alice can lift her baby**.

Alice **možno** podnimať rebjonka. Subj.dat **mod.3sg.neut** lift baby

- #Alice mozet would have the reading like "the doctor told Alice that she would be able to do (i.e., believes that she should be able to)"
- (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.

Maria **možet** idti plavat' Maria **MOD** go swim.inf

• *Maria.dat možno idti plavat'* - external/circumstantial ("Alice *can* go swimming when her pulse has gone down to an appropriate level after ...")

## **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.

No mne **ne nužno** nadevať narjadnuju odeždu.

But	I.dat	neg	MOD	put.on	dressy	clothes
No	mne	ne	nado	nadevat'	narjadnuju	odeždu.
But	I.dat	neg	MOD	put.on	dressy	clothes

(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 wear a face covering.

```
Mne
      ne
             nužno nosiť masku.
I.dat
             need
                    wear
                           mask
      neg
Mne
                    nosit' masku.
      ne
             nado
I.dat
             need
                           mask
      neg
                    wear
```

### **B5** Deontic impossibility

(12') In Indonesia, the law states that when you ride a motor bike... You mustn't ride a motor bike without a helmet.

Vy	<i>ne</i>	<i>možete</i>	<i>upravljat'</i>	<i>motociklom</i>	bez	<i>šlema</i> .
You.pl	neg	mod	manage	motorbike	without	helmet
Vam You.pl.	dat	<i>nel'zya</i> mod	<i>upravljat'</i> manage	<i>motociklom</i> motorbike	<i>bez</i> without	<i>šlema</i> . helmet

(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 mustn't stay after 6pm."

Posetiteli	ne	mogut	ostavat'sja	posle	6.
Visitors	NEG	MOD.pl	stay	after	6
Posetitljam	nel'zja	ostavat 'sjo	a posle	6.	
Visitors.dat	MOD	stay	after	6	

### 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.

Vam	nužno	poexat'	po	etoj	doroge.
You.dat	MOD	20	prep	this	road

- **Dolžno** fine here too.
- (25) Team A are playing in a tournament. In order to advance... Team A has to beat Team B.

Komande	A	<b>nužno</b> pobedit'	komandu	В.
Team	A	MOD win.perf	team	В
Komanda	A	<b>dolžna</b> pobediť	komandu	B
Team	A	MOD win.perf	team	В

(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.

Esli	my xotim	lučšuju	pizzu v gorode,	to	nam	nado	zakazat'	и	Gino.	
If	we want	best	pizza in town,	then	we.dat	MOD	order	at	Gino.	
			-							
Esli	my xotim	lučšuju	pizzu v gorode,	to	nam	nužno	zakazat'	и	Gino.	
	•		pizza in town,				order	at	Gino.	
			r ,							
Esli	my xotim	lučšuju	pizzu v gorode,	to	my	dolžni	zakazat'		и	Gino.
If	we want	best	pizza in town,	then	we.nom	<b>MOD</b>	order		at	Gino.

<sup>\*</sup>*mozno* - totally infelicitous in the context

## **C2** 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.

Tebe **sleduet** sest' na avtobus. You.dat MOD sit prep bus

• *Sleduet* (equivalent to should)

(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**.

Tebe **sledujet** exat' prosjoločnymi dorogami na poberež'e. You.dat **MOD** go country road prep seaside

(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.

#### sledujet

- #dolzen stronger order
- *Mozno* "you may consider going to my shop"

#### **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.

Vymožetepoexat'popervomymaršrutu.You.plMODgoprepfirstroute

(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.

```
My možem pojti v bassejn v škole
We.nom MOD go prep swimming-pool prep school
```

(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.

```
Ty možeš poijti v etot butik.
You.sg MOD go prep this boutique
```

#### 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 / needn't take the bus.

<i>Tebe</i>	<i>ne</i>	<i>objazateľ no</i>	exat'	<i>na</i> on	avtobuse.
You.dat	neg	MOD	ride		bus
<i>Tebe</i>	<i>ne</i>	<i>nužno</i>	exat'	na	avtobuse.
You.dat	neg	MOD	ride	on	

- *Objazatel'no* is more natural
- #ne mozno -> you can't take a bus because there is no bus
- #ne dolzen -> there is a bus, and you don't have money so you shouldn't take 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.

```
Vy ne možete poexat' po drugoj doroge.
You neg MOD go on other road
```

#Vam nel'zja poexat' po drugoj doroge

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

Komande	A	nel'zja	proigrat	komande	B
Team	Α	MOD	plat	team	В

#### 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!

```
Mne očen' nužno/nado v tualet!
I.dat very mod / mod in toilet

# dolzny
# objazani
```

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

```
Mne nužno / nado čixnut'.

I.dat mod / mod to.sneeze
```

• *nužno/nado* - express some sort of physiological necessity

Checking with an inanimate subject.

Context: the bike needs fixing, the chain is not working properly so

```
Velosipeddolženbit'nalaženperedispol'zovaniem.Bicyclemodbe.infrepairedbeforeusageVelosipednadonaladit'peredispol'zovaniemBicycleMODrepairedbeforeusage
```

(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 output**.

```
Voda
       dolžna vyjti
                               pravoj
                                       storoni.
                         S
Water mod
              come.out from right
                                       side
Voda
       objazana
                                      pravoj
                     vvjti
                               S
                                                   storoni
Water mod
                     come.out from right
                                                   side
```

• #nužno/nado - because this sentence doesn't express

### **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, 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.

```
Dervo Duku
              ?dolžno / možet zdes'
                                   rasti
Tree
       duku
              mod
                   / mod
                                   grow
Dervo Duku
             vozmožno
                            zdes'
                                   rastjot
Tree
       duku
             mod
                            here
                                   grow
```

(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).

```
Maria možet prigotovit' traditsionnye ital'anskie makarony.
Maria mod.3sg prepare.inf traditional italian pasta
```

vozmožno - in principle, if she gets the ingredients should get the pasta.

#### #dolžno

(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 možet sejčas xodit'
Ben can now walk
```

that... Paul can lift that rock.

# dolžen # vozmožno

(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

```
Paul mog podnjat tot kamen'.
Paul MOD lift that rock
```

(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**.

```
V
       mikroavtobusy možet pomestiť sja
                                             20
                                                     čelovek.
In
       minivans
                              fit
                                             20
                      mod
                                                     person
V
       mikroavtobusy vozmožno
                                                     20
                                                            čelovek
                                     vmestit'
       minivans
                      MOD
In
                                     fit
                                                     20
                                                            people
```

• Not too clear a distinction between the two

### 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**.

```
Vulkannedolžen objazateľ novzorvať sja.VolcanoNEGMOD obligatoryto.erupt
```

- Here, it's just "not necessarily the case that it will erupt"
- "Without **objazatel'no (adverb),** you're saying that there is clear evidence that it won't erupt."
  - o #Vulkan ne **dolžen** vzorvat'sja

```
Vulkan možet i ne vzorvat'sja.
Volcano MOD foc neg to.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.** 

```
Ben ne možet xodit'
Ben NEG MOD walk

#Benu nel'zja xodit'

#Ben ne dolžen xodit'
```

(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**.

```
Voda ne možet / ne dolžna viteč s levoj storoni
Water NEG MOD / NEG MOD flow.out from left side
```

• Ne dolžna - it shouldn't be coming out from the right... because it's blocked, etc.

(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.

```
Derevo Duku ne možet / ne dolžen zdes' rosti
Tree duku NEG MOD / NEG MOD here to.grow
```

#Nel'zja

- Only used in deontic impossibility. Doesn't work here

### 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.

```
Ja dolžna ejo kupit'.
I mod her buy.inf

Mne nado ejo kupit'
I.dat mod her buy
```

#mozet

(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.

```
Ja dolžna sxodit' v kinoteart.
```

?Mne nado sxodit' v kinoteart

- Infelicitous if you don't have the internal urge to do smth (you'd do this to catch up with some friends who are talking about the film or something)
- (43) A daughter tells her parent... My friend wants to come visit me.

```
Moj drug xočet k nam prijti.
My friend wants to us come
```

#Dolzen #Nado

# Table of Russian modals:

MODALS	EPISTEMIC	ROOT/NON-EPISTEMIC						
		PARTICIPA	NT-EXTERNAL	PARTICIPANT-INTERNA				
	<b>Epistemic</b>	<b>Deontic</b>	<b>Teleological</b>	Circumstantial	<b>Bouletic</b>			
Necessity	dolžen(~1)/dolž	Dolžen (2)	Nužno (1)	Nužno (1)	Dolžen (1)			
	no (1)	Objazani	Nado (1)	Nado (1)	Nado (1)			
	Navernoje	(2)	Dolžen (2)	Dolžen (2)	xočet (2)			
Weak Necessity	dolžen(2)/dolžn o (1)	Sleduet (2)	Sleduet (2)		n/a			
	\\ Navernoje (1)							
Possibility	Možet (2)	Možet (2)	Možet (2)	Možet (2)	n/a			
	\\ Vozmožno (1)	\\ <b>Možno (1)</b>		Vozmožno (1)				
Non-necessity	Vozmožno net (1)	Ne nužno (1)	Ne nužno (1) Ne	Ne dolžen objazateľno (1)				
	Možet ne (2)	Ne nado (1)	objazateľno (1)	Možet i ne (2)				
Impossibility	Ne možet (2)	Ne možet (2)	Ne možet (2)	Ne možet				
		Nel'zya (1)		Ne dolžen				

Adverbial forms (1)	vozmožno, nado, nužno
Verbal forms (2)	Možet, dolžen, sleduet

#### Tentative Table of Modals:

MODALS	S EPISTEMIC ROOT/NON-EPISTEMIC									
		PARTICIPA	NT-EXTERNAL	PARTICIPANT-INTERNAL						
	<b>Epistemic</b>	<b>Deontic</b>	Teleological	Circumstantial	Bouletic					
Necessity	Dolžen	Dolžen			khotet'					
		Prixoditsja + impf Nado (adv)								
Weak Necessity		byl by (cop + pst)			n/a					
Possibility	Možet / Možno	Možet	Možet	Možet	n/a					
	Mog (moč)			Umeyet ?						
Non-necessit y		Ne dolžen (neg + mod)		Ne dolžen						
Impossibility	Nel'zja	Nel'zja + impf	Nel'zja	Nel'zja + perf						

- DWN seen in Fintel & latridou (2006)
- Ne dolžen "rarely used for multiple events"
- According to corpus studies from Haan (2002) *prixoditsja* has not been seen in epistemic cases with imperfective verbs. Could be worth testing
- Haan (2002) also suggests for *nel'zja* "if the main verb is perfective, the interpretation is negated ability, if it is imperfective, it denotes negated permission"

Anticipate differing readings triggered by verbal aspect - the modality can be implicit
based on the tense/aspect of the verb, or the reading of a modal determined by the
aspect (cf. Klimonov & Klimonov, 2008)

### References:

De Haan, F. (2002). Strong modality and negation in Russian. R. Reppen, S. Fitzmaurice & D. Biber, Using Corpora to Explore Linguistic Variation. Amsterdam/Philadelphie: John Benjamins, 91-110. Section 6

Fintel, K. V., & latridou, S. (2008). How to say ought in foreign: The composition of weak necessity modals. In Time and modality (pp. 115-141). Springer, Dordrecht.

Klimonov, V. D., & Klimonov, G. (2008). The connections between modality, aspectuality, and temporality in Modern Russian. Modality-aspect interfaces. Implications and typological solutions, 147-173.

Padučeva, E. (2008). Russian modals možet "can" and dolžen "must" selecting the imperfective in negative contexts. *Modality-aspect interfaces. Implications and typological solutions*, 197-214.