Unit 4 (b) Modality

The area between "yes" and "no"

Grammar presentation given on 28.xi.2017

Robert Spence Angewandte Sprachwissenschaft Universität des Saarlandes The learning goals for today's session are:

Modality



Goal

1 To understand how modal verbs differ from other verbs in English.

γρ

- 1 To understand how modal verbs differ from other verbs in English.
- To learn which verbs are "in" (or "on the edge of") the system of modal verbs.

Modality

- 1 To understand how modal verbs differ from other verbs in English.
- 2 To learn which verbs are "in" (or "on the edge of") the system of modal verbs.
- 3 To understand the difference between the "indicative" TYPE of MODALITY (either PROBABILITY or USUALITY (a.k.a. "indefinite frequency")) and the "imperative" TYPE

(either obligation or inclination (a.k.a. READINESS/ABILITY)).

γρ

- 1 To understand how modal verbs differ from other verbs in English.
- 2 To learn which verbs are "in" (or "on the edge of") the system of modal verbs.
- 3 To understand the difference between the "indicative" TYPE of MODALITY (either PROBABILITY or USUALITY (a.k.a. "indefinite frequency")) and the "imperative" TYPE (either OBLIGATION or INCLINATION (a.k.a. READINESS/ABILITY)).
- To understand the various ways in which modality can be expressed (verbs, adverbs, and other structures) and how these encode subjectivity or objectivity.

γρ

- 1 To understand how modal verbs differ from other verbs in English.
- To learn which verbs are "in" (or "on the edge of") the system of modal verbs.
- 3 To understand the difference between the "indicative" TYPE of MODALITY (either PROBABILITY or USUALITY (a.k.a. "indefinite frequency")) and the "imperative" TYPE (either OBLIGATION or INCLINATION (a.k.a. READINESS/ABILITY)).
- To understand the various ways in which modality can be expressed (verbs, adverbs, and other structures) and how these encode subjectivity or objectivity.
- 5 To understand the difference between the two ways in which [negative] POLARITY can be expressed – [direct] and [transferred].

γρ

- 1 To understand how modal verbs differ from other verbs in English.
- 2 To learn which verbs are "in" (or "on the edge of") the system of modal verbs.
- 3 To understand the difference between the "indicative" TYPE of MODALITY

 (either PROBABILITY or USUALITY (a.k.a. "indefinite frequency")) and the
 "imperative" TYPE

 (either OBLIGATION or INCLINATION (a.k.a. READINESS/ABILITY)).
- To understand the various ways in which modality can be expressed (verbs, adverbs, and other structures) and how these encode subjectivity or objectivity.
- 5 To understand the difference between the two ways in which [negative] POLARITY can be expressed – [direct] and [transferred].
- To understand the difference between the [median] VALUE of MODALITY ('will') and the [outer] VALUES (either [high] 'must' or [low] 'may'), by studying how they interact with [transferred] [negative] POLARITY.



How do modal verbs differ from other verbs in English?

Modality



Goal

 No non-finite forms: no infinitive (*to can), no '-ing' form (*canning) - unlike German.

- 1 No non-finite forms: no infinitive (*to can), no '-ing' form (*canning) unlike German.
- No ending on third person singular present (she can not *she cans)
 like German.

- No non-finite forms: no infinitive (*to can), no '-ing' form (*canning) - unlike German.
- No ending on third person singular present (she can not *she cans)
 like German.
- 3 A 'remote' form (e.g. could), which is more likely to indicate remoteness in reality (cf. könnte) rather than remoteness in time (cf. konnte).

- No non-finite forms: no infinitive (*to can), no '-ing' form (*canning) - unlike German.
- No ending on third person singular present (she can not *she cans)
 like German.
- 3 A 'remote' form (e.g. could), which is more likely to indicate remoteness in reality (cf. könnte) rather than remoteness in time (cf. konnte).
- 4 Combinable with *n't*: (*she can't*; cf. **she walkn't*).

- No non-finite forms: no infinitive (*to can), no '-ing' form (*canning) - unlike German.
- No ending on third person singular present (she can not *she cans)
 like German.
- 3 A 'remote' form (e.g. could), which is more likely to indicate remoteness in reality (cf. könnte) rather than remoteness in time (cf. konnte).
- 4 Combinable with n't: (she can't; cf. *she walkn't).
- § Function as finite verbal operators she can ... (indicative) vs. e.g. can she ... ? (yes/no interrogative).

- 1 No non-finite forms: no infinitive (*to can), no '-ing' form (*canning) unlike German.
- No ending on third person singular present (she can not *she cans)
 like German.
- 3 A 'remote' form (e.g. could), which is more likely to indicate remoteness in reality (cf. könnte) rather than remoteness in time (cf. konnte).
- 4 Combinable with n't: (she can't; cf. *she walkn't).
- **§** Function as finite verbal operators *she can ...* (indicative) vs. e.g. *can she ... ?* (yes/no interrogative).
- 6 Function in tags she can ..., can't she?

- 1 No non-finite forms: no infinitive (*to can), no '-ing' form (*canning) unlike German.
- No ending on third person singular present (she can not *she cans)
 like German.
- 3 A 'remote' form (e.g. could), which is more likely to indicate remoteness in reality (cf. könnte) rather than remoteness in time (cf. konnte).
- 4 Combinable with n't: (she can't; cf. *she walkn't).
- **§** Function as finite verbal operators *she can ...* (indicative) vs. e.g. *can she ... ?* (yes/no interrogative).
- 6 Function in tags she can ..., can't she?
- Have I forgotten anything?

Which verbs are modal verbs in English?





....



Gnals

The [positive] forms:

- The [positive] forms:
 - [high] must, ought to, need, has/had to



- The [positive] forms:
 - [high] must, ought to, need, has/had to
 - [median] will, would, (shall??), should, is/was to



- The [positive] forms:
 - [high] must, ought to, need, has/had to
 - [median] will, would, (shall??), should, is/was to
 - · [low] can, could, may, might, (dare)



- The [positive] forms:
 - [high] must, ought to, need, has/had to
 - [median] will, would, (shall??), should, is/was to
 - [low] can, could, may, might, (dare)
- The [negative] forms:



- The [positive] forms:
 - [high] must, ought to, need, has/had to
 - [median] will, would, (shall??), should, is/was to
 - [low] can, could, may, might, (dare)
- The [negative] forms:
 - [high] mustn't, oughtn't to, can't, couldn't, (mayn't, mightn't, hasn't/hadn't to)



- The [positive] forms:
 - [high] must, ought to, need, has/had to
 - [median] will, would, (shall??), should, is/was to
 - [low] can, could, may, might, (dare)
- The [negative] forms:
 - [high] mustn't, oughtn't to, can't, couldn't, (mayn't, mightn't, hasn't/hadn't to)
 - [median] won't, wouldn't, shouldn't, (isn't/wasn't to)

- The [positive] forms:
 - [high] must, ought to, need, has/had to
 - [median] will, would, (shall??), should, is/was to
 - [low] can, could, may, might, (dare)
- The [negative] forms:
 - [high] mustn't, oughtn't to, can't, couldn't, (mayn't, mightn't, hasn't/hadn't to)
 - [median] won't, wouldn't, shouldn't, (isn't/wasn't to)
 - [low] needn't, doesn't/didn't need to, doesn't/didn't have to



 $\boldsymbol{\cdot}$ You needn't do that [true modal] ('das musst du nicht tun')

- You needn't do that [true modal] ('das musst du nicht tun')
- You don't need to do that [marginal] ('das brauchst du nicht zu tun')

- You needn't do that [true modal] ('das musst du nicht tun')
- You don't need to do that [marginal] ('das brauchst du nicht zu tun')
- · in need in Not benötigen

- You needn't do that [true modal] ('das musst du nicht tun')
- You don't need to do that [marginal] ('das brauchst du nicht zu tun')
- · in need in Not benötigen
- I dare say! / I daren't do it!

- You needn't do that [true modal] ('das musst du nicht tun')
- You don't need to do that [marginal] ('das brauchst du nicht zu tun')
- · in need in Not benötigen
- I dare say! / I daren't do it!
- ich darf sagen! (ich bin so frei; ich erlaube mir) / ich wage es nicht, das zu tun!

- You needn't do that [true modal] ('das musst du nicht tun')
- You don't need to do that [marginal] ('das brauchst du nicht zu tun')
- · in need in Not benötigen
- · I dare say! / I daren't do it!
- ich darf sagen! (ich bin so frei; ich erlaube mir) / ich wage es nicht, das zu tun!
- need and dare are 'on the way out' of the system

- You needn't do that [true modal] ('das musst du nicht tun')
- You don't need to do that [marginal] ('das brauchst du nicht zu tun')
- · in need in Not benötigen
- · I dare say! / I daren't do it!
- ich darf sagen! (ich bin so frei; ich erlaube mir) / ich wage es nicht, das zu tun!
- need and dare are 'on the way out' of the system
- better may be 'on the way in' (we better let it in, bettern't we?)

- You needn't do that [true modal] ('das musst du nicht tun')
- You don't need to do that [marginal] ('das brauchst du nicht zu tun')
- · in need in Not benötigen
- I dare say! / I daren't do it!
- ich darf sagen! (ich bin so frei; ich erlaube mir) / ich wage es nicht, das zu tun!
- need and dare are 'on the way out' of the system
- better may be 'on the way in' (we better let it in, bettern't we?)
- Even if verbs come in, or go out, or shift around within the system

 wenn du magst ('wenn du das tun willst'); wenn du vermagst,
 das zu tun ('wenn du das tun kannst') the ARCHITECTURE of the system remains the same, with [high], [median], [low] values.

The ambiguity on which MODALITY is based:



. .

 \cdot 1) She must be very careful.

- Modality
- γρ

- 1) She must be very careful.
- ullet 2) She must be very careless.

- Modality
- γρ
- Goals

- 1) She must be very careful.
- 2) She must be very careless.

Example 1) means: She is required to be...

2) Sile must be very careless.

- 1) She must be very careful.
- 2) She must be very careless.
- Example 1) means: She is required to be...
- Example 2) means: I deduce that she is...

- 1) She must be very careful.
- 2) She must be very careless.
- Example 1) means: She is required to be...
- Example 2) means: I deduce that she is...
- All other things being equal (which often they aren't...), there is a phonological difference between the two:

- 1) She must be very careful.
- 2) She must be very careless.
- Example 1) means: She is required to be...
- Example 2) means: I deduce that she is...
- All other things being equal (which often they aren't...), there is a phonological difference between the two:
- · //.1. ^ she must be / very */ CAREful//

The ambiguity on which MODALITY is based:

- 1) She must be very careful.
- 2) She must be very careless.
- Example 1) means: She is required to be...
- ${}^{\textstyle \bullet}$ Example 2) means: I deduce that she is...
- All other things being equal (which often they aren't...), there is a phonological difference between the two:
- · //_{.1. \(\)} she must be / very */ CAREful//
- · //_{.1. \(\shear \) she / must be / very */ CAREless//}

Goals

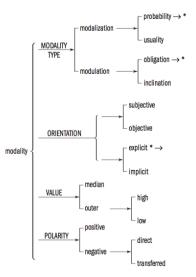


Fig. 4-25 System network of MODALITY

Simultaneous systems, so 4 \times 4 \times 3 \times 3 combinations; in reality (* \rightarrow +*) only 12 \times 9.

MODALITY TYPE and VALUE (1) — **MODALIZATION (the "indicative" type)**

always must will usually

- This is MODALIZATION (the "indicative" type of MODALITY).
- It spans the gap between "it is" and "it isn't".
- It is typically expressed by either a modal verb, or a modal adverb, or both together:
- that'll be Professor Steiner at the door ('right now')
- that's probably Professor Steiner at the door
- that'll probably be Professor Steiner at the door
- · There are two dimensions:
- PROBABILITY (certainly/probably/possibly) and USUALITY ("indefinite frequency") (always/usually/sometimes)

. .

 That'll be Professor Steiner at the door ('that's probably him – not in the future, but right now')

Modality

- That'll be Professor Steiner at the door ('that's probably him not in the future, but right now')
- Oh the students'll lie on the lawn all day in summer ('they usually do that – not next summer, but every summer')

γρ

- Modality
- γρ
- Goals
- That'll be Professor Steiner at the door ('that's probably him not in the future, but right now')
- Oh the students'll lie on the lawn all day in summer ('they usually do that – not next summer, but every summer')
- Probability 75% -> Expectation of 75 / 100 occurrences

- That'll be Professor Steiner at the door ('that's probably him not in the future, but right now')
- Oh the students'll lie on the lawn all day in summer ('they usually do that – not next summer, but every summer')
- Probability 75% -> Expectation of 75 / 100 occurrences
- cf. flipping a coin: probability of Heads is 50%, so if you flipped the coin 100 times you would expect to get Heads approx. 50 times and Tails approx. 50 times.

- γρ
- Goals
- That'll be Professor Steiner at the door ('that's probably him not in the future, but right now')
- Oh the students'll lie on the lawn all day in summer ('they usually do that – not next summer, but every summer')
- Probability 75% -> Expectation of 75 / 100 occurrences
- cf. flipping a coin: probability of Heads is 50%, so if you flipped the coin 100 times you would expect to get Heads approx. 50 times and Tails approx. 50 times.
- Two different ways of expressing less-than-certain knowledge: paradigmatically ('either-yes-or-no': how likely?) or syntagmatically ('both-yes-and-no': how often? (how usual?))

- That'll be Professor Steiner at the door ('that's probably him not in the future, but right now')
- Oh the students'll lie on the lawn all day in summer ('they usually do that – not next summer, but every summer')
- Probability 75% -> Expectation of 75 / 100 occurrences
- cf. flipping a coin: probability of Heads is 50%, so if you flipped the coin 100 times you would expect to get Heads approx. 50 times and Tails approx. 50 times.
- Two different ways of expressing less-than-certain knowledge: paradigmatically ('either-yes-or-no': how likely?) or syntagmatically ('both-yes-and-no': how often? (how usual?))
- Adverbs expressing usuality are sometimes called 'adverbs of indefinite frequency'; like modal adverbs of probability they are part of the Mood element, just like the Subject and the Finite and the Polarity — because they're not just part of WHAT you're asserting, they're part of the ACT OF ASSERTING it!!

γρ

. .

Cool

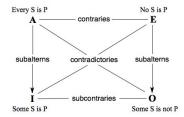
 ${}^{\textstyle \cdot}$ If modalization is expressed doubly (verb AND adverb), then:

- If modalization is expressed doubly (verb AND adverb), then:
- if it's the <u>same</u> VALUE each time, it counts once:

- If modalization is expressed doubly (verb AND adverb), then:
- if it's the same VALUE each time, it counts once:
- that probably will be him -> it's probable that it's him (NOT: it's probable that it's probable that it's him)

- If modalization is expressed doubly (verb AND adverb), then:
- if it's the same VALUE each time, it counts once:
- that probably will be him -> it's probable that it's him (NOT: it's probable that it's probable that it's him)
- if it's a <u>different</u> VALUE each time, it counts twice:

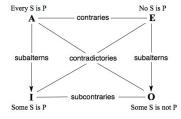
- If modalization is expressed doubly (verb AND adverb), then:
- if it's the same VALUE each time, it counts once:
- that probably will be him -> it's probable that it's him (NOT: it's probable that it's probable that it's him)
- if it's a <u>different</u> VALUE each time, it counts twice:
- that certainly might be him -> it's certain that it's possible that it's him



- Term "A" (= universal affirmative): All Australians are the descendants of convicts (cf. Australians are certainly... Australians are always...)
- Term "I" (= particular affirmative): Some Australians are... (cf. Australians are possibly... Australians are sometimes...)

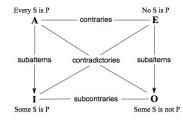
Modality





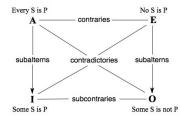
Modality





 Two differences from Aristotle (because we're really doing rhetoric, not logic): Modality

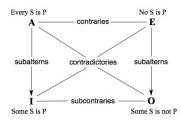




- Two differences from Aristotle (because we're really doing rhetoric, not logic):
- 1) In real life, if we're absolutely certain, we just say "they are"; if we say "they must be", it means that we're slightly less than 100% certain

Modality





- Two differences from Aristotle (because we're really doing rhetoric, not logic):
- 1) In real life, if we're absolutely certain, we just say "they are"; if we say "they must be", it means that we're slightly less than 100% certain
- 2) We add a term for 'less certain than certain, but more certain than possible': (they'll be descendants of convicts etc.)

Modality



(you!) do it! (I!) required hust (99%) determined
supposed (should) (752) tean
allowed many (502) willing don't do it
or as if!

MODULATION: OBLIGATION and INCLINATION (a.k.a. READINESS/ABILITY)

Modality



MODULATION: OBLIGATION and INCLINATION (a.k.a. READINESS/ABILITY)

 $\boldsymbol{\cdot}$ This is modulation (the "imperative" type of modality).

Modality



MODULATION: OBLIGATION and INCLINATION (a.k.a. READINESS/ABILITY)

- This is MODULATION (the "imperative" type of MODALITY).
- It spans the gap between "do it!" and "don't do it!"

Modality



- It spans the gap between "do it!" and "don't do it!"
- It is typically expressed by either a modal verb (1), or by a 'catenative' (hypotactic verbal group complex) structure (2):

Modality



• It spans the gap between "do it!" and "don't do it!"

This is MODULATION (the "imperative" type of MODALITY).

- It is typically expressed by either a modal verb (1), or by a 'catenative' (hypotactic verbal group complex) structure (2):
- (1) you must do your homework!(1) I must drive you home!

Modality



- $\boldsymbol{\cdot}$ This is modulation (the "imperative" type of modality).
- It spans the gap between "do it!" and "don't do it!"
- It is typically expressed by either a modal verb (1), or by a 'catenative' (hypotactic verbal group complex) structure (2):
- (1) you must do your homework!
 - (1) I must drive you home!
- · (2) you're required to do your homework!
 - (2) I'm determined to drive you home!

Modality



- This is MODULATION (the "imperative" type of MODALITY).
- It spans the gap between "do it!" and "don't do it!"
- It is typically expressed by either a modal verb (1), or by a 'catenative' (hypotactic verbal group complex) structure (2):
- (1) you must do your homework!
 - (1) I must drive you home!
- (2) you're required to do your homework!
 - (2) I'm determined to drive you home!
- Note that, syntactically, the structures are [indicative] structures: Subject before Finite (i.e., [declarative]), reversible for [yes/no interrogative] e.g. Must you do your homework? Must I drive you home?

- This is MODULATION (the "imperative" type of MODALITY).
- It spans the gap between "do it!" and "don't do it!"
- It is typically expressed by either a modal verb (1), or by a 'catenative' (hypotactic verbal group complex) structure (2):
- (1) you must do your homework!
 - (1) I must drive you home!
- (2) you're required to do your homework!
 - (2) I'm determined to drive you home!
- Note that, syntactically, the structures are [indicative] structures: Subject before Finite (i.e., [declarative]), reversible for [yes/no interrogative] e.g. Must you do your homework? Must I drive you home?
- There are two dimensions:

- This is MODULATION (the "imperative" type of MODALITY).
- It spans the gap between "do it!" and "don't do it!"
- It is typically expressed by either a modal verb (1), or by a 'catenative' (hypotactic verbal group complex) structure (2):
- (1) you must do your homework!
 - (1) I must drive you home!
- (2) you're required to do your homework!
 - (2) I'm determined to drive you home!
- Note that, syntactically, the structures are [indicative] structures: Subject before Finite (i.e., [declarative]), reversible for [yes/no interrogative] e.g. Must you do your homework? Must I drive you home?
- There are two dimensions:
- OBLIGATION ('you!') ('are wanted to') (required / supposed [səˈpəʊst] / allowed) and

- This is MODULATION (the "imperative" type of MODALITY).
- It spans the gap between "do it!" and "don't do it!"
- It is typically expressed by either a modal verb (1), or by a 'catenative' (hypotactic verbal group complex) structure (2):
- (1) you must do your homework!
 - (1) I must drive you home!
- (2) you're required to do your homework!
 - (2) I'm determined to drive you home!
- Note that, syntactically, the structures are [indicative] structures: Subject before Finite (i.e., [declarative]), reversible for [yes/no interrogative] e.g. Must you do your homework? Must I drive you home?
- There are two dimensions:
- OBLIGATION ('you!') ('are wanted to') (required / supposed [səˈpəʊst] / allowed) and
- INCLINATION (a.k.a. READINESS/ABILITY) ('I!') ('want to') (determined / keen / willing)

Knowledge and Power

Modality



C--1

ملممت

 ${}^{\:\raisebox{3.5pt}{\text{\circle*{1.5}}}}$ Modality expresses intermediate degrees of knowledge and power.

Goals

- $\boldsymbol{\cdot}$ Modality expresses intermediate degrees of knowledge and power.
- · Modalization: Probability ('epistemic modality')

- $\boldsymbol{\cdot}$ Modality expresses intermediate degrees of knowledge and power.
- · Modalization: Probability ('epistemic modality')
- Modulation: Obligation ('deontic modality')

Summary: Modality compared with Polarity and Mood

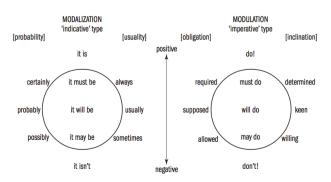


Fig. 10-6 Diagram showing relation of modality to polarity and mood

Modality



Goals

Combining [outer] VALUE and [transferred] [negative] POLARITY (1)

[outer] VALUE and [transferred] [negative] POLARITY (2)

[outer] VALUE and [transferred] [negative] POLARITY (3)

[outer:high]

[outer:low] [negative:direct] γρ

Modality

Note that probability, in itself, can only ever be positive, never negative (i.e. it is always somewhere between p 0 (0%) and p 1 (100%)). However, you can 'metaphorically' 'transfer' the <u>negative marker</u> – from the process itself to the Modality on the process. In so doing, you cause something interesting to happen:

```
[negative:direct] [negative:transferred]
it's certain that it isn't him - it isn't possible that it's him

[median]
[negative:direct] [negative:transferred]
it's probable that it isn't him - it isn't probable that it's him
```

[negative:transferred]

Similar things happen with all four types of modality. (Try it!)

it's possible that it isn't him - it isn't certain that it's him

ORIENTATION [subjective] / [objective] and EXPLICITNESS [implicit] / [explicit]

The explicit forms (which are 'grammatical metaphors') are only possible with PROBABILITY and OBLIGATION, not (yet) with USUALITY OF INCLINATION.

Modality



. .

For highschool literary appreciation essays choose explicitly subjective assessments of probability.

For university science essays dress up your assessments of probability by making them explicitly objective.

ORIENTATION [subjective] / [objective] and EXPLICITNESS [implicit] / [explicit]

The explicit forms (which are 'grammatical metaphors') are only possible with PROBABILITY and OBLIGATION, not (yet) with USUALITY OF INCLINATION.

1) I know that he did it (subjective: explicit) MOST SUBJECTIVE

For highschool literary appreciation essays choose explicitly subjective assessments of probability.

For university science essays dress up your assessments of probability by making them explicitly objective.

Modality



Gnals

ORIENTATION [subjective] / [objective] and EXPLICITNESS [implicit] / [explicit]

The explicit forms (which are 'grammatical metaphors') are only possible with PROBABILITY and OBLIGATION, not (yet) with USUALITY OF INCLINATION.

- 1) I know that he did it (subjective: explicit) MOST SUBJECTIVE
- · 2) he must have done it (subjective: implicit)

For highschool literary appreciation essays choose explicitly subjective assessments of probability.

For university science essays dress up your assessments of probability by making them explicitly objective.

Modality



Gnals

- 1) I know that he did it (subjective: explicit) MOST SUBJECTIVE
- · 2) he must have done it (subjective: implicit)
- · 3) he certainly did it (objective: implicit)

For highschool literary appreciation essays choose explicitly subjective assessments of probability.

For university science essays dress up your assessments of probability by making them explicitly objective.

Modality



Goals

with PROBABILITY and OBLIGATION, not (yet) with USUALITY OF INCLINATION.

- 1) I know that he did it (subjective: explicit) MOST SUBJECTIVE
- 2) he must have done it (subjective: implicit)
- · 3) he certainly did it (objective: implicit)
- 4) it's certain that he did it (objective: explicit) MOST OBJECTIVE

For highschool literary appreciation essays choose explicitly subjective assessments of probability.

For university science essays dress up your assessments of probability by making them explicitly objective.

Modality



Goals

The explicit forms (which are 'grammatical metaphors') are only possible with PROBABILITY and OBLIGATION, not (yet) with usuality or inclination.

- 1) I know that he did it (subjective: explicit) MOST SUBJECTIVE
- 2) he must have done it (subjective: implicit)
- 3) he certainly did it (objective: implicit)
- 4) it's certain that he did it (objective: explicit) MOST OBJECTIVE
- 1) I demand that he do it (subjective: explicit) MOST SUBJECTIVE

For highschool literary appreciation essays choose explicitly subjective assessments of probability.

For university science essays dress up your assessments of probability by making them explicitly objective.

Modality



Modality

The explicit forms (which are 'grammatical metaphors') are only possible with PROBABILITY and OBLIGATION, not (yet) with USUALITY OF INCLINATION.

- 1) I know that he did it (subjective: explicit) MOST SUBJECTIVE
- 2) he must have done it (subjective: implicit)
- 3) he certainly did it (objective: implicit)
- 4) it's certain that he did it (objective: explicit) MOST OBJECTIVE
- 1) I demand that he do it (subjective: explicit) MOST SUBJECTIVE
- 2) he must do it (subjective: implicit)

For highschool literary appreciation essays choose explicitly subjective assessments of probability.

For university science essays dress up your assessments of probability by making them explicitly objective.

Modality

γρ

Goals

The explicit forms (which are 'grammatical metaphors') are only possible with PROBABILITY and OBLIGATION, not (yet) with USUALITY OF INCLINATION.

- 1) I know that he did it (subjective: explicit) MOST SUBJECTIVE
- 2) he must have done it (subjective: implicit)
- 3) he certainly did it (objective: implicit)
- 4) it's certain that he did it (objective: explicit) MOST OBJECTIVE
- 1) I demand that he do it (subjective: explicit) MOST SUBJECTIVE
- 2) he must do it (subjective: implicit)
- 3) he's required to do it (objective: implicit)

For highschool literary appreciation essays choose explicitly subjective assessments of probability.

For university science essays dress up your assessments of probability by making them explicitly objective.

- with PROBABILITY and OBLIGATION, not (yet) with USUALITY OF INCLINATION.

 1) I know that he did it (subjective: explicit) MOST SUBJECTIVE
 - · 2) he must have done it (subjective: implicit)
 - · 3) he certainly did it (objective: implicit)
 - 4) it's certain that he did it (objective: explicit) MOST OBJECTIVE
 - 1) I demand that he do it (subjective: explicit) MOST SUBJECTIVE
 - · 2) he must do it (subjective: implicit)
 - 3) he's required to do it (objective: implicit)
 - 4) it's required that he do it (objective: explicit) MOST OBJECTIVE

For highschool literary appreciation essays choose explicitly subjective assessments of probability.

For university science essays dress up your assessments of probability by making them explicitly objective.

Modality



Goale



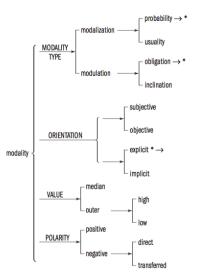


Fig. 4-25 System network of MODALITY

Simultaneous systems, so 4 \times 4 \times 3 \times 3 combinations; in reality (* \rightarrow +*) only 12 \times 9.



. .

Modality

γρ

Goals

 $\frac{\text{MODALIZATION}}{\text{the } \underline{\text{main}}} \ \underline{\text{verb}}); \ \text{so the remote form means "remote in REALITY"}.$

Modality

γρ

Goal

 $\frac{\text{MODALIZATION}}{\text{MODALIZATION}} \text{ is always tenseless (although combinable with any tense of } \underline{\text{the main verb}}; \text{ so the remote form means "remote in REALITY"}. But \\ \underline{\text{MODULATION can have any tense (combining with - basically - a }}\underline{\text{tenseless main verb}}.$

γρ

Goals

MODALIZATION is always tenseless (although combinable with any tense of the main verb); so the remote form means "remote in REALITY". But MODULATION can have any tense (combining with – basically – a tenseless main verb).

γρ

Goals

 $\frac{\text{MODALIZATION}}{\text{Modulation}} \text{ is always tenseless (although combinable with } \underbrace{\text{any } \underline{\text{tense}}}_{\text{of}} \underline{\text{of}}$ $\frac{\text{the } \underline{\text{main}}}{\text{MODULATION}} \text{ (sombining with - basically - a } \underline{\text{tenseless}}$ $\underline{\text{main } \underline{\text{verb}}} \text{)}.$

MODALIZATION ("indicative" type):

he may do it - 'possibly he does it'

Goals

MODALIZATION is always tenseless (although combinable with any <u>tense of the main verb</u>); so the remote form means "remote in REALITY". But MODULATION can have any tense (combining with – basically – a <u>tenseless main verb</u>).

MODALIZATION ("indicative" type):

he may do it – 'possibly he \underline{does} it'

he might do it – 'very possibly he $\underline{\text{does}}$ it'

 $\frac{\text{MODALIZATION}}{\text{the main verb}}; \text{ so the remote form means "remote in REALITY". But}\\ \frac{\text{MODULATION can have any tense (combining with - basically - a tenseless main verb)}.$

MODALIZATION ("indicative" type):

he may do it - 'possibly he <u>does</u> it'
he might do it - 'very possibly he <u>does</u> it'
he may have done it - 'possibly he <u>did</u> it'

Modality

γρ

Goals

 $\frac{\text{MODALIZATION}}{\text{the } main} \ \text{verb}); \ \text{so the remote form means "remote in REALITY"}. \ \text{But} \\ \text{MODULATION can have any tense (combining with - basically - a } \\ \underline{\text{tenseless}} \\ \underline{\text{main } \text{verb}}).$

MODALIZATION ("indicative" type):

he may do it - 'possibly he does it'
he might do it - 'very possibly he does it'

he may have done it – 'possibly he $\underline{\text{did}}$ it'

he might have done it – 'very possibly he $\underline{\text{did}}$ it'

MODALIZATION is always tenseless (although combinable with any tense of the main verb); so the remote form means "remote in REALITY". But MODULATION can have any tense (combining with - basically - a tenseless main verb).

MODALIZATION ("indicative" type):

he may do it - 'possibly he does it' he might do it - 'very possibly he does it'

he may have done it - 'possibly he did it'

he might have done it - 'very possibly he did it'

(— the remote form (here: *might*) can mean 'toned down' (weaker), OR 'toned up'(stronger), depending on the tone contour used—)

Goals

MODALIZATION ("indicative" type):

he may do it - 'possibly he does it'
he might do it - 'very possibly he does it'

he may have done it - 'possibly he $\frac{\text{did}}{\text{did}}$ it'

he might have done it – 'very possibly he <u>did</u> it'

(— the remote form (here: *might*) can mean 'toned down' (weaker), OR 'toned up'(stronger), depending on the tone contour used—)

MODULATION ("imperative" type):

γρ

Goals

```
MODULATION can have any tense (combining with – basically – a tenseless main verb).

MODALIZATION ("indicative" type):

he may do it – 'possibly he does it'

he might do it – 'very possibly he did it'

he might have done it – 'possibly he did it'

(— the remote form (here: might) can mean 'toned down' (weaker),

OR 'toned up'(stronger), depending on the tone contour used—)

MODULATION ("imperative" type):

he may do it – 'I allow him to do it'
```

Goals

```
MODALIZATION is always tenseless (although combinable with any tense of the main verb); so the remote form means "remote in REALITY". But MODULATION can have any tense (combining with – basically – a tenseless main verb).
```

```
MODALIZATION ("indicative" type):
he may do it - 'possibly he does it'
he might do it - 'very possibly he does it'
he may have done it - 'possibly he did it'
he might have done it - 'very possibly he did it'
   (— the remote form (here: might) can mean 'toned down' (weaker),
    OR 'toned up'(stronger), depending on the tone contour used—)
                                     MODULATION ("imperative" type):
                                      he may do it - 'I allow him to do it'
                     he is allowed to do it - 'someone allows him to do it'
```

γρ

Goals

 $\frac{\text{MODALIZATION}}{\text{Modulation}} \text{ is always tenseless (although combinable with } \underbrace{\text{any } \underline{\text{tense}} \ \underline{\text{of}}}_{\text{the } \underline{\text{main}}} \underbrace{\text{verb}}_{\text{is so the remote form means}}; \text{ so the remote form means "remote in REALITY"}. But \\ \underline{\text{MODULATION can have any tense (combining with - basically - a } \underline{\text{tenseless}} \\ \underline{\text{main } \underline{\text{verb}}}_{\text{is solution}}.$

MODALIZATION ("indicative" type): he may do it - 'possibly he does it' he might do it - 'very possibly he does it' he may have done it - 'possibly he did it' he might have done it - 'very possibly he did it' (— the remote form (here: *might*) can mean 'toned down' (weaker), OR 'toned up'(stronger), depending on the tone contour used—) MODULATION ("imperative" type): he may do it - 'I allow him to do it' he is allowed to do it - 'someone allows him to do it' he was allowed to do it - 'someone allowed him to do it'

γρ

Goals

MODALIZATION is always tenseless (although combinable with any tense of the main verb); so the remote form means "remote in REALITY". But MODULATION can have any tense (combining with – basically – a tenseless main verb).

MODALIZATION ("indicative" type): he may do it - 'possibly he does it' he might do it - 'very possibly he does it' he may have done it - 'possibly he did it' he might have done it - 'very possibly he did it' (— the remote form (here: *might*) can mean 'toned down' (weaker), OR 'toned up'(stronger), depending on the tone contour used—) MODULATION ("imperative" type): he may do it - 'I allow him to do it' he is allowed to do it - 'someone allows him to do it' he was allowed to do it - 'someone allowed him to do it' she said he might do it - 'she said someone allowed him to do it'

4 (b).23

```
MODALIZATION is always tenseless (although combinable with any tense of
the main verb); so the remote form means "remote in REALITY". But
MODULATION can have any tense (combining with - basically - a tenseless
main verb).
```

MODALIZATION ("indicative" type): he may do it - 'possibly he does it' he might do it - 'very possibly he does it' he may have done it - 'possibly he did it' he might have done it - 'very possibly he did it' (— the remote form (here: *might*) can mean 'toned down' (weaker), OR 'toned up'(stronger), depending on the tone contour used—) MODULATION ("imperative" type): he may do it - 'I allow him to do it' he is allowed to do it - 'someone allows him to do it' she thought he might have done it -

he was allowed to do it - 'someone allowed him to do it' she said he might do it - 'she said someone allowed him to do it'

γρ

Goals

```
MODALIZATION is always tenseless (although combinable with any tense of the main verb); so the remote form means "remote in REALITY". But MODULATION can have any tense (combining with – basically – a tenseless main verb).
```

MODALIZATION ("indicative" type): he may do it - 'possibly he does it' he might do it - 'very possibly he does it' he may have done it - 'possibly he did it' he might have done it - 'very possibly he did it' (— the remote form (here: *might*) can mean 'toned down' (weaker), OR 'toned up'(stronger), depending on the tone contour used—) MODULATION ("imperative" type): he may do it - 'I allow him to do it' he is allowed to do it - 'someone allows him to do it' he was allowed to do it - 'someone allowed him to do it' she said he might do it - 'she said someone allowed him to do it' she thought he might have done it -

'even though he didn't do it, she believed he was allowed to do it'?

γρ

Goals

```
MODALIZATION is always tenseless (although combinable with any tense of the main verb); so the remote form means "remote in REALITY". But MODULATION can have any tense (combining with – basically – a tenseless main verb).
```

MODALIZATION ("indicative" type): he may do it - 'possibly he does it' he might do it - 'very possibly he does it' he may have done it - 'possibly he did it' he might have done it - 'very possibly he did it' (— the remote form (here: *might*) can mean 'toned down' (weaker), OR 'toned up'(stronger), depending on the tone contour used—) MODULATION ("imperative" type): he may do it - 'I allow him to do it' he is allowed to do it - 'someone allows him to do it' he was allowed to do it - 'someone allowed him to do it' she said he might do it - 'she said someone allowed him to do it' she thought he might have done it -'even though he didn't do it, she believed he was allowed to do it'?

'she considered it very possible that he <u>did</u> it'?

```
MODALIZATION is always tenseless (although combinable with any tense of the main verb); so the remote form means "remote in REALITY". But MODULATION can have any tense (combining with – basically – a tenseless main verb).

MODALIZATION ("indicative" type):
```

he may do it - 'possibly he does it'
he might do it - 'very possibly he does it'
he may have done it - 'possibly he did it'
he might have done it - 'very possibly he did it'
(— the remote form (here: might) can mean 'toned down' (weaker),
OR 'toned up'(stronger), depending on the tone contour used—)

MODULATION ("imperative" type):
he may do it - 'I allow him to do it'
he is allowed to do it - 'someone allows him to do it'

he was allowed to do it – 'someone allowed him to do it'
she said he might do it – 'she said someone allowed him to do it'
she thought he might have done it –
'even though he didn't do it, she believed he was allowed to do it'?

'she considered it very possible that he <u>did</u> it'? (there's ambiguity here – but often it's very subtle!!)





Goal

Normally, probability is tenseless (because you've chosen [modal] not [temporal] in the system finiteness type a.k.a. ${\tt MODAL\ DEIXIS}$).

Modality



Goal

Normally, probability is tenseless (because you've chosen [modal] not [temporal] in the system finiteness type a.k.a. modal deixis). (KNOCK KNOCK!)

Modality



Goal

[temporal] in the system FINITENESS TYPE a.k.a. MODAL DEIXIS). (KNOCK KNOCK!)

That must be Professor Steiner = it is certainly him ('present')

Normally, probability is tenseless (because you've chosen [modal] not

Modality



Normally, probability is tenseless (because you've chosen [modal] not [temporal] in the system FINITENESS TYPE a.k.a. MODAL DEIXIS). (KNOCK KNOCK!)

That must be Professor Steiner = it is certainly him ('present')

(Who presided over the meeting?)

Modality



Normally, probability is tenseless (because you've chosen [modal] not [temporal] in the system FINITENESS TYPE a.k.a. MODAL DEIXIS). (KNOCK KNOCK!)

That must be Professor Steiner = it is certainly him ('present') (Who presided over the meeting?)

It must have been Prof. Steiner = it was certainly him ('past')

Modality



Normally, probability is tenseless (because you've chosen [modal] not [temporal] in the system FINITENESS TYPE a.k.a. MODAL DEIXIS). (KNOCK KNOCK!)

That must be Professor Steiner = it is certainly him ('present') (Who presided over the meeting?)

It must have been Prof. Steiner = it was certainly him ('past')

(Who will be chairman next year?)

Modality



Normally, probability is tenseless (because you've chosen [modal] not [temporal] in the system FINITENESS TYPE a.k.a. MODAL DEIXIS). (KNOCK KNOCK!)

That must be Professor Steiner = it is certainly him ('present')

(Who presided over the meeting?)

It must have been Prof. Steiner = it was certainly him ('past')

(Who will be chairman next year?)

It must be going to be Prof. Steiner = it will certainly be him ('future')

Modality



Normally, probability is tenseless (because you've chosen [modal] not [temporal] in the system FINITENESS TYPE a.k.a. MODAL DEIXIS). (KNOCK KNOCK!)

That must be Professor Steiner = it is certainly him ('present') (Who presided over the meeting?)

It must have been Prof. Steiner = it was certainly him ('past') (Who will be chairman next year?)

It must be going to be Prof. Steiner = it will certainly be him ('future') But if instead of [high] VALUE ('certain') ('99%') you have [low] ('possible') ('50%'), then sometimes the modal verb can refer to the future:

Modality



Normally, probability is tenseless (because you've chosen [modal] not [temporal] in the system FINITENESS TYPE a.k.a. MODAL DEIXIS). (KNOCK KNOCK!)

That must be Professor Steiner = it is certainly him ('present') (Who presided over the meeting?)

It must have been Prof. Steiner = it was certainly him ('past')

(Who will be chairman next year?)

It must be going to be Prof. Steiner = it will certainly be him ('future') But if instead of [high] VALUE ('certain') ('99%') you have [low] ('possible') ('50%'), then sometimes the modal verb can refer to the future:

It may rain tomorrow = perhaps it will rain ('future') ('50%')

Modality



Normally, probability is tenseless (because you've chosen [modal] not [temporal] in the system FINITENESS TYPE a.k.a. MODAL DEIXIS). (KNOCK KNOCK!)

That must be Professor Steiner = it is certainly him ('present') (Who presided over the meeting?)

It must have been Prof. Steiner = it was certainly him ('past') (Who will be chairman next year?)

It must be going to be Prof. Steiner = it will certainly be him ('future') But if instead of [high] VALUE ('certain') ('99%') you have [low] ('possible') ('50%'), then sometimes the modal verb can refer to the future:

It may rain tomorrow = perhaps it will rain ('future') ('50%') People disagree about the meaning of "will" in:

Modality



Normally, probability is tenseless (because you've chosen [modal] not [temporal] in the system FINITENESS TYPE a.k.a. MODAL DEIXIS). (KNOCK KNOCK!)

That must be Professor Steiner = it is certainly him ('present') (Who presided over the meeting?)

It must have been Prof. Steiner = it was certainly him ('past')

(Who will be chairman next year?)

It must be going to be Prof. Steiner = it will certainly be him ('future') But if instead of [high] VALUE ('certain') ('99%') you have [low] ('possible') ('50%'), then sometimes the modal verb can refer to the future:

It may rain tomorrow = perhaps it will rain ('future') ('50%') People disagree about the meaning of "will" in:

It will rain tomorrow

Modality



Normally, probability is tenseless (because you've chosen [modal] not [temporal] in the system finiteness type a.k.a. MODAL DEIXIS). (KNOCK KNOCK!)

That must be Professor Steiner = it is certainly him ('present')

(Who presided over the meeting?)

It must have been Prof. Steiner = it was certainly him ('past')

(Who will be chairman next year?)

It must be going to be Prof. Steiner = it will certainly be him ('future') But if instead of [high] VALUE ('certain') ('99%') you have [low] ('possible') ('50%'), then sometimes the modal verb can refer to the future:

It may rain tomorrow = perhaps it will rain ('future') ('50%')

People disagree about the meaning of "will" in:

It will rain tomorrow

Does it mean ('future') ('100%'), or ('future') ('75%')?

Modality



Normally, probability is tenseless (because you've chosen [modal] not [temporal] in the system FINITENESS TYPE a.k.a. MODAL DEIXIS). (KNOCK KNOCK!)

That must be Professor Steiner = it is certainly him ('present')

(Who presided over the meeting?)

It must have been Prof. Steiner = it was certainly him ('past')

(Who will be chairman next year?)

It must be going to be Prof. Steiner = it will certainly be him ('future') But if instead of [high] VALUE ('certain') ('99%') you have [low] ('possible') ('50%'), then sometimes the modal verb can refer to the

future:

It may rain tomorrow = perhaps it will rain ('future') ('50%')

People disagree about the meaning of "will" in:

It will rain tomorrow

Does it mean ('future') ('100%'), or ('future') ('75%')?

The sun will rise tomorrow at 6:45 a.m. means ('future') ('100%')

Modality



γρ

Guais

Normally, probability is tenseless (because you've chosen [modal] not [temporal] in the system FINITENESS TYPE a.k.a. MODAL DEIXIS).

(KNOCK KNOCK!)

That must be Professor Steiner = it is certainly him ('present')

(Who presided over the meeting?)

It must have been Prof. Steiner = it was certainly him ('past')

(Who will be chairman next year?)

It must be going to be Prof. Steiner = it will certainly be him ('future') But if instead of [high] VALUE ('certain') ('99%') you have [low] ('possible') ('50%'), then sometimes the modal verb can refer to the future:

It may rain tomorrow = perhaps it will rain ('future') ('50%')

People disagree about the meaning of "will" in:

It will rain tomorrow

Does it mean ('future') ('100%'), or ('future') ('75%')?

The sun will rise tomorrow at 6:45 a.m. means ('future') ('100%')

Don't be fooled by grammarians pretending to be philosophers! The grammar of a natural human language IS its OWN philosophy, and DOES contain the notion '100% certain knowledge of the future'!!

 Your homework for next week is to complete Exercise Sheet 5, which was handed out in class and which contains a page from last summer semester's exam.

In case you missed the class, the exercise sheet is also available here:

http://www.spence.saar.de/courses/grammar/questions04b/ index.pdf

Goals

Most of the ideas presented here come from M.A.K. Halliday, An Introduction to Functional Grammar, 2nd edition 1994 ("IFG2") or 3rd edition 2004 ("IFG3").

Further reading: Halliday 2004, chapter 4.5 and chapter 10.3 (or Halliday 1994, chapter 4.5 and chapter 10.4).

See also: Annabelle Lukin's "prezi" slide on Modality (on Vimeo):

https://vimeo.com/album/2028694/video/51422776