
INSTRUCTOR	Dr. Prerna Nadathur (prerna.nadathur@phil.hhu.de)
OFFICE	24.53.00.87
CLASS SCHEDULE	Thursday 14.30-16.00
CLASS LOCATION	TBA
COURSE WEBSITE	pnadathur.github.io/modality-sommer20.html All course materials will be posted on the website.

COURSE DESCRIPTION

In linguistic communication, modal expressions (*might*, *must*, *can*, *should*) allow us to talk about events and objects that are possible or necessary, instead of being limited to describing just those things that are present in the here and now. This class is an introduction to the semantic analysis of modality, as it appears in a variety of expressions, including modal auxiliary verbs like *might* and *must*, verbs that express attitudes or beliefs (*think*, *believe*, *wish*), and conditional statements.

- (1) Modal auxiliaries:
 - a. Britain might withdraw from the European Union.
 - b. *Interpreted roughly*: It's possible that Britain will leave the EU (in one of the possible ways for the world to develop, Britain leaves the EU)
- (2) Attitude verbs:
 - a. I believe that the moon is made of green cheese.
 - b. *Interpreted roughly*: In all of the worlds compatible with my information, the moon is composed of green cheese.
- (3) Conditional statements:
 - a. If it snows tonight, shops will be closed tomorrow.
 - b. *Interpreted roughly*: In all of the possible futures in which it snows this evening, the shops are closed tomorrow.

We begin with an introduction to the possible worlds framework for modal logic, and build from this to the standard Kratzer premise semantics, which allows us to evaluate different types of modal claims. We then spend several weeks looking at the different modal flavours: epistemic modality, which deals with what is logically possible or necessary relative to a body of information (modeled by sets of possible worlds), deontic modality, which deals with permission and obligation (in a legal or moral sense), and finally different kinds of circumstantial modality, which deals with what is possible or necessary based on certain sets of facts about the world. Along the way, we examine some challenges posed by different types of modality for the standard premise semantics.

The second part of the course focuses on conditional statements, introducing the (historical) development of a modal analysis for conditionals, and presenting some arguments for and against this approach. We then examine the interpretation of counterfactual or subjunctive conditionals like (4), which intuitively require us to reason about the actual world, but on the assumption that certain established facts are changed.

- (4) If you had checked the weather this morning, you would have carried an umbrella.

Throughout the course, our discussion of modality and modal reasoning intersects with a number of core areas in semantics and pragmatics, including presupposition, context-dependent interpretation, and pragmatic implicatures. This course assumes that students have completed introductions to (formal) semantics and pragmatics.

POLICIES

- (i) **Readings.** Readings should be completed before the class for which they are assigned. All readings can be downloaded from the course webpage. To access the reading list, you will need the course password: **lukeminen**.
- (ii) **Assignments.** Assignments will be given every 2–3 weeks. They will be made available on Thursdays on the course webpage, and are due by 4pm on the following Thursday (or as specified on the assignment). They can be submitted in class, by email, or dropped off in the ‘Modality’ tray in the secretariat (24.53.00.86).
- (iii) **Participation.** To receive credit points (Kreditpunkten, Beteiligungsnachweis) for participation, you must receive 60% of the available points on the homework assignments.
- (iv) **Final exam/Abschlussprüfung.** In order to qualify for the AP, you must take and pass a final exam. You can apply for the AP using the appropriate forms for your course of study, available in the linguistics department office (24.53.00.86). The final exam for this class will have two components, to be completed at home: a set of short answer questions, similar to those on the assignments, and an essay (~ 3 pages).
- (v) **Language.** Lectures and any supplementary materials will be in English. You are strongly encouraged to complete the assignments in English: you will NOT be penalised for errors having to do with English grammar. If you would strongly prefer to complete your responses in German, I will do my best to accommodate you; however, please let me know in advance. If you intend to apply for the AP and wish to complete the final exam in German, please let me know by 25 June.
- (vi) **Academic integrity.** Academic dishonesty and plagiarism are strictly prohibited. You are welcome to use the library, textbooks, journal articles, and other resources, but you *must* cite any sources that you use. Quoted material in particular must be attributed, including page numbers where possible. You are welcome (and encouraged) to work with one another to solve the problems on the assignments, but you must write up your solutions independently, in your own words. It is a good practice to indicate the names of your collaborators on your assignments. You may NOT collaborate with others on the final exam.
- (vii) **Electronic devices.** As a courtesy to other students, please do not use cell phones during class. You may use a laptop to take notes.

COURSE PLAN (subject to revision)

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| 1. Introduction and course overview; formal basics | 09.04.2020 |
| 2. Formal basics, continued: intensional semantics, propositional attitudes
<i>Readings:</i> von Fintel & Heim 2011 (Chs. 1–2), Kaufmann et al. 2006 | 16.04.2020 |
| 3. Premise semantics for modals
<i>Readings:</i> Portner 2009 (Chs. 1–2), von Fintel & Heim 2011 (Ch. 3) | 23.04.2020
<i>Assignment 1 due</i> |
| 4. Premise semantics continued
<i>Readings:</i> Lewis 1975, Kratzer 1981, Kratzer 1991 | 30.04.2020 |
| 5. Epistemic modals
<i>Readings:</i> von Fintel & Gillies 2007, 2008 | 07.05.2020
<i>Assignment 2 due</i> |
| 6. Attitudes and evidentials
<i>Readings:</i> Stephenson 2007, Anand & Hacquard 2008 | 14.05.2020 |
| [no class 21.05.2020, university holiday] | |
| 7. Modal force
<i>Readings:</i> von Fintel & Iatridou 2008, Deal 2011, Yanovich 2016 | 28.05.2020
<i>Assignment 3 due</i> |
| 8. Deontic modals
<i>Readings:</i> Portner 2009 (Ch. 4), von Fintel & Heim 2011 (Ch. 5),
von Fintel 2012 | 04.06.2020 |
| [no class 11.06.2020, university holiday] | |
| 9. Ability modals and actuality entailments
<i>Readings:</i> Brown 1988, Mandelkern et al. 2017, Nadathur 2019 (Chs. 1–2),
Hacquard 2016 | 18.06.2020 |
| 10. Conditionals: overview
<i>Readings:</i> von Fintel & Heim 2011 (Ch. 4); Kratzer 1986,
von Fintel & Iatridou 2002 | 25.06.2020
<i>Assignment 4 due</i> |
| 11. Counterfactuals and similarity
<i>Readings:</i> Stalnaker 1968, Lewis 1973, Lewis 1981 | 02.07.2020 |
| 12. Indicative and subjunctive conditionals
<i>Readings:</i> Grice 1967, Stalnaker 1975, Leahy 2011, Heim 1992, Ippolito 2006 | 09.07.2020 |
| 13. Pragmatic interpretation of conditionals
<i>Readings:</i> Geis & Zwicky 1971, van der Auwera 1997a,
Nadathur 2013 (Chs. 3–4), Austin 1961, Franke 2007 | 16.07.2020
<i>Assignment 5 due</i> |

General

- [1] von Fintel, K. & I. Heim. 2011. Intensional semantics: lecture notes. Ms, MIT.
- [2] Kaufmann, S., C. Condoravdi, & V. Harizanov. 2006. Formal approaches to modality. In *The Expression of Modality*, ed. W. Frawley. Berlin: De Gruyter.
- [3] Kratzer, A. 2012. *Modals and conditionals: new and revised perspectives*. Oxford: Oxford University Press.
- [4] Portner, P. 2009. *Modality*. Oxford: Blackwell.

Premise semantics

- [1] Kratzer, A. 1981. The notional category of modality. In *Words, Worlds, and Contexts: New approaches to word semantics*, eds. H-J. Eikmeyer & H. Rieser, 38–74. Berlin: De Gruyter.
- [2] Kratzer, A. 1991. Modality. In *Semantics: An International Handbook of Contemporary Research*, eds. A. von Stechow & D. Wunderlich, 639–650. Berlin: De Gruyter.
- [3] Lewis, D. 1975. Adverbs of quantification. In *Formal Semantics: the Essential Readings*, eds. P. Portner & B. Partee.

Epistemics, attitudes, evidentials

- [1] Anand, P. & V. Hacquard. 2008. Epistemics with attitude. *Proceedings of Semantics & Linguistic Theory* 18.
- [2] von Fintel, K. & A. Gillies. 2007. An opinionated guide to epistemic modality. In *Oxford Studies in Epistemology*, Vol. 2, eds. T. Gendler & J. Hawthorne, 32–62. Oxford: Oxford University Press.
- [3] von Fintel, K. & A. Gillies. 2008. CIA leaks. *The Philosophical Review* 117: 77–98.
- [4] von Fintel, K. & A. Gillies. 2010. *Must ...stay ...strong!* *Natural Language Semantics* 18: 351–383.
- [5] Heim, I. 1992. Presupposition projection and the semantics of attitude verbs. *Journal of Semantics* 9: 183–221.
- [6] Stephenson, T. 2007. Judge dependence, epistemic modals, & predicates of personal taste. *Linguistics & Philosophy* 30: 487–525.

Variable-force modality

- [1] Deal, A.R. 2011. Modals without scales. *Language* 87: 559–585.
- [2] von Fintel, K. & S. Iatridou. 2008. How to say ‘ought’ in foreign: the composition of weak necessity modals. In *Time and Modality*, eds. J. Guéron & J. Lecarme, 115–141. Springer.
- [3] Yanovich, I. 2016. Old English **motan*, variable-force modality, and the presupposition of inevitable actualization. *Language* 92: 489–521.

Deontic modality

- [1] Chisholm, R. 1963. Contrary-to-duty imperatives and deontic logic. *Analysis* 24: 33–36.
- [2] von Fintel, K. 2012. The best we can (expect to) get? Challenges to the classic semantics for deontic modals. Ms, MIT.

Ability modals

- [1] Austin, J.L. 1961. Ifs and cans. In *Philosophical Papers*, eds. J. Urmson & G. Warnock.
- [2] Brown, M. 1988. On the logic of ability. *Journal of Philosophical Logic* 17: 1–26.
- [3] Hacquard, V. To appear. Actuality entailments. In *The Companion to Semantics*, eds. D. Gutzmann, L. Matthewson, C. Meier, H. Rullman, & T.E. Zimmerman. Oxford: Wiley.
- [4] Matthewson, L. 2011. Gitksan modals. *International Journal of American Linguistics* 79: 349–394.
- [5] Mandelkern, M., G. Schultheis, & D. Boylan. 2017. Agentive modals. *The Philosophical Review* 126: 301–343.
- [6] Nadathur, P. 2019. Causality, aspect, and modality in actuality inferences. Ph.D. dissertation, Stanford University.

Conditionals: indicative and subjunctive

- [1] von Fintel, K. & S. Iatridou. 2002. If and when *if*-clauses can restrict quantifiers. Workshop in Philosophy and Linguistics at the University of Michigan, November 8–10, 2002.
- [2] Grice, H.P. 1967. Indicative conditionals. In *Studies in the Way of Words*, 58–85. Cambridge, MA: Harvard University Press.
- [3] Heim, I. 1992. Presupposition projection and the semantics of attitude verbs. *Journal of Semantics* 9: 183–221.
- [4] Ippolito, M. 2006. Semantic composition and presupposition projection in subjunctive conditionals. *Linguistics & Philosophy* 29: 631–672.
- [5] Kratzer, A. 1986. Conditionals. In *Proceedings of the Chicago Linguistic Society* 22(2): 1–15.
- [6] Leahy, B. 2011. Presuppositions and antipresuppositions in conditionals. In *Semantics & Linguistic Theory* 21, eds. N. Ashton, A. Chereches, and D. Lutz, 257–274.
- [7] Lewis, D. 1973. Counterfactuals and comparative possibility. *Journal of Philosophical Logic* 2: 418–446.
- [8] Lewis, D. 1981. Ordering semantics and premise semantics for counterfactuals. *Journal of Philosophical Logic* 10: 217–234.
- [9] Stalnaker, R. 1968. A theory of conditionals. *Studies in Logical Theory* 2: 98–112.
- [10] Stalnaker, R. 1975. Indicative conditionals. *Philosophia* 5: 269–286.

Conditionals and pragmatic interpretation

- [1] Austin, J.L. 1961. Ifs and cans. In *Philosophical Papers*, eds. J. Urmson & G. Warnock.
- [2] van der Auwera, J. 1997. Pragmatics in the last quarter century: the case of conditional perfection. *Journal of Pragmatics*, 27: 261–274.

- [3] Francez, I. 2015. Chimerical conditionals. *Semantics & Pragmatics* 8: 1–35.
- [4] Franke, M. 2007. The pragmatics of biscuit conditionals. In *Proceedings of the 16th Amsterdam Colloquium*, eds. M. Aloni, P. Dekker, & F. Roelofsen, 91–96.
- [5] Geis, M. & A. Zwicky. 1971. On invited inferences. *Linguistic Inquiry* 2: 561–566.
- [6] Horn, L. 2000. From *if* to *iff*: conditional perfection as pragmatic strengthening. *Journal of Pragmatics* 32: 289–326.
- [7] Moss, S. 2012. On the pragmatics of counterfactuals. *Nous* 46: 561–586.
- [8] Nadathur, P. 2013. If ... (and only if: conditional perfection and completeness. M.Phil. thesis, University of Oxford.