

# Conditionals: between language and reasoning

## Suggested topics for final essay

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### 1 Introduction

- Below I suggest indicate some possible topics for some final essays, and suggest some literature which may give you ideas.
- These topics are not exhaustive: you are welcome to choose a topic different from the ones below. In this case, please get in touch with me before starting to work.
- The suggested readings are meant as a starting point. As you read the literature or browse the web, you will see references to other papers which are not listed here, but which may well be relevant. Conversely, as you zoom in on a specific issue, you will find that not all the suggested readings are relevant. You should feel free to focus on the relevant ones.
- The headers below are areas rather than specific paper topics. A typical paper topic will be a specific problem/question located within one of these areas. However, your paper should situate the specific question in the broader context.
- You may choose one of the following two formats for your paper:
  - Survey essay: you survey a part of the literature on the problem at hand. You illustrate the relevant empirical observations and the theories which have been proposed to account for them; you explain the predictions made by the theories, and discuss the arguments that have been given for/against each theory. You are welcome to engage with the debate yourself, assessing the given arguments critically, and proposing new ones.
  - Research essay: you try to make a small novel contribution to the literature. This could, e.g., take one of the following forms:
    - \* point out new data on a certain phenomenon, and use them to draw theoretical conclusions;
    - \* propose a new account of a problem, comparing it with existing ones;
    - \* study an existing theory in detail, bringing out some new consequences, and assess these consequences critically;

- \* generalize an existing account to cover new data, or work out in detail an account which is only sketched in the literature.
- In any case, you should explain clearly what your aim is; structure the paper into sections each of which has a clear purpose; make sure to relate your contribution firmly to the literature; and summarize your findings in the conclusion.
- You should aim for a size of 10 to 15 pages.
- See also the course webpage for more details on the requirements.

## 2 Suggestions

### 1. Conditional excluded middle

There are various issues in this area. One is that most approaches to conditionals let the antecedent generate a hypothetical context, a set of possible world, and then interpret the conditional in terms of universal quantification over this set. These approaches do not validate CEM. However, we saw that several arguments speak in favour of CEM, or at least of the strong behavior of disjunction which is predicted by CEM. One question is how those accounts can be modified to account for these observations. Here there are different strategies: plural reference, epsilon functions, and bilateral support-reject semantics. Another issue is how to render CEM valid while avoiding the collapse of “if A then might C” to “if A then C”.

- Schlenker (2004), [Conditionals and definite descriptions](#)
- Schulz (2014), [Counterfactuals and arbitrariness](#)
- Santorio (2017), [Conditional excluded middle in informational semantics](#)
- Ciardelli (forthcoming), [Indicative conditionals and graded information](#)

### 2. Sobel sequences

It has been pointed out that Sobel sequences, that motivate variably strict accounts of conditionals do not sound equally good when reversed. This observation, which is unexpected from the perspective of standard accounts, has led to an interesting debate, and to dynamic theories where counterfactuals quantify over a modal horizon that evolves through a discourse.

- von Stechow (2001), [Counterfactuals in a dynamic context](#)
- Gillies (2007), [Counterfactual scorekeeping](#)
- Moss (2012), [On the Pragmatics of Counterfactuals](#)
- Willer (2018), [Lessons from Sobel sequences](#)

### 3. Conditionals and unconditionals

Unconditionals are sentences like “I’ll go to the party whether it rains or not”, or “Whatever she said about me, I don’t care”. These are conditional constructions: for instance, the first sentence says that the speaker will go to the party if it

rains, and also if it doesn't rain (it expresses that her going to the party is *unconditional* on the rain, hence the term for such sentences). How exactly are these constructions related to ordinary if-conditionals? How are they different? What does their logic look like?

- Zaefferer (1991), [Conditionals and unconditionals: cross-linguistic and logical aspects](#)
- Rawlins (2008), [Unifying \*if\*-conditionals and unconditionals](#)
- Ciardelli (2016), [Lifting conditionals to inquisitive semantics](#)
- Bledin (2018), [Fatalism and the logic of unconditionals](#)

#### 4. Conditionals and modals

An important aspect of the semantics of conditionals that has become salient in recent literature (and which is not captured by traditional accounts) is their ability to restrict the domain of quantification of modals. For instance, “if Alice is in Paris, she is probably staying with Bob” expresses that it is probable, relative to the worlds where Alice is in Paris, that she is staying with Bob. Related to this, an interesting puzzle is that conditionals seem to commute with modals: “it might be that if Alice is in Paris, she’s staying with Bob” seems equivalent to “if Alice is in Paris, it might be that she’s staying with Bob”. This turns out to be very challenging to account for compositionally.

- Gillies (2010), [Iffiness](#)
- Kolodny and MacFarlane, [Ifs and Oughts](#)
- Yalcin (2012), [A counterexample to \*modus tollens\*](#)
- Bledin (2018), [Fatalism and the logic of unconditionals](#)
- Gillies (2018), [Updating data semantics](#)
- Ciardelli (forthcoming), [Restriction without quantification](#) (via LSF)

#### 5. Disjunctive antecedents

The debate surrounding conditionals with disjunctive antecedents has been lively in recent years. Some questions are the specific source of simplification of disjunctive antecedents, and the explanation of apparent counterexamples to SDA. One may also ask whether disjunction is unique in its power to introduce multiple possibilities as assumptions; one interesting question is to what extent indefinites like *a*, *some*, *any*, *two*, ... have similar effects.

- Alonso-Ovalle (2009), [Counterfactuals, Correlatives, and Disjunction](#)
- Ciardelli (2016), [Lifting conditionals to inquisitive semantics](#)
- Khoo (2018), [Disjunctive antecedent conditionals](#)
- Willer (2018), [Simplifying with free choice](#)
- Lassiter (2018), [Complex sentential operators refute unrestricted simplification of disjunctive antecedents](#)

- Cariani and Goldstein (2019), [Conditional heresies](#)

## 6. Conditionals and conditional probabilities

Adams' thesis that the probability of a conditional equals the conditional probability of the consequent given the antecedent is very well supported by intuition and by experimental evidence (at least for "normal" situations). Some issues here are whether there are any genuine counterexamples to the thesis, whether the thesis is compatible with conditionals expressing propositions, and how the thesis can be vindicated in an informational approach to conditionals.

- Khoo and Santorio (2018), [Probability of conditionals in modal semantics](#). (these lecture notes give an overview; references can be found in there).

## 7. The relation between indicatives and subjunctive conditionals

We saw that there are semantic differences between indicatives and subjunctive conditionals, and that this has led many theorists to focus on one of the two kinds of conditionals. In recent work some new efforts have been made to understand exactly where the semantic difference lies and to give a unified theory. Here the project could be to review these proposals (or a specific one) and/or discuss their merits and their shortcomings.

- Starr (2014), [A uniform theory of conditionals](#)
- Khoo (2015), [On indicative and subjunctive conditionals](#)

## 8. Intuitionistic conditional logic

On the more mathematical side, a recent development is the study of Lewis-style conditional logics in the intuitionistic setting. Several suggestions to take this work further are given at the end of the third paper listed here.

- Segerberg (1989), [Notes on conditional logic](#) (background)
- Weiss (2018), [Basic intuitionistic conditional logic](#)
- Ciardelli and Liu (forthcoming), [Intuitionistic conditional logics](#) (via LSF)

## 9. Comparing causal approach to counterfactuals

Causal modeling semantics delivers a powerful, simple and predictive analysis of counterfactuals. In its original version, however, it has heavy syntactic restrictions. In recent years, various causal theories without such restrictions have been proposed. It would be interesting to look in detail at the relations between (some of) these approaches, highlighting the differences between them and discussing how these differences bear on the empirical adequacy of these theories.

- Schulz (2011), [If you'd wiggled A, B would have changed](#).
- Briggs (2012), [Interventionist counterfactuals](#)
- Kaufmann (2013), [Causal premise semantics](#)

- Ciardelli, Zhang, and Champollion (2018), [Two switches in the theory of counterfactuals](#)
- Santorio (2019), [Interventions in premise semantics](#)

#### 10. Background semantics and intervention

Although background semantics is formulated within the context of causal models, it does not define the notion of an intervention. While not needed to deal with the switches scenario, this notion seems to be needed to deal with nested counterfactuals like the failure of modus ponens discussed by Briggs (2012). Is it possible to integrate the basic idea of background semantics with a notion of intervention that makes the right predictions about these cases?

- Schulz (2011), [If you'd wiggled A, B would have changed.](#)
- Briggs (2012), [Interventionist counterfactuals](#)
- Kaufmann (2013), [Causal premise semantics](#)
- Ciardelli, Zhang, and Champollion (2018), [Two switches in the theory of counterfactuals](#)

#### 11. Causal modeling semantics and non-recursive models

In the literature, causal models are often assumed to be recursive. Recently, Santorio looked at an implementation of causal modeling semantics which is defined also on non-recursive models. He argued that there are examples involving such models where our intuitions run against the logic of minimal change semantics, and are accounted for by his causal account.

- Santorio (2019), [Interventions in premise semantics](#)

#### 12. Even if

In conditional antecedents it is often natural to use the particle *even*. What is the role of this particle? Can we explain the contribution of *even* in conditional antecedents on the basis of a general account of the meaning of *even* (as it occurs, e.g., in *even Alice liked the movie*)?

- Bennett (1982), [Even if](#)
- Lycan (1991), [Even and even if](#)
- Moreno-Ríos et al (2008), [Inferences from semifactual 'even if' conditionals](#)