#### Tasks ahead

- Find common denominator for X-marking on modal operators (conditional modal would, weak necessity, desire predicates)
- Find analysis for "local" X-marking (inside conditional antecedent, complement of X-desires)
- Find compositional analysis for both [a millenium problem, afawct]

### Back to Stalnaker

## Stalnaker's strategy

"I am going to assume that we can identify at least paradigm cases of the contrasting categories of conditionals independently of any contentious theoretical assumptions about the grammatical marks by which we are identifying them, and then ask what work are those grammatical marks, whatever they are, doing? That is, what is the functional difference between a so-called subjunctive and a so-called indicative conditional?"

(Stalnaker 2014: pp.175f)

## The meaning of X-marking

"I take it that the subjunctive mood in English and some other languages is a conventional device for indicating that presuppositions are being suspended."

#### Anderson cases

If she had taken arsenic, she would show exactly the symptoms that she is in fact showing.

"In this case, it is clear that the presupposition that is being suspended in the derived context is the presupposition that she is showing these particular symptoms—the ones she is in fact showing. The point of the claim is to say something like this: were we in a situation in which we did not know her symptoms, and then supposed that she took arsenic, we would be in a position to predict that she would show these symptoms."

(Stalnaker 2014: p.185)

#### Modus tollens

There were no muddy footprints in the parlor, but if the gardener had done it, there would have been muddy footprints in the parlor, so the gardener must not have done it.

"Here, the subjunctive conditional cannot be counterfactual, in the sense defined, since one is arguing that the gardener did not do it, and one cannot presuppose something one is arguing for. That is, the argument is appropriate only in a context in which it is initially an open question whether the gardener did it."

"In this case, the presupposition that is suspended is the proposition, made explicit in the first premise of the argument, that there are no muddy footprints in the parlor. The idea behind the conditional claim is something like this: suppose we didn't know that there were muddy footprints in the parlor, and in that context supposed that the gardener did it. That would give us reason to predict muddy footprints, and so to conclude that if we don't find them, he didn't do it."

(Stalnaker 2014: p.185)

# Stalnaker (in a nutshell)

- O-marked conditionals: the selection function *f* is constrained to find a *p*-world within the context set (the set of worlds compatible with all the presuppositions made in the context of the current conversation).
- X-marked conditionals: f may reach outside the context set.
- That is, with X-marking, we abstract away from some established facts and then run a thought experiment. We then conclude that even in *p*-worlds outside the context set, where *p* is true, the consequent is true.

#### Stalnaker recast

- O-marking signals that the modal base is contained in the set of epistemically accessible worlds.
- X-marking signals that the modal base is not entirely contained in the set of epistemically accessible worlds.

# But what about the other uses of X-marking?

- X-marked weak necessity: additional ordering source
- X-marked desires: widened domain to reach worlds where an actually unattainable desire can be satisfied

#### Common denominator?

Departure from a default modal parameter:

- X-marked conditional: domain wider than epistemic set
- X-marked weak necessity: enriched ordering source
- X-marked desire: domain wider than doxastic set

## Local X-marking

- X-marking in conditional antecedents and in the complement of X-desires
- Idea: O-marking narrows the proposition to the relevant domain (epistemic, doxastic), X-marking signals that this narrowing would not work

## Summary

X-marking appears crosslinguistically in

- X-conditionals
- X-desires
- X-necessity

#### Desiderata

- A unified analysis of the meaning of X should be given.
- Once a unified meaning has been identified, its morpho-syntacticsemantic composition needs to be given.
- No known account within the Past-as-Past or Past-as-Modal camps achieves this.

#### What's next

- Pretty much everything is left to do
- The common denominator of the meanings of X-marking remains elusive
- Multiple X-marking is a puzzle
- The compositional derivation is a puzzle