Anankastic Conditionals
Deontic modality: linguistic and logical perspectives on oughts and ends

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A new set of sentences to consider

(1)  a. Jones should not eat fastfood.
A new set of sentences to consider

(1)  a. Jones should not eat fastfood.
    b. If Jones wants to eat fastfood for dinner, then he should not go to McDonalds.
A new set of sentences to consider

(1)  

a. Jones should not eat fastfood.

b. If Jones wants to eat fastfood for dinner, then he should not go to McDonalds.

c. If Jones wants to eat fastfood for dinner, then he should go to McDonalds.
A new set of sentences to consider

(1)  
   a. Jones should not eat fastfood.  
   b. If Jones wants to eat fastfood for dinner, then he should not go to McDonalds.  
   c. If Jones wants to eat fastfood for dinner, then he should go to McDonalds.  
   d. Jones wants to eat fastfood for dinner.
A new set of sentences to consider

\[(2)\quad \text{a. Jones should not smoke.}\]
A new set of sentences to consider

(2)  a. Jones should not smoke.
    b. If Jones wants to smoke, then he should not buy cigarettes.
A new set of sentences to consider

(2)  
  a. Jones should not smoke.
  b. If Jones wants to smoke, then he should not buy cigarettes.
  c. If Jones wants to smoke, then he should buy cigarettes.
A new set of sentences to consider

(2)  
a. Jones should not smoke.  
b. If Jones wants to smoke, then he should not buy cigarettes.  
c. If Jones wants to smoke, then he should buy cigarettes.  
d. Jones wants to smoke.
Consistent pairs of conditionals

- The two conditionals in the set have identical antecedents and seemingly contradictory consequents but are consistent.
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- The two conditionals in the set have identical antecedents and seemingly contradictory consequents but are consistent.
- A deontic modal, broadly construed, is necessary for the consistency of the conditionals.
- Compare with predictive, epistemic, and counterfactual modals, where the corresponding pairs are inconsistent.
Inconsistent pairs of conditionals

Predictive:

(3)  
   a. If Jones wants to eat fastfood for dinner, then he will go to McDonalds.  
   b. If Jones wants to eat fastfood for dinner, then he will not go to McDonalds.
Inconsistent pairs of conditionals

Epistemic:

(4) a. If Jones wanted to eat fastfood for dinner, then he must have gone to McDonalds.
   b. If Jones wants to eat fastfood for dinner, then he must have not gone to McDonalds.
Inconsistent pairs of conditionals

Counterfactual:

(5)  
   a. If Jones had wanted to eat fastfood for dinner, then he would have gone to McDonalds.  
   b. If Jones had wanted to eat fastfood for dinner, then he would not have gone to McDonalds.
Anankastic conditionals

- The two conditionals have the same form,
  \textbf{If want } p, \textbf{ should } q, 
  but a different interpretation.
Anankastic conditionals

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  \textbf{If want} $p$, \textbf{should} $q$,
  but a different interpretation.
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Anankastic conditionals

- The two conditionals have the same form,
  \[
  \text{If want } p, \text{ should } q, 
  \]
  but a different interpretation.
- The conditional in (c) conveys a best-means-of relation between \( p \) and \( q \).
- Anankastic conditionals (ACs): conditionals of the form \textbf{If want } p, \textbf{ should } q \textbf{ } that convey a best-means-of relation between \( p \) and \( q \).
Instrumental necessities

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- From this perspective then, both conditional necessities are instrumental necessities.
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- Is the difference in interpretation between the conditionals in (b) and (c) a difference in the underlying semantics?
- The conditional in (b) also conveys a best-means-of relation, but one between \( \neg p \) and \( q \).
- From this perspective then, both conditional necessities are instrumental necessities.
- Arguably, all the necessities in the set, including the one in the unconditional premise, are instrumental necessities, but different considerations are at play in their interpretation.
Dilemma

The new set also presents a dilemma in terms of its potential conclusions.

Is the dilemma true?

(6)  a. Jones should not to go to McDonalds.
    b. Jones should go to McDonalds.

(7)  a. Jones should not buy cigarettes.
    b. Jones should buy cigarettes.
Factual detachment

(8) a. If a wants p, a should q.
   b. a wants p.
   ______________________
   c. a should q.

- Is factual detachment with instrumental necessities generally valid?
- If not, when does the inference go through?
- Should factual detachment be (in)valid for anankastic conditionals?
Factual detachment and anankastic conditionals

(9)  a. If you want to go to Harlem, you should take the A train.
b. You want to go to Harlem.
c. You should take the A train.

(9) seems compelling.

Factual detachment for ACs has had a long series of detractors in the philosophical literature, who seek analyses of the conditional that would fail to validate factual detachment.

One major argument against it is the variability in the intuitive acceptability of the pattern across instantiations of $q$ and $p$. 
Deontic logic for practical reasoning

- Deontic logic was developed in a narrow setting as a logic of obligations.
- In this course we want to consider how it can be used for means-end reasoning and also taking linguistic considerations into account.
- We will consider side by side the linguistic semantics and corresponding logical analyses of the sentences in the new type of set.