## Handout 17: Back On The Riverboat

Philosophy 691: Conditionals Northern Illinois University ★ Fall 2011 Geoff Pynn

## APPARENT COUNTEREXAMPLES TO CONDITIONAL NON-CONTRADICTION

- Data: cases where each of a pair of subjects in different information states / contexts seems appropriately to believe / assert one of a pair of "contradictory" indicative conditionals. These cases pose a challenge for anyone who thinks that:
  - (a) Indicative conditionals have truth-conditions, and
  - (b) Conditional non-contradiction is valid for indicatives:

CNC  $\neg((A \rightarrow C) \& (A \rightarrow \neg C))$ 

Given CNC one of the conditionals apparently must be false, but both beliefs / assertions seem epistemically flawless. Most poignant for proponents of a view like Stalnaker's or Lycan's. Theorists who deny (a)—e.g. Adams, Bennett, Edgington, or Gibbard—or (b)—e.g., the horseshoer—aren't similarly challenged, though they need some explanation about what's going on in the cases, and why CNC has the intuitive pull that it does.

- 2. Gibbard's Riverboat Case. Pete and Stone are playing a hand of poker. The game will end when Pete calls or folds. Zack has seen Stone's hand and secretly communicated its contents to Pete. Jack has seen that Pete's hand is weaker than Stone's hand. Both leave the room before seeing how the game ended. Two conditionals believed / asserted by Zack and Jack, respectively:
  - Z: If Pete called, then he won.
  - J: If Pete called, then he lost.

Some say that Z is false: unbeknownst to Zack, Pete has the losing hand, so blameless as his belief / assertion is, it's just wrong. There is also an interesting disanalogy (noted by Lycan and many others) between Zack and Jack's bases for accepting their contradictory conditionals. Jack's basis for accepting J is simply that Pete has the losing hand. Zack's basis, by contrast, seems to involve a "backtracking" inference of some kind. Asked to defend his acceptance of Z, he would probably say something like: "Well, I signaled Stone's hand to Pete, so if he called *that would have to be because* he had the stronger hand." See DeRose (2010) for an interesting recent discussion of this disanalogy.

- 3. Bennett's Top Gate Case. Top Gate holds back water at the mountain lake. Two gated channels run down the east and west sides of the mountain. When Top Gate opens, water flows down whichever channel's Gate is open. When both West and East Gates are open, a safety mechanism prevents Top Gate from opening, so that water never flows down both channels at once. Esther operates the controls for East Gate and knows that East Gate is open; Wesla operates the controls for West Gate and knows that West Gate is open; neither knows that the other Gate is open. Esther believes / asserts *E* and Wesla *W*:
  - E: If Top Gate opens, then all the water will flow east.
  - W: If Top Gate opens, then all the water will flow west.

Both conditionals seem clearly correct, and unlike Gibbard's case there are no salient differences between their evidential bases.

## LYCAN'S TREATMENT

- 1. "Hard-line" vs. "compatibilist" treatments. Hard-liners say that one of the conditionals is false, thereby saving CNC; compatibilists accept that CNC is valid and say that both can be true. Lycan wants to be a compatibilist. He tries to do it with quantifier domain restrictions. (Those who deny that CNC is valid don't get a label...)
- 2. The details are complicated, but Lycan's basic idea is this: Zack's  $\mathcal{R} \neq$  Jack's  $\mathcal{R}$ . "Despite appearances, Jack's conclusion does not formally contradict Zack's, because we know that the parameter  $\mathcal{R}$  takes a different value for Jack from the value it takes for Zack—Zack's restriction class includes at least one event in which Pete has a better hand than Stone" (175).
- 3. The idea applied to Bennett's case: For both *E* and *W* to be true, Esther's *R* must contain at least one event in which West Gate is closed but none in which East Gate is, and Wesla's *R* must contain at least one event in which East Gate is closed but none in which West Gate is.
- 4. "[I]t proves unexpectedly hard to apply [my] theory to the Riverboat case, mainly because of our unclarity as regards 'relevance' and because of the failure of bivalence within 'events'. [...] I do not have a good enough intuitive handle on my own notion of 'relevance' to be able to provide a crushing answer..."
- 5. Is this a defense of compatibilism? Given Lycan's semantics, the full rendering of CNC is:

 $\mathsf{CNC-L} \neg (\forall e[e \in \mathcal{R}](\mathrm{In}(e, A) \supset \mathrm{In}(e, C)) \And \forall e[e \in \mathcal{R}](\mathrm{In}(e, A) \supset \mathrm{In}(e, \neg C)))$ 

His move here shows that the Riverboat case is not a counterinstance of CNC-L, since (we are assuming)  $\mathcal{R}$  is interpreted differently for each conditional.

But note that CNC-L is not valid: it's false whenever  $\neg \exists e[e \in \mathcal{R}](\operatorname{In}(e, A))$ , since in that case each member of the negated conjunction is true. If we impose the Antecedent Requirement, then no English indicative can ever be properly interpreted in a way that would furnish the raw materials needed for a counterinstance to CNC-L, so perhaps we have here validity in the "loose and popular sense". Still, let it be noted for the record that Lycan's semantics for 'If A then C' invalidate CNC. Perhaps we can call him a 'quasi-compatibilist'?

- 6. One reason to be suspicious about Lycan's rescue mission: he thinks that in general quantifier domain shifts are easy to force. (See, e.g., his discussion on p. 60.) Such shifts don't require us to gain or lose any beliefs about the underlying matters of fact. This is why we can waver back and forth between the premise and conclusion of a problematic instance of Antecedent Strengthening. But I can't imagine any way to shift between a true reading of Z and a true reading of J except by adding (or subtracting) a belief about the underlying matters of fact; e.g., about the relative strengths of Pete's and Stone's hands.
- 7. What if Pete calls? Would we still say that both beliefs / assertions were correct? No. Supposing Pete calls and loses, we'll say that Z was incorrect. (Similarly: supposing the mechanism breaks down and Top Gate opens, flooding both channels, we'll say that E and W were both incorrect.)
- 8. We can respect this by imposing the Reality Requirement: then each  $\mathcal{R}$  contains any actual Pete-calls event(s), and so Z is false if there are actual events in which Pete calls and loses. (Or: supposing Top Gate opens and both channels flood, each of Esther's and Wesla's  $\mathcal{R}$  contains an event that makes their conditionals false.)
- 9. But Lycan doesn't like the Reality Requirement; if he rejects it, this route is not open to him. He argues that we don't need the Reality Requirement to explain why Zack would recant his commitment to Z upon learning that Pete called and lost. I'm not sure this is correct, but suppose it is. That wouldn't imply that Zack's earlier belief / assertion of Z was false. Lycan agrees, and bites the bullet: "His original assertion was not only assertible but true in the context. I am happy with this understanding of the case. I do not hear the recantation as a confession of error [...] When he recants, it is only because his hidden parameter has shifted, and shifted in an irrevocable way; once he knows that Pete had the losing hand, he can no longer count Pete's winning as a real possibility" (177).