PHIL 5983: Rationality Seminar

University of Arkansas, Fall 2004

Topic: Delusions III: Rationality and the Deluded
Readings: *Pathologies of Belief* (Chapters 6 & 8); Bermudez "Normativity and Rationality in Delusional Psychiatric Disorders"

*Charles will cover Chapter 6, and I'm not doing notes for Chapter 8.

"Normativity and Rationality in Delusional Psychiatric Disorders"

*2 contributions of neuropsychology to understanding cognition:

1. "The fractionation of cognitive abilities that we find in neuropsychological syndromes provides a valuable clue as to the functional architecture of particular cognitive systems."
2. "…the study of specific impairments can help to identify the anatomical systems responsible for particular information-processing tasks in normal subjects." (458)

--The *subtractivity* assumption: "…the performance of a neuropsychological patient reflects total normal cognitive functioning minus those systems that have been impaired (rather than the operations of new post-traumatic brain structures)." (458)

*Bermudez argues that many psychiatric disorders involve violations of the norm of rationality, and aims to carefully distinguish species of these norms.

--Like our other authors, he focuses on delusions in particular. Here is his, by now familiar-sounding, account of delusions (and the prima facie case for the irrationality of the deluded):
"There are many different ways of spelling out just what is distinctive about delusional beliefs (Oltmanns and Maher, 1988), but all share an emphasis on the imperviousness of delusional beliefs to countervailing evidence, however overwhelming that countervailing evidence might seem to a third-person observer. It is fairly clear why this should seem a breakdown in rationality. Rational believers must be sensitive to evidential considerations and shifts in the balance of those evidential considerations." (462)

--An interesting philosophical, as well as therapeutic, puzzle:
"This immediately poses a puzzle to any theorist who believes there to be a close conceptual connection between (1) the concept of a person, (2) the concept of intentional action and (3) the concept of rationality. There seems to be a clear and obvious sense in which many psychiatric patients are not acting rationally. But how then can they be intentional agents acting for reasons and susceptible to the

various forms of therapy that effectively count as forms of rational persuasion?" (462-463)

*Bermudez distinguishes two primary kinds of rationality:

procedural rationality: "Subjects are procedurally rational to the extent that they reason in accordance with familiar deductive principles as modus ponens, modus tollens, contraposition and so on, together with such basic principles of probability theory as that the probability of a conjunction can never be greater than the probability of its conjuncts; that the probability of a hypothesis and the probability of its negation should add up to 1; and so forth." (463)

--These are the (only!) norms of rationality that are picked out by the so-called "standard picture of rationality". This picture is widely accepted by philosophers and cognitive scientists, as well as by some psychologists like Tversky and Kahneman (or so it seems).

--But Bermudez points out, as Gilbert Harman has emphasized in his work, that it is not at all clear (and is in fact not the case, Harman argues) that the rules of logic, which apply to propositions, carry over as psychological rules that apply to beliefs. (We also raised this concern in the first week of our seminar.)
"There is a clear difference of type and character between normative principles governing the deductive or probabilistic relations between propositions and normative principles governing the psychological processes resulting in either changes of belief or alterations in one's plans." (465)

--Also, the rules of logic do not tell us how to *revise* our beliefs when the rules of logic are violated.

epistemic rationality: "…one is *epistemically rational* to the extent that one reasons in accordance to the norms of good reasoning. Whereas procedural rationality is a matter of inference, of the conclusions that it is appropriate to draw from a given belief or set of beliefs, epistemic rationality is principally a matter of the dynamical relations of how beliefs relate to evidence and how they should be changed in response to changes in the structure of evidence." (468)

*Bermudez next distinguishes the positive from the negative symptoms of schizophrenia, and applies the above varieties of rationality to them.

Positive symptoms: Appear in acute schizophrenia; the presence of an abnormality—e.g., hallucinations or delusions
Negative symptoms: Appear in chronic schizophrenia; the lack of a normality—e.g., "poverty of action or poverty of thought" (469)

--Suggestion: Positive symptoms are associated with impairments of epistemic rationality (but not procedural rationality); no such association occurs with negative symptoms.

In defense of the procedural rationality of schizophrenics:
"Many delusional schizophrenics, particularly those suffering from so-called paranoid delusions, manage to construct a remarkably consistent and coherent view of the world. Apparently recalcitrant data are fitted into the web of delusional belief, their consequences noted and assimilated. Procedural rationality is, as we have observed, primarily a matter of consistency, and the internal consistency of the schizophrenic's delusional belief system is well known." (471)

And schizophrenics do not seem to perform worse than normal subjects on deductive reasoning tests.

But, schizophrenics do violate norms dealing with the processing of evidence (epistemic rationality):
"Yet it is characteristic of delusional patients not to entertain the possibility that the delusional belief might be false. Relatedly, it is also a norm of good reasoning to search for evidence that might confirm or disconfirm a given hypothesis. Yet delusional patients either fail to engage in such search or filter out any non-confirmatory evidence. In fact, many delusional belief systems are constructed in such a way as to be effectively untestable and irrefutable." (474)

*Bermudez accepts that delusions are the product of abnormal perceptual experience + epistemic irrationality. But, he also adds that there must be a salient affective dimension to the perceptual experience. (478)

*Bermudez also critiques the Gold and Hohwy category of experiential rationality. His complaint is that this is not any kind of rationality at all:

"It does not involve any transitions between thoughts that can be judged as valid or invalid, well-grounded or ungrounded…In what sense is it properly described as *irrational* to have one form of experience rather than another?" (481)

*Finally, Bermudez offers a third kind of rationality, that is non-epistemic and pragmatic.

<u>inclusive rationality</u>: "an overarching sense of rationality (inclusive rationality) on which certain courses of action can count as rational despite being epistemically irrational." (482) (Again, we raised this possibility in our week 1 discussion.)

--Note the relevance of this kind of rationality to therapeutic considerations:
"There is no point trying to alleviate those psychiatric symptoms that can be classified as rational in this inclusive sense unless some substitute is found that will perform the same function that those symptoms were performing." (489)

*Q: Is Bermudez correct that the accounts of delusional belief content that cite attributional biases are uninformative?
"If possessing an attributional bias just is having the tendency to find external causes for negative outcomes, then we learn nothing about the genesis of the behavior by being told that patients with paranoid delusions find external causes for negative outcomes because they reason with an attributional bias." (483)

--He makes a similar charge of uninformativeness with regard to Stone & Young's conservatism/observational adequacy explanation. (484)