

CULTURE, MEDICINE AND PSYCHIATRY

Volume 5 No. 4 December 1981

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RATIONALITY 'GOES WITHOUT SAYING'

Comment by

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The great virtue of Young's paper is that it addresses one of the oldest and most important problems in cognitive anthropology, the problem of rationality. However, I find Young's solution to this ancient problem precipitous and unconvincing. So, in a spirit of constructive debate, let me reformulate the problem of rationality and outline a scheme for locating Young's 'irrationalism' in its proper place.

Almost any Western scientist is committed to the view that ideas must appeal to our rationality to be worthy of respect, and that the only ideas worthy of respect are those which are explicit, consistent, coherent, unambiguous and true. For anyone committed to that view it is somewhat baffling to read in ethnographic reports that, e.g., the Bororo believe their sorcerers are bushcats, or that the Yir-Yoront deny the link between copulation and pregnancy, or that the Ndembu claim that quarrelsome women become infertile, or that in Arabia the breast milk of a pregnant woman is thought to be poisonous, or that the Pawnee refer to their corn as 'mother'. Indeed, mindful of those standards of rational appeal entrenched in our own scientific tradition, a central theoretical goal for cognitive anthropology has been to develop a theory of intellectual diversity capable of explaining to a Western scientific audience how other peoples manage to commit themselves to ideas and understandings that we, as Western observers, find contradictory, confused, ambiguous or false.

For over 100 years cognitive anthropologists have struggled with the problem of rendering intelligible to a Western audience the apparently contradictory, confused, ambiguous and false beliefs of other peoples. After a dispute-ridden century of Tylorian (and neo-Tylorian), Levy-Bruhlian (and neo-Levy-Bruhlian), Levi-Straussian, and Piagetian renditions and re-editions of the so-called 'primitive mind' it is comforting to at least be able to identify the enduring question behind the 'primitive mind' dispute, and to be able to reduce the variety of conceptions of the primitive mind to three types. That enduring question concerns the nature and distribution of rationality, viz.: What are the canons that govern the language and thought of the *ideal* scientist, statistician, and logician (e.g., Bayes rules of statistical inference, Mill's principles of experimental reasoning) and how do those canons compare with the canons that govern ordinary (everyday, folk, mundane, natural, savage) language and thought. A century-long distillation process has produced three possible answers to the question: (1) The

rationalist answer, i.e., the canons of logic and science (whatever they may be, and, of course, they must be identified and defended) and the canons of ordinary cognition are, despite superficial differences, really the same; (2) The irrationalist answer, i.e., the canons of logic and science and the canons of ordinary cognition are different and unequal (ordinary language and thought being an underdeveloped, incomplete or deficient version of logico-scientific cognition, or vice versa); (3) The non-rationalist answer, i.e., the canons of logic and science and the canons of ordinary cognition are different but equal, in the sense that they are incommensurate, each addressed to its own special objectives. Young, by this scheme, is an irrationalist.

For the most part the century-long dispute has ended in a stalemate. It now seems unlikely that either rationalism, irrationalism or non-rationalism will win the battle for the interpretive minds of cognitive scientists. In some ways ordinary language and thought is like logico-scientific language and thought. In some ways it is different. The difference may or may not be a matter of progress. The crucial question seems to be when does it make sense to emphasize likeness, difference or advance.

Advocates of the first view emphasize the underlying rationality of ordinary cognition, focussing especially on cases where the perception of an irrationality in our informant represents a failing of understanding on our part. A mother says to her son: "If you don't practice your violin this minute you can't go to the movies". The child diligently practices and is about to go to the movie as mother shouts out, "Where are you going! It does not logically follow that if you do practice you can go to the movies. You've committed a logical error". This hypothetical case is interesting because it is the mother not the child who has failed to understand the *tacit* rational norm governing their exchange. Mother said "if you don't practice your violin now you can't go to the movies", but what was *communicated* was "only if you don't practice now you can't go to the movies". The child, properly comprehending the logic of the tacitly conveyed biconditional, guided his action with a defensible norm. As it turns out, much that underlies rational discourse in ordinary conversation 'goes without saying'. The 'rational' need not be synonymous with the 'explicit', although what goes without saying to 'insiders' may not be quite so obvious, and may even appear irrational, to outsiders.

Advocates of the second view emphasize the irrationality of ordinary cognition, focussing on cases where knowledge of the proper canons for reasoning, judgment and choice is unequally distributed across expert vs. novice, modern vs. primitive, adult vs. child, doctor vs. client, etc. Much of the Piagetian and cognitive developmental corpus from which Young borrows the notions of pre-operational thinking and polythetic classification is an elaboration of this view. Piaget views the human mind as intendedly logical and scientific, striving

to figure out what causes what, striving to adapt intelligence to the demands of a common reality, striving for consistency among ideas. In his studies of ontogeny Piaget traces the history of the child's attempt to build up or "construct" for himself a set of logical and scientific canons (the propositional calculus, the law of agreement and difference, etc.) for regulating his own thought and for deciding whether a piece of his own thinking is successful or unsuccessful. For Piaget, most of ontogeny is a history of the child's adherence to, and then abandonment of, irrational canons, and the continued adherence by adults to either pre-operational or concrete operational concepts (e.g., confusing likeness with likelihood or contingency with necessity) is held to be irrational.

Advocates of the third view emphasize the non-rationality of ordinary cognition, arguing that ordinary language and thought is neither a mirror image of logico-scientific thought nor a faint copy of it. The basic idea is that ordinary cognition is neither an adequate (rational) nor deficient (irrational) example of logico-scientific thinking, but rather is aimed at objectives quite apart from (merely) 'representing' reality, noting observed recurrent regularities and mapping their boundary conditions. For example, Searle (1979) has constructed a very general classification of the functions of ordinary language. Even at a global level of analysis one must distinguish "assertive" utterances (e.g., scientific-like propositions or 'beliefs') from four other non-representational utterance types (directives, emotives, commissives and declarations). Assertives express beliefs. The accurate representation of the world is their aim. They "commit the speaker to something being the case, to the truth of the expressed proposition," as e.g., when I assert (as I shall below, *pace* Young) that 'operational thinking is compatible with polythetic categorization'.

It seems to be an interesting fact about ordinary language and thought that there are relatively few pure assertives. Most ordinary talk aims to do more than merely 'represent' (if it aims to 'represent' at all). What it aims to do is various, but, at the very least, ordinary language labels and descriptions tell you what to feel, how to behave and who's responsible. Ordinary language labels are 'conclusion-tending', as was obvious in a recent 'murder' trial as prosecution and defense struggled to agree on the 'terms' for arguing the case — should they refer to the 'mother', the 'offspring' and the 'child' or the 'patient', the 'fetus' and the 'product of conception'? If 'representation' were the only goal of ordinary cognition (and, ideally, it is the only goal of scientific thought) we would have no need to interpret the difference in meaning of such (now famous) lexical items as 'father', 'dad', 'daddy', 'pop', and 'old man'; indeed, we would have no need for five terms at all, for they all represent or point to the same thing. But representation is not the only goal of ordinary language and thought; 'father', 'daddy', 'old man', etc., do not register in the same key.

Ordinary language and thought is also routinely engaged in some rather

dramatic non-scientific, non-representational, so-called 'constitutive' activities (Searle 1969; D'Andrade 1981). In 'constitutive' activities one's words (e.g., 'You're fired'; 'I dub thee Sir Allan'; 'Your mother's brother and your father's sister's husband are both 'uncles'') are used to *create* a reality rather than map an independently existent reality. In such cases one's words have no truth value; they are neither true nor false. Constitutive utterances are used to make something the case rather than report that something is or is not the case. Indeed, as D'Andrade (1981) notes, underlying many ordinary language categories (e.g., 'marriage', 'money', 'theft') is a system of constitutive rules of the form 'X counts as Y in context C'. To understand the meaning of a constitutive category is not merely to observe and describe some objective physical fact. It is rather to understand the terms of what D'Andrade calls a 'social agreement that something counts as', e.g., 'marriage' or 'theft'. 'Unclehood' is not an objective feature of father's sister's husbands waiting there for any scientific observer to discover. Scratch a little on some of our folk medical categories (e.g., 'insanity') and one discovers the terms of a social agreement about what counts as what. Much of everyday discourse is a tacit negotiation of that compact and not everyone is party to the agreement.

Science is not all there is to ordinary language and thought, and scientists, focussing as we must on 'representational' goals, are not always aware of what is being accomplished by ordinary discourse. Indeed we should be aware of the danger of interpreting other people's purposes as though they were our own. Imagine the following, uttered by an employer to his factory laborers (see Tambiah 1973): A boss is to his workers as a father to his son. One of the hazards of a pure "representational" concern is the ease with which it is possible to misinterpret the employer's rhetoric as science and inappropriately accuse him of observational failure (again Tambiah 1973). Or so it is argued by those who view logico-scientific thought and ordinary thought as 'separate but equal'.

Despite the century-long dispute, the tension between rationalist, irrationalist and non-rationalist conceptions of the ordinary mind has been a creative force in cognitive studies, spawning new discoveries and inciting daring feats of reinterpretation. March (1978; also March and Olsen 1979), for example, advocating a form of rationalism, has argued that ambiguity and inconsistency are "not necessarily a fault in human choice behavior to be corrected but a form of intelligence" and he has examined some of the advantages of keeping our goals ambiguous or having no explicit goals at all. Ziff (1972), arguing in a similar rationalist vein, has examined some of the differences between the formal languages of logic and science and the natural language of ordinary discourse. Ziff argues that ordinary discourse is not necessarily less precise than scientific discourse, but rather attains its precision in a different way. Where scientific discourse

strives for *universal* intelligibility by means of formal explicitness (a separate term for each concept and each term a separate concept – the monothetic hierarchical form of definition referred to by Young), ordinary discourse strives for intelligibility among speakers who share a 'form of life', speakers who can count on context and tacit background understandings to decode potentially ambiguous utterances. Indeed, Ziff argues that explicitness does not only *not* add precision to ordinary discourse; it actually creates a breakdown in communication under the 'strain of explicitness'.

"A cheetah can run faster than a man." Really? What about a sick cheetah? Or a baby cheetah? Or a three legged cheetah? Or a cheetah with a five hundred pound weight on its back? And how long is the race anyway. And what is the terrain? Up the side of a mountain? Did you mean to say "some cheetahs can beat some people under some conditions" – with the implication that some men can beat some cheetahs under some conditions? As Ziff's humorous example demonstrates, the more one tries to be explicit about what was *said* (you did say "a cheetah can run faster than a man"; and a sick, three-legged baby cheetah is a "cheetah") the worse things get. Yet, was there really a failure of precise communication. The 'precise' need not be synonymous with the 'explicit'.

Irrationalist interpretations of ordinary cognition have also flourished in the last ten years. A neo-Tylorian literature has emerged (e.g., Wason and Johnson-Laird 1972; Tversky and Kahneman 1974; D'Andrade 1974; Shweder 1977, 1980; Nisbett and Ross 1980) examining the cognitive processing limitations of the human mind and documenting the ways normal, intelligent adults are deficient logicians, faulty statisticians and muddled empirical scientists. Ordinary folks are not very good at doing applied science. They are not sure what evidence is relevant for testing a generalization. They overlook base-rate information. They confuse likeness with likelihood. They lack a concept of correlation, etc.

But, perhaps the most surprising development of the past ten years has been the renewed interest in non-rationalist interpretations of ordinary thought. A concern for the non-rational can be traced back to Levy-Bruhl's notion that the canons governing so-called primitive thought are neither deductive, inductive nor causal – allogical rather than illogical. For Levy-Bruhl the primitive was not a bad scientist but rather a good mystic.

Anthropology has witnessed something of a Levy-Bruhlian revival, especially among so-called 'symbolic anthropologists'. In the contemporary neo-Levy-Bruhlian re-edition the primitive is no longer a mystic but rather a creator of symbolic worlds, and 'symbolic' types inside and outside anthropology are busy pointing to the 'arbitrary', 'constitutive' and 'semiotic' components of our thinking (e.g., Schneider 1968; Geertz 1973; Sahlins 1976), pointing to those areas where there are no logical canons or regularities of nature dictating what is proper or necessary for us to believe. Thus, for example, the renewed interest

in the view that our classifications of things (e.g., what's 'food' and what's 'not food' – well, you can eat rabbits and sheep but not dogs or horses) are determined neither by logic nor by (what Foucault calls) 'immediately perceptible contents', a view that culminates in the relativist principles that 'any two things have exactly as many properties in common as any other two' and that we do not classify things together because they are more alike than other things; rather, things seem more like each other because they have been classified together (Goodman 1972).

Young enters this century-long 'rationality' debate by pointing to a supposed gap between the scientific language and thought of the 'empathetic physician' and the supposed proto-scientific language and thought of ordinary folks as they talk about their symptoms or trace the origins of their dis-ease. Medical scientists are said to have difficulty understanding the implications of their patient's statements about illness, to have difficulty understanding what it all means when a patient says she is 'anxious' or 'depressed'. Borrowing a series of distinctions from the cognitive developmental literature (e.g., Piaget's distinction between pre-operational and operational thinking and Vygotsky's distinction between polythetic and monothetic categories) Young argues that the medical scientist and the layman differ in their modes of reasoning. And, after a few respectful nods in the direction of conversational pragmatics (p. 322), and after some hedging (pp. 323–324), Young embraces the 'irrationalist' interpretation of ordinary thought so prevalent in the developmental literature. Moved by the spirit of 'irrationalism' Young scales scientific thought versus ordinary thought along a series of gradients (e.g., 'strongly accommodated to reality' vs. 'weakly accommodated to reality'). He calls upon his fellow medical anthropologists to reject the assumption that 'informants can be treated as if they were rational men'. By acknowledging the deficiencies in the rationality of our informants Young believes we will be in a better position to understand ordinary medical discourse. Why do I find Young's arguments so unconvincing?

My first difficulty I shall refer to as the problem of weak illustration. Young calls on us to reject the assumption that our informants are rational and he claims that the modes of reasoning underlying folk medical utterances cannot be viewed as rational. What corpus of folk medical utterances warrants such a claim? What (in particular) is it that Young finds so troublesome? There are surprisingly few examples in the paper. I can find about three. First, ordinary folks use ordinary language terms ('pain', 'health', 'anxiety') when talking about illness and that's supposed to be troublesome because these terms are polythetic. Why that's supposed to be a bad thing I'll return to in a moment. Secondly, ordinary folks (sometimes?) engage in (what looks to me simply like) circular or tautological reasoning (failing to establish the logical independence of cause and consequence) as when we ascribe 'someones sicknesses to his 'sickness' '.

Young (p. 329) describes this as a pre-operational propensity to detach events from the factors which affect them. Yet, then along comes a third illustration (p. 331) in which (ironically) informants are said to seek causal connections like mad, even to the extent of causally connecting two events, a hospital visit and the onset of impotency, which were three months separated in time. And, what's supposed to be the problem with ordinary thinking in that case? The problem is that informants entertain hypotheses about what causes what which are wrong or seem unreasonable.

Now it seems to me these illustrations do not support the conclusion Young would have us reach. Almost all ordinary language terms are polythetic in form (Wittgenstein's analysis of the term "game" is the classic illustration). All that suggests is that rationality, science and operational thinking are compatible with polythetic categorization, as I believe they are. In support of the idea that rational science is compatible with polythetic categorization I would point to the recognition among numerical taxonomists (e.g., Sokal and Sneath 1963; Sokal 1974) that polythetic categorization is the ideal form for general purpose scientific taxonomies. If one aims at a parsimonious summary of nature's grouping of things (e.g., vertebrates vs. invertebrates) there are very few taxa that can be defined by reference to necessary and sufficient criteria. One may be tempted to say, e.g., that 'all vertebrates have erythrocytes in their blood' but then along comes some life form that qualifies as a vertebrate in all sorts of ways but lacks erythrocytes in its blood (e.g., Rudd 1954). One by one necessary and sufficient criteria disappear; the best one can do in a general purpose classification is define probabilistic complexes of characteristics no conjunction of which is necessary or sufficient.

I also wish to support the suggestion that logical and operational thinking is compatible with polythetic categorization. It is true that logical thinking presupposes the resolution of ambiguity and vagueness. However it is equally true that logic is indifferent to the mechanism or process for resolving the ambiguity or vagueness (e.g., formal monothetic lexicalization or tacit context-specific understandings). Indeed, there has been a recognition among some philosophers of language (e.g., Black 1963; Ziff 1972) that the difference between logico-scientific languages and ordinary languages does not reside in their relative degree of ambiguity but rather in the means by which, and the juncture in the communicative process at which, ambiguity gets resolved. The ambiguity so characteristic of ordinary language lexical items does get resolved, but it gets resolved in context and by means of subsequent verbal interaction. For example, none of the true things one can say about "solitaire" or 'professional baseball' qualify as necessary or sufficient features of 'games'. Yet when someone utters 'I just played a great game' it is not difficult to discover (by asking or looking) that he spent the last three hours at home alone with a deck of cards having fun

rather than making money before a crowd. And, for example, despite the fact that the term 'tall' is polythetic (and vague) the implication of the utterance 'pass the salt to the tall man' is quite determinate when the only other two people at the table are 4'10" and 5'6".

As for Young's two other examples, all they show is that people sometimes make logical errors (e.g., reason in circles), draw erroneous inferences or entertain theories that turn out to be wrong. Experts and virtuosos make such errors and so do laymen. The examples certainly do not show that the *canons* specifying what counts as a proper piece of thinking differ between scientist and layman. Perhaps Young wants to say that expert and layman respect the same logico-scientific canons (and thus can be brought to recognize their errors) but that laymen (more often than experts) "forget" to follow the canons which they themselves respect. After all we all know that 'if P then Q' does not imply 'if Q then P' yet we often commit the fallacy. Pre-operational thinking, however, as Piaget uses the concept, refers to a stage in the construction of adequate canons for regulating one's thoughts; it does not refer to performance errors *per se*; the pre-operational child does not know the proper canons of thought, that is, the child has no concept of his own mistakes.

My second difficulty with Young's analysis I shall refer to as the problem of the wavering and undifferentiated conception of rationality. At the beginning of the essay (pp. 317-318) it seems that what Young wants us to abandon is the view that thinking in everyday life is equivalent to what mathematicians and logicians do, that is, self-consciously manipulate monothetic symbols following algorithmic rules for consistently interdefining terms into vast tautological systems. The point is well-taken; a natural language is not a formal language and the goals of ordinary thought are not necessarily the goals of the mathematician or logician. The only thing that seems surprising is that Young should equate rationality with such formalizations or that he should believe that the mathematical logician's view of rationality is the predominant view in the social sciences (all that attributing without citation is disquieting).

Later however the rational man model starts gobbling up all sorts of features of thought, and by the end of the essay ordinary folk (in contrast to rational men) are said to be (among other things) undifferentiated (vs differentiated), non-causal (vs causal), concrete (vs abstract), pre-operational (vs logical), polythetic (vs monothetic), unsystematic (vs systematic), egocentric (vs decentered), unreflective (vs self-reflective), associative (vs propositional), weakly accommodated to reality (vs strongly accommodated to reality), etc. Young then unifies all these characteristics by linking them to literacy or 'textualization' while reminding us (an irrationalist's reminder) that some peoples have it and some peoples don't (p. 325).

I am troubled by all the lumping. I suspect the only place all those features

of thought go together is in the Piagetian image of the ideal scientist. I doubt they go together either developmentally or cross-culturally. For example, is it not possible to manipulate propositions without being self-reflective? Didn't people draw inferences from empirical premises expressed in ordinary language (e.g., the cow is in the corn; therefore, the cow is not in the barn) long before anyone self-consciously tried to work out the rules of inductive logic? Certainly it is possible to be strongly accommodated to reality without having to rely on formal operational skills or monothetic terminology; indeed the demands of local adaptation may be such that one can get quite far simply imitating what one sees, noticing what goes together in immediate time and space, and remembering it all. And, as noted earlier, many attempts to accurately map the correlational structure of characteristics in the plant and animal world have turned out to be polythetic in form. In the area of social cognition (e.g., the classification of individual differences) behavior is so context-dependent that it is concrete thinking, not abstract thinking, that has turned out to be most adaptive (see e.g., Mischel 1968). Indeed, I find it ironic (and distressing) that Young picks up the notion that people are 'habitually' pre-operational (or operational, or inbetween) (p. 329) just at the moment when the field of cognitive developmental psychology is about to abandon the notion of broad 'stages' in thinking and about to recognize that for children as well as adults the content of what you think about is decisive for how you think (e.g., Wason and Johnson-Laird 1972; Gelman 1978; Flavell 1980). What the evidence shows is that by clever manipulation of task content, an experimenter can demonstrate either the absence of logical thinking in an adult or the presence of logical thinking in a three year old! So what's all this talk of habitual pre-operational thinking?

My final difficulty with Young's paper I shall refer to as the rush to irrationalism. Now it seems to me that the unresolved and irresolvable "rationality" debates of the last 100 years should teach us that there is no general solution to the problem of interpreting native utterances; non-rationalism, rationalism, and irrationalism each has its place. As a first step in interpreting any stretch of discourse we must understand what the speaker is trying to do with his words, i.e., we must identify the function of the utterance. Is the speaker trying to report a fact, influence our attitudes, direct our action, declare an article of faith, etc. It does little good to interpret poetry as science or myth as logic. After we have 'bracketed out' the non-rational there may be nothing left to interpret as irrational.

If we are convinced that our speaker is trying to be scientific and that his utterance has 'assertive' or representational force we engage in a second stage of analysis. We ask, what are the standards or norms that the speaker uses to regulate or evaluate his own thinking. A useful starting place is to assume that his norms are the same as ours. This may or may not turn out to be the case,

but errors of thought alone should not convince us that the assumption is wrong unless the speaker refuses to alter his understanding in the face of evidence, instruction and criticism. If the speaker bows down before reason and evidence and alters his claims we can then set ourselves the task of finding out why the error was made in the first place. We can examine the speaker's 'psycho-logic'; we may discover, for example, that normal, intelligent adults require external representational aids (e.g., a 2 x 2 table) to successfully engage in formal operational thinking. If the speaker persists in his claims and we are convinced that his goal is to do science (e.g., explain an outcome, estimate a likelihood, draw a deductive inference) we can either invoke and explore interfering 'emotional' factors or we can try to identify the alternative irrational canons underlying his thought. What, for example, does the speaker identify as an error in thinking, etc.

Unfortunately, Young has not engaged in the actual interpretation of any stretch of medical discourse (I noted his 'weak illustrations' earlier). Had he followed the interpretive steps outlined above his commitment to irrationalism might have seemed more motivated. Instead he seems to have merely imported a few concepts from the literature on children's minds and then declared its relevance to medical anthropology. In the light of the interpretive alternatives and in the absence of evidence the declaration seems precipitous and unconvincing.

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Comment by

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Professor Young argues in this and previous papers that medical anthropologists should study various species of scientific discourse as they do forms of popular discourse. Rather than simply collecting and classifying folk beliefs or gathering cross-cultural data to confirm or disconfirm contemporary theories in social

psychiatry and medicine, medical anthropologists should turn their attention to the analysis of these theories as discursive forms. In a previous paper, Young (1980) subjected the current genre of stress theories to such analysis. In the paper published above, Young asserts that this approach is applicable not merely to medical and psychological theorizing, but to anthropological discourse as well.

While not explicitly referenced in these two pieces, Foucault's studies of Western medicine, psychiatry, and sexuality provide (at least in part) the methodological frame for Young's approach. Foucault has elaborated a sociology of knowledge that goes well beyond the crude analysis of scientific theories in terms of their social origins and the interests they serve in society. He demonstrates the importance of analyzing fine strands of discourse, of studying who in a society 'is accorded the right to use this sort of language', 'the institutional sites . . . from which this discourse derives its legitimate source and point of application (its specific objects and instruments of verification)' (Foucault 1972: 50, 51), the symbolic and epistemological structure of the discourse, the realities or 'objects' it produces (*ibid.* 49), and the 'local power relations at work' in the development and use of each strand of discourse (Foucault 1978: 94). Those who have read in the Foucault corpus will recognize that Young's analysis of 'the discourse of stress' barely begins to exploit the potential of this approach to understanding an important stream of popular and scientific psychological language in our society. Recognition that 'the discourse on stress depends on the tacit knowledge of the 'abstract individual'' (Young 1980: 136) and on the objectification of de-contextualized stressors is an important beginning point for such analysis. Both historical and ethnographic research would provide valuable insight into the popular roots of and response to stress theories, their relation to theories of self-control and individual responsibility in therapeutic discourse, and the contradictions involved in using such theories to reattach biomedical meanings to the personal and social grounds of suffering. Young's critique of Rational Man Theories aims to demonstrate that anthropological theory reproduces the same conventional knowledge of the abstract individual as do stress theories. Unfortunately, Young's argument in this paper does not do justice to the methodologies of a theory of discursive practice nor to the complexity of the anthropological theories involved.

Little fault can be found with the argument that humans often do not say what they think or do what they say, and that in the face of affliction thought and action are seldom logical. Because Young provides a caricature of a rationalist perspective (in order to keep the argument 'concise'), and because he casts so wide a net in charging adherence to this position ('most medical anthropologists'), most will aptly deny being caught among Rational Man Theorists. Young is certainly correct in arguing against a 'volitional belief model' that reduces