"Not guilty as charged" is my reaction to Stephen Norris' somewhat strange idea that I am a crypto-logical-empiricist. I'm obviously not an acknowledged one, since I have been arguing publicly against logical empiricism for some thirty years. But what I find truly puzzling in Norris' review is the fact that he manages to give the impression that I adopt a questionable but unquestioned view of philosophical analysis, when the book is primarily a sustained argument about the nature of such analysis. More particularly, the book is an attempt to articulate my concerns about some aspects of empirical work on intelligence (such as IQ testing) which I think can be shown to be deficient largely because there is no adequate theory or conception of intelligence behind the practice. The result is that the methodology of research drives the practice and defines the concept. This argument is set within the broader context of my attempt to explicate my view of the nature of philosophical analysis.

In brief, the conclusion of my argument on the three main themes of the book are: (1) philosophical analysis is neither to be seen as a matter of revealing a given and incontestable truth (such as "intelligence" means "X" and that is an indisputable fact), nor, at the other extreme, as a matter of mere subjective or cultural opinion (such as "intelligence" is whatever our society takes it to be. The question of the truth or falsity of a concept does not arise, but the questions of its subtlety, clarity, and usefulness, and so on do. In one sense, analysing a concept is an entirely individual matter (I conceive what I conceive; my account of intelligence is an account of what I take intelligence to mean), but it is not, therefore, a purely subjective matter. A concern for clarity, completeness, coherence, and compatibility (the four Cs) will both set logical and empirical restraints on what one can reasonably say and lead to a fifth C—a degree of commonality. Linguistic usage is explicitly referred to as a useful starting point, but something that has no logically necessary relevance to conceptual analysis and that may well be challenged by the analysis. (2) Approaching the task in this way, I would define intelligence in terms of possessing understanding of a number of distinctive and important types of inquiry. (3) IQ testing is predicated on a very different conception of intelligence—namely, the ability to perform well on the tests—presumably, at least partly, because testers have failed to articulate a conception in the appropriate manner. The conception of intelligence implicit in such testing is neither valuable in itself nor obviously related to intelligence, as I understand it, in any way.

Norris' summary of what he sees as my four main points is, therefore, more or less correct. His objection that I do not refer to "the vast amount of work done" on the nature of the metalanguage of science seems to me slightly peculiar, but of no great consequence, as does his wish that I had written a critique of Nel Noddings or Jane Roland Martin rather than what I wanted to write. Similarly, I do not see a strong reason for responding in the context of this book to arguments about cultural and gender bias that I do not find very convincing anyway. (For those who wish to know more about my views on that topic, I add a footnote to various other books of mine that do address it.1)
We now get to Norris' central concern about what he calls "an empiricist dogma." The first thing to say is that I do not subscribe to this dogma, but I suspect that the confusion arises out of differing interpretations of phrases such as "radically different," "fundamental distinction," and "fundamental cleavage." I entirely agree that no empirical activity proceeds without any conceptual or logical moves and that, conversely, no reasoning is entirely divorced from empirical consideration at every level. In my view, the fact remains that the activity of articulating an idea in accordance with the 4 Cs is an appreciably different kind of activity from many others which I would loosely clarify as "empirical" in that they are considerably more focused on observation and experiment. More specifically, I distinguish between the activity of trying to test something not very clearly defined but referred to as "intelligence," and the activity of trying to tease out in detail what one understands by "an intelligent person." And I maintain that in a book such as Herrnstein and Murray's recent The Bell Curve the failure to do the latter seriously jeopardises the worth of the attempt to do the former. This has nothing to do with any thesis about a total and irreconcilable difference between the analytic and the synthetic; it is simply putting forward the claims of philosophy.

Norris is mistaken to imagine that I take on the role of lexicographer. He is evidently unaware of my explicit explanation of how I use phrases such as "we should not say" "what we mean," and "the notion . . . strikes one." These are not to be interpreted as literal empirical claims but as appeals to the individual reader to consider whether such locutions seem intelligible to him or her. Thus, the questions that Norris raises are precisely the questions that the reader is supposed to contemplate and, if my thinking is sound, they will answer them in the affirmative. The question of whether individual readers will or will not answer them affirmatively is an empirical question. But determining whether something does or does not strike one as contradictory is not what most people would clarify as an "empirical" procedure.

Let me return to the issue that the book is actually concerned with. A number of people (call them what you like) are claiming that by using IQ tests they can tell us about the degree of intelligence possessed by individuals. In response, I am saying "such tests certainly don't test what I mean by intelligence," and suggesting to the reader that, if he thinks about it carefully, he will share my view. Whether he does or does not, I go on to point out that some questionable assumptions here are not primarily empirical questions but rather questions of logical coherence, comprehensibility, and reasoning. (For example, why assume that intelligence is normally distributed? On what grounds do we posit an entity "intelligence" that has degrees? What does it mean to do so?) Most important of all, I go on to raise the question of why anyone should care about intelligence as defined by IQ tests.

It is, of course, true, as Norris says, that scientific practice neither does, nor needs to, wait totally on the definitive analysis of a concept. Scientific research does contribute to the refinement of various concepts. But the burden of my argument has been that this is, nonetheless, a risky way of going about things and that, as far as we can, we would be well advised to give more thought to key concepts in our research programs than we commonly do (particularly in education). My example of cancer may have been badly chosen, inasmuch as cancer is to a large extent a name for we know not what. But the basic point
seems to me to remain sound, and I stand firmly behind the contention that "whether speed in thinking is an aspect of intelligence is a question that can only be answered by thinking about the concept, by reflection on what we mean, by argument about the kind of thinking that we presume to dignify with the title of 'intelligent'." Since this is really the heart of the matter, I will briefly elaborate.

Norris writes: "We can learn about the relationship between speed of reaction time and intelligence without having a clear idea of what intelligence is," and he suggests that I deny this and that I believe that "sense determines reference." In fact, I do not believe that "sense determines reference" without qualification, and I do not deny that we can learn something about the relationship between X and Y without having an entirely clear idea of what X and Y are. My point rather is to stress (a) that too often we proceed with empirical inquiry into concepts that we are more unclear about than we should be, and (b) that there is always a degree of judgement or decision-making in conceptual matters which logically cannot be made up for by any amount of empirical work. Thus, as I once put it, whether a new breed of animal that had some of the features of a cow and some the features of a horse should be classified as a cow, horse, or something different from either is finally a matter for decision, not discovery. Certainly, in the case of intelligence, the problem is not that nothing can come of any empirical research until the concept is fully understood, but that in the absence of any clear and agreed conception it becomes defined by the nature of the research methodology. I maintain that whether intelligence as defined by, say, the logic of IQ testing is truly intelligence is a meaningless question. But what is not meaningless is to point out that whether we want to define intelligence in this way and, more importantly, value intelligence in this sense are not matters that can be advanced by any amount of further empirical research. We have to reason and make decisions in the light of that reasoning.

At this juncture, Norris does something intriguing. He distinguishes between terms "referring to the natural world" and those "referring to artifacts," and suggests that perhaps in the case of the latter it may be largely a matter of "reflecting upon and studying linguistic practices" "in the manner Barrow describes" that we determine their meaning. Now, I must repeat that the procedure of "reflecting upon and studying linguistic practices" is not only not the manner of determining meaning for artifacts (or any other concepts) that I advocate, it is, in fact, one of the positions that I explicitly repudiate. However, two further points need to be made here: first, Norris has surely got it the wrong way around, in so far as he has got anything. That is to say, the concept of an artifact such as a "hammer" is less governed by logical and empirical considerations than a concept referring to something in the natural world such as "gold." This is because what we currently refer to as "gold" exists independently of our wishes, intentions, and so on, while a "hammer" only exists if we conceive of it and to some considerable extent in the form that we conceive it. Second, and much more importantly for this argument, Norris lists "intelligence" as a term referring to the natural world, comparable to "gold," and in so doing begs the very question at issue. For, in assuming it to be akin to gold, he is assuming that intelligence, like the brain, is a material given, whereas a substantial part of the philosophical argument has been devoted to trying to
establish that, on the contrary, intelligence, like mind, is a philosophical construct. As a matter of fact, I would argue that in addition to distinguishing between terms referring to the natural world and those referring to artifacts, we should add a third category of terms referring to idealised abstract concepts such as justice in which category intelligence should clearly be placed. But for the present, the point to emphasise is that what can be said empirically about intelligence cannot coherently be determined until we have decided what kind of a concept intelligence is and, following that, what more specifically constitutes what we understand by the term.

Of course, if mind and brain are treated as indistinguishable, or if we deny coherence to the idea of mind as distinct from brain, and if intelligence is defined in physical, neurophysiological, or strictly behavioural terms, much of what I have said is, if not irrelevant, considerably weakened. But my argument in the book is precisely focused on that question, and one thing that remains certain is that that question is not primarily empirical.

Notes


