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Virtue, Objectivity, and the Character of the Education Researcher

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See table of contents

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Article abstract

In his 1993 book, Hare asks “What Makes a Good Teacher?” In this paper we ask, “What makes a good education researcher?” We begin our discussion with Richard Rudner's classic 1953 essay, The Scientist Qua Scientist Makes Value Judgments, which confronted science with the internal subjectivity it had long ignored. Rudner's bold claim that scientists do make value judgments as scientists called attention to the very foundations of scientific conduct. In an era of institutional research ethics, like the Tri-Council’s ethics policy, Rudner's call for an approach to these value judgments is even more relevant. The contemporary education researcher primarily engages with ethics procedurally, which provides a certain level of consistency and objectivity. This approach has its roots in principle-based theories of ethics that have long been dominant in Western universities. We argue that calls, like Rudner's, for an objective science of ethics, are at the root of this dominant institutional approach. This paper critiques the suitability of such principle-based ethics for solving Rudner's concerns, and posits that educational research ethics is better understood as a matter of character and virtue. We argue that, much like the ethical teacher, the ethical education researcher is a certain kind of person.

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Virtue, Objectivity, and the Character of the Education Researcher

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In his 1993 book, Hare asks "What Makes a Good Teacher?" In this paper we ask, "What makes a good education researcher?" We begin our discussion with Richard Rudner's classic 1953 essay, The Scientist Qua Scientist Makes Value Judgments, which confronted science with the internal subjectivity it had long ignored. Rudner's bold claim that scientists do make value judgments as scientists called attention to the very foundations of scientific conduct. In an era of institutional research ethics, like the Tri-Council's ethics policy, Rudner's call for an approach to these value judgments is even more relevant. The contemporary education researcher primarily engages with ethics procedurally, which provides a certain level of consistency and objectivity. This approach has its roots in principle-based theories of ethics that have long been dominant in Western universities. We argue that calls, like Rudner's, for an objective science of ethics, are at the root of this dominant institutional approach. This paper critiques the suitability of such principle-based ethics for solving Rudner's concerns, and posits that educational research ethics is better understood as a matter of character and virtue. We argue that, much like the ethical teacher, the ethical education researcher is a certain kind of person.

The Tri-Council Policy Statement, "Ethical Conduct for Research Involving Humans," issued jointly by the Canadian Institutes of Health Research, the Natural Sciences and Engineering Research Council of Canada, and the Social Sciences and Humanities Research Council of Canada (1998), contains a set of general ethical research principles and guidelines intended to ensure that all academic research involving living subjects is done ethically and for ethical purposes. Because these councils and all researchers in receipt of their funds are committed to abide by this policy and the ethics review process it institutionalizes, this statement has direct effects on what kinds of research studies are conducted, the manner in which they are carried out, and the means of their public justification.

We shall argue that the Tri-Council is designed to influence value judgments that education (as well as other) researchers make as part of the research process and to introduce ethical considerations to the types of decisions being made as part of education research. This interpretation leads us to Richard Rudner (1953), who raised a question about ethics and objectivity in science (in his case natural science) and suggested a means to answer it. The means he suggested, constructing an objective science of ethics, is simply not possible due to difficulties inherent in principle-based ethical approaches, which is what the Tri-Council policy is. Instead, we will argue that a virtue-based approach to ethics is the most fruitful way forward, both in more plausibly meeting the Tri-Council's stated policy objectives, and in providing a possible candidate for an objective means of evaluating value judgments in educational research.

We will begin by framing this discussion within the context of the Tri-Council policy. Then we will draw on Rudner's (1953) insights in his classic essay, *The Scientist Qua Scientist Makes Value Judgments*,

to examine the complex ethical issues raised by policies like the Tri-Council document. Although Rudner did not likely have educational research in mind, his insights about the ethical scientist will prove highly valuable in our reflections about ethical education researchers. Having discussed the ethical issues Rudner raised, we will evaluate the efficacy of principle ethics and virtue ethics in solving such issues. In the end, we conclude that the education researcher requires virtue, and that such an approach may provide important resources to satisfy Rudner's call for objective scientific ethics. In so arguing we extend a previous position identified by Pring (2001) where he, like us, begins his discussion with research ethics policies and goes on to argue that principle approaches are insufficient when virtue is ignored. While our discussion must address many of the same concerns as Pring's—honesty in research, the insufficiency of principle-based accounts, the importance of virtue—we examine these in light of Rudner's call to objective ethics. As we connect this move to virtue with Rudner, and with Aristotle, we hope to provide new and engaging reasons to extend the basic project proposed by Pring.

Framing Rudner's Call

The Tri-Council policy imposes an obligation on researchers to include moral considerations when determining fundamental scientific properties such as validity of research design and instruments. Does this introduction of factors external to science into the research process run directly contrary to the traditional view of science as a means of attaining objective knowledge? If the researchers are addressing questions of value in their practice, are they not intentionally increasing the influence of their own biases? Recognizing that scientists, and by extension, education researchers, unavoidably make such value determinations in their role as researchers Rudner made a proposal as bold-sounding today as it was when he made it:

> What is being proposed here is that objectivity for science lies at least in becoming precise about what value judgments are being and might have been made in a given inquiry and even, to put it in its most challenging form, what value decisions ought to be made; in short that a science of ethics is a necessary requirement if science's progress towards objectivity is to be continuous. (1953, p. 6)

Rudner really proposed two distinct endeavors, although from the statement above it is unclear whether or not he was aware of this. He wanted a science dedicated to understanding how ethical decisions have been, and are, actually being made in scientific inquiry. He also desired a prescriptive science directing how they ought to be made. This paper will examine these two proposals. We shall argue that a *descriptive* science of ethics in research inquiry might well make certain decisions more predictable and transparent and so be of some benefit. However, such an approach cannot deliver objectivity for reasons we shall identify and that Rudner may well have anticipated. This is, indeed, perhaps why Rudner put his proposal in "its most challenging form," because he was aware that only a *prescriptive* science of ethics can make it possible for ethics to become objective. We will show that this well-intended prescription for restoring the hope of objectivity to science is highly optimistic, but at least theoretically possible within certain parameters. To do this we shall argue that Rudner's prescriptive ethics, and education research itself, is best served by returning to virtue ethics.

Before we consider these issues, consider why it is that Rudner wanted a science of ethics to save the concept of objectivity in science. Although he did not explicitly tell us what he meant by "objective," "dealing with facts or conditions as perceived without distortion by personal feelings, prejudices, or interpretations" seems close to his intention (Objective, 2008). By contrast, value judgments are subjective and should not be part of scientific work. For it to be shown that value judgments are intimately bound with science undermines the fact-value distinction at the heart of the scientific enterprise as it was conceptualized in Rudner's day.

According to Rudner the problem is that scientists not only do, but must, make value judgments in their work. For example, they do so in order to judge whether the evidence for a scientific hypothesis is "sufficiently strong or that the probability is sufficiently high" (Rudner, 1953, p. 2) to accept. Educational researchers make such judgments frequently, choosing, for example, to tolerate a 5% chance of being wrong in order to claim a 95% chance of being right. At the conclusion of a study into the efficacy of an early literacy intervention, Phillips, Norris and Mason (1996) concluded "the results showed positive effects on reading achievement because of the treatments that lasted until the end of second grade for all treatment groups" (p. 191). The claim that the effects were significant enough to be considered real is one that required a value judgment on the part of these researchers.

We find this argument very difficult to fault and note that in making it Rudner's was an early contribution to a long chain of critiques problematizing the notion of scientific objectivity (e.g., Feyerabend, 1975; Kuhn, 1962; Longino, 2002). One might invoke a rule that any time a researcher has to make a value judgment that judgment must pertain to "external questions" (Rudner 1953, p. 5), outside the proper boundaries of science. However, as Rudner pointed out through reference to Quine, this is a futile move. Statements in science cannot be proven true, in the classical sense that "what we know cannot be otherwise than it is" (Aristotle, trans. 1953, 1139b20), on either analytic or experiential grounds. Rather the validity of scientific statements and the acceptance of scientific hypotheses rests fundamentally on judgment. Therefore, science is not truly objective and thus the fact-value distinction does not hold. Faced with this threat to scientific objectivity, Rudner suggested not only to make these value judgments explicit, but also to govern them through an objective science of ethics. The subjective and arbitrary nature of using value judgments to accept scientific hypotheses would thereby be reduced and the fact-value debate would be resolved by somehow turning values into facts. Rudner did not expect this to be an easy task. Rather it would be the work of "many generations" (Rudner, 1953, p. 6).

A Science of Ethics

As was mentioned previously, Rudner's science of ethics must of necessity contain two components: a descriptive one and a prescriptive one. David Hume (1966) was probably the first to point out this important distinction, noting that discovering how things *are* cannot speak directly to how things *ought* to be. Thus, the most minute and exact description of how researchers make moral judgments will not tell how they ought to make them. Science cannot assign value or "seriousness" to particular outcomes simply by description. The consequences of a decision may be good or bad, but this evaluation must be based on values that are not deducible from the nature of the world itself but are rather dependant on how people think about what that world *should* be (Dewey, 1960).

However, this does not mean that such a descriptive science would not be useful. On the contrary, by helping to make explicit the value judgments issued in scientific practice such a science could be useful in controlling for bias and perhaps in improving those judgments. Both Code (1987) and Hardwig (1991) draw attention to the necessity in actual practice for scientists to be able to place well-founded trust on other scientists due to the vast complexity and amount of information necessary for modern scientific research. Insight into the actual moral behaviour of scientists might aid in assessing just how well-founded is that trust in certain situations.

As a matter of fact, there is an emerging discipline of moral psychology that seeks to address just these sorts of issues. Promising studies have been conducted into such issues as identifying and quantifying the possible effects on moral behaviour of group consensus within organizations (Morris & McDonald, 1995; Tsalikis, Seaton, & Shepherd, 2008), and attempting to determine empirically the role of emotions in moral judgment through the use of MRI brain scanning (Greene, Sommerville, Nystrom, Darley, & Cohen, 2001). These studies have relevance to moral decision-making in science by potentially addressing such questions as how research affiliation or certain types of emotionally charged circumstances can influence moral behaviour. Yet, this is not all of what Rudner had in mind because it

contributes only to the descriptive side of the problem. So, although such knowledge might indeed be useful for Rudner, who wants to remove the subjective from science altogether, a complex and difficult description of that subjectivity in practice would not be satisfactory to him because he would disqualify it as a solution to his problem.

What if, instead of a descriptive science of the present day world of individual value judgments, these judgments were built into a more objective framework? If scientists applied, to return to Rudner's example, the same reasoning to weigh the "seriousness" element in a hypothesis, then, at least hypothetically, bias might be sufficiently controlled to make objectivity possible.

The end product of Rudner's prescriptive science of ethics would then presumably be a systematized and non-arbitrary method for determining things like the "seriousness" of consequences in weighing hypotheses that would be used by all scientists when these types of issues arose. It would seem, following this line of reasoning, that Rudner sought a system of principles that could guide the ethical behaviour of the scientist.

Principle and the Researcher

Principle-based ethical approaches hold that the rightness or wrongness of an action depends on its conformity to a particular principle or set of principles. Kant's deontological approach, for example, proposed that an action is ethical if the maxim that underlies it is universalizable, a principle referred to as the categorical imperative (Johnson, 2004). A Kantian researcher would not, for example, choose to falsify research findings in pursuit of prestige because he could not consistently will the universalizing of fraudulent research. A utilitarian would not choose to falsify research because, although it might benefit the researcher, it could harm many others (Sinnott-Armstrong, 2006). Principle-based approaches, like Kantianism or utilitarianism, have long been widely dominant in research ethics (Nash, 1988). This dominance may be attributed to the ease with which such reasoning fits within the wider research culture. Speaking of Kant one education scholar says:

> …he seeks a moral law to parallel in the moral domain what Newton had disclosed about the domain of nature; he seeks universality, and via his transcendental deductive approach defines objective rules for freedom. The basis of morality lies in pure practical reason, a priori, which discloses the categorical imperative. (Keat, 1992, p. 451)

The connection between such thinking and Rudner's desire for an objective ethics of science is clear. If we were to have universal principles to govern the behaviour of the researcher, the task would simply become training scholars in the application of said principles. If it could be shown that the principles could be applied in a consistent fashion one could fairly claim that the impact of the individual researcher's values had been lessened. In other words, the decisions of the researcher would become more objective.

Assuming that one could identify a categorical imperative, or set of imperatives, for researchers, this approach at first would seem to satisfy Rudner's hopes rather well. But such a position surely places a great deal of faith in principle-based ethics, which have begun to lose their luster in the academy. Carr (2007) makes a key critique in the context of teaching that one may very well apply a set of principles about caring, for example, and yet fail to be a caring teacher. In other words, the impartial application of a set of principles may result in a person whose behaviour we would nonetheless find ethically deficient.

One articulation of this problem labels such a person a "justice minimalist" (Strike, 2000). The justice-minimalist researcher would conform to the given principles but act in ways that are ethically insufficient. He or she would do the absolute minimum required, but no more. Surely Rudner, and

many ethicists of science, would react negatively to the person who does as little as is required by the rules and refuses to attempt anything further.

The reason that the justice minimalist seems so ethically unpalatable is that one would hope ethical educational researchers would be special *sorts of persons*. After all, education can be influenced by the findings of formal, institutional research. It would be unnerving indeed if it became acceptable for researchers to do as little as might minimally satisfy a set of ethical principles. One would hope that those investigating discrimination or abuse in schools, for example, would go above and beyond what was minimally required of them.

There is also the difficult question of how to account for the application of principles to specific situations (Pring, 2001). A principle held to be universally true must be interpreted through the lens of the individual researcher, who is deeply influenced by personal value systems. This is the point at which conventional research ethics comes into play. A profession or organization, like the Tri-council, generally espouses an ethical code of some sort. These codes are sets of principles universally applicable within that profession or organization. In research, for example, one must aim for the least possible risk for research subjects for a given gain (Gefenas, 2006). Gefenas (2006) points out that it is still unclear what acceptable risks are, and when a certain increase in risk may be permissible. Thus, even the most ardent of principle ethicists is left with a difficult decision as to how a particular principle applies in a given situation, and whether it applies at all.

For this reason, principle-based codes of ethics tend to be inconsistently applied and subsequently fail to produce clear changes in behaviour (Moore, 2006). It is for these reasons among others that principle-based ethics has lost its near-total dominance in the last few decades. It regularly is critiqued for providing a rather "sterile" (Baron, 1985, p. 140) account of ethics. So it would seem that these approaches would promote ethically unpalatable minimalists and provide a marginal gain in objectivity because they fail to constrain sufficiently application to unique cases. At least researchers would be working with objective general criteria. Within this framework there is hope, then. It is, however, a faint hope.

Character and the Researcher

At least fifteen years ago medical ethicists began a return to Aristotle and the ethics of virtue. Toon's 1993 article, for example, is an important early indication of the rising view that professional ethics might be served better by cultivation of personal character than by strictly principle-based approaches. This thought was echoed in many related areas. Scott's 1995 article on Aristotle and nursing ethics, for example, called for a focus in nursing education on the development of character. Despite similar general arguments for increased attention to virtue (see Pring, 2001) this shift in focus has been slow to influence educational research ethics. Why might this be so? Returning to Carr's point, it is clear that one may conform to certain principles about caring and yet fail to be a caring person. It also makes sense that we should advocate the creation of caring teachers rather than teachers who merely conform to certain principles, a position Carr (2007) himself supports. Is the same not true for one who conducts research into teaching? Would we want a researcher who aims to conform to the requirements of principles of honesty, or an honest researcher who needs no principle to realize when something is dishonest? Surely Carr is correct in emphasizing character over conformity.

It is in Aristotle that we find a framework for the ethics Rudner seeks. Specifically, this framework is best articulated in Aristotle's *Nicomachean Ethics* (trans. 1953). Perhaps most fundamental to this discussion is that Aristotle viewed moral qualities as "destroyed by deficiency and excess" (Aristotle, trans. 1953, 1104a10-15). Thus, a person of the best moral qualities is one in whom dispositions appear neither in excess nor in deficiency. Just as one may exercise both too much and too little, so too one can be foolhardy and cowardly in response to danger. The true moral quality, he

argued, is in the mean. It is these means that he called the *moral virtues*. The agent is called upon to act in ways that exhibit these virtues.

Within the context of research ethics, this position is interesting. If we were to identify an objective character of researchers, as opposed to a set of principles for evaluating the behaviour of researchers, we would be able to solve the problem of justice minimalism. Aristotelian virtuous action resides only in the fullest expression of virtues. No space is left for minimal levels of conformity as is the case in principle-based approaches. Furthermore, we find an objective basis for evaluating the behaviour of the researcher that does not depend on the suitability of principles whose application must be judged for given cases. Rather, we are provided an account of the researcher that enables us to evaluate *all* actions in light of their implications for the character of that agent.

To determine what scientific virtues might be it is useful to return to Aristotle's arguments. One of his key ideas is that of function (Aristotle, trans. 1953, 1097b30-1098a20). The function of the harpist is to play the harp. The good of the harpist must, therefore, be to play the harp well. Similarly, if the function of a man is "a kind life" (1098a10-15), then to live a kind life well must be the good of the man. Since doing such things well requires certain excellences (virtues) that serve that kind of good, one will find that virtues are those things that serve the function of the thing well. For the researcher one could express this as follows:

1. If research aims for truth,
2. then the *function* of the researcher is to seek that truth,
3. and the *good* of the researcher must be to seek that truth *well*.
4. Thus, the dispositions of character that serve truth-seeking must be scientific virtues (or the virtues of the researcher).

Although it is a difficult process to identify what virtues best foster truth-seeking, Aristotle does offer a framework that theoretically could provide such virtues. One could counter that such an approach requires an essentially subjective judgment about which virtues are relevant in which circumstance, and which action best embodies them. Even so, the debate would be operating on the assumption that the virtues in question were objective and that it is at least theoretically possible to arrive at an action that best satisfied them and that therefore would be the most objectively ethical course of action. Although arriving at such virtues is a much larger project than this paper can tackle, it seems clear that some dispositions are objectively better for research than others. An excellent example is the honest reporting of findings. It would surely be detrimental for researchers to behave as if they were more confident or more certain than they really were, or to overstate the significance of certain findings. Similarly, a researcher must avoid being under-confident in discussing findings that were rigorously reached. To overstate insignificant findings or to understate significant ones would risk harm to those who depend on such knowledge. The ethical researcher, that is the researcher of the strongest character, would display a virtue that found the mean between these two extremes, that is, stating findings with just the level of certainty they warranted.

Another possible scientific virtue is Hare's *open-mindedness*. Speaking within the context of educational philosophy, Hare (2003) argues that one ought to be disposed to fairly and seriously consider new ideas. Interpreting his point through an Aristotelian lens, open-mindedness may be understood as a mean much like Aristotle's virtues. As Hare (2003) points out, one who is close-minded is less able to accept valuable new ideas, and more likely to adopt uncritically ideas that fit within existing prejudices. Conversely, Hare argues that open-mindedness does not involve uncritically accepting anything and everything. Open-mindedness, then, could be the golden mean between closing one's mind to all conflicting ideas and uncritically opening one's mind to ideas of dubious value. Much like honesty, Hare's open-mindedness seems ideally suited for a conception of scientific character. It is important to note that in both cases the kind of objectivity being discussed is not necessarily *dispassionate*, but is rather a matter of developing virtuous passions, like honesty or open-mindedness.

A frequent critique of virtue ethics is that it fails to yield clear advice for action. Hursthouse (2003), in her response to this critique, answers the common objection that "virtue ethics does not, because it cannot, tell us what we should do" (p. 185). It must be recognized, she argues, that if virtue ethics fails to provide guidance for action, principle-based approaches fail on the same grounds. A utilitarian would ask whether a certain action provided the greatest good for the greatest number, while a virtue ethicist would ask whether that action was one a fully virtuous agent would undertake. In both cases, one is left with specific contextual reasoning to undertake and is given significant guidance on how to frame it. To aid in such judgments, Hursthouse proposes we discuss the rules and principles that grow out of our ideas about virtuous conduct. The ideas that are produced in this fashion are referred to by Hursthouse as "v-rules" (2003, p. 190). When one is faced with a difficult situation, v-rules can aid one in deciding upon specific actions while not abandoning the focus on the agent's character.

To clarify this idea let us return to the example of honesty in the portrayal of scientific findings. The virtue-ethicist researcher would seek to arrive at an action that best expressed the full range of his or her virtues. Let us presume that honesty is a scientific virtue. The agent needs to decide what action best expresses the mean between overstated and understated portrayal of findings. To aid in this decision, the researcher could draw on various v-rules. These rules could be established by convention, or authored by individual researchers in their moment-to-moment decision-making. One such rule could be that a virtuous agent must be clear about the sources of uncertainty and the basis for confidence in any report of findings. Articulating such subordinate concepts overcomes some of the objections to virtue ethics, while still focusing on the implications of the action for the agent. The agent is still motivated by a desire to choose actions that express virtues, and thereby objectively good scientific character.

It may seem that the act of specifying v-rules threatens the theoretical objectivity of the approach, but on closer inspection v-rules do not fall prey to this challenge. The fundamental focal point is the notion of objective good as understood through the researcher's function. A v-rule is legitimate if it is shown, through its originating virtue, to promote the objective good of the researcher (seeking truth well). Thus the v-rule identified previously, that researchers must be clear about the sources of their uncertainty and confidence, must be demonstrably linked through the agent to the service of good research. In the end, even when principles are considered, the virtuous agent is the one best able to decide upon ethical action.

Conclusion

Education researchers posses a great deal of responsibility. The insights they provide into teaching and learning have clear potential to impact the lives of students. Taking the history of moral education as an example, research has played a powerful role in teacher practice. Hartshorne and May's now infamous study of character education was largely responsible for the near-abandonment of character education in the early 20th century (Yu, 2004), though it has since returned with a fresh round of pro-character education research. Kohlberg's (1984) now-classic studies spurred a generation of attempts to foster moral progression, the implications of which are still being digested.

Thus the character of researchers is of the utmost importance. Their decisions about what level of confidence to report in their findings, for example, are of significant ethical weight. Knowing how important their conclusions can become, the decisions scholars make with respect to how they might verify and articulate their findings become inescapably moral. Much like the teachers who might come to draw on their work, researchers are expected to have embodied the virtues of open-mindedness and intellectual honesty. This much, though, has been argued profitably before (Pring, 2001).

This discussion has pressed much further, though. We have shown that a virtue-based approach, like the Aristotelian one examined here, offers a possible solution to Rudner's call for

objectivity in scientific ethics. Using the aim of research as the foundation, one may build an Aristotelian system that allows for the discussion of ethics within an objective framework. This is not to say that every decision will be made on objective grounds. Rather, we postulate that Aristotle provides insight that allows for a theoretically objective framework with which to engage in discussions of ethical conduct in research and with which to evaluate the conduct of researchers themselves.

So it seems that the end of Rudner's search might not be a set of principles, but a set of virtues that could form an objectively ethical scientific character. Such a character would certainly be an ideal. Aristotle did not expect virtuous persons to be common. However, it would be an ideal grounded in an objective conception of ethics. It would sidestep the key problems of principle ethics. Most importantly, it would permit the ethical evaluation of *any* actions of the researcher *qua* researcher. The issues brought forth by Rudner's groundbreaking paper are best resolved by a conception of the scientific character. Whether that conception draws directly and straightforwardly from Aristotle, as we have done, or whether it draws from some modified Aristotelian conception or other conception of character altogether, is an issue we have not attempted to resolve here.

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