

The Theory, Practice, and Future of Ethics Education in Science

by

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ABSTRACT

The landscape of science education is changing. Scientific research and the academy are both becoming increasingly complex, competitive, interdisciplinary, and international. Many federal research agencies, scientific professional societies, and science educators seem to agree on the importance of strong ethics education to help young scientists navigate this increasingly craggy terrain. But, what actually should be done? When it comes to teaching ethics to future scientists, is the apparent current emphasis on basic responsible conduct of research (RCR) sufficient, or should moral theory also be taught in science ethics education? In this thesis I try engage this question by focusing on an existing, related debate on whether moral theory should be part of teaching professional ethics more generally. After delving into the respective approaches promoted by the three primary participants in this debate (C. E. Harris, Bernard Gert, and Michael Davis) I unpack their views in order to ascertain their practical application potential and relative benefits. I then take these findings and apply them to ethics education in science, paying particular attention to its purported learning objectives. In the end I conclude that the presentation of these objectives suggests that moral theory may well be required in order for these objectives of ethics education in science to be fully achieved.

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CHAPTER 1

INTRODUCTION

Current talk of ethics in science focuses on responsible conduct of research (RCR). Both the National Science Foundation (NSF) and the National Academy of Science declare RCR to be an essential part of the formation of future scientists (“Chapter IV”; Committee) and the NSF and National Institutes of Health have formal requirements for RCR training in education (“Responsible”; “Update”). Preliminary investigation into major research university websites would seem to indicate that the majority of this sort of training is limited to one credit-hour seminars or online tutorials¹. However, the ongoing changes in science, education, and university culture all risk undermining the efficacy of these current ethics education practices (Hollander and Arenberg; Committee). Moreover, given some of the proposed expansions on the notion of “responsible conduct of research,” there is even more reason to question if this existing methodology is sufficient (see e.g. Hollander and Arenberg). In particular, there is a call to teaching students a deeper understanding of ethics (see e.g., Hollander and Arenberg 12-3, 18) as well as promote the deeper moral values that underpin science and ensure it serves the public trust (Committee).

One possible way to answer this call to greater depth in ethics education in science would be to add moral theory to the ethics education curriculum. Since moral theories explicitly focus on the theoretical underpinnings of ethics and arguably offer a

¹ Although one hopes that RCR training is infused in the curriculum more generally as well.

richer understanding of morality and moral values, *prima facie* this seems like an ideal solution. However, whether it actually *is* ideal is an open question, and one we will pursue in this thesis. Since there is no noticeable debate on this exact question of moral theory in science, we will instead explore the question of moral theory in professional ethics more generally, and then apply it back to science. Since this concern of professional ethics more generally deals with professions like engineering – which has experienced a similar call to deeper ethics education (Hollander and Arenberg) – looking at it should hopefully shed light on the science question as well.

In exploring this question, we will focus on one illuminating (and perhaps representative) debate between three scholars: C. E. Harris, Bernard Gert, and Michael Davis. First we will examine their respective views on the role of moral theory in professional ethics, paying particular attention to how they perceive moral theory and its advantages (or disadvantages) when it comes to teaching and practicing professional ethics. We will then look at how their respective approaches will likely play out in a professional ethics class setting when it comes to actually analyzing moral problems. This is a more practical exercise aimed at ascertaining what sort of ethics understanding students will probably garner from the experience. Next, we will compare some of the respective views' features to see if there might be a reasonable consensus on what we should do when it comes to teaching ethics or moral theory in professional ethics. This includes examining not only the pedagogical goals of teaching ethics in professional ethics, but also some of the practical realities of the context of teaching ethics in professional ethics. Finally, we will bring it back to science, considering in particular what science students ought to get out of ethics education and what sort of approach

seems most likely to achieve these outcomes, as well as briefly considering some of the questions to be asked and pursued next.

CHAPTER 2

HARRIS

Since this particular conversation about the appropriate place of moral theory in professional ethics begins with C. E. Harris, we will start there. Within this tripartite conversation, Harris is the only one who advocates using a traditional moral theory when teaching practical or professional ethics. In particular, he advocates using consequentialism (namely utilitarianism) and deontology (namely Kantian ethics, which he refers to as “RP theory” for “respect for persons”) (Harris “Is Moral Theory Useful” 51), because he believes that these two moral theories are at the level of moral reasoning that best fulfills what he takes to be the necessary functions of a moral theory. In Harris’ analysis, there are four basic levels of moral reasoning, each of which fulfills to a different degree the three key functions that a moral theory ought to perform. These four levels represent an ascending degree of this function fulfillment, with the level-four theories of utilitarianism and RP theory fulfilling these functions to the greatest degree. Furthermore, along with these level-four theories best exemplifying the necessary functions of a moral theory, they also offer five key advantages in practical application for professional ethics, one when the conclusions of utilitarianism and RP theory converge and four when these conclusions diverge. Ultimately, these advantages are why Harris believes that moral theory – especially utilitarianism and RP theory – is beneficial to both students and practitioners of professional ethics, and why he advocates their place in the classroom.

According to Harris, there are four levels of moral reasoning. At the first level we have moral judgments that are made about specific acts or actions, where moral reasoning involves considering the action in a single case or situation – in isolation from other cases or situations – and then classifying that action as permissible, impermissible, obligatory, or supererogatory (Harris “Is Moral Theory Useful” 53). There is a particular subset of this level of moral reasoning that involves making an implicit moral judgment about a specific act or action by means of descriptive evaluation (Harris “Is Moral Theory Useful” 53). In these instances, the description of the action in a case or situation is such that it implies that the given action is wrong or impermissible, so in essence there is a hidden premise “action *X* is wrong” that reduces the description to being a moral judgment about a specific act.

The second level of moral reasoning is more general than the first, and involves making moral judgments that apply to a range of related actions (Harris “Is Moral Theory Useful” 53). So at this level of moral reasoning we would consider an entire class of actions that can occur in cases or situations and then classify that entire class as “permissible, impermissible, obligatory, or supererogatory” (Harris “Is Moral Theory Useful” 53). At the third level of moral reasoning we have what Harris refers to as “intermediate moral principles,” which includes things like D. Ross’ “prima facie duties” and Bernard Gert’s “moral rules” (Harris “Is Moral Theory Useful” 53). Finally, the fourth level of moral reasoning is where we find “high-level moral principles, or moral standards” like those found with utilitarianism and RP theory (Harris “Is Moral Theory Useful” 53-4).

By way of illustration: At level one, we would have something like the judgment: “Mark should not divulge information about his clients without their express permission.” At level one prime (the subset) we would have something like: “Mark’s actions are a form of exploitation!”, which has the implied premise “exploitation is wrong”, thereby reducing the previous statement to: “Mark’s actions are wrong.” At level two we would have something like: “Divulging information about his clients without their express permission is wrong,” which considers a general class of actions. At the third level we would consider things like Ross’ duties of fidelity (that there was a promise to not divulge client information) or non-maleficence (if said divulgence might cause client harm) or Gert’s moral rules like “keep your promise” or “do your duty” (if there is a professional duty to not divulge client information without express permission). At the fourth and final level, we would calculate the harm versus the benefits of Mark’s actions (for utilitarianism) or look to whether or not clients’ rights have been unduly violated or infringed (with RP theory).

Part of why Harris makes these various distinctions in terms of levels of moral reasoning has to do with the fact that he believes that what constitutes a moral theory is really just a matter of degree (“Is Moral Theory Useful” 56). According to Harris, there are three key functions – unitive, insight, and rational – that a moral theory ought to be able to perform; how well a theory performs each of these functions is indicative of its degree of being a moral theory. The degree of a moral theory’s unitive function depends on how well it is able to take a large collection of moral judgments – ideally the whole of morality – and basically capture these many moral judgments with a single statement or idea. Theories that cannot capture the whole of moral judgments, or that require more

statements or ideas than just one, are less unitive than a theory that can capture all moral judgments in a single idea, and the more statements or ideas required to capture morality and/or the less of morality that is captured, the less unifying or “unitive” we consider to be a given moral theory.

The degree of a moral theory’s insight function depends on how well or how much it can offer insight into morality itself, its nature, and its purpose. The more moral insight, the higher a theory’s function, and vice versa. Finally, the degree of a moral theory’s rational function depends on how truly useful or practical that theory is in terms of trying to analyze and resolve moral issues. The better a moral theory is at providing rational (or practical) suggestions when faced with moral issues or dilemmas, the higher the rational function, and vice versa. These three functions are supposed to map onto the basic functions of theories in any other disciplinary area, like science where evolutionary theory unifies a large grouping of biological phenomena (e.g. the genetic, developmental, and morphological diversity), offers insight into the nature of said phenomena, and provides rational suggestions for further scientific research (Harris “Is Moral Theory Useful” 56). With respect to ethics, then, a good moral theory should unify a large grouping (if not the entirety) of moral judgments, offer insight into the nature and purpose of moral judgments and morality itself, and provide a rational basis for dealing practically with moral issues we might come across.

Based on these three purported functions, we can see how from level one to level four there is an increase in the degree of moral theory function fulfillment. Since particular judgments like “Mark should not divulge information about his clients without their express permission” cover only that particular action, offer no significant insight

into the nature of morality more generally, and do not suggest more general guidelines for further moral reasoning, they fail to perform any of Harris' three functions. More general judgments like "Divulging information about his clients without their express permission is wrong" perform the unitive function slightly because they do cover a class of actions, but this class of actions is still relatively small and their degree of specificity offers minimal insight into morality more generally or the resolution of moral issues beyond the given class of actions. Intermediate moral principles like Ross' duties and Gert's moral rules extend quite a bit further than the first two levels, and, when combined with "auxiliary concepts" like what rational impartial people would do, can arguably cover all of common morality and provide rational guidelines for tackling moral problems (Harris "Is Moral Theory Useful" 57; also 55). However, while moral reasoning at the third level appears to fulfill all of the required functions of a moral theory (at least with these auxiliary concepts added), according to Harris theories at the fourth level like utilitarianism and RP theory ultimately satisfy the three required functions of moral theory even better (or to a higher degree) ("Is Moral Theory Useful" 57).

Harris recognizes that level-four theories like utilitarianism and RP theory struggle to entirely fulfill the required unitive function of a theory ("Is Moral Theory Useful" 57). In fact, because of the many controversies surrounding both theories (see e.g. Harris "Is Moral Theory Useful" 58-9), he ends up conceding that neither theory is adequate in accounting for all of common morality (Harris "Is Moral Theory Useful" 57, 59). This problem (which Harris refers to as "the Problem of Incomplete Extension" ("Is Moral Theory Useful" 59)) can elicit two main responses (Harris "Is Moral Theory Useful" 59-60). The first is to seek out a better theory, presumably one that does capture

all of common morality, which is what Gert suggests is the most natural response to this Problem (“The Usefulness” 26).

However, Harris rejects this proposal of adopting a sort of utilitarian Kantian principle (“A Reply” 46-7), and in fact declares the prospects of finding any better theory than utilitarianism or RP theory “dim” (“Is Moral Theory Useful” 59). The second response, which Harris prefers, is that this inability of any single moral theory to adequately capture all of common morality actually suggests that we have at least two separate, conflicting conceptual strains of morality that make up common morality itself, and these two conceptual strains are what basically lead us to utilitarianism and RP theory (“Is Moral Theory Useful” 59). Even though neither strain can encompass all of common morality (Harris “Is Moral Theory Useful” 60), Harris claims that this should not be viewed as a problem (if anything, in practice Harris appears to treat it like a useful tool). Because of the Problem of Incomplete Extension, Harris thinks it is often particularly useful to analyze a given moral problem using *both* theories and then compare the results (“Is Moral Theory Useful” 60). If the results from both tests converge, then we are justified in having a high degree of confidence that the converged upon conclusion is correct or best (Harris “Is Moral Theory Useful” 60). However, even if they diverge this analysis can still be quite useful (Harris “Is Moral Theory Useful” 61).

In particular, Harris sees several key benefits that can come about from using level-four theories like utilitarianism and RP theory, even when the results of analyzing a moral problem with both theories diverges. First, Harris maintains that “high-level moral theories” actually enhance our abilities in recognizing the nature and structure of some of

the fundamental conflicts that occur in moral controversies (“Is Moral Theory Useful” 62). In his reply to Bernard Gert, Harris illustrates three main “modes” of moral problems or controversies: an application problem, a conflict problem, and a RP/utilitarian problem. The first mode (application problem) is a problem about whether or not a particular morally charged term (like “bribe” or “extortion”) applies in a given situation (Harris “A Reply” 39). The source of the problem is that while “paradigmatic” applications of moral terms are often uncontroversial (such as Harris’ case of an engineer taking a large sum of money to promote a specific product), when dealing with “non-paradigmatic” applications people can frequently disagree as to whether or not that moral term applies (such as Harris’ case where the engineer is now trying to import products abroad and needs to determine if the customs-demanded “fee” is a “bribe” or an “extortion” so he can decide whether or not paying the fee is permissible).

The second mode (conflict problem) occurs when there is a conflict between two or more competing obligations or values and it is unclear what degree of importance or “weight” ought to be assigned to each of these values (Harris “A Reply” 40). The third mode (RP/utilitarian problem) is a specific kind of conflict problem: one that occurs between the two competing conceptual strains in terms of how we evaluate our moral options, whether by focusing on general utility or welfare or focusing on respecting the moral agency of individuals who are affected by a course of action (Harris “A Reply” 40-1). Since this third mode represents many, if not most, of the kinds of moral conflict we tend to encounter, using both utilitarianism and RP theory in moral problem analysis is especially beneficial to our recognition and understanding of the fundamental nature of many conflicts and moral controversies.

The second benefit of using high-level moral theories, which seems to me to almost be a species of the first, is that it helps us anticipate the nature and character of moral controversies before they even arise (Harris “Is Moral Theory Useful” 62). I say it seems like a species of the first because recognizing the fundamental nature of utilitarian-RP conflicts and anticipating that the likely character of moral conflicts is going to be utilitarian-RP appear highly intertwined (see e.g. Harris “Is Moral Theory Useful” 64). The third and fourth benefits are that knowing “high-level moral theories” provides us with a richer knowledge of the conceptual and technical underpinnings of moral analysis and, arguably a result of this richer knowledge, a greater ability to engage and critique opposing moral positions or beliefs (Harris “Response” 82; also Harris “Is Moral Theory Useful” 64-5).

In the end, Harris sees many reasons for using moral theories like utilitarianism and RP theory: not only do these theories represent the pinnacle of (available) levels of moral reasoning and, as a result, best fulfill the functions he argues a moral theory ought to fulfill – namely unify the majority of morality and our moral judgments, offer insight into the nature of morality and our moral judgments, and aid us in making rational moral decisions; they are also the most useful to people who do professional ethics in an effort to resolve moral problems in professional practice. When these problems occur, testing them with both utilitarianism and RP theory and reaching the same conclusions with each can provide us with a high degree of confidence in a chosen course of action. Moreover, even when this convergence does not happen, though, these tests are still the way to go.

Ultimately, even in cases of divergence, Harris believes that students of professional ethics and professional practitioners can find both value and reassurance

from recognizing and understanding that the sort of conflicts that they come across in professional ethics, specifically those between promoting general welfare and respecting individual persons, are in fact the kind of conflicts that are entrenched in the very nature of morality itself. Because of this understanding they can have an increased awareness of how and why these conflicts play out in their own professional lives and in public debates, appreciate the richer insight that this understanding of moral theory provides into the underpinnings of the moral tests and moral reasoning used in professional ethics, and have as an advantage the ability to use these two theories to evaluate and critique the moral issues with which they are presented.

CHAPTER 3

GERT

Another advocate of using moral theory in teaching practical and professional ethics is Bernard Gert. The specific moral theory he advocates is his own, which he refers to as “common morality.” Common morality can be thought of as “Kant with consequences”, or “Ross with a theory” (Hare 27); it’s what Harris placed at the third level of moral reasoning (although we will discuss whether or not this distinction Harris makes seems truly warranted). Gert’s common morality is an attempt at systematically unifying all – or at least the majority – of our commonly accepted moral beliefs and judgments into a set of rules and procedures we can follow to determine those cases in which we are justified in breaking one or more of the rules. Based on the idea of what rational, impartial, equally informed people would accept and promote, Gert devises ten basic moral rules and a two-step procedure for deciding appropriate rule-breaking scenarios, and also offers some guidance on the morally relevant features we should look at in making these determinations.

While there are some challenges that can occur when utilizing this latter procedure – in particular with situations where rational moral disagreement is still possible even after perfect application – Gert maintains that his common morality is nonetheless best at fulfilling what he argues are the key functions of a moral theory, and moreover has particular advantages when it comes to dealing with irresolvable moral disagreements. Additionally, because this common morality comes from our common experience and is the sort of thing we by and large already accept, it has a sort of

intuitiveness that is advantageous when trying to have students and practitioners who use professional ethics learn the rules, their application, and their justified violation. This means that common morality not only is best at being a moral theory and helping deal with irresolvable moral disagreements, it is also eminently practical, which is why Gert concludes that it is the moral theory that belongs in the professional ethics classroom.

Gert's view is that insofar as we tend to believe that morality as a phenomenon is essentially universal, then we believe that there is in fact only one morality, and all competing moral theories or systems are really just variations of that universal morality (Gert "Morality" 8). So in this sense, common morality is a foundational moral theory, as opposed to utilitarianism and RP theory, which would be variations (or what Harris called "strains"). Along with being foundational, Gert says common morality is at least implicitly accepted or acknowledged by pretty much everyone, and in particular everyone doing professional ethics. Regardless of whether they realize it, anyone who is engaging in professional or practical ethics is making assumptions about a "systemic knowledge of morality" that grants their moral judgments some sort of rational basis (Gert "Morality" 6). Now, it could be the case that this "systematic knowledge of morality" actually comes from some other moral theory like utilitarianism, RP theory, virtue ethics, etc. Or, at least, it is not clear why these would be excluded at this point in the argument. However, Gert maintains that when doing professional ethics and analyzing moral conflict in professional settings, people believe that their conclusion is precisely what most impartial and rational people with the same knowledge and understanding of the situation would reach, which is a core part of Gert's common morality ("Morality" 6).

In its most condensed version, Gert's common morality can essentially be thought of as a set of moral rules and acceptable violations as can be determined and publicly advocated by impartial, rational people. Gert's exact rules are as follows:

1. Don't kill. (Don't cause permanent loss of consciousness)
2. Don't cause pain. (This includes mental pain as well as physical pain.)
3. Don't disable. (Don't cause loss of ability.)
4. Don't deprive of freedom (or opportunity).
5. Don't deprive of pleasure.
6. Don't deceive.
7. Keep your promise. (Don't break your promise.)
8. Don't cheat.
9. Obey the law. (Don't break the law.)
10. Do your duty. (Don't neglect your duty.) ("Morality" 13-4)

These are supposed to be the rules that all moral agents (as rational persons) can know, understand, agree with, and act upon (Gert "Morality" 17; also Gert "The Usefulness" 28).

Once we know these rules, determining whether a potential violation of the rules should be allowed involves a two-step procedure that begins with identifying the morally relevant features. One possible way to identify the morally relevant features of a potential rule-violation situation would be to follow Gert's list of ten questions:

1. What moral rules are being violated?
2. What harms are being
 - a. avoided?

- b. prevented?
- c. caused?
- 3. What are the relevant desires of the people toward whom the rule is being violated?
- 4. What are the relevant rational beliefs of the people toward whom the rule is being violated?
- 5. Does one have a duty to violate moral rules with regard to the person(s), and is one in a unique or almost unique position in this regard?
- 6. What goods are being promoted?
- 7. Is an unjustified or weakly justified violation of a moral rule being prevented?
- 8. Is an unjustified or weakly justified violation of a moral rule being punished?
- 9. Is the situation sufficiently rare that no person is likely to plan or prepare for being in it?
- 10. Is the violation being done intentionally, knowingly, voluntarily, freely, or negligently? (“Morality” 17-8)

While Gert presents these questions as the preferred method for discovering the morally relevant features, I imagine he would allow for other questions or procedures insofar as they would generate the same morally relevant features as does his list of questions.

The second step would then be to look to the effects that would occur if the rule-violation in question were publicly allowed and determine whether or not an impartial

rational person would advocate the violation given the effects that are thought to follow. In making this determination, we need to consider the goods and harms involved, what kind they are, how serious they are, what their likely duration would be, and the probability of them actually occurring (Gert “Morality” 18). Additionally, when multiple people are affected, then we need to take into account the distribution of these goods and harms (Gert “Morality” 18). So, in the end, Gert’s common morality is a sort of Kantian-utilitarian moral theory: the ten determined rules are deontological, while the determination of whether breaking a rule is morally justified is consequentialist.

Unfortunately, though, this second step – even when performed perfectly – cannot guarantee a consensus on what a rational impartial person would publicly allow; according to Gert, equally informed impartial rational people might still reasonably disagree on the relative ranking of the potential ill effects of allowing the violation (whether one type of harm is worse than another) or agree in rankings but still disagree as to how much harm they think would be likely to occur if the violation were publicly allowed (“Morality” 18-9). Either of these disagreements would lead to different conclusions about the morally correct action would be.

Even with this apparent deficiency in mind, given this basic understanding of Gert’s moral theory, it is not readily apparent why Harris is so opposed to granting this version of common morality level-four status. One can condense much of the theory and unify most of common morality under the (seemingly) single idea: *morality consists in a set of rules and acceptable violations as can be determined and publicly advocated by impartial, rational persons* (stated earlier in this section). Unpacking the rules and procedures for determining acceptable violations takes a bit more effort (but even here it

was a matter of a few pages, which hardly bespeaks of an arduous undertaking or apparent disunity). Moreover, utilitarianism's idea of the greatest good for the greatest number and Kant's Categorical Imperative require unpacking as well, so it seems a bit unfair to hold this fact against common morality but not utilitarianism and RP theory. Gert's common morality also fulfills the insight function by explaining the nature and source of morality (what impartial rational people would agree upon), as well as the rational function by giving a systematic way to help resolve moral issues. As such, while Harris might have other good reasons for showing preference to utilitarianism and RP theory (Harris "A Reply"), that Gert's common morality fails to be a moral theory to the same degree or level in terms of his stated functions does not seem reasonable.

Moreover, Gert seems to suggest a different set of functions for a moral theory, one that might push utilitarianism and RP theory down to a lower level than common morality. Over the course of discussing common morality and his comparison of it with Harris' view, Gert brings up at least five key functions that a moral theory ought to fulfill². First, Gert says any moral theory ought to explain – and indeed, if possible, *justify* – morality and any of its corresponding variations ("Morality" 8). Second, a moral theory ought to explain the different ways of categorizing the moral status of categories of an action, such as permissible, impermissible, obligatory, or supererogatory (Gert "Morality" 9). Third, a moral theory ought to explain how morality relates to social practices and institutions, including professional roles (Gert "Morality" 9). Fourth, a moral theory ought to be able to fulfill its practical function of helping people in their

² I say at least five because these are the ones I picked up on, but since I could not find a single cohesive list there could well be more embedded in his writing elsewhere.

making of moral decisions and judgments, which includes making explicit the nature and interaction of the moral rules, ideals, and features that comprise morality (Gert “The Usefulness” 29). And finally, a moral theory ought to explain not only why there is widespread agreement on the answers to many moral questions, but also explain why there is apparent unresolvable moral disagreement over the answers to a not insignificant portion of controversial moral issues (Gert “The Usefulness” 31).

The first function is like Harris’ “insight function,” except that Gert makes it stronger by requiring (or at least recommending) justification for the moral theory. The fourth function is like Harris’ “rational function,” but again appears stronger by demanding a moral theory not simply “provide a useful and suggestive basis for moral analysis and for resolving moral issues” (Harris “Is Moral Theory Useful” 56), but actually make a lot of the features and their interactions “explicit.” Gert does not appear to have a corollary to Harris’ “unitive function,” and indeed decries this function as being almost a sort of slogan worship (“The Usefulness” 26) (although Harris denies the latter claim (“A Reply”). But this does leave Gert requiring or suggesting three functions that Harris apparently does not: explaining the different moral categorizations of actions, such as the difference between moral rules and moral ideals (which Gert does by use of the impartiality clause, “Morality” 19); explaining the relationship between morality and various aspects of society and social institutions and practices (on which Gert especially makes a point to separate common morality from religious and cultural tradition as well as describe professional duties (“Morality” 10, 15, 20-22; “The Usefulness” 32, 33, 35); and explaining the presence of unresolvable moral disagreements.

Gert seems to present this last function – explaining the presence of why there are apparently unresolvable disagreements about many moral issues – as a key benefit of common morality with respect to professional ethics. According to Gert, “A valuable practical function of a moral theory is to remind people that when dealing with controversial matters there are sometimes legitimate unresolvable moral disagreements” (“The Usefulness” 31-2). Specific to professional ethics, Gert draws on his experience as a member of a hospital ethics committee, where he found “that fruitful moral discussion is far more likely to take place when everyone acknowledges that there is more than one morally acceptable solution to a controversial moral problem” (“The Usefulness” 31). On the surface at least, this seems counter to the common morality program; if common morality is supposed to capture all of morality, and is the sort of thing we all can (and indeed often do) agree with, how is it that we are able to end up with disagreements where resolution is impossible?

This happens, Gert says, because even when we all agree on the facts of a situation and its morally relevant features, there can be aspects to the analysis that are not really governed by the moral rules, or are subject to more subjective interpretation. First, rational, impartial, equally informed people can agree on the harms and benefits to a situation, but not agree in their relative rankings (Gert “The Usefulness” 33). Second, in cases where a situation can impact things that are not deemed moral agents – and hence not explicitly governed by the moral rules – rational, impartial, equally informed people can disagree on which of these things ought to still be protected, at least partially, but the moral rules, and to what extent (Gert “The Usefulness” 34). Third, rational, impartial, equally informed people can disagree on the overall balance of good and bad

consequences that will probably occur if a rule violation is publicly advocated versus publicly condemned (Gert “The Usefulness” 34). Finally, rational, impartial, equally informed people can disagree with the interpretation or scope of a moral rule, particularly when a potential violation is non-paradigmatic (Gert’s example involves whether hair-coloring constitutes a violation of the anti-deception rule, “The Usefulness” 35).

Even acknowledging the existence of these different sources for moral disagreement, and granting that these sources might lead to irresolvable disagreement, Gert maintains that recognizing and accepting the rational existence of multiple acceptable solutions to moral problems is an asset to his view because it allows for people to compromise in the solution of a moral dilemma without sacrificing their own moral integrity (“The Usefulness” 31). Additionally, Gert believes that its overall intuitiveness and basis in common experience make common morality easy to both teach and practice, making it a more reliable guide for students and professionals seeking to determine the morally best course of action in a given situation (“The Usefulness” 36-7).

In the end, Gert believes we have good reasons for favoring his common morality over the alternatives: not only is it a fairly succinct, cohesive theory with ten basic moral rules and a two-step procedure for determining acceptable violations of the rules based on the idea of what rational, impartial, equally informed people can agree upon and promote, it is also to his mind the theory that best fulfills the necessary functions of a moral theory – namely explaining and justifying the moral theory; explaining the moral categorizations of particular actions; explaining the relationship between morality and various social institutions; provide practical ways for practitioners to make morally responsible decisions; and explain the presence of irresolvable moral disagreement. Moreover, this

ability to explain the presence of irresolvable moral disagreement, as well as its intuitiveness to and ability to be easily explained and used by everyday people that are in large part why Gert maintains that common morality is the best option when it comes to teaching students about professional ethics.

CHAPTER 4

DAVIS

Opposing both Harris and Gert in their support of using moral theory in teaching professional ethics – whether utilitarianism/RP theory or common morality – is Michael Davis. Davis states that he is not opposed to moral theory per se, and, in fact, thinks that in theory understanding moral theory can be helpful (“Professional Ethics”; see also Davis “The Usefulness of Moral Theory in Practical Ethics” 69). However, he believes that in practice moral theory is not particularly useful (or simply not useful at all) (Davis “The Usefulness of Moral Theory in Practical Ethics” 69). Given the various constraints that exist in the context of teaching professional ethics in a course, he maintains that trying to teach moral theory is not the appropriate avenue.

After differentiating some of the possible functions of a moral theory, Davis selects and expands on the function he believes is most relevant to teaching professional ethics – helping students in choosing the correct course of action. Davis also considers some of the important differences between moral theory generally and professional ethics specifically and combines knowledge of these differences with the primary objectives of teaching professional ethics to determine what he believes should be the goals of a course in professional ethics. Because of these goals and potential practical problems that may (or do) occur with trying to teach moral theory to professional ethics students, Davis concludes that moral theory is inappropriate in a professional ethics course. He also presents his own list of eight tests as a practical alternative to moral theory, which not only better fulfills his perceived objectives for a professional ethics course, but also has

the advantages of decreasing: (a) student resistance to learning; (b) time needed to present the material; (c) time necessary to learn and apply the material; and (d) amount of necessary instructor expertise or training. In the end, it is largely the sheer practicality of Davis' tests that he believes makes them ideal candidates for instruction in a professional ethics course, where moral theory is not only unnecessary, but perhaps even detrimental to student learning.

In considering Davis' position, it is useful to understand how he differentiates the functions of moral theory in general and the goals of teaching professional ethics specifically. According to Davis, three (non-exclusive) functions of moral theory that ought to be distinguished are: First, a moral theory ought to provide us with some sort of understanding into the nature and purpose of morality. Second, a moral theory ought to help people determine which course of action available to them is morally correct. And third, a moral theory ought to empower people with the ability to defend their own course of action and convince others that their choice is morally correct, or the ability to criticize another's choice and attempt to convince them that that choice is not morally appropriate and in need of revision (Davis "The Usefulness of Moral Theory in Teaching" 53).

Specifically when it comes to teaching professional ethics, Davis says that the key concern is a version of the second function, specifically to help students determine which course of action available to them is morally correct in the context of their chosen profession ("The Usefulness of Moral Theory in Teaching" 53). In a later work ("Professional Ethics"), Davis presents what he views as the three objectives of teaching professional ethics, which I suspect he takes to be an expansion on this function of helping people choose the course of action that is morally correct (or perhaps just morally

best), because they are particular skills are all part of how one goes about making decisions on what course of action is morally appropriate. These functions are: to increase ethical sensitivity (which is “the ability to identify ethical problems in context”; to increase ethical knowledge; and to improve ethical judgment (which means improving “the ability to design an acceptable course of action for the ethical problem identified” thereby translating “knowledge into an (appropriate) plan” (Davis “Professional Ethics”). Davis also considers and rejects the potential objective: to increase ethical commitment, which involves “increasing the relative frequency with which students turn ethical plans into acceptable professional conduct” (“Professional Ethics”)³.

Also contributing to Davis’ thesis that moral theory is not the best way to teach professional ethics is his position that professional ethics is itself different from regular moral theory. Basically, professional ethics involves “special, morally permissible standards of conduct” that apply to all and only members of a given profession simply in virtue of the fact that they are members of that profession” (Davis “Professional Ethics”). As such, “professional ethics” is not only different from regular ethics, but it can also be quite varied depending on the professional ethics of different professions (so, for example, nursing ethics will be different from engineering ethics, which will be different from teaching ethics, and so on). Because of this peculiarity of professional ethics, Davis points out that “It is the special preserve of those who know how to practice the

³ Davis gives three reasons for rejecting this objective (essentially that academic testing of ethical commitment is either ineffective or impractical, and that the true measure of ethical commitment occurs after graduation at which time there are too many intervening factors to accurately test whether or not the classroom learning objective of increasing ethical commitment was actually achieved (Davis in progress).

profession in question or who have at least studied that practice in depth” (“Professional Ethics”), rather than ethics in the more ordinary sense of morality or moral theory.

Given Davis’ focus on the “professional” component in professional ethics coupled with his adopted learning objectives focusing on helping students learn how to choose the correct course of action in a morally problematic situation, Davis ultimately decides that what really needs to be taught in professional ethics is the following:

Given that the objective of teaching professional ethics is to give students the appropriate sensitivity, knowledge, and judgment, a course in professional ethics should, it seems, include: 1) teaching students to recognize ethical problems that members of the profession typically encounter; 2) teaching students about the context in which they must address those problems (typical employer practices, the profession’s organization, the profession’s social functions, and so on), the special standards that members of the profession should consider when trying to develop reasonable solutions to those problems, ways to develop reasonable solutions (a decision procedure), and arguments that might be used to defend those solutions; and 3) giving students opportunities to practice judgment by explaining realistic ethics problems typical of their profession, resolving them, and defending their resolution. (“Professional Ethics”)

In this sense, the context presented in a professional ethics course should largely introduce students to the ethics they will come across in their own professional practice (Davis “Professional Ethics”).

Regardless of whether we accept Davis' narrowed as now interpretation of the appropriate role of ethics in professional ethics (as opposed to moral theory), Davis has three arguments for why he believes that any course about professional ethics is ultimately better without moral theory than it would be with it. The first two arguments are practical arguments about the issues of *who is teaching* and about *who is learning* in the course in professional ethics. For the first argument, according to Davis, we can distinguish between three different types of instructors who might be called upon to teach professional ethics: moral experts or qualified moral theorists, self-taught (amateurs with minimal training or knowledge), and those in-between ("The Usefulness of Moral Theory in Practical Ethics" 70-1). Moral experts are those instructors who know enough moral theory to adequately and appropriately teach utilitarianism and RP theory (or, if another moral theory is selected, that particular theory). Since these instructors are qualified to teach the given moral theory or theories, presumably Davis would not take issue with *them* teaching moral theory (except, perhaps, on the grounds of his second or third argument). What Davis does seem to take issue with is the idea that instructors at the second or third level – for which we have some empirical evidence to believe represent the majority of professional ethics instructors (McGraw et al) – can teach moral theory sufficiently and/or accurately.

For the instructors who are self-taught, Davis illustrates his perception of the deficiency of their ability by way of suggesting that an example text they might use (Harris' own *Engineering Ethics*) could not prepare instructors to teach the theories themselves, but rather just a few rules (similar to some Davis proposes in his alternative) ("The Usefulness of Moral Theory in Practical Ethics" 71). For the instructors who are

in-betweeners (typically those who have had a class in moral theory or some relevant training in moral theory), Davis admits that they will likely be more capable of teaching moral theory than the self-taught instructors; however, he questions whether we have good reason to think they will get the moral theory right (“The Usefulness of Moral Theory in Practical Ethics” 71). More pointedly, Davis suggest that non-moral experts who know a little moral theory have a tendency to get part – or all – of a given moral theory wrong, or at best have a more shallow, incomplete understanding of it (“The Usefulness of Moral Theory in Practical Ethics” 71). So, the argument seems to go, lacking instructors who are truly qualified to teach moral theory, we should not try to have moral theory be taught in professional ethics.

While the first practical argument focuses on who is teaching, the second argument focuses on who is learning. For this argument, Davis questions how much moral theory students are able to learn *even if* they have a qualified moral theorist or expert as their instructor (“The Usefulness of Moral Theory in Practical Ethics” 72). Since Davis is himself qualified to teach moral theory as an expert, he uses his experiences teaching moral theory – both in moral theory courses and in business or professional/practical ethics courses – as an estimate for typical student learning (or, perhaps more accurately, reception to learning); the results are less than sanguine. More alarming, given his experiences as a truly qualified instructor, he questions what we can expect from “ordinary instructors” – those who are self-taught or have minimal moral training (Davis “The Usefulness of Moral Theory in Practical Ethics” 72).

Davis’ third (and to my mind strongest) argument is that given the goals and objectives of teaching professional ethics, there is a simpler, more effective alternative

than trying to teach moral theory. According to Davis, instructors of professional ethics should teach something along the lines of his list of tests (“The Usefulness of Moral Theory in Practical Ethics” 73-4), which he believes does “pretty much *everything* teaching moral theory is supposed to do in a practical ethics course or for a practitioner with a problem but at lower cost in time and effort” (“The Usefulness of Moral Theory in Practical Ethics” 74). Davis’ list of tests includes the following:

1. **Harm test** – does this option do less harm than any alternative?
2. **Publicity test** – would I want my choice of this option published in the newspaper?
3. **Defensibility test** – could I defend my choice of this option before a Congressional committee, a committee of my peers, or my parents?
4. **Reversibility test** – would I still think the choice of this option good if I were one of those adversely affected by it?
5. **Virtue test** – what would I become if I choose this option *often*?
6. **Professional test** – what might my profession’s ethics committee say about this option?
7. **Colleague test** – what *do* my colleagues say when I describe my problem and suggest this option as my solution?
8. **Organization test** – what *does* the organization’s ethics officer or legal counsel say about this? (“The Usefulness of Moral Theory in Practical Ethics” 73-4)

While Davis’ list is not going to be able to fulfill many of the moral theory functions posed by Harris and Gert – it’s not unifying morality under a single concept, providing

particular insight into the nature of morality, etc. – it *does* arguably fulfill the necessary theoretical functions that contribute to what Davis says are the objectives of teaching *professional ethics*.

Moreover, Davis believes his tests have additional advantages. The main advantages Davis attributes to his list are seen as a direct result of the more “common sense” nature of his the list. Since the list is more intuitively plausible to students than “moral theory,” the supposed results are a decrease in student resistance, a decrease in the time it takes to present to students (because there is no need for an elaborate defense), a decrease in how long it would take for students to apply the moral tests “with reasonable accuracy,” and a decrease in the need for instructor training or moral experts (since one need not be a philosopher to learn the tests and teach them (Davis “The Usefulness of Moral Theory in Practical Ethics” 74). Davis also presents as an apparent advantage the fact that his tests don’t hold the implicit claim that they are “correct” and alternatives are wrong or inadequate in the same way as do most moral theories (“The Usefulness of Moral Theory in Practical Ethics” 75)⁴. Perhaps the main advantage of Davis’ list, though, is that it seems to more clearly fulfill the specific objectives for teaching professional ethics posed by Davis without adding to those objectives “extraneous” matter more fitting when teaching moral theory more generally; in this way, his list better meets with the “moral” goals in teaching professional ethics.

In the end, Davis believes he has good reason for discounting moral theory in a professional ethics setting, and instead showing preference for a more practical non-moral-theory set of moral tests: not only does this approach best fulfill his more refined

⁴ Although perhaps not so much moral theories as Harris or Gert present them.

conception of the goals and objectives in teaching professional ethics, but it also does not fall victim to two of his main arguments against the use of moral theory in teaching professional ethics, namely that most teachers are poorly suited to teach it (adequately and appropriately) and most students of professional ethics are poorly suited (or motivated) to learn it. Moreover, his approach has several practical advantages that using moral theory purportedly does not, such as decreases in how long it takes for teachers to teach ethics and for students to learn it, and improvement in student receptivity to the material and an instructor's ability to master it and instruct others about it. Because of these many practical advantages, Davis believes we should do away with teaching moral theory in a professional ethics course and opt for a simpler (and to his mind better) way without theory.

CHAPTER 5

THE VIEWS APPLIED

The Case

In order to get a better idea of how each of these three views – Harris’ use of moral theory (utilitarianism and RP theory), Gert’s common morality, and Davis’ non-theory moral tests – play out in practical application, it is a useful exercise to run them through (it least in preliminary form) the same case study to see how they each function and what results derive from their use. The focus of this exercise is less on what specific conclusion each of these views reaches with respect to the specific case, but more on the process it takes to reach that conclusion. The hope is that by looking more in depth at the process we can get a better idea of what the students of professional ethics using that approach will experience and learn, as well as get some insight into what it might take for an instructor of professional ethics to teach that approach.

Since Harris’ use of moral theory really requires a case where there is a utilitarianism/RP conflict, I selected a case where this conflict was present. Additionally, since part of Davis’ critique of Harris was that his example cases were not strictly professional ethics and hence not likely to come up in a professional ethics class (Davis “The Usefulness of Moral Theory in Teaching” 53-4), I selected a discussion case that is offered by the National Academy of Engineering as a professional ethics case that can come up in engineering practice and be used in class discussion. The specific case I

selected was “Responsibility for Public Safety and the Obligation of Client Confidentiality (adapted from NSPE Case No. 90-5),” and is as follows:

Tenants in an apartment building sue the owners of the building in order to force them to repair a number of annoying, but not dangerous, problems. The owners' attorney hires Duchane, a structural engineer, to inspect the building and testify on behalf of the owner.

In the course of his inspection, Duchane discovers serious structural problems in the building, which are an immediate threat to the tenants' safety. These problems, however, are not mentioned in the tenants' suit.

What should Duchane do? Should Duchane report the information to the attorney? To the owner? To the tenants?

Suppose Duchane reports this information to the attorney, who tells Duchane to keep this information confidential because it could affect the lawsuit.

What should Duchane do now?

Is there a way to resolve the problem without compromising either Duchane's professional responsibility for the public safety or his obligation to preserve client confidentiality? (“Responsibility”)

Because of how the case is presented, the basic decision a student would have is: Should Duchane keep the information confidential or not?

Harris

The first thing to do with this case using Harris' approach would be to make sure that using high-level moral theory is necessary. Harris takes "as a maxim of practical ethics that only lower-level principles or considerations should be employed if they are sufficient to satisfactorily deal with the issue at hand" ("Is Moral Theory Useful" 62). However, according to Harris these lower-level principles really only work if there is an obvious case of moral permissibility/impermissibility (like when an action is clearly a case of theft, etc.); since we are dealing with a case where there is a conflict of interests and values and no clear-cut answer, we need to analyze the situation using higher-level theories, namely utilitarianism and RP theory.

While an extended exploration into what each of these theories would consider to be the best course of action may involve a great deal of nuance in using several tests (such as doing cost benefit analysis and comparing act and rules utilitarianism for utilitarianism, and applying the Golden Rule or trying to determine where and which rights may be being infringed or violated (Harris "Is Moral Theory Useful" 54)), I take it that the general thrust of the analysis – at least insofar as it is a utilitarian/RP theory conflict – is going to hinge on the conflict between promoting general human welfare (here, the tenants) and protecting persons from having their moral agency violated (here, the owners, and maybe also the hiring attorney) (Harris "Is Moral Theory Useful" 57). A more sophisticated utilitarian analysis might weigh in the harms and benefits to the owners, attorney, and engineer as well (e.g. What harms will the owners have in terms of cost if Duchane tells versus the benefits if he stays silent? What harms might Duchane

incur professionally if he tells or does not? Will he lose potential future business if he tells, but run the risk of harming his standing with other engineers if he does not? Might not telling have long-term harms with respect to public trust of engineers if the truth about the building is discovered later? Etc.) Similarly, a more sophisticated RP analysis might look at more than the confidentiality violation (What respect does the engineer owe to the tenants? To the attorney? Does he have some obligation to himself or to the profession that might be violated depending on his choice? etc.)

After considering these sorts of questions, students will either find that the conclusions offered by utilitarianism and RP theory converge (in which case they can have greater confidence in that conclusion than if they had only met it with one of the theories), or they will find that the conclusions diverge. In the case of the latter, students can supposedly still find the process of using these moral theories enriching because they are better able to recognize the structure of this fundamental conflict that can happen in professional ethics, namely the conflict between promoting general human welfare and protecting the moral agency of individual persons. Additionally, after being exposed to the sort of utilitarianism/RP theory conflict as exists in this case, they will be able to anticipate it showing up in other similar cases of professional ethics. Students will also benefit from the richer understanding they get from moral theory in how to do moral analysis, as well as be able to use their knowledge of these two moral theories to critique available courses of action.

Gert

The first thing to do with this case using Gert's approach would be to look at his list of ten moral rules (p. 15 above) and see which ones are going to potentially be violated depending on which decision Duchane might make. Because Duchane has professional duties in virtue of being an engineer, he is going to need to consider rule #10: Do your duty. If there are any explicit laws related to the situation, he must look to rule #9: Obey the law. If he has made a promise (explicit or implicit) to either the building owners or the attorney, he will need to consider rule #7: Keep your promise. If he might be called on as to the condition of the building and either lies or stays silent (which might be considered a lie by omission), he will need to consider rule #6: Do not deceive. If telling the tenants means financial harm to the owners, he may also have to keep in mind rule #5: Don't deprive of pleasure. Also, depending on the degree of structural damage and the risks that damage poses to the residents, he might need to consider rules 1-3 (Don't kill; Don't cause pain; and Don't disable) as well.

After amassing the rules involved, students will then need to determine what the morally relevant features of the case are by following Gert's list of ten questions (pp. 15-6 above). This will first involve listing the rules potentially being violated (1-3 and 5-10). Next, they need to consider the harms being avoided, promoted, and caused with each decision (so staying silent might cause or promote harm to the tenants by avoid financial harm to the building owners; not staying silent will likely harm the building owners and possibly the attorney, but perhaps help the tenants avoid harm). The next two questions for teasing out morally relevant features involve ascertaining the relevant desires and the

relevant rational beliefs of those individuals toward whom the rules are being violated (e.g. the building owners' desire to win the lawsuit and save their money, the tenants' desire safer living accommodations, Duchane's desire to do the right thing, the attorney's desire that Duchane stay quiet; etc.).

Students also need to consider whether Duchane might have a unique duty to violate the moral rules given his professional role, and see if there will be any goods being promoted with either decision (e.g. the good of the attorney and clients winning the lawsuit and earning/saving money versus the good of the tenants winning the lawsuit and receiving better housing and/or compensation, etc.). They will need to consider whether there is an unjustified or weakly justified violation of a moral rule either being prevented or punished, and whether the given situation is "sufficiently rare that no person is likely to plan or prepare for being in it" (Gert "Morality" 18) (which does not seem to be the case here, because if this sort of conflict is common enough then a reasonable person should be prepared for it). Finally, they need to determine if the violation is "being done intentionally, knowingly, voluntarily, freely, or negligently" (Gert "Morality" 18).

After working through the many morally relevant features at hand, the next step is for each of the potential rule violations to ask the question: Would a rational, impartial, fully informed person publicly advocate this violation given the effects that will likely follow? This includes considering the seriousness, likely duration, probability of occurrence, and overall distribution of all of the goods and harms involved. At the end of this process each individual student should be able to determine what looks to be the appropriate course of action based on their own analysis, but their conclusions may end up differing from the conclusions that other students will end up with. Even if different,

however, students are meant to take comfort in knowing that irresolvable disagreement on what Duchane ought to do in this case is a real possibility and that they can have this disagreement without any ill effect on their own moral integrity.

Davis

Applying Davis' plan to the given case does not involve multiple steps in the same way that the other two plans do; what it involves is working through Davis' eight tests to see what the results of these tests combined say about the morally appropriate course of action. For the first test (the harm test), students would consider which course of action does the least harm (or if there might be third option that does even less harm).

Presumably they would consider harms to all parties involved, perhaps even considering degree and distribution, then try to determine which choice results in less harm. For the second test (the publicity test), students ask "Would I (or Duchane, in this case) want that choice published in a newspaper?" Public opinion being what it is, I suspect these test leads to the choice of finding a way to inform the tenants rather than remaining silent. For the third test (the defensibility test), students ask which choice could be defended to a committee of peers or to one's parents. The fourth test (the reversibility test) has us ask "what would I think if I was one of the people adversely affected by this choice?" (so as Duchane we would ask what it would be like to be the building owners and attorney if he tells, and the tenants if he keeps silent).

For the fifth test (the virtue test), students would ask what they would become if they choose that course of action often (so if Duchane makes a habit of either divulging

client information (even for the sake of safety) or if he makes a habit of maintaining client information (even with the risk of harm to others) what does that decision say about who he is as a person?). The sixth test (the professional test) has students ask what a particular professional ethics committee would say about a choice (so the question becomes what would a professional ethics committee in engineering say Duchane should do (or should've done)?). The final two tests (the colleague test and the organization test) involve actually consulting one or more colleagues and the organizational rules or ethics counsel to determine what they have to say on the subject. So the suggestions we take from these tests are that Duchane should talk the situation over with an engineering colleague as well as any organizational ethics counsel.

Davis makes it clear that he does not expect any one of these tests to determine the correct course of action (“The Usefulness of Moral Theory in Teaching” 56); each test is simply meant to bring out various aspects each option has that might have otherwise been overlooked. Then, if one course of action (e.g. Duchane keeping silent) passes all eight tests, then it is in all likelihood a good choice on what to do, and vice versa. Things are arguably more difficult when an option passes some tests but not all of them, and especially difficult if there is basically an even mix (passing four and failing four); there is no included scale with the tests to help students decide which one(s) should take precedence when there is divergence (although I suspect the tests 6-8 might carry more weight). However, students can perhaps feel more confident in their decision-making because they have used four theoretical “screens” to catch the morally relevant considerations (Davis “The Usefulness of Moral Theory in Practical Ethics” 75).

CHAPTER 6

BRINGING IT ALL TOGETHER

Relevant Features and Benefits

Having examined in some detail the three competing views (Harris, Gert and Davis) and seen in preliminary form how all three would likely play out in dealing with an actual professional ethics scenario in the classroom, we are in a good position to engage a broader comparison of these views. The idea here is not only to get an idea of how the views stack up against one another (e.g. which view has a feature or proposed benefit that the others do not), but to also see which view or views has/have the sort of features and benefits that are most appropriate in the context of professional ethics and a professional ethics course.

To make this comparison easier, I have constructed a table [Table 1: Comparison of Features/Proposed Benefits of the Three Views] that compares these three views on whether or not they have a given feature or proposed benefit. The list of features and benefits was selected primarily from what each of the authors (Harris, Gert and Davis) presents as benefits or advantages to his respective view. I also included what Harris and Gert present as features of a moral theory, since they both showed a preference for their own views at least in part because their views presumably best fit the requirements of a moral theory, thus implying that these features are benefits or advantages; since Davis does not consider being a moral theory an advantage, his proposed goals of a moral theory were not included on the list. I then looked at each view to see whether it had the

Table 1: Comparison of Features/Proposed Benefits of the Three Views

Feature/ Benefit	Harris	Gert	Davis
Able to unify much of morality and moral judgments under a single idea	maybe	yes	maybe
Able to offer insight into the nature and purpose of morality	yes	yes	no
Able to justify morality and its variations	no	yes	no
Able to help users analyze and resolve moral issues	yes	yes	yes
Able to explain different types of moral categorization (e.g. permissible, impermissible, obligatory, supererogatory)	yes	yes	no
Able to explain how morality relates to social practices and institutions	no	yes	maybe
Able to explain irresolvable moral disagreement	no	yes	no
Able to offer a high degree of confidence in a course of action when the results of multiples tests converge	yes	no	yes
Able to help users recognize the nature of fundamental conflicts in moral controversies	yes	maybe	maybe
Able to help users anticipate the nature and character of future moral conflicts	yes	maybe	maybe
Able to provide a richer knowledge of the conceptual and technical underpinnings of moral analysis	yes	maybe	maybe
Able to provide an enhanced ability to critique opposing views	yes	maybe	yes
Has a basis in common sense	no	yes	yes
Explains all of common morality	no	yes	no
Allows users to maintain moral integrity in the face of irresolvable moral disagreement	maybe	yes	no
Able to be taught with minimal student resistance	maybe	maybe	yes
Able to be taught quickly	maybe	maybe	yes
Easy for those with limited experience in ethics to use	no	no	yes
Does not require moral expertise in order to teach well	no	maybe	yes
Has no implicit claim to being the one correct theory	maybe	no	yes

feature or benefit, and categorized the results as ‘yes’ (meaning the view or theory definitely has that feature), ‘no’ (meaning the view or theory definitely does not have the theory), and ‘maybe’ (meaning it’s not clear if the view or theory might have the feature, or meaning that the answer is reasonably open to interpretation). Except for two of the features, I basically accepted the authors’ claim that his theory or view had a particular feature or benefit (and where I question the purported benefit and say ‘maybe’ it’s because I think there is good reason). The table illustrates the results, but I will discuss them in a bit more detail below.

Able to unify much of morality and moral judgments under a single idea. Since his view is presumed to capture the whole of common morality under one general idea or moral theory, Gert’s theory arguably fulfills this particular function (Gert “Morality” 2011). For Harris, while neither utilitarianism nor RP theory captures the whole of morality, he does believe they each capture a lot (or at least appear to), so for his view I said ‘maybe.’ For Davis’ view I also said ‘maybe’ because even though he is not trying to necessarily unify all of moral theory under a single idea, his list of tests do actually capture a lot of morally relevant features from multiple moral theories, so is at least unifying in that sense.

Able to offer insight into the nature and purpose of morality. Both Harris and Gert claim that their view have this feature (Harris “Is Moral Theory Useful”; Gert “Morality”; Gert “The Usefulness”), but since Davis’ view only has moral tests independent of any moral theory, the latter does not appear to offer much, if any, insight.

Able to justify morality and its variations. Only Gert claims to be able to do this with his view (“Morality” 8), and indeed seems to be the only one who considers this to be a requirement of moral theory.

Able to help users analyze and resolve moral issues. All three views are able to do this, although with varying degrees of difficulty.

Able to explain different types of moral categorization (e.g. permissible, impermissible, obligatory, supererogatory). Only Gert appears to present this as a requirement for a moral theory (“Morality” 9), but Harris’ view presumably would be able to do the same. For Harris, moral reasoning at level two can achieve this (“Is Moral Theory Useful” 53), and since moral reason at level four is higher and can presumably do everything the lower-level theories do and more, it follows that his level four theories (utilitarianism and RP theory) can do this as well.

Able to explain how morality relates to social practices and institutions. Only Gert states this as a featured requirement for moral theory (“Morality” 9), but with Davis’ emphasis on understanding professional roles his view might fulfill this requirement as well. The main question with Davis’ view would be how much it really explains about the morality that is relating to the professional duties.

Able to explain irresolvable moral disagreement. Gert is the only one who claims to be able to do this, or that this is an important feature for a moral theory to have (“The Usefulness” 31). However, all three admit of some degree of moral pluralism, so even if Harris and Davis do not try to explain irresolvable moral disagreement, their views presumably would allow for it.

Able to offer a high degree of confidence in a course of action when the results of multiples tests converge. Both Harris' view and Davis' view are able to do this, Harris' when both utilitarianism and RP theory converge on a conclusion and Davis' when several of his eight tests converge on a conclusion. Since Gert's view does not have multiple moral tests like these two, his view is not able to do this (nor would he expect it to).

Able to help users recognize the nature of fundamental conflicts in moral controversies. Harris is the only one who claims this as an advantage ("Is Moral Theory Useful" 62), based on the idea that most fundamental conflicts in moral controversies are of a utilitarianism/RP theory sort. However, it is possible that both Gert and Davis can do this to an extent with their views as well. With Gert, the process and practice of teasing out morally relevant features using his questions will likely over time help users see patterns in the types of conflicts they come across. Similarly, with Davis the practice of using his tests over time will possibly help students see that certain features and conflicts are more common.

Able to help users anticipate the nature and character of future moral conflicts. Harris is again the only one who claims this as an advantage ("Is Moral Theory Useful" 62), but as argued in Chapter 2 the ability to anticipate the nature and character of future moral conflicts seems to follow from the ability to recognize the nature of fundamental conflicts in moral controversies, so insofar as Gert and Davis are able to do the former they should also be able to do the latter.

Able to provide a richer knowledge of the conceptual and technical underpinnings of moral analysis. Harris presents this as a major benefit to using high level moral

theories (“Is Moral Theory Useful” 64-5; “Response” 82), so his view should definitely have this particular feature. Again, however, insofar as students and practitioners are able to engage the conceptual and technical underpinnings of moral analysis by going through the process of moral analysis, Gert’s view and Davis’ view would arguably achieve this benefit as well.

Able to provide an enhanced ability to critique opposing views. Harris also presents this as a major benefit to using high level moral theories (“Is Moral Theory Useful” 64-5; “Response” 82), so his view should definitely have this particular feature. However, Davis also appears to present this as something his view does, and indeed professional ethics ought to be able to do (“The Usefulness of Moral Theory in Teaching”; “Professional Ethics”). Since Gert’s view concedes the existence of moral conflicts for which there is no resolution possible, it’s not clear how well his view is able to do this; it seems like if two people go through his whole moral reasoning process and end up with different views, there really are no grounds for critique. He does, however, claim that full explication of common morality can help practitioners defend their respective views and critique others (Gert “The Usefulness” 37), so it may be possible.

Has a basis in common sense. Both Gert and Davis claim their views have this feature, but since Harris is defending high-level moral theories like utilitarianism and RP theory, his view really is not based on common sense.

Explains all of common morality. Only Gert’s theory of common morality is able to achieve this feat.

Allows users to maintain moral integrity in the face of irresolvable moral disagreement. Gert is again the only one who appears to consider this feature a benefit

(although he presents it as a major one (“The Usefulness” 31)). However, Harris’ view might have a similar advantage if this irresolvable moral disagreement is of a utilitarianism/RP theory sort and students have developed an appreciation for the fundamental nature of this sort of conflict. Davis’ view does not appear to do this, and indeed it seems he would disagree that this feature would even be a benefit (“The Usefulness of Moral Theory in Teaching” 57).

Able to be taught with minimal student resistance. Davis is the only one who explicitly claims this benefit to his view (“The Usefulness of Moral Theory in Practical Ethics” 74), and is arguably the only one whose view has this feature (since Davis attempts to highlight resistance to both moral theory and the use of Gert’s common morality (“The Usefulness of Moral Theory in Practical Ethics”; “The Usefulness of Moral Theory in Teaching”). But this is really an empirical question and in need of further evidence to truly establish what degrees of student resistance are present with each of the respective approaches.

Able to be taught quickly. Davis believes that his moral tests would be the quickest to teach (“The Usefulness of Moral Theory in Practical Ethics” 74), but Harris does make the argument that his view can be taught just as quickly (“Response”). Gert’s common morality, however, requires many steps and procedures and would seemingly take quite a bit of time for students and practitioners to get it right (insofar as this is possible). But, Gert’s view contains many heuristics that can potentially help speed up the process, so we may again have what is a truly empirical question.

Easy for those with limited experience in ethics to use. Davis presents this feature as a key benefit of his view (“The Usefulness of Moral Theory in Practical Ethics”),

while it is doubtful that moral novices could jump in with utilitarianism, RP theory, or common morality and use them with particular reliability in the beginning.

Does not require moral expertise in order to teach well. As Davis argues, we have reason to suspect that Harris' theories require moral expertise to be taught well ("The Usefulness of Moral Theory in Practical Ethics"). Gert appears to think that, since his common morality is drawn largely from common sense that it also does not require moral expertise ("The Usefulness"); however, having seen in the previous chapter (5) how his method actually applies to a professional ethics case I am suspicious that a lay ethicist would be unlikely to get the process right without some serious training or practice. In the end, Davis' view seems like the only one with this feature.

Has no implicit claim to being the one correct theory. Only Davis openly states that his view has this (or that it is a benefit) ("The Usefulness of Moral Theory in Practical Ethics" 75). Gert maintains that his common morality is the one correct morality, so his view does not have this feature. Since Harris grants that neither utilitarianism nor RP theory fully capture morality, he may in some ways believe that there is not just one correct theory. But since he openly prefers these two views over, e.g., virtue ethics, there is an implicit claim to views being more correct.

The Possibility of Consensus in Professional Ethics

Since none of the three approaches is able to encompass all of the above features, the question that presents itself – the question that should determine which approach to teaching professional ethics is likely best – becomes a question of which features on the

list really matter; if we can figure out which feature(s) we must have (or perhaps some we absolutely do not want), then we can start narrowing down our options. This, however, appears to be the likely point of impasse between Harris, Gert and Davis. If, for example, Gert stands firm that being able to explain irresolvable moral disagreement and/or explicate all of common morality is a necessary part of professional ethics training, neither Harris' nor Davis' approach will ever suffice. Similarly, if Harris maintains that helping users recognize the nature of fundamental conflicts in moral controversies, anticipate these sorts of conflicts, obtain a richer knowledge of the conceptual and technical underpinnings of moral analysis, etc., are all key values for both students and practitioners of professional ethics, then even insofar as Gert's or Davis' views might be able to do these, they will always be a pale comparison to Harris' own approach and so hardly any reason for him to abandon ship. Finally, if Davis' key concerns when it comes to teaching professional ethics are the practical concerns like what can be taught quickly, with limited instructor training or student resistance, and minimum time required before students can start "doing ethics" reasonably well on their own, then neither Harris' nor Gert's approach can come close to his own in meeting these needs. Consequently, we have a theoretical Mexican standoff, where none of the parties is likely to shoot first and lose their ground.

So what now? If real consensus appears to be impossible, is there a reasonable middle ground? One idea would be to take Davis' tests (or something similar) and bolster them with information on the theoretical underpinnings of the moral tests (whether these underpinnings are in terms of moral theories a bit like Harris perceives them or grounded in Gert's common morality). As Harris and Gert point out, there are potential benefits to

students having this sort of enriched understanding, so it seems like this would take the best of both worlds. The results, presumably, would be an eminently practical set of tests and heuristics that are relatively easy for teachers to teach and for students to learn *combined* with a deeper ethical knowledge that would help students grasp some of the greater nuances of these tests, recognize the theoretical underpinnings that make these tests reliable tools in ethical decision-making, and help them position themselves in a much broader moral landscape than they would have with the tests alone.

However, there is a question as to whether or not students of professional ethics actually need this deeper ethical knowledge. According to Davis, not only do students not need it, they also do not want it (“The Usefulness of Moral Theory in Practical Ethics” 75). While this attitude may in fact be a quirk of the student population with which he interacts, it is plausible that many (if not most) professionals and professionals-in-training do actually just want the fastest and simplest way to approach a given moral problem; maybe all they really want is just enough ethics training to make sure that they choose a course of action that ensures that they are not going to be held legally, financially, or professionally liable for having done something “wrong.”

But presumably the goals of teaching ethics to (future) professionals run deeper than that. Or, at least, they ought to. Even though Davis argues that instructors of professional ethics ought to focus on more practical/professional application of ethics when it comes to teaching (such as recognizing typical ethical problems within the profession and the professional context in which to address these problems, and practicing the “special standards” individuals in this profession should consider and apply in engaging these problems (“Professional Ethics”), he does include more aspirational

moral questions in his tests (such as “What would I become if I choose this option often?” (“The Usefulness of Moral Theory in Practical Ethics” 73-4). As such, it seems like even he wants (however implicitly) students to get at some of the deeper ethics issues at play.

Moreover, if the specific pedagogical goals of teaching ethics in any particular professional program go beyond these sorts of bare-minimum objectives Davis puts forward (e.g. any goal wanting some theoretical understanding in addition to practical application), it is not clear that simply handing students a set of tests and teaching them how to use them will be able to achieve these particular goals. However well thought-out the tests, however much ethical underpinnings are behind the tests but left unstated, and however reliably students can apply them, in the end tests alone are highly unlikely to offer students the same degree of insight, knowledge and understanding into the nature of the moral issues and problems that they encounter as they would get with some degree of moral theory. Additionally, without this degree of insight, etc., it seems unlikely that they can develop a broader understanding and appreciation of the broader moral landscape in which these individual moral issues and problems arise.

But what about the practical concerns of teaching moral theory in a professional ethics course? As we already saw in Chapter 4, Davis argues that moral theory does not belong in such a course in part because of the perceived facts that most instructors of professional ethics are not qualified to teach moral theory (or teach it well), and most students of professional ethics struggle to learn (or even be motivated to learn) moral theory as well. While it may be the case that Davis’ observations leading to his

conclusions are correct (although surely they would not hold true at every college or university) we still have reasons to doubt his conclusions.

First, with respect to Davis' argument against the qualifications of who is teaching, there is reason to think Davis is being rather uncharitable to Harris and *Engineering Ethics*, which is part of Harris' reply to the argument (Harris "Response"). Likewise, with respect to Davis' argument about student learning of and reception to moral theory, Harris responds with some good points on what also might explain the apparent student resistance (namely an issue with "theory" more so than with "ethics" ("Response" 85)). However, I believe the better response to Davis' arguments is that there are entirely different, and to my mind more appropriate, conclusions we can draw from the apparent problems with who is teaching professional ethics and how well students are reacting to being taught professional ethics than the ones Davis draws himself.

For the first argument: assuming that there is in fact a dearth of qualified instructors who are able to adequately and appropriately teach moral theory to students of professional ethics, this does not prove that moral theory does not belong in the professional ethics curriculum; it just as easily suggests that what we need to have is better instructor training in moral theory, or more hires of instructors who are already moral experts. To substitute another field for moral theory: I find it hard to imagine that a chemical engineering department lacking an instructor qualified to teach fluid dynamics would simply excise the material from the curriculum; surely, given the importance of fluid dynamics to chemical engineering, they would instead hire someone who is qualified or train someone already there so that they can become qualified.

Similarly, for the second: granting that students of professional ethics resist and/or struggle with learning moral theory does not prove that we should not teach them moral theory; it can merely be suggestive of student resistance to learning theory (or learning generally). For example, I imagine that a large number of (thoroughly qualified) biology instructors teaching introductory or lower-level biology courses experience similar blank stares as Davis and at least have some population of students who resist and/or struggle with the “theory” of evolution. However, this does not mean that instructors and biology departments should shrug their collective shoulders and declare “So much the worse for evolutionary theory”; because they believe there is good reason for students to know about evolutionary theory, the latter is taught, student resistance notwithstanding.

The basic idea here is that what should be driving the argument is whether or not the information at hand (whether fluid dynamics or evolutionary theory or moral theory) is important enough to the given curriculum (or the program at large) to warrant its being taught. If so, then we need qualified instructors, *period*, and the presence or absence of qualified instructors should have no bearing on the material’s perceived worth. Likewise, if we decide independently of student proclivities that moral theory is something that should be taught in professional or practical ethics, then the fact that students seem to turn into weeping angels when we mention Mill or Kant (or Aristotle or Gert) should not dissuade us from sticking with the “correct” curriculum. As such, what we really should be looking for is whether or not moral theory is the “correct” curriculum (which it may not be), and that determination seems like one that should be made based on the pedagogical goals of a professional ethics course rather than potential instructor and/or student failings.

Bringing It Back to Science

So what does all of this tell us about what we should do in science? First, it should tell us to look at the proposed goals of teaching RCR (and perhaps ethics more generally) in science. While the overt goal of RCR training is to have there be less instances of scientific and/or research misconduct, there are some more specific learning objectives designed to get at this overarching goal. As a representative example, consider the following list of RCR learning objectives proposed by NIH:

- increase knowledge of, and sensitivity to, issues surrounding the responsible conduct of research
- improve their ability to make ethical and legal choices in the face of conflicts involving scientific research
- develop an appreciation for the range of accepted scientific practices for conducting research
- learn about the regulations, policies, statutes, and guidelines that govern the conduct of PHS-funded research
- develop positive attitudes toward life-long learning in matters involving the responsible conduct of research. (“Why”)

Understanding the policies and practices of scientific research and practicing making ethical choices given these policies and practices are quite similar to Davis’ main objectives for teaching professional ethics. But what about the other two? What does it mean for students to “increase knowledge of, and sensitivity to, issues surrounding the responsible conduct of research” and “develop positive attitudes toward life-long learning

in matters involving the responsible conduct of research”? Can we reasonably expect student to achieve these goals with the sort of tests or heuristics Davis offers without any accompanying moral theory?

Another good list to look at comes from the National Academies of Science and Engineering Workshop on Ethics Education and Scientific and Engineering Research. As part of the findings of this workshop, participants identified nine “required skills” that should be part of any scientific/engineering/research ethics education as follows:

- Recognizing and defining ethical issues.
- Identifying relevant stakeholders and socio-technical systems.
- Collecting relevant data about the stakeholders and systems.
- Understanding relevant stakeholder perspectives.
- Identifying value conflicts.
- Constructing viable alternative courses of action or solutions and identifying constraints.
- Assessing alternatives in terms of consequences, public defensibility, institutional barriers, etc.
- Engaging in reasoned dialogue or negotiations.
- Revising options, plans, or actions. (Hollander and Arenberg 12-3)

As with the previous list, much of this one looks like it can be fulfilled by moral tests without any corresponding moral theory. However, how much moral insight and knowledge is required in order to appropriately recognize and define ethical issues? Are the positions of all of the relevant stakeholders captured by Davis’ list (and, moreover, can you *understand* their respective perspectives from using tests alone)? And what is

entailed in identifying value conflicts? One of the main benefits to a moral theory approach like Harris' is that it is supposed to explicitly help students recognize the nature and character of fundamental moral (and value) conflicts; but as we saw earlier in this chapter, it is not clear that Davis' approach can really do the same. In addition to identifying value conflicts, what about truly understanding values? How are students expected to develop an understanding of the moral values that support science – like honesty, fairness, collegiality, openness, trust, etc (Committee 2-3, 48) – without being taught something about the theoretical moral underpinnings to these values (or is it enough that they can simply name them)?

The point here is that right now ethics in science, even when focusing primarily on RCR, is stating objectives that appear to need moral theory in order for them to be (fully) achieved. Or at least the rival approach that focuses on moral tests rather than moral theory looks like it can at best get us only part way towards achieving these objectives. Given this setup, it looks like we have two options. First, we can eliminate and/or modify some of the proposed objectives of ethics education in science so that moral theory is clearly no longer required (and opt instead for something like Davis' moral tests). This would presumably carry with it the many benefits Davis' tests purport to have, like being quick and easy to teach, minimize teacher training and student resistance, etc. It would also arguably be able to provide for a sort of shallow insight into the nature of moral reasoning and moral problems as they exist in science and research, and would still fulfill the more practical application ethics objectives there.

However, the question we need to ask ourselves is: Is this sort of shallow insight enough? If the answer is no, and if we want to keep all of the above ethics objectives

proposed, however, it looks like at least some degree of moral theory needs to start making its way into the science ethics curriculum. While in this thesis we only looked in-depth at two approaches that might fulfill these needs, there are going to be other approaches to including moral theory that can probably serve science's needs equally well. So what science needs to decide – or what her mortal, corporeal, earthly representatives need to decide – is how much and what sort of ethics education she really needs. Additional questions should be empirically, like which approach to teaching ethics is *actually* faster or easier or confronts less student resistance or is the sort of thing that helps students grapple with moral conflicts more reliably. But these, really, are the sorts of questions that should probably be secondary; the primary concern should be figuring out what real purpose ethics education is supposed to serve in science. But since that figuring is the sort of thing that hinges on the perceived weight and worth of particular values, we may need a little moral theory to even get started

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