

CONFESSIONS OF AN UNCONSCIOUS INTERDISCIPLINARIAN

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ABSTRACT

This is a cautionary tale, told by one whose venture into interdisciplinary work began with a social psychology experiment. Realizing there were moral dimensions to the experiment, he began following his interests across conventional boundaries. Ultimately, this led to studies of how people think about responsibility and, more recently, the ethical dilemmas faced by nurses and doctors who care for seriously ill newborns, an area that reaches far beyond the boundaries of moral philosophy into economics, sociology, and health policy. These experiences suggest that interdisciplinary theorists would do well to study what actually happens when people do interdisciplinary research. By creating and studying narratives about cases of interdisciplinary research, those who study interdisciplinarity will be able to temper abstract theory with experience.

I

I didn't start out that way; hardly anybody does. I was going to be like the rest, and walk the straight and narrow. I guess I just couldn't resist temptation.

You don't just one day decide to be one! In fact, you don't even realize it's happening until it gradually dawns on you. By then it's already too late to turn back. You're hooked, and there's nothing, nothing you can do to get loose; no way to regain your lost innocence. The most you can hope for is to warn others about the perils of following along the same path that led you to this state. About the only way I know of doing that is to tell cautionary tales, and who can you talk about more authoritatively than yourself? So, for the sake of those who might otherwise naively have followed, I offer here the confessions of an unconscious interdisciplinarian.

I suppose it all began in graduate school, about the time I started on my MA research. I was doing this nice, innocent experiment in social psychology

where we cleverly tricked undergraduates into thinking they were witnesses to someone accidentally receiving a severe electrical shock: a clever experiment with good results. One thing bothered me though: the subjects would tell me how interesting and ingenious the experiment was, how wonderful it was that I was doing it, how happy they were to have participated in it. But their eyes, and their voices, and their trembling bodies contradicted their words. Some of them – many of them, especially those who had not sought help for the phony shock "victim" – gave every indication of serious emotional distress, every indication except the words they used to assure me and praise the research.¹

Eventually I remembered that subjects in other studies like this one, studies in which subjects were placed in potentially emotionally wrenching situations, and in which they sometimes did not react as we all know good, courageous folks are supposed to react, those subjects told their experimenters the same things mine were telling me. And the researchers doing those other studies reported their subjects' words as proof that the research wasn't having any bad effects on them.²

I couldn't be so sure. I began seeing things in the research in my field that unsettled me, things like the "self-esteem" manipulation where you give a supposed personality profile test to people, flip a coin (or consult a table of random numbers), and give them one of two already prepared profiles, one very flattering, the other speaking of shallowness and insincerity. You give one of these fake results, and then watch what effect the supposedly raised or lowered self-esteem has on what they do in a staged situation.

This made me uncomfortable, though I couldn't explain it very well. When I raised questions about the self-esteem ploy, questions like, "Is it right to do that to people, especially vulnerable adolescents?" I got a variety of responses. Some people thought I was simply daffy – a premature eccentric. Others reacted as if I had come to high tea in a dirty, torn shirt with "Born to Party" printed on the front, and then proceeded to talk of gross and unmentionable things to the other guests. In other words, I was committing a fairly serious breach of etiquette. But I think the third response was the most interesting. These folks seemed to regard me as we would someone from another culture where they used many of the same words we do, or at least the same word-sounds, but with different meanings. They saw me as some sort of an intellectual dyslexic.

But though this may have been the beginning of my fall from grace, I had not yet become a flaming, no-holds-barred interdisciplinarian. I was looking at one thing -- psychological research -- from a vastly different perspective -- morality. But I had not yet committed the mortal sin of trying to (forgive me for using such language) integrate the two perspectives in any

way. Still, I had begun my descent, and the remaining voyage down the slippery slope was prolonged but inexorable.

The next big step came with my doctoral dissertation. At that point, I wasn't fooling anybody. But I had become interested in how people think about responsibility. The specific problem was how people attribute responsibility for accidents. Earlier research gave conflicting results.³ Generally, researchers had set out to prove that people made these judgments in a systematically irrational fashion. And the patterns they found were certainly irrational in that no one could explain them. It struck me that the way the questions were usually asked – "Is so-and-so responsible for this accident?" -- was more than a little ambiguous. So then I took the plunge and started reading -- oh, that first fatal article – philosophy.⁴ Specifically, I read H.L.A. Hart, Patrick Devlin and others on the concept of responsibility in law and philosophy. And when I realized that people might be understanding the question quite differently, according to the circumstances of the particular case they were being given, I thought that maybe that might account for the otherwise inexplicable patterns – patterns that might not be at all irrational, but possibly quite sensible. I did the studies, and learned that indeed people took the question of responsibility to mean different things as I had expected.⁵

But of course, by now my ultimate capitulation was all but a fait accompli. I had dared to inject semantics, moral philosophy, and jurisprudence into the very heart of a social psychology experiment. And it had worked. And I had enjoyed it!

As everyone knows, the sure way to damnation is to keep bad company. Naturally, that's what I did, hanging around with faculty at colleges that openly permitted – sometimes even encouraged, if you can believe it! – interdisciplinary studies. I sealed my doom in a pair of fellowship years during which I consorted brazenly with philosophers and theologians. And, rather than overlook any possible detour from the abyss, I have for the past many years labored in not one, but two interdisciplinary research institutes.

But enough about the general lamentable trajectory I have followed since first tasting the forbidden fruit. I want to talk about a specific problem that will show to the unwary innocent how easily one can be enticed from the disciplinary path into the fires of interdisciplinarity. (The late John Gardner captured some of the flavor of this journey in his book Mickelsson's Ghosts about the misadventures of a philosopher named Mickelsson, who teaches, among other things, a course in medical ethics: "What a world, Mickelsson was thinking. Tillson and himself, arch-enemies, sheparding another poor innocent -- fugitive from the clean, honest field of Engineering -- into the treacherous, ego-bloated, murder-stained hovel of philosophy.")⁶

Ironically enough, the problem I want to talk about involves the most innocent of the innocent – babies; specifically, seriously ill newborns who find themselves exposed to the exigencies of the Neonatal Intensive Care Unit, a glaring, technology-dominated environment of lights, buzzers, beeps, gauges, dials, and the odors of disinfectant.

My involvement began innocently as well. The director of a large NICU came to my Institute and asked for assistance in dealing with the grave ethical dilemmas the doctors and nurses in his unit confronted regularly. Not to be disagreeable, and because in part our bluff was being called, we agreed. But first we insisted that we be permitted to spend time in the unit, familiarizing ourselves with it, with the problems, and with the personnel. I became one of the key people in this effort, and made a number of visits to the unit. After several months, I had learned three things; one was expected, but two were surprises. The expected one was that, yes, there were grave moral dilemmas in that unit. After all many of the babies there were on the brink of death. Some would live lives of gross impairment, even if treated with everything modern medicine would offer them. Some would die, no matter what, and perhaps merely have their brief life extended only at the cost of great pain and suffering for them, their families, and their nurses and physicians. The ethical issues raised there continue to absorb me to this day, and will probably do so for some time.⁷

But the second discovery was interesting as well. You should know that the experienced nurses who work in these units are often masterful, and frequently have a better understanding of what will help a particular infant than many of the physicians. This is especially true if the physician is junior and inexperienced. Yet, units like this are usually organized hierarchically, with the physician giving orders to the nurse. Most units bow to reality, and despite the formal hierarchy, instruct the young MDs to pay careful attention to the advice of the nurses. This unit reflected the hierarchical bent of its director, and put even naive physicians in charge. Nurses, knowing they knew better than the junior physicians, nonetheless were not permitted to argue medicine. So they argued ethics. In significant measure the agitation in that unit that focused on ethical dilemmas was actually displaced from a genuine sore point – nurse-physician relationships. Had we accepted the director's definition of the problem, worn our philosopher's robes and blinders, we would have missed an important element of the problem.⁸ Fortunately we did not, and in the subsequent retreat with the unit staff, we did discuss the ethical dilemmas, but we also pointed out tactfully some of the sociological and organizational factors exacerbating tensions in that unit.

Someone might correctly object that this was not an instance of genuinely interdisciplinary scholarship, but rather a response to a practical,

non-scholarly problem, namely dissension in an organization. There may be no deep linkage between the moral problems surrounding the care of seriously ill newborns, and the questions about the psychological and social dynamics of the NICU. At a practical level though, we cannot expect to make any realistic recommendations for policies or practices without a grasp of both the moral and the organizational issues. So such recommendations may be in that sense interdisciplinary, but are they scholarship?

We can do scholarship in moral philosophy or in the sociology of organizations without reference to the other discipline. But if the vineyard in which you labor is something called medical ethics or bioethics, then perhaps we have learned something of scholarly value by observing the discrepancies between how moral problems are formulated by health professionals, and the actual appearance and significance of those problems to an observer trained in moral philosophy.

The third discovery, which was later to become much more important, was that contrary to the impression given by the then sparse literature on moral dilemmas in newborn care, the most common and morally complicated problems in NICUs were not what would later be called "Baby Doe" or "Baby Jane Doe" cases. These two unfortunate infants were born with congenital anomalies, and questions were raised about the appropriateness of treating them aggressively in light of their other disabilities, especially the fact that they would be retarded to some degree.⁹ While these cases have dominated the public debate, and have been extremely influential in shaping the response by federal and state governments, they are relatively uncommon, and usually unproblematic from a moral point of view, though some hard cases appear. But by far the most common cases in the NICU, often very morally problematic, are the very premature infants who, even with the most skilled and aggressive care, have slim odds of living, and a significant probability of mental or physical disabilities if they should survive. To complicate matters further, the proportion of infants born so prematurely in the U.S. appears to be much higher than in other industrialized nations, and probably reflects decisions about health policy.¹⁰ In short, we give little weight to prenatal health care, prenatal nutrition; education of pregnant women, and – not least – prevention of teenage pregnancies.

So, it turns out that in order to understand "ethical issues in the care of newborns," we must reach far beyond the boundaries of moral philosophy into the fields of economics, sociology, health policy. Furthermore, if we want to understand something about the sources of our responses – moral and otherwise – to seriously ill newborns, we must make use of a wide range of humanities disciplines. We arranged a conference, just now published with additional material as a book, that called on the disciplines of history,

literature, religion, jurisprudence, and medicine as well as philosophy. The individual articles are mostly disciplinary.¹¹ The cumulative impact, though, is clearly multidisciplinary, at least.

In my own writing on this and other issues, I now routinely find myself relying on the insights of several disciplines, including the biomedical sciences, sociology, psychology, literature, history, and of course law and ethics. The focus is ethics and public policy, but, I believe the approach is thoroughly interdisciplinary, not from any a priori ideological commitment to the alleged superiority of interdisciplinary work, but because the nature of the questions I find interesting and my own inclinations leave me no choice.

"Unconscious" is probably the wrong adjective. But so would be "unwitting" or "unwilling" or any of the others I can think of at this time. Perhaps the way to conceive of my route down the interdisciplinary garden path is that I was drawn there by the nature of the problems I chose to find interesting. Like the scientist who does not set out to become a theorist of this or that, I simply followed my questions, which turned out to have a logic of their own, or at least to compel the use of certain methods and theories in order to give passably valid answers.

On the relation of interdisciplinary studies to the disciplines, I see no natural or necessary conflict between the two. Indeed, interdisciplinary work, like all scholarship, builds on what has come before, and that includes disciplinary as well as interdisciplinary work. In my own case, I discovered the enormous value of good legal scholarship as well as the importance of a range of humanities disciplines for illuminating the problems that obsess me. And I continue to find that my training in science and statistics serves me very well in understanding and analyzing ethical issues in science and medicine.

II

What purpose might be served by telling such "stories" as this one? In the midst of theoretical debates about the nature and justification of interdisciplinary studies, it is all too easy to lose sight of the complex actualities of interdisciplinary research. Take, for example, the accusation by Thomas L. Benson that interdisciplinary studies "rests upon serious conceptual confusion."¹² Benson is certainly right in saying that advocates of interdisciplinary studies have typically been less than clear or consistent about their methods or purposes. William H. Newell's defense of interdisciplinary studies meets Benson on the same, relatively abstract ground.¹³ Such theoretical debates are important and necessary to clarify the intellectual foundation for interdisciplinary studies. But they are not sufficient.

Abstract discussions too easily lose sight of the thing-in-itself -- the rich array of interdisciplinary scholarship. This creates at least two difficulties. First, they allow us to construct elaborate models of what interdisciplinary research must be, undisciplined by the realities of how it actually does proceed. Second, it may lead us into agnosticism about the very existence of interdisciplinary research.

The novel The Master and Margarita by the Russian writer Mikhail Bulgakov opens in a park where two men are discussing a poem ridiculing belief in the existence of Jesus. Agreeing that Aquinas' five arguments for the existence of God all fail, as does Kant's sixth proof, a third man pins the discussion and offers a seventh: he recounts the story of Jesus' meeting with Pontius Pilate, and then proceeds to demonstrate the supernatural in action. (This fellow is, in fact, the devil.)¹⁴ Let this "confession" -- this story -- be a "seventh argument for the existence of interdisciplinary studies": I, like many others, have committed them.

My hope is that this narrative, along with many others, will serve as the raw material for analyses that will tell us much better than mere speculation ever can what interdisciplinary studies really is. What I am suggesting is that patient study of what actually happens when people do interdisciplinary research will yield insights into the process that together with theorizing about it in the abstract will enhance our understanding of it. Within the past couple of decades, the philosophy of science was rescued from an abyss of irrelevant abstraction by the attention some individuals paid to what scientists actually did, rather than devising logical reconstructions of what they supposed scientists must have been doing. Probably the most famous product of this movement to infuse historical narratives into the philosophy of science is Thomas Kuhn's The Structure of Scientific Revolutions.¹⁵ But the change in method -- forcing speculation to confront historical particularity -- is at least as important as the specifics of Kuhn's own theory. Even critics of Kuhn's work recognize that one must show respect for the actualities of scientific practice. In that sense, Kuhn has wrought his own "revolution" in paradigm. And I see no reason in principle why the same methods and the same concepts could not be applied fruitfully to the study of change in non-scientific disciplines, or to the evolution of interdisciplinary studies.

III

Let me offer a modest beginning to this effort by returning to the incident that began my own "career" in bioethics -- the research project that led me to have grave misgivings about deception in social psychological research. It seemed clear to me that the research subjects who had negative reactions to the research (more than half) often showed quite profound

indications of their discomfort. The messages they gave with their tenseness, pained faces and choked voices contrasted starkly with what they said to me. They spoke calm words of admiration for my cleverness, and assurances that they were not the least bothered by it all; everything but their words gave precisely the opposite message.

Only much later did perspective and a general increase in knowledge about human behavior and motivation permit me to see that those people who had just let themselves down precipitously by failing to help a fellow in apparently great danger had, at that moment, no one else to lean on to prop up their imperiled sense of self-worth. No one except me, whom they could not afford to offend, no matter how awful or angry they felt.

I also realized then how vacuous was the comfort taken by other deceptive researchers who reported that their subjects "approved" of what the researchers had done. If the dynamics were anything like what I had observed, the subjects had little choice, and the justifications little meaning.

In what sense is this argument "interdisciplinary"? It is not merely an argument in moral philosophy that deceptive research is wrong per se; nor is it merely an empirical observation or theory. It requires as necessary components both moral arguments and insights from psychological theories (dealing with discrepancies between verbal and non-verbal behavior, factors affecting interpersonal interactions, the need for and methods by which self-esteem may be sustained, and the potential for self-deception in the service of avoiding internal conflict) as well as the privileged empirical observations I was able to make in my role as experimenter.

I believe a similar account can be given of my work on issues in neonatal intensive care. And within the field of bioethics I am by no means alone. In a not yet published paper, David H. Smith, a leading scholar in bioethics whose disciplinary training was in religious studies, argues convincingly that there are at least three species of important work in bioethics: scholarship that essentially plies a single discipline, particularly moral philosophy or religious ethics; scholarship that has a principal home in one discipline, but that incorporates other elements to the degree that it can no longer be said to be merely work in that discipline, nor can or ought it to be judged solely by the criteria normally applied to purely disciplinary work; and scholarship that defies any efforts to "place" it within a particular discipline.¹⁶ David goes on to argue that all three types of work are valuable.

To a considerable degree, work at the second and third level utilizes work at the first or "foundational" level. But I am convinced that calling it "applied philosophy" is grossly misleading. The image of a mechanical

application of principles derived elsewhere could not be further from the truth as a description of excellent work in bioethics at the second or third levels. If anything, such mechanistic writing is frowned upon as unimaginative, uninformed, useless, and even subversive to the larger goals of the field – which include the desire to encourage dialogue among disciplines.

Another problem with the "foundational" metaphor is the implication that influence moves in only one direction – from the disciplines outwards or upwards. But an equally forceful argument has been made that bioethics has made substantial contributions to moral philosophy: as one article by a renowned philosopher put it: "How Medical Ethics Saved the Life of Philosophy."¹⁷ The jist of this argument is that moral philosophy had become so detached and intellectually arrid that it virtually ceased having anything interesting to say to the world; that it was not merely less practically useful, but even less intellectually rich and exciting. Talking once again about substantive moral problems has had a tonic effect on the entire discipline. The relationship between disciplinary and interdisciplinary inquiry is not that of foundation to application, but of two parallel and mutually influential enterprises, with related but by no means identical standards of excellence and overlapping but not identical "communities of interest" or "epistemic communities" – terms employed by Julie Thompson Klein to describe those groups of scholars who share interests, commitments, and mastery of a literature which qualify them to judge each other's work.¹⁸ These scholarly mini-communities exist in all disciplines and all intellectually respectable "interdisciplines." Indeed, they supply the small-d "discipline" that is often confused with the larger organizational entities we call misleadingly "Disciplines."

The point, after all, of a Discipline is to impose discipline – orderliness, standards, etc. – and to avoid undisciplined efforts – that is, disorder, chaos, that which cannot be judged. That goal is in all cases accomplished by the very small community of scholars interested in that particular sort of research. There are two noteworthy exceptions to this generalization. First, critiques from outside the mini-community are sometimes very helpful in illuminating what important things are not being taken into account theoretically or practically. Second, new forms of work sometimes fail to find a home in any existent community of interest. This makes judging such work especially difficult. It makes doing it perilous. And indeed, much of it is of little enduring worth. But occasionally, work of this type can transform a current community of interests, or even perhaps establish a new one.

IV

All that I said speaks directly to interdisciplinary research, and not to interdisciplinary education. I have always argued that, politically, the case for

interdisciplinary education will be greatly strengthened by a showing of vigorous interdisciplinary scholarship. I still believe that is true as a fact about academic politics. Reflection, though, has led me to doubt whether there is such a close coupling between the case for interdisciplinary research and interdisciplinary education, at least at the undergraduate level.

For one thing, the best argument in favor of interdisciplinary education emphasizes its potential for fostering intellectual flexibility and problem solving, including, not least, practice at learning to see the interests and world views that often determine the way a problem is framed, so that one may reframe it. This is a point that gives interdisciplinary education a leg up on strictly disciplinary studies. In competent hands, it can even show measurable results.¹⁹ For life skills, it is valuable training. Whether it makes for better scholarship later on than disciplinary training is an open question. My point here is that it counts unequivocally in favor of interdisciplinary education.

A second consideration is suggested by Raymond C. Miller's apt remarks about those programs of study on college campuses that are already interdisciplinary -- nursing, social work, engineering, and journalism among others.²⁰ These are all of course openly vocational. The message would seem to be that interdisciplinary education is the best job training. As in the first consideration, however, there is no clear lesson for interdisciplinary scholarship. To state my point simply, the cases for and conditions of interdisciplinary undergraduate education and interdisciplinary scholarship may not be as closely conjoined as I once thought.

V

It is time for observers of interdisciplinary research to tie their theories of interdisciplinarity down to the realities of its practice. Probably the best way to do that is to tell "stories" -- to create narratives -- about cases of interdisciplinary research. By studying these narratives, we can temper our theories of interdisciplinarity in the forge of experience. My hope is that this "confession" will be a small contribution to that purpose. As for the characters in Bulgakov's novel, and as it was for my Apostolic namesake, seeing is believing -- and perhaps the beginning of understanding as well.

NOTES

1. T.H. Murray, "Learning to Deceive: The Education of a Social Psychologist," Hastings Center Report (April 1980), 11-14.
2. S. Milgram, "Subject Reaction: The Neglected Factor in the Ethics of Experimentation," Hastings Center Report. 7:5, (1977), 19-23.
3. The leading articles at that time included K.G. Shaver, "Defensive Attribution: Effects of Severity and Relevance on the Responsibility Assigned for an Accident," Journal of Personality and Social Psychology, 14, (1970), 101-113; J.I. Shaw and P. Skolnick, "Attribution of Responsibility for a Happy Accident," Journal of Personality and Social Psychology, 18 (1971), 380-383; and E. Walster, "Assignment of Responsibility for an Accident," Journal of Personality and Social Psychology, 3 (1966), 73-79.
4. P. Devlin, The Enforcement of Morals (New York: Oxford, 1965); H.L.A. Hart, Law, Liberty and Morality (New York: Vintage, 1963).
5. T.H. Murray, "Attributing Responsibility for an Accident: Defensive Attribution in the Light of a Conceptual Analysis of Responsibility." Ph.D. Dissertation in the Department of Psychology, Princeton University, 1975.
6. J. Gardner, Mickelsson's Ghosts (New York: Knopf, 1982), p. 11.
7. See, e.g., A. Fleischman and T.H. Murray, "Ethics Committees and Infants Doe," Hastings Center Report (December, 1983), 5-9; T.H. Murray, "The Final, Anticlimactic Rule on Baby Doe," Hastings Center Report (June 1985), 5-9; T.H. Murray, "Why Solutions Continue to Elude Us," Social Science and Medicine, 20:11 (1985) 1103-1107; T.H. Murray, "'Suffer the Little Children': Suffering and Neonatal Intensive Care," In T.H. Murray and A.L. Caplan (eds.) Which Babies Shall Live?: Humanistic Dimensions of the Care of Imperiled Newborns (Clifton, N.J.: Humana Press, 1985).
8. A. Caplan, "Can Applied Ethics Be Effective in Health Care and Should It Strive to Be?" Ethics, 93 (1983), 311-319.
9. For a good description of the facts in the best known cases, see J. Lyon, Playing God in the Nursery (New York: Norton, 1985).
10. T.H. Murray, "Ethics and Health Care Allocation." Public Law Forum, 41, (1984), 41-50.

11. Which Babies Shall Live, op. cit.
12. T.L. Benson, "Five Arguments Against Interdisciplinary Studies," Issues in Integrative Studies, 1, (1982), 38-48.
13. Three responses to Benson's article appeared in Issues in Integrative Studies, 2, (1983), along with Benson's reply. They are, with respective page numbers, W.H. Newell, "The Case for Interdisciplinary Studies: Response to Professor Benson's Five Arguments," 1-19; J.L. Petr, "The Case For/Against Interdisciplinary Studies: A Comment on the Debate," 20-24; R.C. Miller, "What Do You Say to a Devil's Advocate?," 25-20; and T.L. Benson, "Response," 31-34.
14. Mikhail Bulgakov, The Master and Margarita (New York: Harper and Row, 1967.)
15. T. Kuhn, The Structure of Scientific Revolutions, 2nd ed. (Chicago: U. of Chicago Press, 1970).
16. D.H. Smith, "Quality Not Mercy: Some Reflections on Recent Work in Medical Ethics." Paper presented at a conference on "Bioethics as an Intellectual Field" held at the Institute for the Medical Humanities, U. of Texas Medical Branch, Galveston, Texas on Nov. 13-14, 1985.
17. S. Toulmin, "How Medicine Saved the Life of Ethics." Perspectives in Biology and Medicine, 25 (1982), 736-750.
18. J.T. Klein, "The Dialectic and Rhetoric of Disciplinarity and Interdisciplinarity," Issues in Integrative Studies, 2 (1983), 35-74.
19. See, e.g., W.H. Newell and W. Green, "Defining and Teaching Interdisciplinary Studies," Improving College and University Teaching, 30:1 (Winter 1982), 23-30.
20. Miller, op. cit., p. 27.

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