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A Right to Die? The Case of Dax Cowart

Preston K. Covey
Carnegie Mellon University, dtrollcovey@gmail.com

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A Right to Die? The Case of Dax Cowart

A Videodisc for Ethics - Version 0.9

Preston K. Covey
Director, Center for Design of Educational Computing

April 25, 1989

CDEC Report # 89-07

Version 0.1 of the videodisc and software received a Merit Award from the University of Nebraska Videodisc Design/Production Group in 1988.

Version 0.9 of the videodisc and software won the Best Humanities category in the 1989 EDUCOM / NCRIPTAL Higher Education Software Awards Program.

Version 1.0 will be published in the winter of 1990 by the ALIVE Center, Akron OH, for the IBM InfoWindow system.

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The documentary material for the videodisc was generously provided by Dr. Robert B. White, Marie B. Gale Professor of Psychiatry at the University of Texas Medical Branch, Galvaston, and Concern for Dying in New York City.

This project is dedicated to the courage of Dax Cowart and people like him who exemplify moral life and inquiry in their most challenging forms.

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A Right to Die? The Case of Dax Cowart

NOTE: The **user manual** for the videodisc (see Appendix) provides a narrative 'walk through' of the program and its functions, but without its visual content. The manual also provides complete system specifications. We have produced an 18-minute demonstration **videotape** (1/2" VHS) on the videodisc (available from CDEC). The video*disc* itself admits of several hours of potential exploration; it is difficult to describe in narrative an experience that is so dependent on visualization. The videotape provides an overview with sample video interactions; it provides only a small selection, not a complete tour, but at least a visual one. The tape illustrates (a) the analysis of the case narrative, the departure point for (b) the video-based guided inquiries, and (c) the video archives option. Two caveats: (1) This is a 'home' video; the visual quality of the 1/2" VHS dubs from the 3/4" Beta master is poor; text on the screen cannot be read, but this is unnecessary to the visualization of the program's flow. (2) The videotape demonstrates an older version (0.1) of the interface and the videodisc; both have been revised in the version (0.9) used with students. Here I provide an overview of the videodisc's program:

Overview. Using footage from two documentary videos, the videodisc presents the famous case of Dax Cowart, a victim of severe burns, blindness and crippling injuries who persists under treatment to insist that he be allowed to die. Through interviews with Dax and other principals in the case (his doctors, lawyer, mother etc.), the user investigates basic ethical issues regarding quality of life, autonomy and competence, the obligations of medical professionals, etc. Throughout, the user must continually address the central dilemma: *whether* Dax should be granted his request to die, as well as the reasons *why* / why *not.* The videodisc will support several hours of interactive exploration of the issues and case material, in two basic modes: 1. Guided inquiry by which the user (or a group of viewers) is led to interact with the visual testimony to the facts, issues, and conflicted viewpoints in the case. 2. Access to archives in which video segments are organized both by major issues and principals. (This mode is appropriate for review; both modes are appropriate for interactive presentation of the case and issues in the classroom.)

Menus:	Introduction:	Video montage	Poses the dilemma and basic task.
	Guided Inquiries:	The Facts	Presentation and analysis of the case narrative.
		The Issues	Interrogation follows each video segment under: Competence & Autonomy Pain of Treatment Quality of Life Medical Professionals' Obligations
		Final Position	When a final choice is made, consequences follow.
	Archives:	Case Summary	
		Issues	Files relevant video segments under each issue.
		Principals	Files video segments under each principal.

In the guided inquiries, the program questions the user after every brief video segment, branches in order to challenge her responses with contrary views and visuals, and queries the consistency of her evolving views. The program prompts reflection, but does not instruct. When a final position is taken on whether to let Dax die, surprising consequences follow for either choice.

If the user is finally disposed to let Dax discontinue treatment and die, as he requests, the viewer is shown Dax's life ten years later (where, though blind and without hands, he is married, with his own business, a tolerably good life). If the user is finally disposed to keep Dax in treatment, she is then confronted with the most powerful, wrenching scenes of Dax's pain in treatment (which he undergoes six times a day for fourteen months). In either case, Dax himself testifies that today, years afterward, having reestablished a tolerably meaningful life, he still firmly believes and feels that it was wrong and would be wrong to override his own wish to discontinue treatment and die.

Objectives. *I try to bring the reader up close, so close that his empathy puts him in the shoes of the characters. You hope when he closes the book that his own character is influenced.* [William Carlos Williams, quoted in 'Moral & Social Inquiry Through Fiction," *NY Times Book Review* 10/25/87 by Robert Coles.] The videodisc is designed as a supplement to courses that treat ethical issues, a sensorium for moral reflection and inquiry. The objective is not to teach a body of theory or concepts, nor to change users' ethical views, but to bring learners 'up close' to the human realities, moral perplexities, conflicted perspectives and sensibilities that confound our best efforts to chart and lead decent human lives. Whatever one's views in ethics, they require testing in the crucible of hard moral experience, experience often lacking in callow youth, experience that is not supplied in most classroom regimens. The lessons taught by the videodisc, if lessons they be, are lessons in the imagination, sensibility and empathy required of competent moral judgment and reasoning; lessons in one singularly necessary condition of ethical reasoning or theorizing: the vivid representation of the interests of others, the appreciation of the moral and practical straits that--but for the grace of fickle fate or our own feckless imagination--afflict us all, our common ground for negotiating conflict in community. A second objective, ironic as it may seem, is to bring users 'up close' to their very own (often inchoate and conflicted) values; to induce the self-knowledge and intimate reflection on one's own sensibilities so often neglected or impossible in abstract academic study, which suffers from what Robert Coles terms *the ever present temptation of the intellect to distance anything and everything from itself through endless generalizations* (one's own values included).

Dax Cowart's request to die poses the kind of hard choice and hard case that makes or breaks our theories about what is right, best, or decent to do. Hard cases in ethics are born of rude realities, perplexing feelings and conflicted viewpoints. But those rude realities rarely invade the groves of academe, while studied reflection is rarely afforded amidst the pressures of practical life. The

videodisc aims to help bridge this gap between theory and practice, thought and feeling; to stimulate and simulate crucial conditions of moral reasoning in ways that other media cannot. Moral reasoning requires, *inter alia:* empathy, the vivid representation of the interests of others; practiced confrontation with hard facts, unforseen consequences, and strong feelings; active deliberation under the duress of hard choices; an appeal, at once, to our senses, sensibilities and minds; with opportunity for challenge and reflection. Exposure to same is the basic objective.

Content. The content of the program is neither the theory nor the concepts of ethics, but experiential data that any ethical theory or analysis must first behold in order to explain. The content is visual case material not delivered by ethics textbooks or other classroom media. The purpose of the program's content is not primarily to instruct, but to inform students' experience.

Five decades of research suggest that there are no learning benefits to be gained from employing different media in instruction, regardless of their obviously attractive features or advertised superiority . . . media are mere vehicles that deliver instruction but do not influence student achievement any more than a truck that delivers our groceries causes changes in nutrition. [Richard Clark, "Reconsidering Research on Learning from Media," *Review of Educational Research,* 53, 1983.]

There is ambiguity if not equivocation in Clark's use of *media.* His notorius truck metaphor is useful for gainsaying his generalization, which (to be fair) is targeted at formal instruction in formal content and methods (in science and mathematics): What if the groceries are not delivered at all? Nutrition will surely suffer. The aim of our videodisc is to deliver experiential content of a sort not deliverable by other, traditional, non-visual (and non-interactive) media. For delivering vivid experience as well as reflective control, for exploiting the combined power of visualization and interactivity, interactive video is a vehicle without alternatives. Here's a simple illustration of the sort of qualitative and affective information that is difficult to convey by non-experiential media: The narrative facts of Dax's case tell us that Dax's hands are nearly useless, that his treatment is extremely painful, that his mother and doctors refuse to release Dax from treatment, contrary to his demands. The qualitative realities behind these facts are vividly evident in the program's visuals. Visualization conveys a direct sense of crucial questions: *How* useless are Dax's hands? *How* painful is his treatment? *How* uncertain does the future quality of his life *feel*? How do his mother and doctors *feel* about letting Dax die without treatment? And: As you *see* it, would *you* be willing to undergo Dax's treatment and lead his life? As you *see* it, would *you* be willing to take active measures to let or help Dax die? Some problems must be seen to be imagined, to be analyzed responsibly, to be resolved sensitively. The program conveys the sort of experiential data required by our moral sensorium for responsible analysis of ethical issues, analysis that is responsive to the emotional and practical burdens of all parties to the case.

Difficulties. Students have great difficulty 'respecting' ethical issues in classroom settings. It is difficult to teach *about* dilemmas in which complex ethical considerations vie for attention and resolution. Moral reflection and imagination require an experiential crucible, an analogue to the scientist's laboratory or the surgeon's theater, rich in palpable complexity that is impossible to ignore, where choices must be made and consequences suffered. The feeling that some problems are not real until they happen to us (a costly form of education) can be obviated by sharper perception of the problems of others. Vicariously sharing others' defeat in the face of problems incapable of clear or felicitous solution, problems of surprising dimensions, undercuts the often facile, judgmental reactions that controversial questions raise in both the political arena and the classroom. It is understandably hard for students to perceive problems they have not experienced.

I taught Dax's case, in narrative form, for six years and have taught ethics for two decades. My students had the most difficulty with three dimensions of the enterprise: (1) motivation for the rigors of analysis and argument on abstract conceptual and theoretical points; (2) the imaginative challenge to identify with the viewpoints of people whose experience or dilemmas they did not happen (yet) in fact to share; and (3) the ability to identify and sort out their own conflicted values. Students frequently giggle at the suggestion that lying is wrong, deny any notion of 'free will' as if it meant nothing to them, argue that any desire to die reflects only insanity -- or cleave absolutistically to the contrary views. These three difficult challenges are basic requirements for ethical inquiry. (3) and (2) are prerequisites to (1). Vivid experience, direct or vicarious--*and* the opportunity to reflect on it--opens the way to (3) and (2). At present, I have only anecdotal evidence and my own observation that one way to students' minds, in ethics at least, is through their hearts and senses. Robert Coles (*The Call of Stories*), J. Anthony Lucas (*Common Ground*) and others attest the power of human stories at close quarters to open our hearts and minds to controversies that rend our souls and society alike. The content added in the videodisc is visual as opposed to narrative. It poses its own difficulties, the difficulties of opening too many (as opposed to too few) channels at once. Some students object that the material is too strong and upsetting. We must deal with this difficulty. The larger learning context, instructor- and peer-support in the use of the videodisc, like a field trip to clinical settings, is crucial; the total social-instructional environment must be considered. In the meantime, this difficulty is preferable to disrespect for the issues. One apologetic reply is, *such is life -- that is just the point.*

Contribution to the Discipline. *Non scholae, sed vitae dicimus.* [Not for school, but for life do we learn -- *Epistolae Morales*]. The study of ethics is too often academic and speculative in the worst senses of those terms. In serious science education we expect students to handle apparatus and process data that is rich in both quantity and quality. In ethics we typically rely on mere mental apparatus and demand neither quantity nor quality in data; nor are we accustomed to

introducing 'hard' or 'raw' data into our studies, being more comfortable with those abstract commodities of detached academic discourse: prepackaged propositions, reasons, concepts and denatured case studies. These are not enough, if our aim is life in the world rather than academe.

Consider the analogy: We do not attempt to teach science by acquainting students with 'scientific method' through books and hot-air disputations (even in most high schools). We do not teach scientific theory abstracted from some hands-on experience with how it is constructed. Science education involves not only the theoretical content of science, but also its art, its craft, its texture, its headaches and frustrations. Put another way, no one would think of *credentialing* scientists, engineers, surgeons or other artists without providing them some hands-on experience with the actual stuff and rude realities of 'real life' practice.

Consider the contrast: Ethics is typically taught by exposing students, through books and hot-air disputations, to verbiage. The verbiage is presumably articulate, insightful, and about matters of great concern or practical import. But it is typically occupied with the analysis of abstract ideas about these matters. In life ethical problems come trammeled with confounding immediacy, detail and emotion, whereas the classroom is experientially barren, devoid of the stuff of moral experience, with meager data in minute quantity, problems faintly viewed at grand theoretical distances, and propositions analyzed to a practically impotent fare-thee-well.

Headlines hype the need for more study of ethics. The traditional academic study of ethics is not well equipped to answer the call or to meet the educational challenge. Wisdom in morals begins most naturally in 'real' experience, in what we see, imagine or feel. Skill in ethical analysis or moral judgment requires the equivalent of a laboratory, studio, or theater -- like the scientist's, artist's, or surgeon's -- for 'safe,' hands-on, experientially rich practice.

The problem in the discipline of philosophy that our videodisc addresses is not just that ethics is poorly taught as a useful reflective discipline for life. The abstract, denatured practice of academic study makes for bad, armchair theory as well. Academic ethics is typically preoccupied with its own conceits and grossly underwhelmed by the data and realities of moral experience. It might be fair to say that ethical theory has achieved the maturity of classical mechanics, by virtue of ignoring large confounding dimensions of human experience. This is conspicuously the case in how poorly ethical theory takes account of human emotion and sensibility, primary forces -- and invaluable resources -- in moral affairs. Apart from a few classic thinkers (for example, Aristotle, Hume) and a recent growing literature (creditable in large part to feminist thinkers and female philosophers), feelings have been disparaged as mere sources of fallacy and bias, forces to be neutralized or overcome in moral reflection.

The limitations of rational decision models are not even as fully acknowledged in ethical theory as they are in economic or political ones. It is perhaps ironic that a recently acclaimed and contentious book, *Passion Within Reason: The Strategic Role of the Emotions,* was written by an economist (Robert Frank). The functional and evidence-bearing roles of emotion in ethical reasoning requires more critical study than it has received in philosophy; *interactive* environments that elicit confounding feelings can also serve as laboratories for this study, as ours does and will. Philosophers need to become more involved with the empirical dimensions of ethics; for example, observing how learners in fact wrestle with ethical issues under emotional duress.

Intended Audience. Our audience is broadly postsecondary. We are collaterally testing the videodisc with two levels of audience: professionals (medical, university faculty) and undergraduate students (at Carnegie Mellon and Allegheny Community College). My notion is that the program and its content must pass muster in both undergraduate and professional education and the continuum between. The feasibility of this ambition is based on the assumption that visual media generally (film, TV) have a very wide 'bandwidth,' the ability to communicate meaningfully with audiences of diverse interests, maturity, and background. Even if sound, this assumption does not obviate the need to be sensitive to designs that may serve one part of the audience spectrum better than another. The videodisc to date does better, all things considered, with faculty and medical professionals than with undergraduate or (young) nursing students. Our hypothesis is that the former are more mature methodologically, with more ability to balance competing hypotheses and conflicting intuitions when confronted with open-ended issues and confounding data. This points to one important dimension of future work: incorporating inquisitorial as well as navigational aids into the environment, heuristics that would illuminate the methodology of ethical inquiry. Our future efforts will expand on the current model of the videodisc as a moral sensorium and incorporate more explicit instruction in method and conceptual analysis.

Contribution to Student Learning. The contribution our videodisc attempts to exemplify is a dimension of moral learning that is lacking in typical academic study: access to the rich, affecting data of 'real life' dilemmas that reveal our own conflicted values and allow us to identify with those of others. In *Teaching Values in College,* Richard Morrill provides a sensible framework for values education, consisting of three dimensions: 'values analysis,' the explicit articulation of the values, principles and concepts that underlie our value judgments or choices (a priority of traditional ethics courses); 'values consciousness,' where two crucial components are self-knowledge (discovering and 'owning' one's own competing values) and empathy (coming to identify with or understand others' values); and 'values criticism,' raising questions about the values posited or discovered (another priority of traditional ethics courses). 'Values

consciousness' is the messiest, least disciplined, and most difficult objective to attain in academic settings; but it is materially crucial to the other analytic and critical dimensions of moral learning. Our videodisc aims to provide a model environment for exploring this difficult experiential dimension, a sensorium to complement other less vivid or less interactive media, a channel to experience that the students otherwise lack, with opportunity for interactive control and reflection.

Use of the Computer. *With all its powers, the computer cannot contribute much to the learning of open-ended subjects like moral philosophy . . . fields of knowledge that cannot be reduced to formal rules and procedures.* [Derek Bok, "Looking into Education's High-Tech Future," EDUCOM Bulletin, Fall 1985. Version of Bok's 1985 Report to the Harvard Board of Overseers.] Bok's allegation is certainly true in its second claim. And the second claim may seem good reason for believing the first, if one's model is the computer as expert system or automated tutor, the computer as teacher. But if one takes seriously the model of the computer as navigational aid and experiential learning environment--as persuasively described and positively assessed by Bok in the self-same paper--then the first claim hardly follows. The computer can provide new windows on experience:

If moral learning is essentially learning by doing, then ***the central and ongoing resource for moral education is experience, real or vicarious*** *. . . [In school] limitations of time, place, resources and structure mean that any major broadening of moral experience must come by way of vicariously living through the moral lives of others . . . .* [Robert Fullinwider, "Learning Morality," *Report from the Institute for Philosophy & Public Policy,* Spring 1988.]

Traditional resources for vicarious experience are literature and history. Allied media are theater and film. A new, complementary medium that combines the reflective opportunities of books with the experiential impact of film or drama is computer-based interactive video. Interactive video provides opportunities for challenge and response, choice under uncertainty, vivid confrontation with unforseen consequences that simulate the complexities and 'lived' perplexities of moral experience. Unlike books, the medium both is vividly experiential and demands *active* response. Unlike linear video, the computer-based medium affords the learner *control,* with opportunity for reflection and choice. Interactive video brings us a significant step closer to the 'real stuff' of moral experience and to that dimension of moral education that Richard Morrill calls *values consciousness* , the paradoxical process of engaged detachment (*aka* detached engagement) whereby we make both *our own* and *others'* values experientially 'present' and susceptible of examination. As a navigational aid and perspicuous repository of experiential data, computer-based video can indeed be a powerful tool for learning in open-ended domains like moral philosophy or ethics. We are only beginning to chart and explore this potential.

Software Features. The type of experience a user is apt to have is the crucial issue. This will depend on the extent and mode of use, matters exogenous to the software itself. A less mature student needs to traverse the full territory of the "Guided Inquiries" in order to avoid the impression of bias in the material, to see and be made to stop to think about all viewpoints. The program is designed to provide counterpoints to whatever tentative resolutions the user chooses to favor in the dilemmas faced by the patient or other principals in the case. The basic mechanism for directing the user to contrary views is the "Yes/No" response to questions. We favored this simple mechanism for our initial implementation because the "answer" is not itself as important as the contrapuntal odyssey that ensues: all sides will ultimately show themselves, whatever the user's inclinations. The 'intelligence' of the program is therefore minimal; the basic heuristic design simply provides successive exposure to countervailing considerations by whatever routes the user chooses. Further research is required to determine whether a more discriminating guidance mechanism (for example, a Likert-type scale for weighting factors and registering responses as shades of gray) is really needed. Thus, *the feature* we would like to highlight as both crucial and problematic is actually *an effect,* a function of exposure to successive contrary video segments and outcomes. The accompanying video*tape* provides a brief but typical contrapuntal sequence from interviews with Dax's nurse and two doctors, with one dramatic outcome of the case. The actual impact of this counterpoint on students must be inferred from sample student protocols. But the effect itself is one thing to note. The quickest impression can be gleaned from the demo tape. An alternative is to spend extended time with each of the "Guided Inquiries," to assess their cumulative effect.

The NoteCard feature, whereby the user can register notes or responses to questions, is merely a heuristic prompt to reflection. Notes can be reviewed on screen, but we do not see the present single-screen with fixed-font text/graphic overlay as an appropriate environment for mounting a full-blown, dynamically-linked, scrolling notecard system: two screens or a larger screen interface with digitized video in a sizable, movable window will be better environments for incorporating both notes and other narrative resources in hypertext form. On the version of the program (1.0) that we will release for the IBM InfoWindow system, notes will be filed under topic, principal (Quality of Life, Dr Baxter) and question (Do you agree, then, with Dr. Baxter's assessment of Dax's prospects for an active life?) to be printed out after each session.

The current version of the program (0.9) for the specified Sony monitor and OnLine graphics overlay board (see Appendix: User Manual for system specs) is the one we have used with students and reviewers this year, hence the one we are submitting. No further development will be done on the software for this particular configuration. We recently (January) shifted development to an IBM InfoWindow version of the software because the present configuration is exotic and expensive,

whereas InfoWindow promises to emerge as a standard (Sony and Pioneer will now market emulators) and will be available in a less expensive model in the near future. Our software and the versions of the authoring language and system for InfoWindow (PILOTplus/OASYS from OnLine Systems) are still undergoing debugging. The InfoWindow version of the software will be the version released through the ALIVE Center later this year. Besides mouse control, it allows the touch-screen option; it will incorporate the note printing facility and revisions dictated by our user testing as appropriate for a version 1.0 release.

Type of Software. The videodisc program is hard to categorize. While it has elements of tutorials and simulations and therefore integrative software, its current design and implementation are more modest. It is best conceived as an educational tool, a sensorium, a learning environment for importing experiential realities into the exploration of multi-faceted ethical issues. It does not instruct in the formal concepts or methods of ethics, although the odyssey it provides through the case material aims to deepen appreciation of the issues and methods of ethics. The software demands hypothesizing and structures student use, quite closely in the challenge-and-response mode of the "Guided Inquiries," but it allows and facilitates open-ended exploration. The narrative case analysis is highly structured, but serves mainly to prepare the student for the contrast with the greater vividness and depth of the 'facts' of the case as presented visually and by personal testimony. As a tool, the software *cum* videodisc is hardly limited to private use by individual students; it may be well deployed as a goad and guide to class discussion, role play, or as a lecture aid, in the classroom (like a slide carousel, controlled either by the instructor or by student presenters). Thus, the most apt category is that of a multi-purpose *educational tool* or resource for exploration of vivid data, viewpoints and issues; its uses and settings for use are themselves adaptable to the ingenuity of instructors and students alike. (For example, a colleague in rhetoric will use the videodisc as an engine for invention in the teaching of writing.) The educational goal remains: learning to deepen one's moral reflective capacities by direct interaction with others' views and experiences -- capacities presupposed by any competent analysis and argument in ethics.

Developmental Testing. All of the above argues for our *a priori* assumptions about the educational utility and impact of the videodisc. During development in 1987-88, we tested the videodisc with over two dozen professional-level users (Dax himself, representatives for Concern for Dying in NYC, our psychiatric consultant, doctors, nurses, a hospital ethics committee, media design experts, ethicists and other university faculty) as well as a small sample of students whom we observed and queried on their experience with the disc. In the fall and spring terms of this year ('88-89) we deployed the revised pilot version of the program (0.9) with undergraduate students in two Carnegie Mellon ethics classes and with volunteer undergraduate nursing students at the

Community College of Allegheny County (CCAC). The latter three groups filled out subjective evaluation questionnaires. We will also examine the papers recently written on the case by one ethics class.

All evaluation to date has been formative; no attempt has been made to compare the 'performance' of users with non-users on any assigned task. With the help of evaluation experts in the coming year, and feedback from our first limited release of the disc to various medical and academic settings, we intend to develop a long-term evaluation strategy and priorities. The effort will be long-term, if only because the modes of use (as a stand-alone resource or as a classroom presentational aid), possible audiences and settings (undergraduate ethics courses, writing courses, graduate or in-service professional courses), and allied tasks (for example, paper assignments, group role-playing as an ethics committee, protocol research on cognitive and affective dimensions of ethical reasoning) are so diverse. Another reason that assessment will be a long march is that there are several research agendas in terms of which to try to understand the videodiscs impact (for example, theories of ethical and cognitive development, moral epistemology and the role of emotions and gender differences therein). There is a good decade's work here. And we need follow-on efforts, a series of refinements and similar applications in ethics, as vehicles.

Impact. We certainly are not in a position to make claims about the disc's improving students' competence in ethical reasoning or decisionmaking, nor is that our express purpose. As all our professional reviewers and the president of the ALIVE Center (which will distribute the disc) saw immediately, the disc is an educational tool, not a training tool for decisionmaking. With this caveat, our expectations have so far largely been met.

About 70% of our undergraduate users (who, by the way, were deliberately given no manual or briefing for use of the videodisc) objected to being required to give "Yes/No" answers to questions in the Guided Inquiries: the issues, they reminded us, are not black or white, but gray and fuzzy. These students did not perceive the obviousness of this point to the developers or the intended heuristic value of said questions. This is a problem: a naive inquirer should not be given any grounds for thinking the developers naive; we must change this interface feature to expressly allow shades of conviction and hypothesis as appropriate responses. To the other students and all of our professional-level reviewers the "Yes/No" mechanism was transparent as a heuristic for guiding their hypothesizing, for registering their inclinations. The epitome was a sophomore engineering student at a public demonstration who kept a large audience engaged in animated controversy as he plied the pathways of the disc unencumbered by its mechanisms. Nonetheless, the "Yes/No" mechanism must probably be changed.

Apart from that feature, our audiences have unanimously found the videodisc preferable to either narrative accounts or the linear video documentaries (which most had viewed beforehand and found overwhelming or 'boring'!). They found the disc to be more engaging, because self-paced, and more challenging, because of its combination of vivid confrontation and reflective opportunity. Few saw the point of the disc to be to change their minds or to argue any particular resolution to any dilemma; those who did only browsed the contents selectively. Most commented that they discovered a lot about their own dispositions and values and that they appreciated the opportunity to do so in private. Most remarked that the content made them less sure of what they believed, even if it did not change their minds; that the visual material showed the pregnancy and protean complexities of the bare narrative 'facts' of the case. Most had very unsympathetic reactions to Dax's doctors (as they do with the documentary presentations), although this fact did not lead them to belittle the dilemma those doctors faced. Some students complained that the material was too strong and hard to view. The only users whom we know used the notecard function liberally and naturally were the ones we directly observed (perhaps because they felt they should 'play the game').

This summary of users reactions is gleaned merely from the students responses to our questionnaire and conversation after the fact. On the whole, these subjective reports and our own observations on the scene are in the ballpark of what we would hope and expect, but ultimately they are just that, subjective reports, as arguably informative as the students' claims that my logic class has made them 'more logical' or that our class discussions were extremely stimulating -- which I'm often sure is in some important sense the case but endlessly questionable. One merit of the videodisc environment, which most users and reviewers have remarked, is that it provides a valuable new opportunity to query and even research our own and others reactions to powerful material on difficult ethical issues in simulated 'real time.' But we have a long way to go to understand its impact as well as the moral reasoning and learning processes upon which it purports to have positive impact. There is little evidence that anyone has developed or could develop ultimately clear objectives or success criteria in these *essentially contested* areas [cf. W. B. Gallie's "Essentially Contested Concepts," *Philosophy and the Historical Understanding,* 2nd Edition (New York: Schocken Books, 1968)].

The Larger Context: *Project THEORIA.* Too many real-world problems for which we aim to equip our students are not well captured in books, lectures, or class discussion. These media cannot always *simulate* the practical realities or *stimulate* the human sensibilities that motivate and confound value-laden dilemmas. Typical students lack one important commodity for learning: ***life experience*** - - or enough of it. Typical academic settings lack adequate means to provide this commodity. In academic terms, the lack is one of sufficient ***data*** and ***context*** - - particularly in areas like ethics, the arts, or politics, where much of the essential data and context

are perceptual, experiential, even emotional.

Multi-media environments are useful for the rich data, texture, and context they allow us to import into experientially barren groves of academic study -- allied with interactive computer technology for the easy control, flexible exploration, and disciplined reflection it can induce. Computer-based interactive video combines the power of television or film with the freedom and control of the computer: the opportunity for dramatic impact, lively interaction and careful reflection; speaking at once to our senses, our sensibilities and our minds; offering a very 'life like' learning experience.

A Right to Die? is one of a series of videodisc projects under the aegis of ***Project THEORIA*** (tay-o-ree'-a), whose agenda is reflected in its acronym: **T**esting **H**ypotheses in **E**thics/**E**sthetics: Exploring the roles of **O**bservation, **R**ationality, **I**magination, & **A**ffect. The goal of Project THEORIA is to design compelling, interactive simulation environments for testing hypotheses and 'theories' of the arts and morals -- among the most difficult and disputed of human value domains. Our focus is values inquiry. ***Theoria*** (Greek for *theory*) is also an allusion, to the paradigm of *theory* rooted in concrete observation, to the etymological roots of both *theory* and *theater* in the ancient Greek verb *theorein: to see, to view, to behold.* Through exploitation of multi-media technology, we aim to provide a theater for ethical and esthetic theory, to bring the theory to ground in realistic settings that are rich in the complex data that any competent theory must first behold in order to explain.

In the 'Golden Age,' in the beginnings of the Western philosophical tradition in Greece, the vehicle for ethical theory *was* the theater: a spectacle, with universal elements of 'the human condition' reflected by chorus and convention in the concrete, compelling drama of Greek tragedy and comedy. Theory in the arts and morals most naturally begins in what we experience first-hand, in what we see, imagine, or feel. *Skills* of moral reflection or imagination, like the practical skills of the surgeon or the theoretic skills of the scientist, require an operating theater or laboratory for *practice.* We need good analogues of that theater or lab for 'hands on' inquiry in the arts and morals: an experiential crucible for learning by seeing and doing. Four projects at the Center for Design of Educational Computing, Carnegie Mellon University, reflect the wide range of value issues amenable to interactive treatment:

> ***A Right to Die?*** *The Case of Dax Cowart* (a videodisc, first in a series)
> ***Art or Forgery?*** *The Case of Han Van Meegeren* (a videodisc)
> ***Birth or Abortion?*** *The Human Face of a Dilemma* (mixed media, including videodisc)
> ***Values Boggled:*** *Ethics, Art & Money in the Work of J. S. G. Boggs* (in concept phase)