

MEANS, ENDS AND MEDICAL CARE

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OVERVIEW

BROAD CONSIDERATIONS IN THE RELATION OF MEANS AND ENDS, TREATING AND HEALING

INTRODUCTION

If, in Western society and medicine we already knew exactly what our ends were and what, in the light of each other, they ought to be; if we knew all the consequences of our acts; if all our values were fixed and could be quantified and measured on a single scale; if we knew exactly where in a chain of events to assign the worth; and if, correspondingly, the value of things were always hierarchically derived and not mutually supported; then our means/ends deliberations would be purely tactical. We would invariably know, in such fields as medical care, exactly what we wanted to do, and our only problem would be how to do it. We could speak without reservation about “costs and benefits” or “cost effectiveness” as though clinical encounters and situations were independent of context, would never generate new and unexpected values, could not fail to fit predetermined categories and could not have any transforming effect on the caregiver or the patient.

If the position, structure and significance of illness were so static and exact, and if “causes” were well defined, clinical encounters could specify “inputs” yielding well bounded, generic and mutually independent “diagnoses,” apply precise “interventions” and arrive at perfectly characterized “outcomes” already evaluated and statistically predictable. The assumptions of an industrial model might then replace those of a professional model; genuine inquiry would never mix with practice: diagnoses and treatments could become standardized and handled by protocol; doctors and nurses could become the tools of such protocols, but tools with a difference; they would have special spigots that could be turned on and off on cue to dispense appropriate quantities of “touch,” “warmth,” “judgment,” “compassion,” and “listening.” Only sincerity would be missing.

These *are* widespread assumptions and behavior based on them is already common. But value is not a set thing. I have no quarrel with decision research, which has showed much about how we attain and fail to attain fixed goals. What I will dispute in the following chapters is the presupposition that static and exact hypothetical imperatives, preset “if/thens,” apply as often and obviate as much as is being pretended in a field like medicine. It is my contention that “efficiency” and “economic rationality” have been conflated, that simple presumptions about means and ends which have proved very successful on limited application are being employed counterproductively in broader and more complex arenas. Speaking most generally, and I will get down to the specifics of it as we go along, “judgment” and “compassion” (part of the means) and “health” (the end) must

remain originals, recreated, reinterpreted, and revitalized to some degree with every clinical encounter.

Several authors, including Micah Hester, Glenn McGee and John McDermott, have pointed this out. What I intend here is to elaborate on their observations by detailing features of the categories, values and situations which underlie medical judgment and make it impossible to mechanize.

The statement that “It is irrational to endorse ends without endorsing the necessary means” is incoherently vague because logical entailment and cause and effect relations are only partly analogous. Experience is fluid; situations have vague and shifting boundaries; what is or is not relevant to them is not always apparent or constant. Some situations, like certain games, are artificially stabilized by rigid rules akin to the rules of formal entailment. In such situations ends are assigned, relevance is prescribed and possible behaviors are specified by rules at the outset. This is generally the case, for example, in a game like chess. The “problem” is winning and “winning” is defined. Purely tactical means/ends deliberations are somewhat less applicable but still of great import in activities like planning and applying drip irrigation and designing sails, catheters or heart valves. But they are greatly deficient in fluid fields such as internal medicine, pediatrics and psychiatry, wherein certain large consequences of the “means” are either unknown or likely to be overlooked, where valued qualities do not lend themselves readily to quantified ranking, where particularity makes much of the difference and where process and product are dissolved in each other.

This book argues that rationales appropriate for the solution of simple problems aptly modeled by games or nut and bolt reproduction are being inappropriately applied to complex and/or dynamic problems like those in health care; that they are damaging in practice when so applied; and that there are fuller models of rational deliberation available to us which are likely to be much more helpful.

Real people are getting hurt because of a theory that reasoning can be automated. Broad deliberation is needed even for choosing when to avail ourselves of mechanical decision aids. Such broad deliberation will be examined in order to understand why we still need it, and how it can be improved. And if, indeed, such deliberation is indispensable, then major alterations are needed in the environments of medical training and clinical care in order to facilitate it.

The argument for broad means/ends deliberation is in essence developed along four complementary lines. First, giving medical examples, a summary of evidence is presented showing that much reasoning is necessarily imaginative, not formal. In particular, a vast and indispensable complex of causal logics is outlined. Second, a tentative, but detailed outline is offered, demonstrating how the categories and cognitive models used to understand disease and health are imaginatively constructed rather than classically defined. Third, drawing on the work of John Dewey, the real subtleties involved in defining means/ends problems and in understanding the complex and dynamic nature of means and ends in practice are illustrated. Fourth, the axioms and assumptions of expected utility theory are reviewed, illustrating how ineptly it deals with clinical realities. Medical care examples

supplemented by ordinary life examples will be found throughout, since the points at issue are well illustrated by the demands of clinical judgment. Finally, suggestions are given for changes in training, caregiving and the evaluation of results which emphasize improving judgments, including value judgments, instead of dispensing with them.

FIRST LINE OF ARGUMENT: COGNITIVE STRUCTURES
AND CAUSAL LOGICS FOR MEANS AND ENDS REASONING

This argument is mainly put forth in Chapter One. Studies in cognitive science and linguistics have shown that our common sense deliberations about causation and means and ends avail themselves of deeply embedded categorical, imagistic and metaphorical structures which enable our thinking. Taking account of these deeply embedded and often unconscious structures makes it possible to propose that means and ends deliberation could be modified, opened up and hence improved. Our daily cognitive operations have roots going clear down into biology. These roots allow a certain amount of flexibility, but are not inessentials from which we can cut ourselves free. Now that we understand more about the embodied forms and origins of our concepts and the variety of metaphors which structure and facilitate our approach to means/ends problems, we should be able to determine whether we are making the best use of this rich imaginative endowment.

How much freedom do we have in conceptualizing means/ends problems in complex and dynamic areas like health care? Given whatever degree of freedom exists, can we make helpful choices among scenarios, metaphors and category understandings with respect to using them on different types of problems? Are prevailing approaches all that are available, and the best? Or, in spite of historic selection for certain thinking patterns is there still room for creativity and improvement? Enmeshed as we are in the most dominant of existing causal logics, from what standpoint can we imagine that we could do better? These questions may appear theoretical, but in the clinic and the hospital they have enormous practical importance. For example, conceiving of causation in mechanical rather than organic terms has much to do with the present emphasis on tertiary and rescue care over primary prevention.

SECOND LINE OF ARGUMENT: COGNITIVE MODELS OF HEALTH
AND DISEASE AND THE RADIAL STRUCTURE OF THE LARGE
DISEASE CATEGORY

This subject occupies Chapter Two. Although it is plainly evident that health and disease are not clear-cut, well defined concepts, the reasons for this fact, as well as its implications, have often been ignored. Chapter Two outlines the principal cognitive models which appear to direct the identification of disease. The role of symptoms in providing a literal starting point for disease is brought out. I claim that the category of "disease," its subcategories, and the individually named diseases is a radial

one, with central prototypical and universally accepted members, progressively less representative instances, and finally marginal, disputable or doubtful ones. A detailed outline of this “disease” category is proposed.

Because concepts of disease and health are partly metaphorical, graded in centrality, overlapping with cognitive neighbors, value-charged, ambiguous, disputed and ever-changing, they cannot be handled in a rigorous or mechanical fashion. But this does not mean that we cannot reason about them at all: it merely requires a broader view of what means/ends deliberation is all about.

THIRD LINE OF ARGUMENT: DEWEY'S BROAD VIEW OF MEANS AND ENDS DELIBERATION

The work of John Dewey already provides many insights into alternate relations of means and ends. His portrayal, in contrast to economic rationality, better accommodates the realities of clinical care. His concept of means and ends allows a broader representation of and response to people's troubles. I will draw heavily on his work in trying to construct a comprehensive theory which does justice to the complexity of real care and thus promotes effective function, while denying that “effective” and “efficient” are the same thing.

A small group of pragmatically oriented medical ethicists including Micah Hester, John Moreno and Griffin Trotter have described the applicability of Dewey's idea of intelligent inquiry to the assessment and resolution of clinical problems.¹ Chapters III and IV here should complement their work by gathering his scattered observations on the interaction of means and ends, and by showing their particular relevance in the cognitive and motivational landscape underlying medical care.

The approach to Dewey is detailed in Chapter Three. Certain general themes of his work on which his more focused discussion of means and ends depends are set forth in this chapter. These themes are: 1. His contention that values arise in nature, not from divine edict or as a consequence of reason turned in on itself. 2. His refusal to organize values in a hierarchy which privileges any one of them as foundational. 3. His view of qualities as both unquantifiable and fully real. 4. His idea that values interact despite and because of being qualitatively different, and therefore involve mutual support. 5. His contention that rationality is much more than deduction, calculation and the application of rules. 6. His emphasis on the crucial importance of context for means/ends deliberation.

The specifics of a Deweyan theory of means and ends, as best I can synthesize it from his various works, occupy Chapter Four. Dewey delineates a view of the situations which become problematic and require inquiry and the application of intelligence/judgment, as opposed to those more generic and less problematic encounters adequately handled through habit (or recipe). He then points out that resolution of a genuinely problematic situation involves creating unity and determinacy out of true indeterminacy. It follows that actual engagement in the process of inquiry and action is often necessary before a satisfactory outcome can be known. Therefore, values are partly created and are at least reinterpreted through engagement, not

simply given at the outset. In truly problematic situations, the ends are not fixed initially. The operational ends-in-view which are part of a developing plan, drawing us on in the process of diagnosis and treatment, are actually in part means, are malleable and are often to be distinguished from final ends or outcomes. Some final ends cannot be aimed at directly, and are achieved only as byproducts of other activity.

Dewey denies that means and ends can be sharply compartmentalized. He indicates that the value of an endeavor is spread out over its course and not only realized at the end. In assessing the prospects of any action or in evaluating it in retrospect, Dewey would have us look impartially at all of the consequences, not arbitrarily considering only specified ones. This view takes side effects or externalities fully into account.

Among the consequences of action frequently ignored are effects on the character and relationships of the agents themselves. These “feedback” effects on character are salient to debates about abortion, euthanasia, assisted suicide, surrogate motherhood and live donor organ transplants today. And they are particularly important to the alteration of character which may occur during medical education and training.

However, after reviewing Dewey’s work, although it has been my primary inspiration, I have found gaps and deficiencies. Some of these result from the fact that no complete or final theory of means and ends reasoning was ever articulated by him systematically in one place. Chapter Four ends with a presentation of problems in Dewey’s theory and areas needing further work. Dewey appears to think that problems are objective. He defines “objective” in a new and complex way, but then seems to trade off the traditional connotations of the word. This does not so much settle old arguments as start new ones.

The great insight of Dewey, I claim, is that he showed not only the indispensability of judgment, but how better to employ it. In the end, Dewey lays out the range of deliberation we need without giving us a blueprint for reaching accord. Given the nature of causal reasoning in medicine outlined in Chapter One, and the non-classical, imaginative character of categories conceptualizing illness presented in Chapter Two, the arena for means and ends reasoning in medicine is best dealt with in the manner largely put forth by Dewey.

FOURTH LINE OF ARGUMENT: THE LIMITATIONS OF EXPECTED UTILITY THEORY AND OTHER VARIANTS OF FORMAL MEANS/ENDS REASONING

Chapter Five presents the axioms of expected utility and criticizes both their assumptions and the claims made for their usefulness in fields like medical decision making. It reviews some ideas about a possible logic of values and expands on them.

Tied as it is to utilitarianism, rational choice theory and the many variations, subtleties and elaborations of it, has tended to dominate thinking about means and ends in this last century. But this theory or group of theories in application suffers from three major problems. First, there is an ambiguity about whether the theory

is a description of how people (and possibly other organisms) act or a prescription for how they should act in pursuing ends. Secondly, there are presumptions about the nature of ends, particularly “utility,” “self-interest,” and “winning” which need to be questioned more sharply. Thirdly, the theory fails to capture usefully many of the messy considerations involved in approaching real life problems like those in health care.

While proponents of rational choice theory seem to believe that with refinements this sort of reasoning can best do justice to all of our practical needs, others believe that even a maximally refined rational choice theory is incapable in principle of addressing many moral and practical problems. They, like Dewey, have tried to put forth expanded concepts of reason which assert its ability to cope with wider issues than they believe rational choice theory can handle. David Schmidtz and Robert Nozick are among the several authors who have tried to show that reason applies to ethics and other values, not just to tactics. And many authors, among them Chaim Perelman and Lucie Obrechts-Tytica, contend that reason, rational argument (and therefore, rational decision making) cannot be limited to formal demonstration. Unabridged reason must be connected to emotion, not severed from it. With proper respect for the “facts on the ground,” a broader kind of reasoning about means and ends does much more for value problem discussion and resolution, and hence for effective action, than does the imposition of protocols based on narrow concepts of rational choice.

TYING THE FOUR ARGUMENTS TOGETHER

Certain intended ends are like “yearnings” or “openings.” Too much charting of them, too much planning and control, and too definite of an agenda is overmanagement which can foreclose on creative potential. Chapter Six illustrates the workings of informal reasoning as applied in clinical encounters. There are illustrations, added to the ones in the earlier chapters, of working to enhance the efficacy of a therapeutic relationship to achieve what can be accomplished in a particular encounter. In the caregiver-patient encounter, both parties help constitute the initial situation and problem, provide much of the means for the solution, are changed in the process of engagement and are involved in a resolution which to some degree must remain open at the outset. Potential benefits of slack, redundancy, meandering, drifting and slowing down are noted in this chapter.

Trust needs to be established and earned, relationships need to ripen, disease processes need to declare themselves over time, and mutual understanding needs to mature. For these among other reasons, growth metaphors for causation rather than mechanical ones, nurturing metaphors for action rather than forceful ones, and dynamic, interactive concepts of ends rather than static and atomic or hierarchical ones are often proper for means/ends assessment in the health care arena. Systems which allow for creative transformations to occur would be encouraged if an amplified Deweyan view of means and ends were adopted.

Chapter Six rounds out the sketch of what that amplified view would be. But how will we foster the conscientious use, as opposed to the abuse of discretion and judgment? Training programs for caregivers need both to recruit and inculcate the special abilities which foster well-grounded and compassionate clinical judgment. We need a practice environment which promotes, instead of frustrating, individualized interactions, listening as opposed to prior structuring of interviews, continuity of relationships, low turnover in personnel, and an ability to understand the situation as well as the actual and potential values in play for each patient. We need to take a harder look at the functions of continuing versus episodic care, including high technology specialized interventions. A new plague of machines in the same old environment will not nourish the human virtues required for responsive rather than imposed care. The ever strengthening science and technology of medicine must be matched by strengthening of the art. This is the art of the possible, an art working in the real world and not in an ideal one.

The reader may wonder how all this relates to medical ethics. What I want to outline is an ontology of value which underlies both the ethical aspects of medical decision making and all other aspects. In fact, ethical values exist “in solution” so to speak, with physiologic, economic, social and psychological ones. They are not walled off, but are mixed with and determined in relation to these others. Pragmatic concerns, I would contend, do not generate a whole new theory of ethics, but can support considerations based in virtue ethics, duty ethics, contractarian ethics and consequentialism or utilitarianism. What pragmatism contributes is a dose of reality; showing how our ethical concerns can work only in concert with our other knowledge of, and values in, experience as a whole.

The pretense that the categories, situations, persons and values involved in medical care can be described mathematically and addressed by rote is shown in the various chapters to be poorly supported. Virtues are indispensable both in making clinical decisions and carrying them out, and suggestions for nurturing them are given in conclusion. Let us get on with that task.

NOTE

¹ See, for example Hester, Micah: *Community As Healing*. Rowman and Littlefield, Lanham, etc. 2001.