JOHN DEWEY'S VIEW OF SITUATIONS, PROBLEMS, MEANS AND ENDS

The general purpose of reflectively based action for Dewey is to transform an "unsatisfactory situation" into a "satisfactory" one. Medical encounters, both narrowly circumscribed brief ones and broad continued ones, exemplify Deweyan "situations." Such "situations" are states of affairs characterized and knit together by "tertiary qualities." The terms "situation," "satisfactory," "unsatisfactory," and "tertiary quality" are fertile with suggestion, but despite Dewey's explanations are not easily clarified. While acknowledging that even after a close look there are residual ambiguities in Dewey's theory of means and ends, the theory illuminates much of what is actually at stake in offering medical care, and what constraints exist on our responses to health problems in the real world.

SITUATIONS

Let us start with "situation." "What is designated by the word 'situation' Dewey says, "is *not* a single object or event or set of objects and events. For we never experience nor form judgments about objects and events in isolation, but only in connection with a contextual whole. This latter is what is called a 'situation." Although objects can be isolated for some purposes and studied focally as if apart from situations, they are never known in practice except in terms of their significance in situations.

The "situation" for Dewey encompasses the relation of an individual (not necessarily a person) to its surroundings. Shared situations are experienced in common with others. On many occasions (as Dewey indicates when discussing the quality which is shared by everyone at a ball game when the umpire yells, "You're out!") we automatically feel a commonality, although presumably it is never complete.² Language, when "…recognized as the instrument of social cooperation and mutual participation."³ facilitates the sharing of situations. The "heart of language," Dewey claims, is to establish mutual understanding. There would be no point in talking if we could not use the conventional commonality of words to enhance mutual participation in and evaluation of situations that underlie joint endeavor.⁴

Changes originating primarily within the individual or in the environment could naturally alter the situation. "...interaction is going on between an individual and objects and other persons. The conceptions of *situation* and of *interaction* are inseparable from each other. An experience is always what it is because of a transaction taking place between an individual and what, at the time, constitutes his environment..." And by "environment" here, he means the totality of persons,

places and things affecting an individual in a period of time bound together by a quality arising in an endeavor, a scenario or a narrative.

It should be noted that such an environment is not solely "given" and "out there" apart from the individual, but is in several key ways dependent on the individual. The capacities of the individual to be affected already equip and limit any possible environment. The physical disposition of a person, including positioning and focus of attention, screens potential environmental inputs. The interests of the individual introduce further selectivity. And finally, there are all the unintentional marks and intentional artifacts of individuals which shape their surroundings.

An illness exemplifies a situation marked by alteration in the relationship of an individual and her or his environment. Prototypically this comes from an environmental insult on the individual, as we have seen, but sometimes it arises primarily from what seems to be an internal source.

TERTIARY QUALITIES

Dewey gives several examples of "tertiary qualities" which define, delimit, characterize and "pervade" the various types of situations into which organisms and their environments can come. "...a situation is a whole in virtue of its immediate and pervasive quality." "The pervasive quality is not only that which binds all constituents into a whole but it is also unique; it constitutes in each situation an *individual* situation, indivisible and unduplicable." Hence any label given to the pervasive quality of a particular situation indicates only substantial similarity to the quality of certain other situations, not qualitative identity.

The primary and secondary qualities like mass, extension, density, hardness, color and shape are thought of as constituent aspects of entities, but "tertiary qualities" are not about parts or aspects of situations. Rather, they amalgamate or integrate the situations as a whole. Dewey compares them to overall impressions in aesthetic experience. He describes them as "immediate," which means that they are experienced at once, not cognized after-the-fact and not wholly susceptible to generic labels. Yet, never at a loss for words, he proceeds to name some of them: "distressing, perplexing, cheerful, disconsolate." And, in *Art as Experience*: "Situations are depressing, threatening, intolerable, triumphant. Joy in the victory won by a group with which a person is identified is not something internally complete, nor is sorrow upon the death of a friend anything that can be understood save as an interpenetration of the self with objective conditions."

A tertiary quality, as I noted of all qualities in Chapter Three, is not just the subjective side of a situation. Dewey is trying to get beyond the complete subjectivization of qualities. Situations are only there for the entities affected and effective in them. Reality, with a capital R, as a situation exhaustively understood from a comprehensive Objective Eye, such as the Eye of God, is a concept which does no work for a pragmatist. It cannot be appealed to as a standard of objectivity because it cannot, in practice, be appealed to at all. On this issue of "Things in Themselves" Dewey is in rare line with Kant.

Qualities also mark "experiences," another term never clearly distinguished by Dewey from "situations," although apparently often substituted for it, particularly when the "situation" has run its course and is reviewed.

"An experience has unity that gives it its name, *that* meal, that storm, that rupture of friendship. The existence of *this* unity is constituted by a single *quality* that pervades the entire experience in spite of the variation of its constituent parts. This unity is neither emotional, practical, nor intellectual, for these terms name distinctions that reflection can make within it. In discourse *about* an experience, we make use of these adjectives of interpretation. In going over an experience in mind *after* its occurrence, we may find that one property rather than another was sufficiently dominant so that it characterizes the experience as a whole."

Dewey failed to comment on the intensity or strength of the tertiary qualities which might characterize different situations, but it seems self-evident that some of these would be strong and others weak. Presumably, situations would be more distinct and easily identified if marked by intense tertiary qualities.

SETTLED AND UNSETTLED SITUATIONS

Two general types of situations occur, Dewey says in *The Quest for Certainty*. The first

"...take place with only a minimum of regulation, with little foresight, preparation and intent. Others occur because, in part, of the prior occurrence of intelligent action.... The first are not known; they are not understood; they are dispensations of fortune or providence. The second have, as they are experienced, meanings that present the funded outcome of operations that substitute definite continuity for experienced discontinuity and for the fragmentary quality due to isolation".

An example of the first type might be stepping out the front door and discovering the evening air filled with fireflies. The experience is immediate, final, unplanned and unarranged. But suppose there are also mosquitoes which soon drive one indoors. The second kind of experience might involve conscious valuation of the first, assessment of its not fully satisfactory nature and a rehearsal of possible responses to improve it. This could result in screening in the porch, followed by more benign but somewhat managed experiences of summer evenings. A "funded" satisfaction of having improved the porch, making it more usable, is now fused with subsequent immediate enjoyments taking place there.

Both "funded" and "unfunded" or accidental situations can either be integrated and settled, or unsettled and "problematic." In settled, integrated situations spontaneous or habitual responses suffice. These experiences do not require reflection. In contrast, the "unsettled" situation requires an imaginative response. An illness is an "unsatisfactory" situation, but some responses to it are automatic and settled, while others require deliberation and/or creative insight.

The most difficult and puzzling part of Dewey's work on means and ends is this concept of the "problematic situation." The problematic situation is the one which requires reflection for action. But how do we know what it includes? How do we recognize it, and how do we mutually agree on what it is? Is it fixed or in

development? Do we *decide* what situation we are in, *intuit* it as a *given*, or realize it as we go along and then *develop* or *transform* it? How it is ultimately defined? We cannot begin to comprehend the working of means and ends in a particular case until we clarify the origin and the scope of the problem which needs to be addressed.

When situations are "unsettled" or "uncertain," the "uncertainty" "... is not just uncertainty at large; it is a unique doubtfulness which makes that situation to be just and only the situation it is." In these situations the relation of an organism and its environment is unsatisfactory and the action needed to improve that relation is not either an established habit or obvious and ready to hand. This seems to be a matter of degree.

Metaphorically, Dewey describes a problem in the interaction of organism and environment as an "imbalance," which we have already seen, is one cognitive model for illness. Wants or needs can be described in terms of "excess" and "lack." ¹³ (Usually, both, as when one has an excess of hunger and a lack of food, or an excess of curiosity and a lack of stimulation). The solution to satisfying these wants however, demands "inquiry" only when the action required needs to be discovered. In such cases, situations are truly "indeterminate" and thus "problematic." They also can be "problematic" when something is amiss but we are not sure what. When we have to figure out even our goals, situations "... are disturbed, troubled, ambiguous, confused, full of conflicting tendencies, obscure, etc." ¹⁴

Dewey would deny that the statue is there in the uncut stone, so to speak. Unsettled situations are not problematic only because we are ignorant of pre-existing solutions, known either by others or by an omniscient God. They are not merely unsettled from a subjective or partial point of view. They are really doubtful.¹⁵

"Inquiry," for Dewey, is the process of formulating problems out of our vague discontents, and then determining how we can go about working on them.

"Inquiry is the controlled or directed transformation of an indeterminate situation into one that is so determinate in its constituent distinctions and relations as to convert the elements of the original situation into a unified whole." ¹⁶

Inquiry cannot be separated entirely from action because actions are involved in the inquiry. We have to move around and try things out with the materials at hand in order to improve our understanding of the situation. Also, inquiry does not cease when endeavor begins, but continues throughout an endeavor until the satisfactory resolution of the unsettled relation of organism and environment is attained.

The process of inquiry cannot be automated because the actions predicated on it become evident only as it unfolds. Inquiry improves our chances of satisfaction, but given the nature of a problematic situation, it does not aim at proof that an unassailably "correct," "appropriate" or "optimal" course is "mandatory." By explaining an inquiry we can often persuade others that our actions were well-founded. However, the results of inquiry do not *compel* assent, and therefore fail

to provide the kind of absolute justification needed by those who would absolve themselves of all personal responsibility.

One result of successful inquiry can be consensus among interested parties about the nature of the problem as seen from a starting point, and about the initial hypothesis as to steps which could yield a satisfactory resolution. However, "consensus" cannot be the sine qua non of successful inquiry and action initiation. It is often a byproduct of free, open minded and wholehearted engagement by participants, but its absence does not mean that a satisfactory resolution cannot be obtained. Nor does its presence guarantee one. If "consensus" were the direct goal of and criterion for successful inquiry, there would be many paths to it other than true engagement of the problem at hand. Many kinds of denial, substitute gratification and manipulations of opinion could achieve a consensus of sorts without engaging the problem at all.¹⁷

The impulse to find a justifying formula on which all responsibility can be placed is so strong that it figures in most criticisms of Dewey's inquiry. Such inquiry has its limitations discussed below, and is only more or less effective, but it is still the best approach we have. Some inquiries are sketchy, some thorough, some narrow, some broad, some better and some worse. Still, there is no requirement that they be perfect in order to be essential in reflective action. They improve on reflexive and arbitrary responses in circumstances unmanageable by rule, impulse or routine.

In medical care, little thought is given to how we identify a problem beyond trying to get at a chief complaint. Our default assumption is that we know the problem, more or less automatically. But physicians must admit that responding to needs explicit or implicit in "problematic" or "unsettled situations" would be premature if thoughtful identification of the problem had not taken place. And, in actual clinical practice, patients often complain that they cannot get a hearing for their real concerns. Physicians may fail to attend to what patients tell them because they have decided what will be meaningful in advance. They discount particular and anecdotal points whose relevance is open, but unproved statistically. They frequently presume that unless they have heard of something, then it could not exist. Additionally, there is the suppressed problem, the one the patient hesitates to mention ("I know you're busy Doctor, but could you just check this lump on my neck?" "By the way, does it mean anything that every once in awhile I can't see for a few minutes out of my left eye?" "Well, if you really want to know, I couldn't afford those blood pressure pills.").

Other potentially relevant troubles fail to come to light initially either because the doctor and patient are strangers or because they are such close friends. We may assume that we know what is included in or relevant to a given problem and what needs to be excluded or ignored, but we should never be too sure. There may even be "potential" problems which are not yet present in anyone's awareness, but need to be sought out in order to make the most of our actions now. And it may turn out that what is relevant or irrelevant shifts dramatically during the action, as, for example, when the wife of a man being resuscitated arrives with an advance directive.

MEANS AND ENDS

Although Dewey rejects the notion that there is a rigid dichotomy of, or an unbridgeable polarity to, ends and means, these terms remain useful in describing aspects of problematic situations. Discourse cannot capture experience completely, but it remains our major aid to shared reflection. It involves separating, for cognitive purposes, aspects and parts of that which is not separate as given, and then recombining them imaginatively. Therefore, we usefully separate means and ends discursively although they are not mutually exclusive in actual occurrence. As we have seen, aspects of reflective engagement can appear in the guise of means at one time or from one perspective, and as ends in another. In addition, during reflective engagement nothing is permanently fixed. In action, means are improved, new means are discovered, motives are modified, the understanding of ends is refined, and unexpected consequences are discovered and assessed.

During this process established values are not to be abandoned lightly. Novel experience does not eradicate all history and memory. In fact, as William James pointed out in *Pragmatism*, we have layers of beliefs and values, some of which are more superficial, more easily changed or amended than others which are the core beliefs and values funded by long experience. Part of wisdom is brokering between old convictions and new experience. Properly weighting the value of each is related to the Bayesian reasoning mentioned in the last chapter.

Deliberation is required in unsettled, truly problematic situations. It is, according to Dewey (much as it was for Aristotle), a consideration of the consequences which can be foreseen as a result of various optional actions. One point requiring deliberation is whether or not to accept the dimensions and qualities of the problematic situation as they *seem* to be given initially. Sometimes, indeed, "deliberation" merely means not being too sure of ourselves. Inquiry first determines what particular "take" we will be disposed toward in conceptualizing an initial discontent.

Consider the problem of a person presenting with apparent anguish from a headache. Is the problem best described as a migraine, drug addiction, hypertension, or addiction in the setting of migraine? How sure are we that there is not also a stroke, along with migraine and addiction? How appropriate is searching for obscured and unappreciated aspects of this particular problem? Which potentially hidden factors should be sought out and considered in its setting? The "tertiary quality" of the situation as initially presented is constituted by outcries, grimaces, tears, head holding, perhaps anger and impatience or appeals for pity in addition to background features such as the time of day and how busy it is in the clinic. This "quality" can be accepted at face value or altered by diagnostic investigation, i.e., an inquiry whose extent is a matter for deliberation. Nearly universally, we hope, the blood pressure will be taken. Will the old chart be obtained? Will the nurse who thought she saw the patient last week with a toothache seriously consider her fleeting impression that he then gave a different name? If the patient has an alias, will we still bother to find out that his twin died suddenly of a stroke at age 35? The results of this inquiry will cause the "tertiary quality" of the situation to evolve, and perhaps will even transform it.

As a working impression of the unsettled situation develops, various possible actions take shape in our imaginations. We then engage in what Dewey called a "dramatic rehearsal," depicting to ourselves and sometimes to one another the probable consequences of acting. The best depiction of consequences and outcomes for various acts depends of course on the knowledge, the imagination and the experience of those who deliberate. Experience, foresight and sensitivity afford moral and tactical advantage, and time for reflection can be critical as well, to help us envision a rich population of possible consequences from engagement. Ignorance, limited vision, lack of information, haste and self-deception are often punished. Unhappily, the punishment does not fall fairly on decision-makers perpetrating ill-considered acts, but on all those who suffer from them.

For this reason, Dewey does not accept an individualized, narrow view of expediency as a valid measure for the success of action. There is no special discount of responsibility for "downstream" effects and "externalities." Rather, he proposes a much broader more catholic view of expediency: the widest range of consequences upon all suffering and enjoying persons affected (he does not go so far as to include all sentient beings), is to be the measure of that expediency. Defined in this manner, the expedient result is also the moral result. [It is not true that] "... the instrumental nature of thinking means that it exists for the sake of attaining some private, one sided advantage upon which one has set one's heart." 18 "Certainly nothing can justify or condemn means except ends, results. But we have to include consequences impartially."19 And "It is willful folly to fasten upon some single end or consequence which is liked, and permit the view of that to blot from perception all other undesired and undesirable consequences."20 The authors of "rapid process improvements" focusing on isolated specifics of clinical care, should please take note of this elementary fact: "outcomes" are not only what you have decided to measure. "Speed of medication delivery to the floor," for example, was the targeted outcome of one such intervention without any study of whether speed was associated with error.

Envisioning consequences rather than examining motives is most important for Dewey's moral theory, but among the consequences of action are effects on the actor which may influence future capacities. Dewey is concerned with the nurture of human capability. As a naturalist, he seeks to work on and with human inclinations, developing and engaging them for beneficial purposes. His view contrasts sharply with Kant, who thought that will could and in fact should control action based on rational considerations alone and that action based on inclination alone could not be morally meritorious. We need to be cultivating inclination according to Dewey, not counting on emotionally unsupported "will." In the medical setting, this means asking what effects interventions have on the character of both caregivers and patients, a subject which has received little notice thus far. To state explicitly what is implicit in Dewey's moral work, virtuous characters and virtuous actions are mutually reinforcing, and can either be seen as means or ends.

Some tasks involve the character of the performer and are colored by it, whereas others can be accomplished by any character who learns a technique. Attending

a terminal patient, for example, is one of the former whereas deciding whether a biopsy slide indicates malignant melanoma is one of the latter. I have been contending throughout this work that clinical judgment often properly involves experience and breadth of spirit, which is why robots will never be more than adjuncts to physicians.

Dewey, in *Democracy and Education* refers to four "traits of individual method" which are essential for teachers. ²¹ These attitudes, essential for successful inquiry in truly doubtful circumstances, would now be called "epistemic virtues." Interestingly, they describe character traits producing a desirable method, and not a method which can be undertaken by anyone, regardless of character. The flexibility, adaptation, responsiveness to context and ability to innovate required for teachers in many unsettled situations is also needed in commonly unsettled medical settings. When we doctors exercise poor judgment, or run from responsibility by pretending that judgment is not our job, we cannot simply be taught techniques which will obviate our incapacity. Real transformation of character – the inculcation of virtues, is needed to perform this trick on us. Here again, the personality of an inquiring caregiver cannot be separated from the results of her or his endeavor. Only in those less common than assumed situations when technique alone counts, does personality fail to leave an imprint on results.

Four virtues requisite for successful inquiry are described by Dewey. I should note that this list has been greatly expanded by later writers on the topic of "epistemic virtues," and I will not argue for any particular list as being either exhaustive or entirely correct. Dewey's suggestions are as follows:

1. Directness

This is a character trait enabling caregivers (Dewey's example, again, is teachers) to immerse themselves in the work. To the greatest extent possible, and obviously this increases after one becomes relatively at ease with one's general scientific and technical competence, the caregiver needs to focus on the "doing" and not the "How am I doing?" aspect of the work. In other words, self-consciousness and performance anxiety get in between the caregiver and the goal rather than facilitating pursuit of it. In particular, a physician who is responding to the potential chart reviewer or plaintiff's attorney is not responding directly in that measure to the needs of the patient in this particular unsatisfactory circumstance. Looking good is not equivalent to doing good.

2. Open mindedness

One must not be too proud or sure that one knows what is going on, but must look for clues and accept them from everywhere. It is very possible that a medical student, a nurse, a nurse's aide, or the patient's twelve year old child will present information or come up with an idea which is crucial to the case. The attending, and especially the senior attending physician should be the most, and not the least receptive to helpful information and suggestions, whatever their source. I, myself recall taking a somewhat extended history about a critically ill infant who turned

out to have Reye Syndrome, when an office aide brought me back to reality saying, "Doctor, I think the baby is really sick." I took another look, grabbed the baby and headed for the pediatric floor. Open mindedness as Dewey describes it means we can continue to expect the expected, but not stop looking for the unexpected. Certainly, we often form hypotheses about what is occurring on the sketchiest of preliminary data and impressions, but such hypotheses should not be prematurely converted into conclusions which are proof against expanded or contrary information.

3. Single-mindedness

(I would call this whole-heartedness.) At bottom this means whole-hearted love of the work. External pressure cannot foster full engagement. Whereas we cannot purge ourselves of outside concerns, such as earning a living, getting home to our families, gaining a good reputation and taking care of our biological needs, we will not be good teachers (or nurses or doctors) if we do not feel called to do our special professional work. So some of the most important questions for a potential medical student or for a graduate nurse who is choosing a field are: "Do you feel a knack for doing this?" "Will you look forward to going to work?" And, "Is this work satisfying to you apart from its external rewards?" Because if the answer to any of these questions is no, then the effective application of specific skills will be impaired. When the answers are yes, then we can attend to our professional duties more single-mindedly. "External discipline" as Dewey calls it, cannot substitute for inner motivation.

4. Responsibility

This refers to rigorous projection of consequences and acceptance of one's own role in producing them. Patients do not want us to throw up our hands and abjure responsibility by claiming that we are only cogs in a large industrial machine. We are, whether we accept it or not, either responsible as parts acquiescing in the workings of a system or as agents asserting our independence from that system. If a surgeon refuses to treat someone whose insurance will not pay for gastric stapling, she is not the puppet of policy, but an active enactor of it, whatever its merits and demerits. Dewey speaks of responsibility as "seeing things through."

But is it true that "inner motivation" is unaffected by external conditions? Not at all. Nothing Dewey encourages prevents us from trying to arrange external conditions in such a way that our inner fires remain lit. Overscheduling, poor equipment, indifferent colleagues, impossible demands for paper work and lack of appreciation can and do wear caregivers down. And opportunities for education, consultation, sharing of experience, clinical investigation and interesting, engaging patients can nourish them. But it should be apparent that these things nurture the spirit of inquiry only when it is already there in force, whereas distracting goals and fearsome strictures tend to stifle it.

Not every desirable consideration can be fully explored in advance of engagement in action, lest paralysis ensue. In no way does Dewey, despite all the above desiderata, advocate waiting to act until the final answers about the problem, the

alternatives and the consequences are in. In fact, this is impossible because we learn through reflection and experimentation. Besides, as already noted, there are penalties for indecision, of which he is well aware. "... while saints are engaged in introspection, burly sinners run the world."²²

"Answers," in problematic situations are partly forged in the process of action. We cannot, in genuinely unsettled situations, have finished preconceptions of our aims because, in fact, we are just about to learn something. We honor our values most by leaving them permeable to modification in the course of experiences occurring as we attempt to actualize them. This capacity to learn while doing exemplifies the virtue of open-mindedness as Dewey describes it.

Dewey seems confident that the ongoing modification of values and strategies during action will be enhancement and not vitiation, but he does not fully explain how. Be that as it may, congealed values truncate experience in addition to foreclosing possibilities for their own growth. Our psychic investment in experience is lessened when we make our values sacrosanct and keep them closed. To the degree that we protect our values from the influence of experience, we diminish its power to *move* us.

J. E. Tiles draws attention to the dynamic, although not infinitely malleable quality of ends in his book *Dewey*. In contrast to the final cause of Aristotle, which has to do with completion of an entelechy involving the expression of a pre-determined essence, Dewey denies that the end, the fulfillment, can be so largely read out of the beginning. This is because he has a more plastic idea of the nature of organisms, particularly humans, than did Aristotle. As Tiles notes, the thoroughly reciprocal relation of ends and means for Dewey requires some interdeterminacy of ends. "The reciprocity arises, according to Dewey, because our ends are not always determinate, and it is only in working out the means to some vaguely specified end that we come to discover at what, exactly, our activity is aimed."²³

The projection of an end which can be a fulfillment as opposed to a mere conclusion is also a means, because it informs and motivates those actions directed at it. Dewey calls this end-as-means an "end in view." "In a strict sense an end-in-view is a *means* in present action;..."²⁴ "...the ends, objectives, of conduct are those foreseen consequences which influence present deliberation and which finally bring it to rest by furnishing an adequate stimulus to overt action. Consequently ends arise and function within action. They are not, as current theories too often imply, things lying beyond activity at which the latter is directed."²⁵

A fairly straightforward example of how means and ends might reciprocate, both acting in motivation, is the case of thirst. Here the intravascular volume contracts or the osmolarity increases, renin, anti-diuretic hormone and other hormones pour out, and water seeking behavior plus the qualitative subjective state of "thirst" is generated. Visions of water and its possible location are produced in the imagination. These aims-in-view or "final causes" exert what might be analogous to a "pull" as opposed to the "push" of hypovolemia and a dry mouth. They act as cues which further reinforce both the subjective state of thirst in its dominance over consciousness, and its production of water seeking behavior. The "push" of the

drive, habit or trait is reinforced by the "pull" of the cue or aim-in-view which could either be present in the environment or produced in fantasy. The final ends are twofold: one is the correction of a physiological imbalance manifested by thirst and perhaps other sensations like a dry mouth, fatigue, dizziness and overheating; the other is the pleasurable sensations accompanying and following quenching of thirst. But thirst as a means generates ends-in-view, i.e., the visions of water and anticipated drinking which reinforce water-seeking behavior.

We have now seen partially how "ends," at least envisioned fulfillments, can operate as means. But there is more to it. Dewey reevaluates, as noted in the last chapter, certain things which have usually been seen as ends in themselves, placing them in context. It turns out that the whole notion of anything "in itself" is suspect when the very nature of any entity has to do with its relations. We have seen that art, knowledge and character are both ends and means. "Character is the interpenetration of habits." While the development of character is on the one hand still a worthy end, character is in part the means of its own development, as it is a means for attaining many other goals.

Also both an end and a means, knowledge is, for the pragmatist, opinion which has been *tried out* and found effective in handling situations. There is debate, of course, about what constitutes proper "handling" of a situation and whether there is something sufficiently objective about a situation that "proper handling" of it can be justified to everyone's satisfaction. In the absence of any common basis for understanding the nature of situations, any assertions about the "truth" of knowledge which results in proper handling of them look purely idiosyncratic. Nevertheless, on this view, while knowledge remains an end, and while the attainment and use of it have their own intrinsic delights, the criterion by which it is ultimately validated is its usefulness as a *tool*, i.e., an instrument or means.

With this view of knowledge, things are "known" in the role of means. Scientific knowledge, which quantifies objects, assorts their characters in definable categories and reduces them to formulae for manipulation, brackets objects for certain uses. "Concepts" of objects themselves are means for handling the objects. Scientific concepts have to do with commonalities, e.g., "universal aspects" of objects and relations. "In truth, the universal and stable are important because they are instrumentalities, the efficacious conditions of the unique, unstable and passing." The natural histories of entities are depicted in terms of these operational concepts and universals, and "physical science...reveals the state or order upon which the occurrence of immediate and final qualities depend." Page 18.

The term "knowledge" in Dewey's work does not apply to immediate experience of the "terminal qualities" or "final qualities" of things. These qualities are evanescent and fragile, aesthetic, moral or spiritual qualities which elude comprehension within the categories of instrumental knowledge. We had to drop the immediacy, the intangible aesthetic and other final qualities of things so that science could render our understanding of them useful in material manipulation. In their immediacy we "can do nothing" with the terminal qualities "save have, suffer and enjoy them." ²⁹

What this means, I think, is that for Dewey "to know" is savoir, to know in an instrumental sense and not *connaître*, to be intimate in a phenomenal sense. Sensuous immersion in and experience of the immediate qualities of things is something most of us would refer to as a kind of knowledge, but this is not the knowledge of science. Science knows things in order to deal with them, whereas qualitative understanding is final. This does not mean that qualitative experience is atomic, I should note. The quality of my experience of this "home" is related to qualities and values of many other past and present things. Nevertheless, it has nothing to do qua quality and value, with manipulation. In contrast, it has a great deal to do with the establishment of values and ends. Although experience provides the raw material for both "knowledge" and qualitative familiarity, only that replicable part of experience which can be placed under concepts and stored for future instrumental use keeps the name of knowledge for the pragmatist. The aesthetic and emotive dimensions of experience cannot be retained in the same sense and drawn upon for instrumental use. Accordingly, as already noted, objects as "known" for science are primarily means, whereas as they are encountered directly and enjoyed or suffered, they are ends and fulfillments. Emotions are not looked upon, it appears, as a bridge to "knowledge," but instead have to do with "familiarity" (phenomenal knowledge, although Dewey did not use that particular term). This has to do with values. We "understand" things apart from our scientific or strictly instrumental "knowledge" of them by becoming familiar with them qualitatively. The distinction between knowledge and familiarity in this sense under girds a meaningful polarity, although not an absolute dichotomy, of means and ends in Dewey's work.

The instrumental and "consummatory" qualities of ends cannot be kept artificially apart, as we have seen in the case of art. Dewey thought that a union of the instrumental and "consummatory" was the ideal to be sought in both crafts and arts. When something is aimed at as if it could be a purely disinterested aesthetic object, apart from a network of value, it becomes an escape, a titillation, a thrill and in fact the very exemplification of an alienated end.³⁰ In Dewey's view the best art is relevant to social life and serves beneficial purposes outside of itself, i.e., it is also a *means*.

"In an imperfect society—and no society will ever be perfect—fine art will be to some extent an escape from, or an adventitious decoration of, the main activities of living..." [But] "Works of art that are not remote from the common life, that are widely enjoyed in a community, are signs of a unified collective life.... In the degree in which art exercises its office, it is also a remaking of the experience of the community in the direction of greater order and unity." ³²

In my own (and not necessarily Dewey's) words, art as *pure* aesthetic experience serves, without any moral or spiritual bearing, in a compensatory role for alienated life in a defective society. As society improves, art becomes less a *medicine*, a balm and an escape, and the places of art become less like *asylums* where we go to recover from a Philistine world. Then art is better integrated with and a part of the whole social life.

Although many in the arts have no doubt been offended that Dewey did not regard "art for art's sake" as the best art, the "art world" should take note of its present role of sycophancy to the rich. Art which indulges a leisured "in" crowd and is exclusive, but is not seriously threatening to the politics of the patron, is exactly that art which has permitted itself to become neutered and sequestered, declawed and toothless.

I think that Dewey was on to something here even though the opposite danger, that art becomes a lackey to causes and not patrons, thus losing its integrity by becoming excessively instrumental, is always present. Nevertheless, if we see art in its role of means as transformative, then it cannot be tamed and put in a subservient role to any power. It will bite back, just because as means it is transformative of ends. The proper balance for art as both aesthetic end and transformative means is essential to the integrity of art as an endeavor.

In the making of a work of art there are instrumental means, such as the grant of the patron, and there are constitutive means such as the paints, the canvas (the media) and the plans of the artist. Dewey asserts that constitutive means which become incorporated in the final work partake of that finality and are the model for the type of means which he regards as non-alienated and participatory in ends. "... not all means are media.... There are two kinds of means. One kind is external to that which is accomplished; the other kind is taken up into the consequences produced and remains immanent in them. There are ends which are merely welcome cessations and there are ends that are fulfillments of what went before."³³ The medium is taken up in the end, which is an expression of the artist carried in the medium.

Ideally, other occupations should work this way to the maximum extent possible. Illnesses are challenges we would rather be rid of, but it makes a difference in character and life experience whether we face them, try to learn from them and live in spite of them, or merely run away. When the entire experience of medical care is treated as a worthless annoyance or a meaningless ordeal, either by the patient or the caregiver, no values are realized. Even suffering which can never be redeemed or justified is best treated as part of life, connected when possible with the meaning of the whole, rather than disconnected and suppressed as an episode. There are values to be realized even in the Valley of the Shadow of Death.

If aesthetic experience on the whole is currently being treated as if it were a disconnected, purified end, illness experience and medical care is being treated as though it were a purely noxious means disconnected from all possible fulfillment. As such, it is disincorporated, walled off and *subtracted* from "really living." This attitude means that little concern goes on for any "real living" that might occur during that medical treatment or experience of illness, namely the occurrence and nourishment of courage, honor, humor, insight into the experience of others and deepening of moral, spiritual or aesthetic values.

The term "ideals" usually means extremely pure ends. Dewey still uses this term in his *Reconstruction in Philosophy*, but he attacks and modifies the conventional connotations of fixity, eternity and other worldliness in ideals. Already in that work,

he moves away from ideals which are enshrined and displayed as unattainable perfections. Such ideals are counterproductive in that they inspire disaffection and resigned cynicism. He sees less absolute ideals instead as functionally related to particular concrete situations. [The ideal] "... ceases to be something ready-made and final; the ideal and rational also ceased [sic] to be a separate ready-made world incapable of being used as a lever to transform the actual empirical world, a mere asylum from empirical deficiencies. They represent intelligently thought-out possibilities of the existent world which may be used as methods for making over and improving it."³⁴

Later in *Experience and Nature, Human Nature and Conduct*, and *Art as Experience* Dewey mostly discards the term "ideal" partly because process, with all its labors is part of any natural product. Instead of judging isolated "ends" by measuring how well they instantiate transcendent concepts of perfection, Dewey introduces "consummation" as a technical term for that feeling of fitness or satisfaction which accompanies the resolution of a problematic situation. Consummation marks satisfactory resolution but comes out of the particular, not from above or beyond it. This resolution completes engagement affirmatively. It is ideal only in that it is a successful natural completion marking an advance or improvement over the initial relation of elements in a situation.

Initially, a resolution with its attendant sense of consummation may be imagined, but finally a differentiated and developed version of this end becomes concrete as a satisfying actuality. Robert J. Roth comments that "Each consummatory experience quickens and heightens our power of discrimination and creates standards of apprehension so that we are better able to grasp the meaning of future situations." There is an element of surprise, accident and delight in consummatory experience. It does not exactly correspond to what was anticipated, and represents the latest twist in development of an aim-in-view. Mistakes are sometimes turned to account. The experience itself is given rein to permeate and color its own resolution, instead of merely concluding in a pre-ordained way.

Dewey has very little to say about endings which are not satisfactory resolutions and which yield no sense of "consummation," i.e., compromises and failures. It should not go unnoticed, in my opinion, that there are many situations in which there is no way to win. In them, we must take what little satisfaction we can from minimizing the damages. A truly naturalistic philosophy should not shrink from descending into the greater and smaller hells of the world, where children survive on prostitution, starving families commit infanticide and tortured depressives end their lives. Any adequate theoretical program of problem solving must be capable of being carried into all the precincts, however bleak. Perhaps if Dewey had written his major work after the abysmal horrors of the Second World War he would not have used a term like "consummation" to describe the heavy hearts with which we must emerge from some endeavors, even when we have done the best we could.

The cash value of the concept, however, is not in the name, but in the working of harm reduction as applied wherever action is called for, even when the best outcome is not good. In these unfortunate situations, a feeling that some result of

worth has been produced, and elements we were given to work with have been turned to some advantage over doing nothing will mark a resolution, call it what you will. Dewey's description of "consummation" answers to that feeling although the name does not.

We have seen that rules and principles cannot just be applied to circumstances without rejuvenation and amendment in the process. Hence the question arises of how one can be steadfast in the pursuit of flexible ends which are moving targets, using plastic rules which evolve while going along. There must be some limit to the elasticity of ends and principles of action or else one might abandon any project upon encountering the first difficulty, naming new goals and revising all previously tested rules on the basis of convenience. Surely on Dewey's account we are not undertaking any serious work simply to flit about from flower to flower: there must be some curb on distractibility and some goad to perseverance. Partly, experience is the answer; perseverance has paid off in the past.

We should not abandon ideals and methods funded by long success. Most ongoing experience has relatively slight weight compared to that of the entire past. Projects undertaken and aims projected for well established reasons will not be lightly abandoned as long as the significance of past experience, the preponderant stability of our long-term needs and the inexorability of a future populated with largely predictable consequences is kept constantly in mind. The past remembered and respected acts as a ballast which stabilizes methods and anchors purpose.

Nowhere does Dewey counsel us to become slackers. But his theory of means and ends implies that moral psychology needs to become more important than unsupported "will" in deciding how and when to apply rules. This requires attention to human nature. Dewey is confident that with improved understanding of what is plastic in our nature and circumstances and what is not alterable, better decisions about when and how to use rules will be forthcoming. Determination, dedication, caution, humility, and compassion among other virtues, cultivated habit and skill, plentiful resources, encouragement by mutual support and discipline with the prospect of rewards or punishment, add up to "willpower." With Dewey, this "willpower" which underlies commitment has natural biological and social sources, not transcendental rational or supernatural ones. The psychobiology of individuals and communities as it underlies moral behavior is the place to look for methods to strengthen commitment.

There is a serious issue about who should have discretion to make *any* kind of medical decision and how extensive the exercise of that discretion should be. Abuses of discretion are real and egregious. Treatments are given solely for pecuniary advantage. Unqualified decisions are made without the benefit of consultation. Bossy physicians misinform patients and ignore their preferences. Difficult or impoverished patients are abandoned. Unwarranted promises are made. Caregivers participate in insurance fraud, and "skimming" of desirable patients with profitable conditions for private clinics while turfing difficult ones over to public institutions. Sometimes they over-prescribe drugs of abuse, indulge other unreasonable demands, etc. But the usual response when problems come to light is to write

more rules. These rules cut two ways, reducing both the harm and benefit of discretion. The many possible ways we could improve discretion instead of eliminating it need more emphasis. We cannot be humane unless we are allowed to be human.

If we consider a sequence of actions necessary to reach a goal, such as the sequence needed to minimize violent behavior in a community, we may well find that the method of indirection is the only feasible one. The reason is that the long-range goal, the vision of a peaceable community, is not immediately operative in altering the events, places and persons which predispose to violence. Perhaps people who are idle need to be put to work, babies need to have more nurturing contact with their mothers, anesthesia is needed for circumcision, noise levels need to be reduced, guns taken out of harm's way, colors muted in some public places, the use of alcohol on election days curtailed, etc. Perhaps preliminary, seemingly very adventitious ends for the relevant players in possible future violent scenes need to be made the operative ends very early in the process. An example is establishing mentoring relationships for young males on the loose.

Dewey calls this a "flank movement," whereby impulses not directed at the long-term goal are drafted into service of intermediate aims. "To *reach* an end we must take our mind off from it and attend to the act which is the next to be performed. We must make that the end...the main thing is to find some act which is different from the usual one. The discovery and performance of this unaccustomed act is the 'end' [an intermediate end-in-view] to which we must devote all attention. Otherwise we shall simply do the old thing over and over again, no matter what is our conscious command. The only way of accomplishing this discovery is through a flank movement."

This is to say that distant goals toward which we have no immediate compelling motivation plus acts of raw will do not equal progress. We have to find sequences of acts induced by cues and directed at intermediate goals which recruit effective impulses, often unrelated to the distant goals, to get ourselves off dead center. Long-term "will" must harness more immediate desire and impulse.

So it is that physicians, nurses and health educators trying to work with tobacco addiction in young people have learned that distant dangers like threats of cancer and heart disease after decades have no compelling immediate effect on behavior in the young. It is far more useful to find out what immediate positive values are being served by smoking (sometimes it is even bravado in the face of distant dangers) and look for substitutes to fulfill the same needs once they are understood and respected. Is nicotine working as an antidepressant, for example. Moreover, important present values for young patients may be getting undermined by tobacco use in ways that some have not fully appreciated, and these can be brought to the fore. Adverse and ongoing cosmetic, physiologic, and social harms and increases in price have motivated tobacco cessation far more effectively than health concerns for a distant and, for many adolescents, practically unreal future. Finally, the very relationship with the medical practitioner, cultivated apart from the smoking issue, can be a positively efficacious therapeutic force.

THE STRENGTHS OF DEWEY'S THEORY, IN SUMMARY

a. It is Possible to Reason About Value

While denying the existence of external sources and criteria for the grounding of values involved in choosing our ends, Dewey nevertheless shows that such values are not arbitrary. They arise in the interaction of our embodied, biological natures with social and material environments. It is true that these natures and environments differ in great degree from one instance to the next, but Dewey shows that such differences have their limits. What individuals and groups have in common as revealed by reflection on and the investigation of human nature is vastly more considerable than individual biological differences, or cultural and environmental ones. Because of our shared psychobiological and social proclivities, we can share ideas about the range of reasonable response in problematic situations. With mindfulness toward these commonalities, there can be meaningful dialogue about value choices, and it is not true that "anything goes." At the same time, real individual, cultural, situational and experiential differences guarantee that within this range of reasonable choices, legitimate disagreements will remain from one circumstance to another. Dialogue about value is thus very possible, while enforced, absolute agreement has no valid basis.

b. Means and Ends are Mingled

Dewey shows that means and ends are not things in themselves, but aspects of things in relation, and he shows this, as we have seen, in rich detail. It is enlightening to recognize that actions and objects have value in both their roles as means and as ends, processes and products mediating and giving immediate satisfaction. We can benefit by caring about means not only because of the ends toward which they are mainly directed, but also because we live there with them as ends themselves, and as means to many things other than the initially intended end. When means are judged in terms of *all* their consequences, including the accidental and unintended ones, the concept of "efficiency," whereby means are judged simply in terms of their contribution toward an intended end becomes highly suspect. In terms of that showcased end, the unrelated consequences are "side effects," "externalities," and sometimes "bonuses."

We are belatedly appreciating, long after Dewey, more and more of the waste which is laid by detrimental externalities. But we still, by and large, fail to recognize the positive immediate values and positive unintended consequences of processes which are seen solely as means to a directed goal. For example, in medicine, we might someday invent a hand-held body scanner which obviates the physical examination as a means for diagnosis. But before giving up the physical exam, we ought to consider therapeutic and relationship-building aspects of that process. Sometimes slower and more personal work is better overall. Certain processes take time; time for the assimilation and digestion of new experience and information; time for new values and relationships to come to fruition. There is much to be slept on.

c. Value is Importantly Qualitative

Dewey's work points to the conclusion that value is in large part qualitative. It will never be adequately measured in numbers. The number of patients we saw in a given day is little related to the amount of help we gave. The length of life is very poorly related to the value of life, unless Jesus, Mozart, Joan of Arc and Shelley were failures. Poverty is one thing, insight another. The name "suffering" covers a multitude of incommensurables. Importantly, in this respect, Dewey shows that the claims for cost-effectiveness analysis are vastly overstated. "Costs" and "benefits" are qualitative, and much more subtle and complex than they are treated by the usual economic assessment.

d. We can Work Rationally Yet Uncertainly

The acceptance of uncertainty is another Dewey contribution. Dewey has highlighted the difference between situations which are routine, generic and adequately handled by habit or protocol, and those which have genuinely uncertain elements. In such genuinely problematic situations the initial dissatisfaction leading to goal directed action is often itself ill-defined, inchoate and obscure. We cannot presume to know what our full situation is prior to reflective inquiry. Correlatively, we cannot be too sure of exactly what we want, or should want, until we engage the materials which present themselves, discovering their true potentials and limitations.

This is especially important in the work of the professions, as Donald Schön has demonstrated in his large body of work on reflective practice.³⁷ Mass production, standardization and commodification foreclose the possibility of individualized, creative engagement attuned to the peculiarities of circumstance. Admitting uncertainty opens a window for new learning about our situations, ourselves, our needs and our possibilities. Determinacy, such as it is, is created out of interdeterminacy during successful inquiry and action. Final values typically differ from initial ones.

e. Qualities Help Define Situations

Although beset with many difficulties, Dewey's proposal that a "situation" is integrated by a "tertiary quality" also offers significant promise. The tertiary quality characterizes the uniting of subject and object, agent and environment. Qualities of situations can only be guessed at by those outside them, but are lived uniquely by those participating. Their names, as we have seen, are only gross generalizations. But it makes all the difference, in characterizing a scene, to include all aspects contributing to its quality, rather than to pretend that the only relevant features in that scene are those which centrally identify it as a case of "pulmonary edema" or "jealousy."

f. The Ultimate End may not be the Effective Motivator

Finally, Dewey had valuable insights about tactics. Realizing that ultimate goals are not always immediately motivating, and that poor pedestrian slogging along

deserves attention, Dewey was interested in how we can bring about genuine change at street level. He fully appreciated actual as opposed to idealized starting and end points for goal-directed activity. His concept of an operative "end-in-view," grounded in the motivating needs of the moment, focuses our attention on the truly productive point at which genuine change is possible. One of the first lessons medical students need to learn, and then relearn continually throughout their careers, is to meet actual patients on their own ground and to start the work there, which is the only place it *can* start.

PROBLEMS OF DEWEY'S MEANS/ENDS THEORY

a. Not all Problems Generate Sufficient Unease

There is need for a more detailed discussion of exactly when and why habit and instinct are appropriate for dealing with felt needs, and when reflective inquiry is demanded. We often proceed overconfidently, assuming that everything is just as it appears at first take, and that our automatic responses are perfectly adequate, when in fact we ought not to be so sure. Some situations are unsettled or unsatisfactory in spite of the fact that major players in them may be unaware. What precautions do we need to take to find out if there are real problems which are not felt problems?

Dewey does not adequately consider how we should judge the factors which limit or enlarge our scope of concern. I think a jogger is more likely to assist a fallen pedestrian than a commuter is. People are more considerate of one another in face-to-face encounters than over telephones. Physicians who expect to encounter and depend on one another recurrently treat each other with more respect than those in large organizations who rarely interact. Cruelty to animals from which you benefit is easier to ignore when someone else carries it out. Thus the situation-identifying emotions on which our responses often depend may not adequately signal true import. Work is needed on the cultivation of adequate and practicably fair situation-defining emotions. I discuss this further in Chapter Six.

b. The Degree of Urgency Rightly Affects the Type of Inquiry

The importance of the pressure of time needs to be fleshed out. Just as problems can be ignored through haste, opportunities can be lost in dithering. The theory fails to discuss adequately how urgency necessarily limits considerations. Also, it fails to discuss factors which might affect our attention to central concerns as opposed to peripheral ones. When performing coronary angiography we are not required to consider opportunity costs of failing to promote dietary alteration and exercise. But there are forums in which such considerations are appropriate. Similarly, an artist designing the lobby of a courthouse is rightly exempted in the process of the endeavor, from her failure to demonstrate outside for better housing. Yet, she should not be immune to consideration of the source of her materials, their cost to the county, to labor and to the environment.

c. The Quality of our Situations is Altered by our Structured Roles

Part of what defines a situation for us is what we claim as our role in it. If three people discover an unconscious victim on the street and one says "I know CPR" that person has represented himself as qualified to play a certain role, making new factors relevant in the situation for him. Ambulance sirens had a different import for me on nights off call, when not covering the emergency department of a small town, than they did on my work nights. Structural factors as well as qualitative ones affect situations.

d. More Needs to be Understood About Sharing Situations

Dewey does not give a full account of when, how and to what extent situations can be shared. The quality of a deathbed scene is one thing for the person dying and another for a medical student present for the first time with a dying person. In order to discuss what is relevant to a situation and what actions are appropriate in it we must be able to know if and how much the quality for us is shared. And, as Hume pointed out, we must cultivate an ability (sympathy) to sense the quality of concurrent situations for others.

There are many *scenes* in the delivery of medical care, for example the scene of a delivery room, and all present share the *scene*. To what extent do they share the *situation?* Dewey certainly cannot mean for individuals sharing scenes to respond only to private qualities, going off on their own without reaching out to understand how other participants experience a "tertiary" quality concurrently. Communication with others is used to bring participants in a scene into sufficiently harmonious understanding of their situations.³⁸ It is one thing to act based on the given quality of a situation for an individual: it is another to justify that action to other participants. We need a more fleshed out account than Dewey gives of exactly how situations are shared, are not shared, come to be better shared and when this matters.

e. What a Problem is or should be is Arguable

Dewey did not acknowledge up front that what is "problematic" or "unsettled" is often a matter for dispute. The claim that, "It is... a mistake to suppose that a situation is doubtful only in a subjective sense." makes the unsatisfactory situation sound as though it exists in the same sense as a floor or a broken hammer. This is manifestly not the case. There is no objective proof such as walking on the situation or trying to drive a nail with it to settle arguments about its nature. The nature of a problematic situation, in contrast to that of an objective fact, depends on the values held by the individuals in it.

As I write, there is a "problematic" "unsettled" situation about getting enough electric power in the state of California. But some people think that most of the problem is not enough power, some think that most of it is unnecessary use of power, and some think it is collusion and market manipulation by suppliers. These are three ways that this problematic situation can be construed, contrastingly defined by diverging values. Similarly, there is a problem with the fit between hyperactive

children and their environments. Depending on the values held by families affected, the problem could be with the children or with the available environments. Likewise, some people have a problem with fuzzy images on their televisions, others have a problem with television as a whole. And a rattle in the dashboard is a problem for me but not for some of my passengers. Whose problem and what problem it is depends here on values and sensitivities.

"Problems" do not exist even initially apart from the incoming values. I am not saying that these values are never consistent from person to person and culture to culture. Aches and pains in old age are a problem for anyone, anywhere who is lucky enough to live that long. But to call a problem which exists in the interaction of an organism and an environment "objective" is misleading if taken to mean inarguable and independent of values. Values and sensitivity figure prominently in how the organism "takes" what is "given" as a problem.

f. The Boundaries of an "Unsettled" Situation are not Self-evident

All of these problems with Dewey's work on means and ends relate to the one big difficulty, deciding what is involved or should be involved in an unsettled situation. When Dewey says a situation is "perplexing" and that this quality is definitive of that situation, much remains unsaid. I am perplexed about the rattle in my dash but my passengers are not. Is this my situation? Is it "objective" for me (certainly a new take on "objective") because it involves objects, but not objective in the sense that it is present for all observers? What if I am, while pondering this rattle, negotiating a four-way stop of two lanes of traffic in every direction? Am I in one situation or two? Are we not, indeed, in multiple "situations" most of the time?

Dewey must admit that all these separately characterizable situations affect the qualitative experience of the subject involved, but he never gave any guidance about whether and to what extent each should or could be compartmentalized and dealt with on its own. It would be possible to construe all the "tertiary" qualities like the flavors in a soup, which meld into one, or it would be possible to think of them like pieces of fruit on a plate, which we sample one after another. This makes a difference for means/ends reasoning. Being "single minded" depends on being able to identify and bound the situation needing resolution. The lack of criteria for deciding what is relevant to what, and what should be considered when undertaking action, is the glaring deficiency of Dewey's work.

Dewey seems to have thought that his conception of means and ends reasoning would settle a lot of arguments. In my view this is not the case. Instead, the real success of his discussion is to show what we need to argue about and why our differences matter. Our means/ends deliberations will be more focused and profitable when first they are recognized as necessary, not avoidable, and second, when they attend to the aspects of means/ends endeavor which he so carefully identified. Put another way, we cannot avoid informal reasoning so we had better appreciate and nurture it. Some suggestions for how to do that will come at the end of Chapter V and in Chapter VI.

CONCLUSION

There are substantial elements of uncertainty in medical caregiving. When these are present, Dewey's insights about "informal" means/ends reasoning can help us negotiate among mutually disparate and even contradicting values which are permeable to change and dynamically evolving. Billiard-ball models of efficient causation fail to do justice to the varieties and levels of causal influences which might potentially matter for a caregiving endeavor. Patients and their caregivers, being organisms situated in shifting environments, are done more justice by seeing their interactions using causal models like Causation is Cultivation, Causation is Nurturance, or Causation is Progeneration.⁴⁰

If an illness and its treatment is seen as a metaphorical journey, it is a meandering one with preliminary, modifiable, and even unanticipated goals. Indeed, the journey story of an illness contains many characters in development, with meaning and significance gathered together throughout as the narrative progresses, not located only at the end. The story creates value and does not merely instantiate pre-existing value, as Dewey pointed out.

Regarding disease models, we can readily see how mechanical breakdown, abnormality, disintegration, disorder, imbalance, loss of vital fluid or being under attack all could be characterizations of "unsettled" or "unsatisfactory" situations as Dewey described them. But those medical problems which lend themselves best to description as mechanical breakdown, and some of those described best as "being under attack," are the most straightforward and the least problematic: For example, congestive heart failure caused by a leaking aortic valve, a first streptococcal pharyngitis or a broken arm. Unless matters of valuation and motivation become conflicted, these conditions require mainly technical help. The elements needing inquiry are minimal.

In contrast, conditions which are less well defined, where patient motivations are critical, or where multiple alternative therapies could be suggested, require more in the way of reflection and judgment along the lines Dewey suggests. Here, as in the case of chronic obstructive pulmonary disease, manic depressive illness or diabetes, creative inquiry, relationship building and mutual deliberation between doctor and patient are essential. These illnesses and problems are often best described as imbalances, losses of order or losses of wholeness.

We should note in addition that the less typical or central a disease is as an example of the category of disease, the more likely that approaches to it will be controversial, non-apparent initially, and tentative. Deliberation over such cases is often full-blown and prolonged. Similarly, much weighing and discussing of strategies is needed when multiple illnesses are present, when cure is out of the question, or when the conditions fail to fit neatly into well-defined diagnostic slots. Caregivers and their patients in all these muddy circumstances would be well served if respect for Deweyan inquiry and training in the virtues which support it were prominent in the medical profession.

We now need to take a closer look at formal reasoning, considering how and when it falls short, despite being trumpeted as the solution to every problem of health care. This look occupies most of Chapter Five.

NOTES

- John Dewey, Logic: The Theory of Inquiry. Op. cit. p. 72.
- John Dewey, Experience and Education. Op. cit. pp. 32–33
- ³ John Dewey, Experience and Nature in The Later Works, Volume 1:1925. Ed. by Jo Ann Boydston, p. 6
- ⁴ John Dewey, *ibid.* pp. 140–141. Also, see John Dewey. *Logic: The Theory of Inquiry*, Chapters 2 and 3. "The Existential Matrix of Inquiry," pp. 30–65.
- ⁵ John Dewey, Experience and Education, Op. cit. p. 25
- ⁶ John Dewey, Logic: The Theory of Inquiry, Op. cit. p. 73.
- ⁷ *ibid.*, p. 74
- ⁸ *ibid.*, p. 75.
- ⁹ John Dewey, Art as Experience, Op. cit. pp. 72–73
- ¹⁰ John Dewey, *ibid.* p. 44. We are left to wonder how the qualities of nested experiences such as the quality of that rupture of friendship which occurred during *that* meal during *that* storm on *that* vacation are marked off or related. It appears that there must be some selection among the various genera of experience going on, at least whenever we try to evoke or refer to tertiary qualities in retrospect. A similar problem about the scope of the "situation" one is experiencing at a given time will be pointed out later in the chapter.
- ¹¹ John Dewey, *The Quest for Certainty*. p. 194.
- ¹² John Dewey, *Logic: The Theory of Inquiry*. Op. cit. p. 109.
- ¹³ *ibid.*, p. 3..
- ¹⁴ John Dewey, p. 109.
- ¹⁵ *ibid.*, p. 110.
- ¹⁶ *ibid.*, p. 108.
- For a detailed examination of consensus, see Moreno, Jonathan. Deciding Together: Bioethics and Moral Consensus. New York: Oxford University Press, 1999.
- John Dewey, Reconstruction in Philosophy, p. 146.
- ¹⁹ John Dewey, *Human Nature and Conduct*, p. 212.
- ²⁰ *ibid.*, p. 212.
- ²¹ John Dewey, *Democracy and Education*, pp. 173–179.
- John Dewey, Reconstruction in Philosophy. p. 196.
- ²³ J. E. Tiles. *Dewey*, p. 156
- ²⁴ John Dewey, *Human Nature and Conduct*, p. 210.
- ²⁵ *ibid.*, p. 207
- ²⁶ John Dewey, *ibid.* p. 37.
- ²⁷ John Dewey, Experience and Nature. p. 116.
- ²⁸ *ibid.*, p. 136.
- ²⁹ *ibid.*, p. 116.
- ³⁰ J. E. Tiles, *Dewey*, p. 190.
- John Dewey, Art as Experience, p. 80.
- ³² *ibid.*, p. 81.
- ³³ John Dewey, *ibid.* p. 197.
- ³⁴ John Dewey, *Reconstruction in Philosophy*, p. 122
- ³⁵ Robert J. Roth. *John Dewey and Self Realization*, p. 44.
- ³⁶ John Dewey, *Human Nature and Conduct, p. 36*
- ³⁷ See Donald Schön. The Reflective Practitioner. How Professionals Think in Action.

- ³⁸ His account is given partly in *Experience and Nature*, op cit. The issue of how meaning develops in relation to sharing situations is discussed by Scott Pratt in "'A Sailor in a Storm:' Dewey on the Meaning of Language." In *Transactions of the Charles S. Peirce Society*, Fall, 1997, Vol. XXXIII, No. 4, pp. 840-862.
- ³⁹ John Dewey, *Logic, The Theory of Inquiry,* op. cit. p. 110.
- And what, most importantly is being nurtured? The therapeutic relationship.