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WHAT IS IRRATIONAL ABOUT
KNOWLEDGE UTILIZATION

Margret Buchmann

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Abstract

The problem of knowledge utilization in professional practice is not a problem of knowledge creation, diffusion and dissemination, implementation, and evaluation, but a conceptual problem. While being grounded in common sense, the connection of knowledge and utility, which includes the notion that the value of knowledge reduces to its utility, misses many of the points of acting and thinking. In part, this paper explores the "knowledge as tool" metaphor, sometimes elucidating it with other possible metaphors. It also argues that the commonsense equation of knowledge and certainty relates to absolutist views of knowledge and authoritative advocacy in social science and policy. Elevating these two strands of common sense--connection of knowledge to utility; equation of knowledge and certainty--to a "scientific" view legitimates the quest for knowledge utilization. In consequence, closure and reductionism supplant the openness that marks, in different ways, both common sense and scientific thinking. While common sense is open because of a vital disorganization and elasticity, science is open where it stresses fallibility rather than certainty in the pursuit of knowledge. Emphasizing the utility of social science knowledge overestimates its certainty and underestimates the range of valid practical concerns.

Margret Buchmann

The higher generalities rarely receive any accurate verbal expression. They are hinted at through their special forms appropriate to the age in question. Also, the emotional accompaniments are partly due to the vague feeling of importance derived from the superior generality, and partly due to the special interest of special forms in which generalities make their appearance. (Whitehead, 1933, p. 5)

In 1835, Tocqueville (cited in Rich, 1981) observed that Americans "have all a lively faith in the perfectability of man, they judge that the diffusion of knowledge must necessarily be advantageous and the consequences of ignorance fatal." This observation remains telling, as statements of contemporary social scientists show. Bell (1980), for instance, declares that the "axial principle of the postindustrial society . . . is the centrality of theoretical knowledge, and its new role, when codified, as the director of social change" (p. 501). Tocqueville implies that he sees the American faith in knowledge and the advancement of mankind as engagingly naive. But in a recent book on knowledge utilization, Tocqueville's dry comments are cited as evidence of his belief "that the possession and diffusion of knowledge is central to the advancement of mankind" (Rich, 1981, p. 37).

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Margret Buchmann is coordinator of the Conceptual-Analytic Project and a Michigan State University assistant professor of teacher education. She gratefully acknowledges Robert E. Floden's contributions to this revision; she also wishes to thank Cleo Cherryholmes, Philip Jackson, and an anonymous reviewer for their critical comments.

This interpretive slip holds a key to the problem of knowledge utilization, attesting to the power of beliefs that people are ordinarily not conscious of.

In Paradoxes of Education in a Republic, Brann (1979) describes the roots in thought and time of the connection of knowledge and utility in the American republic. The modern notion that knowledge should be useful is associated with viewing utility as the measure of the good. In a republic, "congenitally engaged in instrumental activity" (p. 20), secular in origin and scientific in orientation, valuing knowledge for its utility led to a view of commendable action with "an emphasis on pursuing, planning, procuring, producing, and on manufacturing, declaring, demonstrating, projecting" (p. 25). One wonders just how crucial beliefs in the utility of knowledge are to the American ethos, if faith persists in view of an educational reality that Brann (1979) depicts as,

an enormous, compacted complex of cherished vestiges, trashed experiments, recovered truisms, partial reformations, occasional explosions, compromising accommodations, paths of least resistance, hopeful engraftings, institutional inertia. The educational main is a shoal of wrecked reports, of reports widely disseminated and minimally implemented. (p. 4)

The problem of knowledge utilization in educational practice is not a problem of knowledge creation, diffusion and dissemination, implementation, and evaluation, but a conceptual problem. Thus I ask, what are people who connect knowledge and utility doing? Why do they pair off knowledge with utilization? What practical or conceptual problems does the connection of knowledge and utility appear to solve? What assumptions and beliefs does it imply? To what kinds of imagination does it appeal? What other concepts denoting processes could be associated with knowledge--for instance, conversation,

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enlightenment, or critique?

While being grounded in common sense, the connection of knowledge and utility, which includes the notion that the value of knowledge reduces to its utility, misses many of the points of acting and thinking. The commonsense equation of knowledge and certainty relates to absolutist views of knowledge and authoritative advocacy in social science and policy. I argue instead that knowledge utilization erodes bases for good practice and encourages people to take knowledge as more certain and directly relevant to action than it is.

Elevating these two strands of common sense--connection of knowledge and utility; equation of knowledge and certainty--to a "scientific" view legitimates the quest for knowledge utilization. In consequence, closure and reductionism supplant the openness that marks, in different ways, both common sense and scientific thinking. While common sense is open because of a vital disorganization and elasticity, science is open where it stresses fallibility and critique rather than certainty in the pursuit of knowledge.

The concept of knowledge utilization implicitly sets policies urging the use of social science knowledge. In the following section I will consider by what means these policies are evoked and rendered persuasive. To this purpose, I will give a brief account of what metaphors do and examine irrational implications surrounding the concept of knowledge utilization. In part, I explore in this paper the "knowledge as tool" metaphor, sometimes elucidating it with other possible metaphors. I will also show how common sense equates knowledge

and certainty by its very style, while being broadminded about goals. This discussion provides background for the further development of the argument in which goal reduction and the fallacy of misplaced certainty are at issue.

If Knowledge is a Tool,
What Else Follows?

In his essay, "The Two Cultures," Snow (1964) quotes a scientist "who, when asked what books he read replied firmly and confidently: 'Books? I prefer to use my books as tools.' " Snow comments, "It was very hard not to let the mind wander--what sort of tool would a book make? Perhaps a hammer? A primitive digging instrument?" (p. 13). There is something odd about connecting knowledge and utility, which this anecdote brings out. What sort of utility might knowledge have? And why consider knowledge as a tool in the first place? To think of knowledge as a tool is to think by analogue, hence metaphorically.

Metaphors are theory-laden. In fact, it is difficult to make a distinction between metaphors and theories (Scheffler, 1960, 1979; Simon & Newell, 1956). Discourse that is metaphorically structured by expressions that are part of common parlance has an in-built persuasive force (Lakoff & Johnson, 1980; Perelman & Olbrechts-Tyteca, 1971). The analogical material is often not perceived any more; the metaphor has become dormant. Its presuppositions and entailments have been assimilated into the common stock of reason and social practices. Thus the "exploratory crossing of categories" can take on the appearance of a "report on isomorphisms" (see Scheffler, 1979, p. 129), relying to some extent on matters of fact--created under the guidance of metaphors.

The concept of knowledge utilization construes knowledge in terms of utility and draws on the metaphor of knowledge as a tool; thus, the

discourse about knowledge utilization is metaphorically structured. This is not of intellectual concern only. To use an example from Lakoff and Johnson (1980), we view and experience arguments as wars. But in a culture where an argument is seen as a dance, people who argue would have different experiences and conduct themselves in different ways. While their goal "is to perform in a balanced and aesthetically pleasing way" (p. 5), our goal is to win. The point is that people not only think and talk under the guidance of metaphors but live and act, guided by metaphors and other rhetorical evocations.

The metaphor of argument as war could prompt statements like, "You shouldn't have taken this lying down," or, "You should have tripped him up there," signifying that while aggressiveness and cunning are appropriate in argument, meekness and simplicity are not. The contentious posture of argument entails and sanctions ends and forms of conduct. Connecting knowledge and utility assumes that knowledge must be used to be of value.

The Concept of Knowledge Utilization

Social events do have causes and social institutions effects; but it just may be that the road to discovering what we assert in asserting this lies less through postulating forces and measuring them than through noting expressions and inspecting them. (Geertz, 1980, p. 178)

Utility is a measure of the good; in some ways of thinking, the measure of the good. According to the Oxford Universal Dictionary, utility is the "fact, quality, or character of being useful; fitness for a purpose; usefulness, serviceableness." More specifically, utility has to do with people's convenience or profit and is attributed to objects that satisfy their needs. To utilize means to make useful, turn to account; utilization signifies related processes or their

results.

The terms "to utilize" and "utilization" also carry positive implications of value. As "mixed" concepts (Wilson, 1963), they do more than describe possible ways of acting. They connote dispositions and actions seen as praiseworthy: not in the sense of being noble or inspired but sensible and down-to-earth. Resourcefulness, for instance, consists in making knowledge, things, the inclinations of others, or a climate of opinion work for one--turning them to account. Using one's resources is taken so readily to be a good thing because value and utility are equated.

One's tools should not lie idle: Where knowledge is valued for its instrumental qualities, the charge to use it is almost implied. Only in extreme cases is it a good thing to refrain from using knowledge, say, when using it would destroy the integrity of a friend. Although it looks like a neutral term, descriptive of what people do or might do, the concept of knowledge utilization suggests what people should be doing and what knowledge should be like.

People should use knowledge and, by implication, knowledge should be useful. People ought to put knowledge into practice and operation, hence, knowledge should be constituted so that it can be turned to account. The concept of knowledge utilization in much modern usage entails normative theories that anchor action in knowledge and its use, and knowledge in the purposes of action. The expectation is that something good will come of this, exceeding purposes of knowing or understanding.

William James (1890/1950) saw such expectations as "fringes" of words and phrases suffused by a "feeling of tendency." Relations and

ends, echoes and foretastes are dimly apprehended and evoked too readily--habitually and instantaneously--to excite attention. These "fringes" connect words with past and future in a social realm and surround them with a halo that is affectively charged. In this halo, reasons, premises, and conclusions are confounded with one another, and with the hopes and apprehensions of people.

Concepts with a neutral appearance that are affectively charged and hint at superior generalities are tricky. They can bind one unwittingly to assumptions and entailments, in this case, about knowledge, goals of action, and sources of value. There is nothing wrong with entertaining assumptions, but it is a good thing to know where one makes them and what they are. For, first of all, assumptions must be tenable or defensible. Second, there may be more than one set of tenable assumptions, with what is taken for granted only representing one possible set. Where there is no sense of alternatives, given assumptions may go unrecognized, while people live with their consequences.

The claims of colloquial reason depend on the taken-for-granted world of common sense. They refer to reality as their author and the authority that confers truth. Yet commonsense tenets surrounding the connection of knowledge and utility do not exhaust what colloquial reason has to say about knowledge and utility as concepts in their own right or in relation to action. I will consider below how common sense manages to be simpleminded about knowledge but broadminded about goals.

Common Sense: Entrenchment and Elasticity

Wittgenstein's (1958) parable about ordinary language and formal symbolic systems provides the terms in which Geertz (1975) discusses

common sense. In Wittgenstein's words,

Our language can be seen as an old city: A maze of little streets and squares of old and new houses with additions from various periods; and this surrounded by a multitude of modern sections with straight regular streets and uniform houses.⁴ (p. 8)

Poetry, ideology, epistemology, and quantum mechanics are in the suburbs of language. Common sense is situated somewhere between these suburbs and the maze of the old city where, on turning around a corner, one may find oneself in a totally unexpected place. As Geertz (1975) explains, common sense is "a relatively organized body of considered thought, rather than what anyone clothed and in his right mind knows" (p. 7). The emphasis is on "relatively organized" and "considered thought," as opposed to, on the one hand, the tight integration of formal systems and, on the other hand, the putative deliverances of direct experience. Common sense is an interpretation of collective experience; it is an historical system of thought.

But people do not see common sense in this way. They take pride in affirming that the tenets of colloquial reason "are immediate deliverances of experience, not deliberated reflections upon it" (Geertz, 1975, p. 7). That people learn about the way things are by taking experience to be the best teacher, learning the lessons of experience, and going to the school of hard knocks is, of course, a theory of learning, of the relationship of mind to reality, and of adaptation to the social world (see Buchmann & Schwille, 1983). It represents the commonsense account of learning about the real world--a theoretical account offered imperiously as the plain truth. Fallibility does not come into the picture at all. To cite Geertz (1975) again, the

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I quote Geertz's rendering, which slightly alters the standard translation by Anscombe.

tenets of common sense,

are conflated into comprising one large realm of the given and undeniable, a catalog of in-the-grain-of-nature realities so peremptory as to force themselves upon any mind sufficiently unclouded to receive them. Yet this is clearly not so. (p. 7)

At issue here is not the adequacy or inadequacy of common sense, the degree to which its tenets are worthy or unworthy of belief. Rather, it is the style and general pretensions of commonsense assertions. Common sense objectifies judgment; it takes collective and historical accomplishments in language to be the real thing. Adequate or inadequate, common sense is in a state of entrenchment.

Common sense is entrenched, but not in terra firma. Though not apparent at close range, its grounds are shifting over time. At different times and places, they can be different to begin with. In modern cultures, planning and achieving are behavioral modes of utility that circumscribe the value of knowledge. But the practicalness of common sense in tribal cultures, for instance, gives a place to knowledge that can be shared and enjoyed.

Understanding Things is Practical

Anthropologists have been puzzled by the taxonomic achievements of "primitives." American Indians know a lot about reptiles that they do not use for purposes of cooking, nor for show and display. Pueblans have an elaborate taxonomy of coniferous trees of no discernible use to them, and Pygmies can distinguish the leaf-eating habits of many species of bats. Reviewing this body of work, Geertz (1975) concludes that,

In an environment populated with conifers, or snakes, or leaf-eating bats it is practical to know a good deal about conifers, snakes, or leaf-eating bats, whether or not what one knows is in any strict sense materially useful, because it is of such knowledge that "practicalness" is there composed. (pp. 19-20)

These so-called primitives are not driven by theoretical or material interests. They explore the world around them to make it intelligible. Variations of life and form in nature give people a sense of wonder that feeds on the capacity to name and order things. One never knows; such knowledge may come in handy. Meanwhile, it is a source of pleasure to the individual and part of the traditional lore that gets passed on to the next generation and changes slowly over time.

Common sense is a system of deliberated thought that grows out of the variety of ends people conceive. It accommodates ideal as well as material interests, and many other things besides. The capacity for containing qualifications and even contradictory principles within its compass is a further sign of its broadmindedness. This comes out clearly in comparing the utilitarian fascination with planning and achieving to an everyday phenomenon that Leites (1969) terms "the horror of completion."

Having Second Thoughts is Reasonable

Grown-ups oppose a tendency of children not to bring their undertakings to a conclusion. This opposition gives rise to repetitive commands and complaints tedious to both sides. The "rule of completion" applies to work and play alike; its burden is "determination," a fixed or settled purpose and the process of arriving at resolute intentions. But everyone knows that there is many a slip between the cup and the lip. And when plans work out as planned, or someone follows through on something, people are often surprised and somewhat awed. One has more sympathy for the waverer, the one who flinches, than for the person who follows through on things to the bitter end.

Leites (1969) describes the relation in which the impulse for

action stands to its consummation or cancellation by the following interior monologue:

Even though I am not sure of not wishing to complete an undertaking, I may feel that it is impossible for me to predict just how far I may wish to go before I actually undertake it. It may be only during the actual course of the enterprise that it will become clear to me whether I intend to complete it or ensure that it miscarries. (p. 144)

In the system of common sense, the rule of completion and the horror of completion exist in comfortable vicinity. They are loosely connected by the understanding that intentions may bind one to ends that turn out to be ill-conceived and that reasonable decisions often involve undoing.⁵ These insights do not conflict with the rule of completion but balance it, because plans of moment ought not to be abandoned capriciously or lightly.

Similarly, the word "exploitation" and its connotations delimit and balance what is suggested by the terms "utility" and "utilization." "To exploit" is defined as "to achieve," "to turn to account," but also, "to utilize for selfish purposes." The concept of exploitation presupposes an idea of conduct not dominated by self-regard or utility; and calling conduct "selfish" means to disapprove of it. The single-minded pursuit of utility is bound to miss important points of individual and social action.

Purposes that govern thought and action to the exclusion of other concerns tend to be unwise in conception and harmful in their

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In a recent book on processes of creating, Perkins (1981) stresses the importance of undoing: "Such acts . . . open up possibilities again, after we thought things were suitably narrowed down. At first thought, this seems only a regrettable consequence of human error, but not so. Often there simply is no reasonable way to detect difficulties other than by working through a situation until they appear" (p. 281).

execution. Given the great many errors people are likely to make, unwavering intentions and beliefs are not adaptive. To have common sense means to be of more than one mind about things: about doing and undoing, exploring and exploiting the world, using knowledge or acting on principles and faith.

More than Knowledge and Utility

Common sense tends to avoid the assumption that knowledge must be used to be of value (and hence related problems) by a generalized process of introducing multiple purposes and considering a wide variety of ends. Thus Tribe (1971) concludes in examining the value of mathematical methods for the conduct of trials--that even if mathematical techniques had utility by increasing the accuracy of trial outcomes--a change of legal procedures resulting in a "trial by mathematics" would diminish the range of ideals enacted in the practice of law. In social action, outcomes are not the only thing that matters and the use of knowledge is no good in itself:

Procedure can serve a vital role as conventionalized communication among a trial's participants, and as something like a reminder to the community of the principles it holds important. The presumption of innocence, the rights to counsel . . . the privilege against self-incrimination . . . matter not only as devices for achieving or avoiding certain kinds of trial outcomes, but also as affirmations of respect for the accused as a human being--affirmations that remind them and the public about the sort of society we want to become and, indeed, about the sort of society we

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Honoré de Balzac's work is a study of the havoc wrought by monomania of several kinds: love, avarice, ambition. Where, for example, in Old Goriot the blind love of a father for his daughters brings endless harm to him and others, Balzac analyzes in Eugénie Grandet a man's desire for gold to the exclusion of all other concerns, including those fathers are expected to have for their daughters. The harm brought on by monomania is not simply a measure of inutility. Regardless of the extent to which individual needs and interests might have been satisfied, monomania implies warped and limited perceptions, harmful in themselves for the balance of mind.

are. (Tribe, 1971, pp. 1391-1392)

The process of law is inspired by ends that we know cannot be achieved; fairness and equality of respect, for instance, are ideals unlikely to be realized in full. They guide the conduct of participants to varying degrees. The maximization of outcome accuracy that a trial by mathematics may advance cannot provide occasions for enacting these ideals in the community. Trials are not simply means to given ends; they affirm social ends, and changes in the trial process change the specification of these ends.

In general, when people live and think the scope of their concerns encompasses more than knowledge and utility. Reducing the scope of concerns inherent to common sense while focusing on knowledge and utility is misleading. It assimilates the use of knowledge to virtue, defining commendable social and personal action as exercises in knowledge use in the pursuit of utility only. This rules out as irrational noble action driven by conviction rather than evidence and ignores the possibility that people may act rightly inspired by ideals.

Utilitarian interpretations of the practical are thus unduly limited. A more compelling view is that practical wisdom means bringing to bear on a situation the largest number of pertinent concerns. Such concerns are a matter of facts and ideas, norms and commitments, habit and reflection. What we regard as known, then, enters into good practice along with other things as only one set of items to be considered.

People ask themselves, "What shall I do?" in response to some concrete, particular situation that will make circumstantial demands on their practical and moral perception. All pertinent concerns will not

be readily apparent, nor will their order be necessarily hierarchical or fixed. Neither can we expect that pertinent concerns will fit together easily or without conflict; more likely, they will compete.

Particular situations prompt people to re-order their concerns, keeping alive their sense of the many different points of acting and thinking (Wiggins, 1978).

Truth is not virtue. Sometimes it is admirable to forge ahead, in spite of the evidence. Truth claims may have to be subordinated to other concerns and considerations of utility put aside. Consider the example of a warrior. Courage, not foolhardiness, requires that the evil intent of an adversary, the likelihood of being wounded, and past experience of pain shall count for nothing (see McDowell, 1978). It is impossible to give an account of what is, in part, a deliberate failure to reckon with facts as rational without reference to virtue, here the virtue of courage. Teaching also requires at times that what is known for a fact shall count for nothing.

In Teaching Faith May Override Facts

The activities of teaching are predicated on a belief that a change for the better can be effected in some way through what a teacher does. An equivalent to the Hippocratic Oath for teachers is a commitment to teaching, whatever the prognosis. It is logically (and perhaps psychologically) impossible to take on this obligation without some belief that students can learn. Faith in the possibility of student learning needs to be upheld whatever test scores, talk in the teachers' lounge, or the opinions of parents may imply to the contrary.

Here it is instructive to touch on a particular case, that of Ms. Allen, one of the teachers studied by Carew and Lightfoot (1979).

In the eyes of this teacher, "None of the children in her class were intellectually deficient" (p.239)--despite test scores or the results of psychological assessments. Where test information interfered with Ms. Allen's belief in the capacity of all children to learn, she would ignore it, on occasion spill coffee over it. Part of the point is that Ms. Allen was a very effective teacher by objective measures; her students, for instance, all tended to become good readers.

Though honoring facts does support good practice, it can stand in the way of honoring commitments. Of course, honoring commitments can create new facts, such as learning in students taught not to expect it. Typically, teachers are encouraged by the school system, test producers, and the media to treat test scores as facts about children. Ms. Allen probably felt that there is something wrong with that. Test scores are imperfect indicators of present and future performance and the formal knowledge on which they are based is uncertain. If tests were perfect however, Ms. Allen would seem foolhardy, not virtuous, to ignore them. Still, it does not follow that knowledge should always be reckoned with. The use of knowledge can conflict with maintaining a belief in children's capacity to learn or affirming the ideal interests of a community.

Common sense is properly practical, hence broadminded about goals: its case for using knowledge is complicated and elastic. In social science and policy, the connection of knowledge and utility is less casual and the commonsense tendency to temper monomania is less present. But if good practice is not furthered by reducing its scope of concerns, neither is it advanced by the commonsense equation of knowledge and certainty. I will argue in what follows that both common

sense and social science may be too convinced of the certainty of knowledge--a conviction that draws strength from connecting knowledge with utility.

Equating Knowledge and Certainty

Common sense may be taken as a starting point of inquiry, but it does not follow that it is equally sound on all questions. One would predict that common sense will not excel at reflection on the grounds of belief and the adequacy of knowledge claims. As explained earlier, its very style implicitly endorses a theory of knowledge and mind that makes critical probing seem pointless. For, in the words of Popper (1975),

If you or I wish to know something . . . we have to open our eyes to look around. And we have to raise our ears and listen to noises, and especially those made by other people. (p. 60)

What comes to mind through the senses is viewed as objectively true: assumed to be directly apprehended and in no way interfered with.

The commonsense theory of knowledge turns on the notion of immediate experience. But natural scientists regard even sense organs as impregnated with anticipatory theories. And in the philosophy of science, there are rival perspectives to the empiricism of the commonsense theory of knowledge. For example, the work of Popper, Lakatos, and Feyerabend stresses the indirect, tentative character of knowledge and challenges the notion of a simple sensory foundation. These philosophers argue that there is little people can be certain of and call for openness to new data, ideas, and systematic criticism.

When social scientists succumb to the fallacy of misplaced certainty, they draw on the commonsense theory of knowledge. Yet while the certitude of common sense is provokingly simple, science has

an element of self-conscious certainty. Objectivity, abstract generality, and disinterestedness are invoked and strengthen scientific credibility. Tending to overestimate the certainty of their conclusions, scientists may lead others into the same error through the rhetoric they use in presenting their findings (Gusfield, 1976; 1981). Thus according to Frankel (1973),

Considerable damage . . . has been done by scientists, among whom social scientists are perhaps the most notable, who exaggerate the amount of sound and applicable knowledge they have and who offer confident solutions to social problems--solutions that, when tried, turn out to be only a mixture of pious hopes and insular moral judgments. (p. 391; see also Campbell, 1975).

When scientists speak as if their metaphorical and parochial language is the language of reality, they borrow an authority from common sense best returned to it forthwith. Ironically, this authority gets turned against common sense in its flexible understanding of the well springs of action and of knowledge itself.

Eroding the Concept of Knowledge

Equating knowledge with claims certified by science relegates to the irrational most everything by which people determine and decide problems of life: values (duty and enjoyment), ends, and commitments. Nothing has changed in this regard since Locke (1690/1959) asked,

Who almost is there that hath the leisure, patience, and means to collect all the proofs concerning most of the opinions he has, so as safely to conclude that he hath a clear and full view; and that there is no more to be alleged for his better information! And yet we are forced to determine ourselves on one side or the other. The conduct of our lives, and the management of our great concerns, will not bear delay: for those depend, for the most part, on the determination of our judgment in points wherein we are not capable of certain and demonstrative knowledge. (p. 371)

Given this equation, what will drop out of consideration is almost all knowledge that ordinary people possess. As Weizenbaum (1980) argues,

People know a great many things that are neither products of research nor materials in textbooks and archives, for example. They know what pleases people they see everyday and what offends them. They know their way about their cities and what detours to take when the usual paths are blocked. (p. 55)

The obverse fallacy is to take anything as knowledge on which someone is willing to act, although this relativistic point of view also has its proponents. In their well-known work on knowledge use and social problem solving, Lindblom and Cohen (1979), for instance, assert that, "Whether it is true or false, knowledge is knowledge to anyone who takes it as a basis for some commitment or action" (p. 12), and make clear that those who take it as a basis for action will call it knowledge even if it is false. Though it is possible to entertain beliefs that are false, one cannot claim to know something if it is false. Also, epistemological difficulties by no means imply that all constructions of reality are true or all points of view of equal merit. Not all views of teaching are sound or capable of sustaining good practice.

Making a distinction between knowledge and certainty shifts the grounds for claiming to know something away from privileged access to knowledge--personal, practical, or scientific--to processes by which beliefs can be communicated and revised. This distinction broadens the scope of valid practical concerns and allows for a more critical and differentiated understanding of knowledge. Thus the different ways of being open that characterize common sense and scientific thinking could be made to work together, increasing the amount of available wisdom. But reaping the best from both worlds requires distancing oneself from colloquial and scientific versions of certainty.

Getting It Wrong
Both Ways

Intellectual intuition and imagination are most important, but they are not reliable: they may show us things very clearly, and yet they may mislead us. They are indispensable as the main sources of our theories: but most of our theories are false anyway. (Popper, 1965, p. 28)

All our forms of speech are taken from ordinary . . . language and cannot be used in epistemology or phenomenology without casting a distorting light on their objects. (Wittgenstein, 1975, p. 88)

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Common sense is sometimes knowledge when science is silent. Yet it seems that social science speaks with authority where it should lean on common sense and leans on common sense where caution would be indicated. There is an odd symmetry in this, and a two-fold potential for error. For, if social science is to make good its claim as a social science, it can ill afford to cut itself off from common sense as a reliable, though not infallible, guide to the many points of acting and thinking. The commonsense theory of knowledge, on the other hand, "may be said to form the weakest part of common sense" (Popper, 1975, p. 104). Thus if social science is to make good its claim as social science, it can ill afford to rely on the commonsense theory of knowledge, either explicitly or implicitly in the rhetoric of conclusions and implications.

The place of knowledge in the scientific ethos suggests why the idea of knowledge utilization is compelling to scientists. People whose lives are tied up with knowledge will feel that knowledge is important; if they live in a culture in which utility seems the end toward which everything gravitates, they will tend to present their knowledge as useful, regardless of the degree to which it actually is. In other words, where value and utility are equated, scientific knowledge will be

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This point and its formulation were suggested by Robert E. Floden.

cast as useful.

This is not to say that empirical or logical knowledge cannot be useful. But equating value and utility makes the definition of the useful seem unproblematic. Yet useful knowledge could be seen as helpful, and helpful, in turn, as correcting, broadening, or sharpening one's perspective, calling into question personal and commonsense beliefs, and deepening or refining one's sense of practical ends. In all of this knowledge can be helpful, though hardly as a tool for unearthing or fashioning particular lines of action. Arguments about whether knowledge is useful, however, center typically on whether it supplies effective means to assumed ends, rather than around the best specification of practical ends (adequate, for instance, to both facts and ideals), or their proper mix where they are competing.

Equating value and utility draws on commonsense, but does not exhaust colloquial understandings about the well springs of action and the value of knowledge. Equating knowledge and certainty is consistent with common sense, but disregards scientific criticism. These misleading equations can be clarified and challenged by recourse to common sense and the philosophy or history of science. But the overarching connection of knowledge and utility with its emotional accompaniments supports empirical conditions that reinforce both equations, masking their problematic effects.

Empirical Conditions and Confusions

The concept of knowledge utilization downplays the fallibility of knowledge. Who would take or offer knowledge as "ready for use" that comes labeled as, "Our best attempt, provisional and limited; deteriorates fast, please treat with caution?" It is almost impossible

to give advice while scrupulously stressing that it is offered on slight grounds. But once you are asked for an opinion,

It is always chilling . . . to say that you have no opinion to give. And if you deliver an opinion at all, it is mere stupidity not to do it with an air of conviction and well-founded knowledge. You make it your own in uttering it, and naturally get fond of it.
(Eliot, 1860/1960 p. 23)

Nisbett and Ross (1980) warn scientists--especially in their role as social advocates--as well as laypersons against committing the fallacy of misplaced certainty. People need to recognize that their interpretations of events are inferences based on theory, rather than simple read-outs of data, and that the same data can easily support different interpretations when viewed from the vantage point of other theories. But social expectations and the pursuit of utility can undercut epistemological wariness and tempt researchers to say more than they know--with the style and general pretensions of common sense but without its substance and elasticity.

The knowledge utilization market, however, is an unlikely place for appraising the grounds of knowledge claims. Once concepts and practices have come into circulation, they may persist whether they are worthy of adherence or not. The quest for application under the banner of knowledge utilization thus can turn innocuous theorizing into lasting folly. And it creates empirical conditions in which the languages of inquiry and of authority are confounded with each other. This confusion cements the social hierarchy of knowledge claims while working against reiterated testing of the justification of knowledge and appropriateness of policies. It draws on the faith in knowledge prevalent in the American culture and masks the inappropriateness and inefficacy of policies:

Each form of language [language of authority, language of inquiry] performs a distinctive function that an analyst can recognize. But their empirical confusion serves an even more crucial political

function. It clouds perception of which policies can be efficacious in achieving desired objectives; for premises, reasons, conclusions, and the affect engendered by widespread fears and hopes are confounded with each other. In this confusion lies a large part of the explanation for a frequent political phenomenon . . . the continuation indefinitely of public support for policies that do not produce the benefits they promise and that are sometimes counterproductive. (Edelman, pp. 21-22)

Many people look upon the distinction between theory and practice as invidious; it is almost bad form to uphold it. However, practitioners may be good at what they are doing, and their success can derive from faith, prescription, habit, or imitation. Further improvement of practice that does not derive from knowledge or theory is improvement nevertheless. On the other hand, it is not clear that people who are good at theorizing or at fashioning ways of knowing are likewise good at specifying practical ends. In fact, this belief can be challenged as a fantasy, an expression of thinking that does not obey the reality principle. A protagonist in Powell's (1955) book, A Question of Upbringing, reflects on this propensity as follows:

Indeed the illusion that anyone can escape from the marks of his vocation is an aspect of romanticism common to every profession; those occupied with the world of action claiming their true interests to lie in the pleasure of imagination or reflection, while persons principally concerned with reflective or imaginative pursuits are forever asserting their inalienable right to participation in an active sphere. (p. 38)

The tentativeness of knowledge is a safety catch that a pretension to usefulness tends to remove. The problematic concept of knowledge utilization defeats not only the purposes of knowing, but the purposes of action as well, for it overestimates the certainty of knowledge and underestimates the range of valid practical concerns.

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