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Abstract

John Dewey's vision of communication posits an important ideal that educational researchers are hard pressed to meet, for the language that facilitates exchanges between scholars often encumbers their attempts to convey their work and findings to a wider, lay audience. The canons of *inquiry* (of foremost concern to researchers) rarely coincide with the exigencies of *policy* (of foremost concern to laypeople). Three potentially incompatible conditions must be met in order to bridge this communicative gap: access, belief, and impact. The condition of access requires that the language and style researchers use to present the findings of their investigations be comprehensible and appealing. The condition of belief demands that researchers gain and maintain credibility in the eyes of their audience. The condition of impact emphasizes the inherent tensions between the perennial tentativeness of knowledge and the immediate need for certainty in action. Israel Scheffler's notion of a "double consciousness," consistent with the author's notion of "second thoughts," is proposed as an aid in enabling resolute commitment while holding action and decision open to revision in light of new insights and wider knowledge.

LEARNING AND ACTION IN RESEARCH REPORTING[1]

Margret Buchmann[2]

The world is there to think about; and if we have lived, or are living, with any sort of energy, we *must* have thought about it, and about ourselves in relation to it—thought "furiously" often. And it is out of the many "thinkings" of many folk, strong or weak, dull or far-ranging, that thought itself grows. (Humphry Ward, 1918, p. 2)

It might be well for all of us to remember that, while differing widely in the various little bits we know, in our infinite ignorance we are all equal. (Popper, 1962, p. 57)

Communication and Learning

In his expansive, many-layered vision, John Dewey brings together communication, experience, art, and learning. Nor are social relations and change left out of the picture. Dewey sees communication as appreciation of meaning and collective growth:

To be a recipient of a communication is to have an enlarged and changed experience. One shares in what another has thought and felt and in so far, meagerly or amply, has his own attitude modified. Nor is the one who communicates left unaffected. Try the experiment of communicating, with fullness and accuracy, some experience to another, especially if it be somewhat complicated, and you will find your own attitude toward your experience changing; otherwise you resort to expletives and ejaculations. The experience has to be formulated in order to be communicated. To formulate requires getting outside of it, seeing it as another would see it, considering what points of contact it has with the life of another so that it may be got into such form that he can appreciate its meaning. Except in dealing with commonplaces and catch phrases one has to assimilate, imaginatively, something of another's experience in order to tell him intelligently of one's own experience. All communication is like art. (Dewey, 1916/1944, pp. 5-6)

The recipient of a communication is best not conceived as a vessel waiting to be filled by an overflowing fountain of knowledge. Instead, she or he should be seen as a fellow

traveller in a world provisionally charted with understandings that are themselves affected by coming into contact with one another.

No Pure and Simple Knowledge

When experts get together, communication may be less of an enterprise. This is not to say that the shared understandings allowing smooth communicative sailing are undistorted. Things as we know them are embodied concretely in representations:

> Let us make this more vivid by considering a mosaic mural made from stone fragments and picturing a street scene as an example of embodied knowledge of the street, buildings, and persons depicted. The size of the stones, the thickness and color of the cement, the range of natural colors available, the restriction to a two-dimensional surface, the required rigidity—all these factors contribute to the substantialized belief or knowledge that is carried; all become a part of the picture, reducing its validity from some ideal of perfection. (Campbell, 1979, pp. 183-184)

Being used to one way of depicting reality makes one insensitive to its limitations and to *vehicular* distortions deriving from the nature of materials, form, and style. By way of contrast, imagine a street scene sketched in watercolors on softly absorbent paper. To the well-accustomed eye, the fragmentation of the mosaic and the cloudiness of the watercolor disappear from view.

Given a thorough induction into modes of representation and ways of knowing, expletives and ejaculations can—under ordinary circumstances—take the place of searching formulations. This holds for radiologists examining a chest X ray or psychologists looking at a dissertation proposal. The demands of communication change when a postulant to the research community has to be told why her proposal is wanting or a patient viewing an X ray has to grasp the fact that he is doomed. Beyond understanding, the question in such cases is, "What is to be done?" To answer this question, our knowledge of the world carried by different communities and knowledge representations does not suffice. Moreover, facts as we know them are consistent with multiple lines of action fashioning futures that are inconsistent with one another: a radical operation, quietly turning inward, or starting to do all the things for which there never seemed to be time; revising one's dissertation proposal, changing one's advisors, or giving up on academia. Action and policy require commitment to ideas about what we want, which is, precisely, not the case.

The task of educational researchers communicating what they have learned to people not in their business resembles these latter cases, including the urgent question of what actions should be taken. Imaginative assimilations of different vantage points and styles of representing knowledge must replace the gestures, symbols, and allusions born of largely

submerged conventions and beliefs. When insiders try to look at familiar pictures from the outside "in," they may come to notice forgotten limitations and enchanting odd details; outsiders bring to bear their inconvenient questions, looking puzzled. Thus the commonplace becomes stripped of its protective grey, and implicit faith becomes vulnerable. Seeing the familiar with fresh wonder brings an end to smooth sailing, but this loss is balanced by gains in learning all around.

Curtailed Communication and Privileged Knowledge

Encounters between experts and nonspecialists may, however, foster the invidious parsimony of catch phrases and magisterial opinions, abridged beyond recognition and disconnected from lived understandings—on the comfortable, if not complacent, assumption that the burden of paying attention rests on one side. Social status here rubs off on knowledge claims and formulations are reduced to formulas, acquiring the nature of flat prescriptions or of rules followed with acquiescence rather than intelligence. In curtailed communication, not all participants are treated as a potential source of good ideas or likely errors. Regardless of worth, privileged knowledge claims remain sheltered. What is sacrificed by diminishing depth and extent, scope of participation, and relative privilege in communication is therefore not only accuracy and completeness, but intellectual gregariousness, breadth of mind, and the vital opportunity for learning to think differently about something.

Communication cut off from learning all around may be more typical than Dewey's ideal communication as the liberal art of bringing together different kinds of knowledge and people—an art that pounds and dissolves the metal of knowledge and creates new amalgams. Of course, the preponderance of curtailed communication does not take away one bit from the power of the more encompassing, lively vision as a means for renewing people's lease on learning. Nor does the failure of reality to measure up to the ideal detract from its intrinsic *rightness*, or connection to what is good, just, and pleasing in human character and conduct. Conditions of wisdom, liberality, and amiable integrity converge, in short, in Dewey's view of communication. I will use this hopeful vision as a point of departure for examining knowledge, action, and collective learning in communicating educational research, particularly in writing.

My discussion of research communication is situated in the large and hazy, much-traversed domain of "theory and practice" in education. It visits the domain's characteristic landmarks in a course informed by ancient concerns for the arts of rhetoric, joined to modern—fallibilist and conjectural—understandings of knowledge. My analysis of multiplying dilemmas in research reporting is meant to clarify what we are up against and what that requires—not to suggest that trying to go beyond the curtailed communication implicit in many attempts at dissemination is impossible. I propose to outflank dilemmas

of research communication, with decision, in a Deweyian spirit of exploration, with knowledge conceived as a moving target in the zone of thought *and* action, and learning considered more important than what we take as known.

How Can We Learn From Educational Research?

It is not sensible to deny the value of researchers' ability to give meaning to their data or to formulate "results." For there can be little doubt that research findings can best be interpreted by persons who sufficiently master a body of work to be a good judge of what can fairly be made of it, or of how insights from different lines of inquiry may or may not be consistent with one another. This is not the same as acting as if everything can safely be left to the authority of science. Conversely, one must wonder about the notion that practitioners should simply draw their own conclusions from research. In thus "passing the buck," we may run into the walls of tradition or idiosyncrasy—that is, we may run into those defensive, enclosing structures that science, for all its limitations, is rather good at opening up. Floden and Klinzing (1990) make clear why substituting one authoritative mystique for another—personal experience for "research"—is not likely to result in reasoned judgments:

> If the validity of research results is supported only by the general authority of research, discussion is closed off. The apparently preferable character of discussions based on personal experience is undercut, however, by the undesirable criteria likely to be used for resolving such discussions. In an exchange of personal experiences, the one that carries the day will be determined by some combination of persuasive rhetoric and authority. The decision is no more likely to be based on sound reasoning than that based on an invocation of the mystique of research. (p. 19)

When one has some reason to be sure, one can make claims that others have some right to trust. The question is, when are one's judgments good enough to go on?

Reasonable Conclusions and Open-Mindedness

In theory and practice, a measure of sound conclusions is reasonableness. What is reasonable is no mere extension of external data or personal experience. "Reasonableness" involves a host of concerns and associated goods, as can be demonstrated by sampling from the terms that may be used to describe a reasonable conclusion, or its reverse—an unreasonable one: "'rash,' 'well-considered,' 'impulsive,' 'far-sighted,' 'intelligent,' 'sensible,' 'foolish,' 'prudent,' 'wise,' 'dangerous,' 'futile,' 'successful,' 'pointless,' 'inconsiderate,' 'clumsy,' 'clever,' 'imaginative,' 'willful,' 'irresponsible,' 'wicked,' 'vicious,' 'irrational,' and many many more" (Black, 1972, p. 197). "Reasonableness" is hence associated with circumspection, due caution and concern for others, skill and know-how, vision, rationality, effectiveness,

responsibility, the exercise of will, common sense and good feeling, and the avoidance of harm and evil.

Though they may seem reasonable enough at the time, one's conclusions often turn out to be wrong or ill-advised; thus, they are not indubitable. Also, available evidence usually allows for more than one reasonable interpretation; thus, most conclusions will have competitors. While "in its honorable sense, knowledge is distinguished from opinion, guesswork, speculation, and mere tradition" (Dewey, 1916/1944, p. 188), scientific reasoning accordingly does *not* move, sternly, by unfailing processes of inference from unassailable premises to conclusions that are univocal and indefeasible. Still, researchers are able to determine things worth believing, seriously discussing, or doing by moving from adequately secure premises, with not necessarily unfailing processes of reasoning, to conclusions judged warranted at that time. It is useful to recall that all knowledge is *human*, as Fisher and his colleagues stress in their final report on the well-known Beginning Teacher Evaluation Study (Fisher et al., 1978):

> No knowledge is ever absolute. Even experimental analyses are generally open to more than one reasonable interpretation, particularly when one wishes to generalize to natural situations and events. Correlative data combined with experiential knowledge and logical reasoning often provide considerable evidence for causal relationships. One should recognize the limitations of such evidence, but not disregard it. (p. 4-36)

The fact that will bring revelation will never arrive; the world will not tell us what we are experiencing. But falling short of certainty does not justify obsessive hedging and rhetorical contortions, as in, "It may not be improbable in view of these exploratory analyses that. . . ." Researchers have to give names to their findings, thus committing themselves to their best conjectures, like all people "thinking furiously" do in trying to make sense of experience and to escape the blind alleys of circumstance. Nor does the absence of irrefutable conclusions entail mindless relativism.

Consider competing perspectives in the arts and sciences. Some critics interpret poems in relation to the artist's biography, others approach them as expressions of the voice of poetry in the conversation of mankind. Some biologists look at an organism as many pairs of fixed and determinate cause-effect connections, but others picture its unity as a vastly complicated "feedback" mechanism. Dewey (1916/1944) reminds us that possibilities for making meaning, though not arbitrary, are endless: "It all depends upon the context of perceived connections in which [something] is placed; the reach of imagination in realizing connections is inexhaustible" (p. 208). In education, competing perspectives cast higher learning as a useful tool in making money, as a dusty—racist and sexist—answer to perennial questions of power and entitlement, or as a civilizing treasure of pure and lasting beauty.

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Again, this variety is not a matter of personal taste and preference; instead, "it reminds us only that different occasions and topics, subjects and contexts, may give us *good reasons* for adopting one standpoint rather than another" (Toulmin, 1982, p. 104). The coexistence of reasonable perspectives inside and outside of scholarly communities provides grounds (i.e., justification) and substance (i.e., subject matter as conceptual, evidential, and argumentative supplies) for *open-mindedness* as an intellectual and moral disposition.

Open-mindedness is a moral disposition in that it is often easier to live and think by well-worn beliefs that are comfortable and close to oneself—in one's social group, profession, or scientific community. As indicated, this disposition is compatible with judging that, in given circumstances, some things are worth believing and testing, and more so than others. Open-mindedness is not "empty-mindedness" or, as Dewey (1916/1944) pointedly explains: "To hang out a sign saying 'Come right in; there is no one at home' is not the equivalent of hospitality" (pp. 175-176). One should not make room for just any belief that happens to come along.

While the tentative nature of knowledge and the inexhaustibility of experience give one many reasons for being open-minded, this stance is not easy to practice. It is perhaps hardest to assume when educational researchers turn from their specialized scientific role to their social role, in which they join the ranks of other people trying to improve the world (see Scheffler, 1984).

Open-Mindedness and Opinions

People rarely take the world as they find it. When Einstein developed the theory of relativity, however, he was not just fond of his opinions; although, when he spoke about politics, he probably was. The trouble with opinions is their entrenchment and crudeness: They are strongholds of ingrained belief at the same time that they are usually not thought through or worked out in detail. As Ben Jonson put it in 1641: "Opinion is a light, vain, crude, and imperfect thing, settled in the imagination but never arriving at the understanding, there to obtain the tincture of reason" (1641/1953, p. 63).

Personal opinions do not have to be self-serving to endanger reasonableness. They can be dogmatic and ill-informed, hot-headed or parochial, and that will do plenty of damage. In reading or listening to a research report, however, it is difficult to tell where the scientist proper stops and the acting, willing person begins talking: Neither the page nor the speaker suddenly turns blue or pink by way of warning. Perhaps the most vexing difficulty is that, when educational researchers speak from their opinions on matters of policy and practice, the "voice of science" seems to become more plain—intelligible and candid—acquiring a straightforwardness it otherwise lacks. This is an agreeable illusion that researchers have every reason (though few incentives) to dispel.

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Coming Out of the Values Closet?

Plainspoken opinions represent what is unscientific in researchers' minds: stipulatory assumptions about people, education, and society, which reflect common sense, group membership, or personal experience. They are spoken with the "voice of science" but without its circumscribed authority. People try to sort out this problem through a disclosure approach, which assumes—along Weberian lines—that:

1.   Any piece of research, any course of study, implies both a selection of subject matter and a selection within the subject matter—a selection of theoretical method as well as a selection of relevant facts.

2.   This selection will naturally be a function both of the interests and values of whoever is responsible for it and beyond him, to some greater or lesser extent, of the society or culture of which he is a member. One might add that a study whose subject matter was chosen entirely at random, that is, one which might be relevant to no particular interest or which was undertaken in the light of no particular value, need by the same token have no particular importance for anyone.

3.   In order to eliminate any possibility of misunderstanding or of hidden persuasiveness, the [researcher] should start by making an explicit and unreserved declaration of his own values and interests in the subject. (Montefiore, 1975, p. 20)

This approach will go some way toward assuring that the interests, biases, opinions, and personal beliefs of researchers do not remain tacit premises, with the result that their arguments unwittingly "pass from bias and opinion in the premiss to the same bias and opinion in the conclusion" (Minkus, 1980, p. 73). In ordinary life, most people know that unreserved declarations are not necessarily helpful or good. In research communication, the disclosure approach does not go far enough and cannot guard against misunderstanding and hidden manipulation. In fact, while secrecy is bad, sincerity may be a form of hypocrisy.

The Ritual of Frankness

First, it is difficult to be explicit and unreserved, not only due to the likely conflict of honesty with interests, but because people's minds are psychologically and logically chaotic in a way that poses problems for disclosure. With his customary insight, Simmel (1950) describes this chaos and what we tend to make of it:

Our actual psychological processes are governed by logic in a much slighter degree than their *expressions* make us believe. . . . There is a very great distance between any regulation by rational norms and the characteristics of these conceptions: namely, their flaring up, their zigzag motions, the chaotic

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whirling of images and ideas which objectively are entirely unrelated to one another. . . . But we are only rarely conscious of this, because the accents of our interests lie merely on the "usable" portion of our imaginative life. Usually we quickly pass over, or "overhear," its leaps, its nonrationality, its chaos, in spite of their psychological factualness, in favor of what is logical or otherwise useful, at least to some extent. (p. 311)

Excessive honesty makes people contradict themselves. If it is very difficult and bewildering to confess all, the second, more interesting question is, What could one get from a full confession of researcher values and interests?

In a provocative paper, Gouldner (1968; see also Shklar, 1984) reinforces the first point, and goes straight to the heart of the second one. The "ritual of frankness," as he calls it, is naive, since it assumes that we know the values we have. Beyond that, simple frankness conveys that one's values are good enough, which is smug, and assumes that having opened up to the knowledge of others and oneself "where one comes from" and "whose side one is on," one has done all that can reasonably be expected. Yet declaring values and interests can never clarify how *having* particular values and interests "affects the worth, the scope, the bite, and the objectivity" (Gouldner, 1968, p. 112) of a particular piece of educational research. And exposing the reasons of one's heart does not mean *probing* them. Hence simple disclosure is vapid—failing to produce any great effect on the understanding—and vacuous, too, for it does not supply a context in which values and interests, with the consequences of having them, can be appraised by comparison and contrast.

Simple frankness about researcher interests and values is a reduction of explanation and examination to sincerity. The ritual of frankness furthermore ignores the fact that not everyone's needs and interests stand on a par in the world we have made. Why else should Nobel laureates, for instance, be called upon to speak about matters of public concern, once they receive this prestigious award? (see Zuckerman, 1977). Less exalted researchers declaring their disciplinary affiliations—educational psychologists, sociologists, or anthropologists—are not just providing information that should help the audience to place and qualify their statements; by their declaration, they claim special knowledge and status. The basic, self-assertive hypocrisy in all of this is, as Shklar (1984) put it, "the pretense that the ideological needs of the few correspond to the moral and material interests of the many. It is a hypocrisy to which all politically active intellectuals . . . are especially given" (p. 66).

The issue of values and interests illustrates the difficulties of helpful (rather than manipulative or misleading) communication. For better, for worse, the wayward arts of language play a much larger role in research reporting than people like to admit.

Art is the specific. . . . The chief consideration for us is, what particular practice of Art in letters is the best for the perusal of the Book of our common wisdom; so that with clearer minds and livelier manners we may escape, as it were, into daylight and song from a land of foghorns. Shall we read it by the watchmaker's eye in luminous rings eruptive of the infinitesimal, or pointed with examples and types . . . ? (Meredith, 1879/1966, p. 2)

Research reporting is like communication of any kind in that it misses its point if it simply passes the audience by. Speaking or writing that is unappealing—awkward, tedious, or very abstract—will impede the communication of worthwhile knowledge and reasonable conclusions. It was Hume's belief, for instance, that because of the remoteness, abstractness, and practical irrelevance of some of the results of his investigations in the theory of knowledge "none of his readers would believe in them for more than an hour" (Popper, 1962, p. 43). Like Dewey, Hexter (1971) argues in his "Rhetoric of History" that more or less skillful formulations of knowledge and experience affect understandings on both sides:

Even where it is technically accurate, dull history is bad history to the extent to which it is dull. . . . Dull history blurs [the historian's] findings *for himself and for those who read his writing*. Those findings then fail to become, or rapidly cease to be part of, the "workable reserve," the readily accessible knowledge, of the writer and reader. . . . (pp. 45-46)

And clarifying what one knows for oneself and other researchers is not the same thing as explaining it to an audience who cannot recapitulate particular processes of scientific work and may not be familiar with them in a general way. Thus what is wordy, scholarly exact, or plainly boring depends not only on the rhetorical skills of researchers, but also on the prior knowledge of the audience.

In the social sciences, researchers are caught in a crossfire of norms and expectations. They have to convince fellow researchers of their soundness while also achieving some communication with the public, for people rightly think that they ought to be posted on discoveries concerning their everyday lives—the source of the researchers' data and the (often mishandled) object of attempts at improvement. The technical language of research is not the language of everyday life, however; it serves to communicate specialized meanings in arguments that can be subtle and difficult. This natural language of science is bound to be baffling and sometimes freezes, as Ziman (1968) warningly put it, into "overmighty systems of thought" (p. 118).

Researchers rarely have the training or talents for casting their arguments so that general audiences can see how, and to what extent, theoretical and practical conclusions may

be authorized and how modes of representation shape and delimit knowledge claims. To attain this educational goal, research reporting has to meet three conditions (each of them a potential hitch): those of access, belief, and impact—with *understanding* being the form of impact germane to science, itself concerned with the growth—and challenge—of knowledge. Since one must catch one's hare before one can cook it, the access condition will always have to be met. Catching one's hare can be difficult enough, yet the other conditions are even more tricky.

Issues of Style and Appeal

Meeting the communicative conditions of access, belief, and (defensible) impact involves true rhetorical dilemmas, rather than problems that "linking agents" or popularizers of research can solve. That is, the arts of communication involve multiple goods that may stand in each other's way. Stylistic choices between, for instance, spareness and evidentiary detail, lifelikeness and abstraction, easy intelligibility and an involved manner that fits the subject, each have their costs:

> In course of use a defined style becomes its own enemy. If one's writing is abstract, it will accommodate ideas, but it will fatigue the reader. If it is concrete, it will divert and relieve; but it may become cloying, and it will have difficulty in encompassing ideas. If it is spare, it will come to seem abrupt; if it practices a degree of circumlocution, it will first seem elegant but will come to seem inflated. The lucid style is suspected of oversimplifying. (Weaver, 1953, pp. 208-209)

The particular constitutions and strengths of different styles in research reporting account, in sum, for respective defects and limitations.

And the dilemmas go on. It is true that there is a relation between the vitality of what one is saying and the appeal of one's style. George Bernard Shaw (1903) put this with style, thus exemplifying his own point: "He who has nothing to assert has no style and can have none: he who has something to assert will go as far in power of style as its momentousness and his conviction will carry him" (p. xxxv). Dryness and pedantry, though leaden and benumbing to the mind, nevertheless reflect some of the proper conventions of science. If research is presented breezily, like a news item, or in the snappy fashion of an advertisement, it may appeal to the audienc . Yet what is said cannot be given the careful appraisal that depends on supplying details with cool precision. If detail and precision rule, a research report may fail to get the audience's attention or its significance may escape from view. Since "it is rhetorically much more effective to insinuate the crucial assumptions into the hearer's mind without focusing attention upon them" (Black, 1968, p. 99), keeping quiet will often promote access and impact, though not understanding.

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In general, tokens of good faith in research reporting may weaken chances for having an impact. The scientific kitchen is as messy as any. How convincing are researchers, really, when disclosing *all* their foibles, together with "the false starts, the mistakes, the unnecessary complications, the difficulties and hesitations" (Ziman, 1969, p. 319) that are part of their work? Ziman sums up the balancing acts of scientific writing as follows:

> A scientific paper is not a candid autobiography, but a cunningly contrived piece of rhetoric. It . . . must persuade the reader of the veracity of the observer, his disinterestedness, his logical infallibility, and the complete necessity of his conclusions. . . . Scientists . . . favor the passive voice, the impersonal gender, and the latinized circumlocution, because these would seem to permit, in the circumstances, a climate of opinion within which, as it were, one can express relatively positive assertions in a tentative tone. (p. 319)

Although each piece of research is best understood as a contribution to collective learning, the impersonal style tends to present scientific work as if its validity were already agreed upon. The remote tone has, on the other hand, its justification. for science downplays the emotive and performative uses of language (those uses related o passion and action) in favor of clarifying and informative uses. Research reporting tends to withdraw from the particular, intuitive, and concrete, separating things from the world that is taken for granted. This, in turn, raises problems of communication:

> Even the most highly trained of us are wearied by long continuance of abstract communication; we want the thing brought down to earth so that we can see it. . . . Thus the universe of Einstein is represented as "like" the surface of an orange; or the theory of entropy is illustrated by the figure of a desert on which Arabs are riding their camels hither and thither. (Weaver, 1953, p. 203)

Abstraction can impede communication and analogies, imagery, and concrete examples nelp people understand things, while bringing in their baggage of appealing, but partially false, associations. "If all communication entails both an assertive, descriptive level and an aesthetic, artistic level then the windowpane is never completely clear; there is always a streak of stained glass to capture our imagination and wonder" (Gusfield, 1976, p. 17). Rhetorical arts help render the incredible worthy of belief. Note, though, that style itself does not discriminate as to the truth of what seems strange. Lies, truth, and half-truths can equally be gilded with happy terms or remain incredible and inaccessible.

Issues of Credibility and Trust

For communication people need, by the first rule of rhetoric, some point of agreement from which a meeting of minds can begin. If they take their communicative task

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seriously, researchers must somehow accumulate enough belief and trust to get a hearing. Thus, although belief should ideally be earned rather than granted in research reporting, without some unearned assent at the outset, the occasion for communicating reasonable conclusions never even arises. While "the concealment of values, by tactical ambiguity or denial . . threatens moral integrity" (Rein, 1971, p. 309), pretending to an Olympian stance of neutrality may strengthen credibility.

What goes down sweetly may be nonsense But people can believe even something that is warranted, while not coming to believe it for good reasons. In any case, once there is trusting belief, there are few incentives for shaking it, to win it again in earnest. Why endanger assent to claims one considers reasonable by drawing attention to their imperfect bac' g, the place of judgment in drawing conclusions, and the different perspectives that may bear on the matter at hand? Issues of credibility in communication, in short, also involve true dilemmas that are entangled, moreover, with dilemmas of style. Researchers pay for gaining the confidence of the audience too readily (assent but little understanding); they also pay for trying to ease people slowly into conviction (diminished access or belief).

The smaller the measure of knowledge on the part of an audience, the greater its need to trust, though confidence is no more justified by greater need. And the smaller the measure of knowledge available to audience *or* speaker, the more likely it is that confidence born of interaction will be based on irrelevant grounds—an engaging personality or distinguished appearance—while to the eyes of colleagues a researcher may be a plausible fellow but a bit of a fraud. What is illogical and mildly unethical may still be interactionally necessary for 'the efficacy of spoken communication rests in the end upon the transmission of nonverbal signs of credibility" (Black, 1968, p. 96).

If researchers actually say everything that is to be said on both sides of a question or offer advice compassed about by clouds of qualifications, credence may be withheld, for people tend to believe assertions more than arguments. This is particularly true for matters of urgent concern, where at least part of oneself wants to hear

> only the voice, the simplicity, the conviction of authority: "Yes, I understand. It happens. Don't fret. Do this! Believe me! . . . " Or words to that effect—words utterly direct and transparent, words without a hint of prevarication or indirection. (Sacks, 1984, pp. 92-93)

On the other side, researchers in the social situation of giving advice will feel a pressure to deliver. This is almost impossible to do while stressing—or, indeed, believing—that what one has to offer are hypotheses held lightly:

> It is always chilling . . . to say 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, 1860/1967, p. 23)

The fact that trust will be grounded objectively only in part does not require withholding it, or always and totally doubting the reasonableness of conclusions. There has to be some mutual reliance when people who differ by knowledge, concerns, and interests come together—in reality or in postulating an audience in research writing. Actually, the need to trust characterizes not only relations among researchers and praciticners, but applies quite broadly. While "in an ideal free society each person would have perfect access to the truth . . . in science, in art, religion and justice . . . this is not practicable; each person can know directly very little of truth and must trust others for the rest" (Polanyi, 1958, p. 68). Once there is distrust, differences shade into suspicion and disregard, eroding the basis for communication and learning.

Research communication attending to these tangled dilemmas of access, belief, and impact is highly skilled and high-minded work. But usually researchers are not very self-conscious writers. Nor do these perplexities describe all the difficulties of research reporting, especially where it moves toward practical conclusions. Then, as I have pointed out earlier, the researcher in her capacity as a self-important human being full of opinions and desires comes to the fore. The compulsions and self-compulsions of science will compete with interests and feelings that urge people toward action.

Issues of Action and Certainty

The wayward arts of rhetoric are entailed in helping people understand their world, but persuasion has still more compelling affinities to acting in it. In research communication, persuasion can be seen as a two-edged sword, its scintillating edges corresponding to the different roles of social scientists as acting, willing persons (on a par with others) and as members of scientific communities (Weber, 1904/1963). Rhetorical devices and desires confound these two roles, which are associated with different language uses as well. Research reporting in education is uneasily balanced between the informative and the performative uses of language, or between imparting and revising knowledge and causing things to happen. The twofold roles and language uses also involve conflicting pressures with regard to certainty.

While researchers like to lay claim to truth, they feel cozy in the modes of eternal doubting or of the divided mind. Practice, however, cannot remain in these modes. One cannot, for example, partly accept a neighbor's offer to buy one's house or forever—probably—accept the offer. At least temporarily, action and decision eliminate open-mindedness. Yet these truths about practice and persuasion do not negate truths about knowledge. That is, the affinity of action and passion to persuasion and the determinacy of

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practice do not do away with the tentativeness and inexhaustibility of facts as we know them. Most certainly, acknowledging that action requires doing one thing rather than another is not the same as claiming that knowledge "implies" action.

The myth of implications for practice. One can understand that people want to believe what they decide to do is the right thing to do, definitely, hoping that their actions will be based on solid, as opposed to shifting and uncertain, ground. But, strictly speaking, nothing is *implied* in scientific findings beyond the questions that may be answered by the research and other *questions* to which the particular investigation is related by the intellectual and social traditions of research communities. Supposed implications for practice—as recommendations for action—are neither deducible from nor logically contained in research results. Action and decision depend instead on moral frameworks and networks of power and authority that affect the work of practitioners, as well as on legal and political knowledge, the resources at hand, and (importantly) know-how. Practical conclusions are not extensions or culminations of research methods and external data, or their highest development and imperative consummation—yet their place in research reports and mode of presentation often suggest just that (Gusfield, 1976).

When researchers cast some of their conclusions as "implications" for practice or policy, they gain persuasive force by a terminological suggestion of cogency—a form of compulsion with logical and moral elements, capable of supplying a *feeling* of certainty. While reasonable people often disagree, it seems that (logical) implications should be binding. Where one is sure of one's premises, implications appear to be no mere assertions or debatable statements, but incontrovertible and, hence, eminently trustworthy. Magisterial imposition, however, endangers learning:

> Ordinary experience is not even left as it was, narrow but vital. Rather, it loses something of its mobility. . . . It is weighed down and pushed into a corner by a load of unassimilated information. (Dewey, 1916/1944, p. 209)

Appearances do mislead, however. For one *can* be sure (i.e., convinced) of premises that are false; and one *can* take issue with logical consequences, since what is thus involved may well be false. (Falsehoods have logical consequences, some true, some false.) The label "implications" may incline one to accept a proposal for action, because what is offered under this label has the reassuring appeal of authority. The rhetoric of implications masks the moral and practical complexity of decisions and the *indeterminacy* of the logic of action (see Buchmann, 1988). Fortunately, language can detect its own snares and unravel the entanglements of claims and desires.

> In being attentive to the elements of language and choice involved in giving meanings to data, the analyst calls attention to the singularity and selective

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activity through which policy implications are drawn. In doing this, it becomes more likely that social scientists and others can create, explore and develop the potential variety of other interpretations and policies which would otherwise remain unrnoticed and unavailable. (Gusfield, 1976, p. 32)

Deliverances That Deliver

A man is relieved and gay when he has put his heart in his work and done his best; but what he has said or done otherwise shall give him no peace. It is a deliverance which does not deliver. (Emerson, 1966, p. 104)

This analysis has applied and vindicated Dewey's vision of communication as appreciation of meaning and collective growth, indicating also how social relations, arts and skills, and diversity of views and desires enter into communicating educational research. I have assumed that questions of action and policy are far from irrelevant to research reporting, although I have likewise argued that relevance must not be construed in a falsely authoritative or uniquely binding manner (see also Floden and Klinzing, 1990). In the movement "outward"—from thought to action—the indeterminacy of reasoned judgment increases and gets more complicated in the process. It remains for us to see what my analysis can yield when applied more specifically to practice.

Outflanking Dilemmas With Virtues?

The standard way of thinking about rational action is to consider possibilities and then to choose the one that seems best, acknowledging that the choice is made on imperfect information. If theoretical conclusions are uncertain and practice requires decision, a way out of this quandary may be a partial reversal of this order, that is, confident action with the habit of going back to examine the adequacy of grounds for actions taken, the ramifying consequences, and the "normative space" that action and consequences help to modify and form:

For every decision inevitably reverberates outward, spills beyond the bounds of the problem, no matter how initially conceived. It creates precedents, activates analogies with the past, helps to form, strengthen or modify a general style, a set of norms that newly influence criteria of consistency in action. (Scheffler, 1985, p. 116)

For researchers, this suggests making recommendations that have some "bite"—or that are capable, in style and substance, of taking a grip or hold upon action and imagination—with the habit of going back to reflect on their reasonableness in the light of emergent or wider understandings. To deliver responsibiy, one must be willing to decide and to learn.

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What Scheffler (1984) describes as the hard task of entertaining a "double consciousness" in policy-making becomes the task of educational researchers when they consider practical conclusions. This double consciousness, resonating with the twofold aspects of the researcher's role, associated language uses, and conflicting pressures with regard to certainty, demands

> energetic fulfillment of commitments already undertaken, while at the same time demanding a skeptical reserve vis-à-vis assumptions underlying these very commitments—a deference to accumulating evidence, a willingness to concede, if such evidence so indicates, that these assumptions may, after all, have been mistaken and the policies perhaps therefore wrong. (p. 163)

While moral and mental virtues such as honesty, directness, responsibility, and open-mindedness are, in sum, required in action, communication, and learning, we can conclude that *perfection* of knowledge, skill, and wisdom are *not*. This is a rather cheering thought, recalling, beyond Dewey, the ancient saying that a living dog is better than a dead lion.

Second Thoughts and the Company We Keep

The "double-minded," but not dithering, approach to rational action consonant with the maxim, "Resolve it first and keep wondering about it afterwards" allows, in its two parts, for the confidence necessary to act and decide. Yet it honors the requirement for "second thoughts"—which is essential because of the imperfections of knowledge and indeterminacy of practical conclusions (Buchmann, 1984). The confidence that fits with both parts of the maxim is neither overboldness nor presumption. It is an attitude of trust, arising from reliance on oneself (including what one knows and wants), circumstances, and other people. As an expectation so assured, reliance does not dampen thought. Pushed hard enough, the concept of reliance itself gives way, dissolving from an accomplished fact or condition into life and action: "To talk of reliance is a poor external way of speaking. Speak rather of that which relies because it works and is" (Emerson, 1966, p. 119).

"Wondering about things afterwards" can be informed by concerns for truth and rightness and a willingness to test, imagine, and remember; to listen to others; and to change one's mind. Thus the charge to entertain "second thoughts" carried by the second part of the maxim brings back the very open-mindedness that its first part ("Resolve it") must suspend in the act of choice, which temporarily ignores the possibility of errors and alternatives. Open-mindedness justifies confidence because it makes room for learning. There is no logical difficulty in combining resolute action and commitment under uncertainty with staying wide awake in the aftermath; still, people do tend to become fond of what they say and do. This psychological difficulty need not keep one from making assertions as long as one stays disposed to turn to *other* people whose good company makes room for "second

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thoughts." With luck, our lives will include a sufficiency of people (speakers or writers) "who were merry or wise or comforting or revealing, whose presence either heartened the spirit or kindled the mind; people who opened windows instead of shutting them" (Struther, 1940, p. 72).

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