

1

ART AND KNOWLEDGE

◆ Elliot Eisner

The idea that art can be regarded as a form of knowledge does not have a secure history in contemporary philosophical thought. The arts traditionally have been regarded as ornamental or emotional in character. Their connection to epistemological issues, at least in the modern day, has not been a strong one. Are the arts merely ornamental aspects of human production and experience or do they have a more significant role to play in enlarging human understanding?

The positivist tradition that has animated western philosophy during the first half of the 20th century viewed the arts as largely emotive rather than primarily informative. The arts are forms that you enjoyed, or felt strongly about, or savored for their delicacy. They had little to do with matters of knowledge. For knowledge of the empirical world you rely upon synthetic propositions whose truth value can be determined. And if you needed to know something about logical relationships, analytic propositions were the sources of data you would manage or manipulate (Ayer, 1952).

Part of the reason for the separation of the arts from matters epistemological pertains to the belief, a true one I would argue, that the arts are largely forms that generate emotion. We seek out the arts in order to take a ride on the wings that art forms provide: The arts are ways to

4 ◆ *Knowing*

get a natural high. This high is secured largely through our sensory response to the way sound is arranged, as in music; to the way colors are composed, as in visual art; to the ways in which the movement of a human body excites us as we experience its motion in time and space, as in dance. The sensory side of human experience is primary in the arts, or so it is believed. Plato himself regarded the senses as impediments to the achievement of that exalted state in which forms could be known (Plato, 1992). The weights and chains of the prisoners incarcerated in Plato's caves were really surrogates or proxies for the distractions that our senses imposed upon whatever our rational mind could possibly muster. Put most simply, the sensory systems that were stimulated through the arts were misleading; they lead one away rather than toward that form of critical rationality upon which truth depends.

Plato's ideas about mind, knowledge, and rationality are much more than ancient history. The model that they have provided has impacted our conception of intelligence and of rationality itself. It is not surprising, therefore, that it should have provided the model that has shaped our conception of science. That mathematics has been regarded as the queen of the sciences is a result of the legacy that Plato's theory of knowledge has left us.

Aristotle, however, had another view, and it is one that in many ways is closer to the most recent thinking done on methodology in social science research. Aristotle made distinctions between kinds of knowledge that people can secure. The three types he identified were the theoretical, the practical, and the productive (McKeon, 2001). The theoretical pertained to efforts to know things that were of necessity, that is, things and processes that could be no other way than the way they are. The processes and products of nature are prime examples. Practical knowledge was knowledge of

contingencies. What are the local circumstances that need to be addressed if one was to work effectively or act intelligently with respect to a particular state of affairs? The productive form of knowledge was knowledge of how to make something. How can this table be fashioned? How can this sculpture be shaped?

In differentiating types of knowledge, Aristotle comes closer than Plato to the kind of artistry that is relevant to arts-informed qualitative research. With Aristotle, we get an effort to draw distinctions in the service of conceptual clarity. This aim is wholly congruent with current efforts to make distinctions between types of research, even to redefine the meanings of research so that they are no longer singular, but multiple. Research differs in the ways in which it is conducted and in the products that it yields. What one needs to research in a situation must be appropriate for the circumstances one addresses and the aims one attempts to achieve. Such an aspiration acknowledges differences in the levels of precision that are achievable. Aristotle cautions us that an educated man expects only as much precision as the subject matter will admit. It is as foolish to seek approximations from mathematicians as exactitudes from poets (McKeon, 2001). What the term knowledge means depends on how inquiry is undertaken and the kind of problem one pursues. Even the term knowledge may be regarded as problematic. Knowledge as a term is a noun. Knowing is a verb. And knowing may be a much more appropriate descriptor of the processes of inquiry made in pursuit of a problem that will not yield to a set of rigidified procedures. Inquiry always yields tentative conclusions rather than permanently nailed down facts. The quest for certainty, as Dewey (1929/2005) pointed out, is hopeless.

What does it mean to know? Here, too, there are a variety of conditions under which the term *know* or *knowledge* can be used. One can know that something is the case.

One can know how something was done. One can know why something operates the way it does, and one can know how. For example, consider a medical relationship. "I remember this patient quite well, but I do not have a diagnosis for his illness." In this example, two types of knowledge emerge, the first pertaining to matters of recognition or recall, and the latter to theoretical or practical understanding. The doctor recognizes the patient, but doesn't know what is causing his problem. Clearly, one can know the former and not the latter, and one can know the latter without knowing the former. How one would find out which was which would depend on one's aims. Each variety of knowing bears its own fruits and has its own uses. The point here is that knowing is a multiple state of affairs, not a singular one. In pragmatic terms knowing is always about relationships. We need to know different things for different purposes, and sometimes we know some things for some purposes but not for others.

In traditional approaches to the conditions of scientific knowledge, the pursuit of certainty has been a longstanding ambition. Furthermore, knowledge is conceptualized as the ability to provide warranted assertions. *Warranted* refers to the provision of evidence regarding the truth or falsity of the assertion, and the term *assertion* itself belongs to a universe of discourse in which language is its representational vehicle. However, it has become increasingly clear since the latter half of the 20th century that knowledge or understanding is not always reducible to language. As Michael Polanyi says, we know more than we can tell (Polanyi, 1966/1983). Thus, not only does knowledge come in different forms, the forms of its creation differ. The idea of ineffable knowledge is not an oxymoron.

The liberation of the term knowledge from dominance by the propositional is a critical philosophical move. Do we not know what water tastes like, although we

have very few words and virtually all of them inadequate for describing what water tastes like, or what music sounds like, or what someone looks like? Words, except when they are used artistically, are proxies for direct experience. They point us in a direction in which we can undergo what the words purport to reveal. Words, in this sense, are like cues to guide us on a journey. The utility of these cues depends upon their ability to help us anticipate the situation we wish to avoid or encounter.

The reason the deliteralization of knowledge is significant is that it opens the door for multiple forms of knowing. There are, indeed, propositions whose truth value is significant and whose claims are testable through scientific procedures. At the same time, there are utterances and images that are intended to be evocative of the situation they are designed to describe. Consider photography. Photographs can be powerful resources for portraying what cannot be articulated linguistically. We see this in the work of Edward Steichen, Dorothea Lange, Paul Strand, and other important photographers of the 20th century. But the ability to reveal is not limited to the talents of such photographers; it is available to those whose talents in photography are more ordinary. The point here is that humans have created within the context of culture a variety of forms of representation. These forms include the visual, the auditory, the gustatory, the kinesthetic, and the like. It includes forms of representation that combine the foregoing modalities as well. These forms of representation give us access to expressive possibilities that would not be possible without their presence. Technology provides new means during each generation for representational possibilities to be extended and diversified. The availability, for example, of neon tubes has made possible forms of sculpture that Michelangelo himself could not have imagined. Thus, technological advances promoted through scientific knowledge make

6 ◆ *Knowing*

new forms available to those who choose to use them.

This *Handbook* is an encomium to the use of new forms of representation in the service of improved understanding of the human condition. Rather than being constrained with criteria and methods formulated decades, indeed centuries, ago, this *Handbook* invites scholars to invent new ways through new means of representing what matters in human affairs. In this sense, the *Handbook* is something of a groundbreaking effort.

One should not conclude that new materials, technologies, and methods are the only innovative resources to be used to create arts-informed research. The way language is treated itself has a great deal to do with what it has to say. Consider, for example, Annie Dillard's book *Pilgrim at Tinker Creek* and focus upon the marriage between acute perception and artistically crafted prose.

It was sunny one evening last summer at Tinker Creek; the sun was low in the sky, upstream. I was sitting on the sycamore log bridge with the sunset at my back, watching the shiners the size of minnows who were feeding over the muddy sand in skittery schools. Again and again, one fish, then another, turned for a split second across the current and flash! the sun shot out from its silver side. I couldn't watch for it. It was always just happening somewhere else, and it drew my vision just as it disappeared: flash, like a sudden dazzle of the thinnest blade, a spark over a dun and olive ground at chance intervals from every direction. Then I noticed white specks, some sort of pale petals, small, floating, from under my feet on the creek's surface, very slow and steady. So I blurred my eyes and gazed upward toward the brim of my hat and saw a new world. I saw the pale

white circles roll up, roll up, like the world's turning, mute and perfect, and I saw the linear flashes, gleaming silver, like stars being born at random down a rolling scroll of time. Something broke and something opened. I filled up like a new wineskin. I breathed an air like light; I saw a light like water. I was the lip of a fountain the creek filled forever; I was ether, the leaf in the zephyr; I was fleshflake, feather, bone. (Dillard, 1974, pp. 31–32)

This brief excerpt gives one a sense of what the artistic treatment of language makes possible. What, in this case, it makes possible is the writer's ability to give the reader a virtual sensory experience of nature in all its glorious richness and complexity. It is different from and, some would argue, more than a literal description; it is an artistic rendering, one that is evocative and that, psychologically speaking, gives us transport to another part of the world.

Let us distinguish for a moment between the descriptive and the evocative. Let the descriptive focus on the desire to create a mimetic relationship between something said and something done. The evocative has as its ambition the provision of a set of qualities that create an empathic sense of life in those who encounter it, whether the work is visual or linguistic, choreographic or musical. In all cases, emotion and imagination are involved. Art in research puts a premium on evocation, even when it has sections or aspects of it that are descriptive in character. Put another way, art is present in research when its presence enables one to participate vicariously in a situation.

Experiencing a situation in a form that allows you to walk in the shoes of another is one way to know one aspect of it. Empathy is a means to understanding, and strong empathic feelings may provide deep insight into what others are experiencing. In that

sense, the arts in research promote a form of understanding that is derived or evoked through empathic experience.

At the same time, it should be recognized that answers to questions and solutions to problems might not be arts-informed research's long suit. This method of inquiry may trump conventional forms of research when it comes to generating questions or raising awareness of complex subtleties that matter. The deep strength of using the arts in research may be closer to the act of problematizing traditional conclusions than it is to providing answers in containers that are watertight. In this sense, the products of this research are closer in function to deep conversation and insightful dialogue than they are to error-free conclusions.

Attention to the relationship between the arts and knowledge has not been entirely neglected by aestheticians. One of the most prominent of them is Susanne Langer. Langer (1957) argues that works of art represent the artist's ability to create a structure of forms that are in their relationships analogs to the forms of feeling humans experience. Thus, what the artist is able to do is to provide a means through which feelings can come to be known. Langer (1957) writes:

What does art seek to express? . . . I think every work of art expresses, more or less purely, more or less subtly, not feelings and emotions the artist has, but feelings which the artist knows; his insight into the nature of sentience, his picture of vital experience, physical, and emotive and fantastic. (p. 91)

Such knowledge is not expressible in ordinary discourse. The reason for this inexpressibility is not that the ideas to be expressed are too high, too spiritual or too anything else, but that the forms of feeling and the forms of discursive expression are logically incommensurate.

What we have here is a radical idea that the life of feeling is best revealed through those forms of feeling we call the arts; that is their special province, which is the function that they serve best. Langer (1957) claims that discursive language is the most useful scientific device humans have created but that the arts provide access to qualities of life that literal language has no great power to disclose. It follows, then, that an education of the life of feeling is best achieved through an education in and through the arts.

If one accepts Langer's argument, then the qualities of feelingful life expressed in human relationships, in the context of education, and in the wider conditions within which human beings live and work are perhaps most powerfully revealed when form is shaped artistically. The means through which those forms emerge is potentially infinite, that is, they might take place through poetry, they might be realized through music, they might be expressed through the visual arts; the options are as open as our imagination.

Of course, to use different media to effectively disclose what one has experienced emotionally requires the use of skills, knowledge of techniques, and familiarity with the materials themselves with respect to the way in which they behave when employed. The material must be converted into a medium, something that mediates the researcher's observations and culminates in a form that provides the analogous structure I mentioned earlier. What is created is the structural equivalent of emotions recollected in tranquility but expressing powerfully what an individual has undergone by virtue of the way the forms of the work relate to each other (Arnheim, 1974).

This process requires one to qualify qualities. That is, to create qualitative relationships among component qualities so that the expressive character of the total array of qualitative relationships actually helps reveal what the artist intended.

8 ◆ *Knowing*

It is interesting to note the ways in which our language, riddled as it is with metaphors, describes affective states of affairs. We talk about being high or being low. We talk about being bright or being dull; we talk about being slow or being swift. Our personal attributes are captured in the metaphors we choose or invent to describe them. It is through such descriptions, at least in part, that we enable others to understand how we feel and, indeed, enable us to recognize our own feelings.

The capacity of metaphor to capture and express literally ineffable forms of feeling is related to Langer's (1957) conception of two kinds of knowing. Langer distinguishes between what she calls discursive and nondiscursive knowledge. The arts, especially music, occupy nondiscursive categories. Her basic argument is that the people we call artists have a conception of the structure of human feeling in its varieties. What they also have is the ability to create through the application of technique and skill forms whose empirical structure echoes the structure of a form of feeling. Thus, works of art enable us to know something about feeling that cannot be revealed in literal scientific statements. Put in Dewey's (1934) terms, science states meaning, art expresses it.

In talking about language, it is important to emphasize the point that language itself can be treated artistically. The meanings of poetry, for example, transcend what literal language provides. Indeed, it has been said that poetry was invented to say what words can never say. In other words, we should not confuse the nonliteral artistic character of language with its literal use. Each use performs its own distinctive functions.

I have been talking about that form of representation called language almost as though it were the only resource that could be used artistically to reveal the qualities and character of a state of affairs. The fact of the matter is that artistically rendered forms of representation can be created with

virtually any material: film, video, dance, poetry, music, narrative, and so forth. Any talk about arts-informed research must take into account the characteristics of the particular art form or art forms that are being employed. Music, for example, does not have the kind of referentiality that realism in the visual arts possesses. One can come to know the countenance of an individual or the feel of a place by the features of a realist painting. There is no comparable analogue in music. Even program music, such as the *William Tell Overture*, is far less referential in character than what photo realists do in their work. Some art forms such as opera or theatre combine art forms. It is not unusual for a stage production to involve not only color and light, but speech and music. These synthetic art forms have different potentialities in the execution of research and need to be taken into account in planning a research agenda.

One might ask, if the arts are so diverse in their features and potentialities for research, do they have anything in common? Just what is it that enables us to refer to all of them as forms of art? For me, the defining feature that allows us to talk collectively about the arts is that art forms share the common mission of achieving expressiveness through the ways in which form has been crafted or shaped. The arts historically have addressed the task of evoking emotion. We sometimes speak of the arts as resources that can take us on a ride. The arts, as I have indicated elsewhere, provide a natural high. They can also provide a natural low. The range of emotional responses is enormous. These emotional consequences in relation to a referent color the referent by virtue of the character of the emotion that the artistically crafted form possesses. Through art we come to feel, very often, what we cannot see directly.

The views that I have just expressed are closer to a modern than to a postmodern conception of what the arts do. But I would

argue that even successful postmodern art participates in the expression of emotion.

Recognizing the distinctive potential of various art forms and developing the skills and techniques to use them is a necessary condition for the achievement of effective arts-informed research.

There is, though, a serious complication in the use of nonliteral forms, and this complication has to do with precision of representation. The precision of representation I refer to is achieved by what Charles Peirce (1998) called the relationships between the referent, the symbol, and the interpretant. This triad is designed to describe a connection between an utterance and that to which it refers. If the interpretant is not clear, the referent to which a symbol refers might not be located. Thus, the more ambiguity or scope given for personal interpretation of the signified material, the less referential precision is achieved. If, however, one takes the view that the dominant function of arts in research is not necessarily to provide a precise referent for a specific symbol connected by a conventional interpretant, but rather to provide an evocative image that generates the conditions for new telling questions and for fruitful discussion, if its major function is to deepen and make more complex the conversation or increase the precision through which we vex each other (Peirce, 1998), then the need for consensus on what is signified might be less significant. But it is an issue that needs to be addressed. One can easily slip into an “anything goes” orientation that makes the research produced a kind of Rorschach test.

At the same time, to idolize precision if in the process it trivializes the questions one can raise, the problem still remains, only it is of another order. Obviously, what are needed are methods that have some significant degree of precision and, at the same time, do not reduce problems into questions that are trivial. One of the major weaknesses of the logical positivist movement

was a tendency on their part to dismiss poetic and metaphorical language as meaningless utterances. This led them to regard as meaningful only propositions of an empirical kind that, in principle, could be proven through scientific procedures. For my taste, this is much too constrictive a conception of the kind of research criteria that are needed in the social sciences. If we indeed know more than we can tell, then we should try telling what we know with anything that will carry the message forward.

Bringing the message forward on new media—or even on old media for that matter—is no simple task. What are needed are skills and techniques to treat a material so that it *becomes* a medium of expression. One of the most formidable obstacles to arts-informed research is the paucity of highly skilled, artistically grounded practitioners, people who know how to use image, language, movement, in artistically refined ways. Schools of education, for example, seldom provide courses or even workshops for doctoral students to develop such skills. As a result, it is not uncommon to find this type of research appearing amateurish to those who know what the potentialities of the medium are. Furthermore, each medium requires, to some degree, its own set of skills and techniques. To be “multilingual” in this research means being able to use different media effectively to represent what one has learned.

One way to address this situation is to create teams of researchers in the social sciences who work closely with practitioners of the arts. It could be the case that such collaboration might provide a way to combine both theoretically sophisticated understandings and artistically inspired images. This too, as a putative solution, would require a new approach to not only the education of the researcher but to the kinds of dissertation projects that would be encouraged and supported. I can well imagine dissertations being prepared by groups of three or four

individuals each of whom had major responsibility for some aspect of the work. It may be unrealistic to expect that someone without a background, say, in the visual arts, would be able to produce at a high enough level the quality of arts-informed research that was needed to warrant a doctoral degree. Furthermore, such work, in my view, should have both a theoretical or conceptual basis and should manifest sophistication in the arts as an achievement that I mentioned earlier. It is particularly in this sense of diverse competencies that arts-informed research is not easier, but more difficult, to do than traditional approaches to research in the social sciences.

Is there a future for arts-informed research? One can only speculate about the conditions that would create such a possibility. One of those conditions pertains to the vigor of those committed to the exploration of the arts and the means through which they help enlarge human understanding. Given the near revolutionary way in which the arts are being regarded as tools for research, I expect that there will be a variety of resistances to be encountered. These resistances need to be addressed by scholars committed to the idea and exploration of arts-informed research. Short-term enthusiasts are hardly going to be able to provide the kind of leadership, indeed the kind of courage, that such an enterprise will require. What will also be required are places in universities where young scholars interested in pursuing arts-informed research can find a sympathetic home. The Media Lab at MIT is a good example of how research might be pursued.

It is also likely that there will need to be collaborative connections made between, for example, schools of education and departments of the arts, photography, film, and videography. It takes a team to produce a docudrama, and it will take no less to create good examples of artistic inquiry. Yet

the kind of collaboration I have in mind can be extremely intellectually exciting. Scholars can bring to bear under one collective umbrella ideas about matters of meaning and communication, matters of technique, and matters pertaining to theoretical knowledge that can enrich the environment and yield truly remarkable products. To encourage such activity will require a modification of promotion criteria that are typically employed in most American universities, particularly in research universities. We typically expect pre-tenure productions to be solo, yet in the hardest of the sciences, physics, work is very often collaborative. Indeed, without collaboration the work that needs to be done would not get done. The Stanford Linear Accelerator, for example, is employed by people living at the other end of the world for purposes that are jointly shared with Stanford University physicists. What this suggests is a new conception of who does research with whom, and what kind of research they do. The vision I am describing is considerably more collaborative, cooperative, multidisciplinary, and multimodal in character. Knowledge creation is a social affair. The solo producer will no longer be salient, particularly in the contexts for those wishing to do arts-informed research.

How can the discussion that has preceded be put in a summary form? Just what is it that makes possible a relationship between art and knowledge? It seems to me that the contributions of the arts to knowledge are several.

First, the arts address the qualitative nuances of situations. By learning how to read the images the arts make possible, awareness of those nuances is made possible. The examination or perception of a painting is as much a kind of "reading" as a text might be. One needs to learn how to see as well as learn how to read in the

customary sense. Thus, in addressing what is subtle but significant, the arts develop dispositions and habits of mind that reveal to the individual a world he or she may not have noticed but that is there to be seen if only one knew how to look.

A second contribution the arts make to knowledge has to do with empathic feeling. Images rendered in artistically expressive form often generate a kind of empathy that makes action possible. One has only to recall images of war, whether created by Picasso as in "Guernica" or by a contemporary photographer addressing the war in Iraq, to realize that we are moved in ways that art makes. Art often creates such a powerful image that as a result we tend to see our world in terms of it, rather than it in terms of our world. Put another way, art does not always imitate life. Life often imitates art.

The ability to empathize with others is a way of understanding the character of their experience that, in some ways, is the first avenue to compassion. To achieve such an outcome, as I have indicated earlier, requires individuals skilled in the use of the medium with which they work and, of course, sensitive to the conditions they wish to render. No small task, but an extraordinarily important one.

A third contribution the arts make to knowledge has to do with the provision of a fresh perspective so that our old habits of mind do not dominate our reactions with stock responses. What we seek are new ways with which to perceive and interpret the world, ways that make vivid realities that would otherwise go unknown. It's a matter, as the anthropologists say, of making the familiar strange and making the strange familiar. To the extent to which we need to give up some of our old habits, the arts are willing and helpful allies in such a pursuit. It means, of course, relinquishing the ties that fetter the imagination. One

wants to encourage rather than to discourage the sweep of imagination in learning how to notice and understand what is not literally there. The arts contribute to the realization of such an aim.

Finally, for the purposes of this chapter, the arts tell us something about our own capacities to experience the affective responses to life that the arts evoke. If the arts are about anything, they are about emotion, and emotion has to do with the ways in which we feel. Becoming aware of our capacity to feel is a way of discovering our humanity. Art helps us connect with personal, subjective emotions, and through such a process, it enables us to discover our own interior landscape. Not an unimportant achievement.

All of the processes that I have described contribute to the enlargement of human understanding. We cannot take such conditions or characteristics or feelings into account unless they are available either by our volition or by the impact of others upon us. We come to understand the world in many ways; the arts are among these many ways. Their virtual absence in the methodology of educational research is a significant shortcoming in the ways in which we may be able to understand what goes on in classrooms and in schools, in conferences and in homes. The arts are a way of enriching our awareness and expanding our humanity. This, too, is not a bad consequence for a process so delicate but important.

Can such aims be achieved in the context of a competitive research environment? Let us hope so. But let us do more than hope. Let us embark on those studies of human action that reveal aspects of human experience and behavior that intuitively are difficult to deny. This is all to say that the quality of work done under the banner of research through the arts will be the most critical feature affecting its future. Let's hope that we are up to the task.

◆ **References**

- Arnheim, R. (1974). *Art and visual perception: A psychology of the creative eye*. Berkeley: University of California Press.
- Ayer, A. J. (1952). *Language, truth and logic*. New York: Courier Dover Publications.
- Dewey, J. (1934). *Art as experience*. New York: Minton, Balch and Company.
- Dewey, J. (2005). *The quest for certainty: A study of the relation of knowledge and action*. Whitefish, MT: Kessinger Publishing. (Original work published 1929)
- Dillard, A. (1974). *Pilgrim at Tinker Creek*. New York: Harper's Magazine Press.
- Langer, S. K. (1957). *Problems of art: Ten philosophical lectures*. New York: Scribner.
- McKeon, R. P. (Ed.). (2001). *The basic works of Aristotle*. New York: The Modern Library.
- Peirce, C. (1998). *Collected papers of Charles Sanders Peirce*. Bristol, UK: Thoemmes Continuum.
- Plato (1992). *Republic*. Indianapolis, IN: Hackett Publishing Company.
- Polanyi, M. (1983). *The tacit dimension*. Gloucester, MA: Peter Smith Publisher. (Original work published 1966)