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EMBODIED KNOWING THROUGH ART

Mark Johnson

The problem with the notion of 'arts research'

Before the last American presidential election, my wife, who is a fibre artist, and I were listening to a candidate praising all the dedicated hardworking men and women who have contributed so much to our society, but who are now suffering the ill effects of our current economic crisis. Among those hardworking contributors to our communal well-being, the candidate included occupations such as plumbers, construction workers, doctors, teachers, military personnel, parents, janitors, and cab drivers. My wife turned to me and quipped, 'He forgot to mention artists!'

The general public almost never thinks about artists, and when it does, it almost never thinks of them as great contributors to the growth of human understanding and knowledge. I suppose that nearly everybody has heard of Picasso, and a lot of people even like his work, but ask them what contribution Picasso has made to knowledge and they are likely to be left speechless. Even worse, ask them what Picasso's art research consisted in, and they probably won't have a clue what you are talking about. Evidence of this relegation of art to an inferior cognitive status can be found in the now worn-out fact that the arts are always the first thing to be cut when schools face financial hardship. I'll wager that you've never encountered anyone exiting an exhibit of the work of artists like Pablo Picasso, Elizabeth Murray, Magdalena Abakanowicz, Mark Rothko, or Henri Matisse and heard them exclaim, 'Wow, I learned so much from that.' For the most part, we do not think of the arts as vehicles of important knowledge. Some people might say of some artist that she is insightful, but that remark does not translate into a belief that the artist's works give us profound knowledge. If you asked someone what profound truth they gleaned from Picasso's *Guernica*, I suppose they might say something on the order of 'war is absolute hell,' or 'what happened at Guernica was abominable', but that would be the lamest possible summary of the transformative power of Picasso's great work.

What I'm suggesting is that, because most people don't think of the arts as giving rise to knowledge, they find the idea of 'art research' confusing, at best, and meaningless,

at worst. The reasons for this are simple: first, most people never think about the nature of knowledge, but when they do, they tend to associate it with the progressive accumulation of scientific knowledge – the building up of true descriptions and rational explanations, mostly in propositional form, for how things work in our physical, social, and cultural worlds. Second, by contrast, people typically think of art in terms of imaginative works that express and communicate emotions. Consequently, the public is not inclined to regard art as a source of knowledge. Third, the term 'research' calls to mind methods of theoretical inquiry, forms of experimentation, empirical testing, and confirmation or disconfirmation of hypotheses in pursuit of progressively increasing bodies of objective knowledge. Fourth, but the arts –especially the visual arts – don't seem to be in the proposition-stating business. People don't recognize any counterpart in the arts to research methods in scientific inquiry. Therefore, the whole idea of *arts research* may seem oddly misconceived.

Scholars in the humanities often experience a similar dismissal of their work as not rising to the level of serious research. After all, in what sense is it 'research' to read what others have written on a subject? Humanists often feel this same sense of oddness when they are asked on grant application forms to describe their *methods of inquiry* and *types of evidence* for their project. They hardly know what to say about their 'method', unless it is some dismissive humorous quip like 'I think really hard about the nature of Being, and then I wait for insight to come to me in a flash.' Just as with the arts, the whole question of method can seem a little bit out of place, and without methods of inquiry, what sense can you make of *knowledge* and *research*? I suspect that some philosophers often manage to get away with claiming to do research and to produce knowledge mostly because they boldly claim to be addressing certain perennial human problems that have no easy answers, and they then call their research 'abstract', 'philosophical', and 'deep' – not easily clarified and summarized.

Humanities scholars have at least one slight advantage over artists because it is part of their job description to write long complicated articles and books that appear to consist of propositional knowledge, even if most of it can seem incomprehensible to ordinary folks. Artists have no such crutch of quasi-propositional truth-claims, and so they feel stumped about how to measure up to alleged rigorous standards of inquiry and research.

I want to suggest that, in spite of these obstacles to the acknowledgment of a significant role for art in the evocation of deep understanding, there are, nevertheless, perfectly good notions of arts research and quite reasonable notions of inquiry in art. However, to articulate these notions, we have to overcome a very deeply rooted traditional conception of knowledge as a body of true propositions that capture the nature of some particular aspect of our world. The key is to stop thinking of knowledge as an abstract quasi-entity or a fixed body of propositional claims. Instead, knowledge should be a term of praise for success in a process for intelligently transforming experience, just as the American philosopher John Dewey argued some eighty years ago.

The prejudice against the visual arts as modes of research

So far I've been claiming that the chief reason the arts are not seen as research is that they are not granted the status of knowledge producers, especially when knowledge

is defined very narrowly as consisting of propositional truths about the world. As is well known, the denial to art of the status of knowledge is deeply rooted in western philosophical treatments of art, and it has carried down to the present day as a cultural commonplace. In dialogues such as *Republic, Symposium, Phaedrus,* and especially *Ion*, Plato notoriously argued for a suspicion of the arts as pretenders to knowledge, on two grounds: first, the arts are not direct presentations of the real, but only distant copies (based on images) that offer no knowledge, but only imitations of imitations of what is real. Second, art 'feeds and waters the passions', thereby undermining the proper functioning of our rational faculties of knowledge.

Aristotle recognized a more positive role for artistic imitations, claiming that poetry can 'present the kind of thing that might be', thereby suggesting that the arts can reveal the possibilities of experience. However, Aristotle thought that the arts show what is possible via *mimesis* of human actions, whereas the sciences give causal accounts of how things come to be as they are and why they behave as they do.

Our contemporary tendency to deny to art the status of knowledge can be traced back at least as far as Immanuel Kant's taxonomy of types of judgment – theoretical, technical, moral, aesthetic, and so on. Kant inherited an Enlightenment faculty psychology that posited separate and distinct powers of mind, such as perception, imagination, understanding, reason, feeling, and will. The central idea was to explain the different types of judgments as the result of different relations of these faculties. Since Kant perpetuated the dominant Enlightenment conception of aesthetics as the science of feelings, he denied any cognitive content (hence, any knowledge potential) to aesthetic judgments concerning beauty in nature and art.

It would be difficult to overestimate Kant's profound influence on subsequent thinking about the relation of art and aesthetic experience to knowledge. Indeed, the very notion of an 'aesthetic experience' is an artefact of seventeenth- and eighteenth-century theories of mind and knowledge. In what is known as his 'Critical Philosophy', Kant asked how several types of mental judgment, each with its own distinctive character, were possible. His answer was that each distinct type involves a unique blend of operations of one or more mental faculties. Thus, for example, in his *Critique of Pure Reason* (1781) he asks how certain theoretical scientific judgments of nature are possible, judgments that articulate universal causal laws and produce objective knowledge of our physical world. In the *Critique of Practical Reason* (1787) he asks how moral judgments involving universally binding ethical imperatives can issue from pure practical reason, without any reliance on emotion. And finally, he concludes what he called his Critical Philosophy with the *Critique of Judgment* (1790), which tries to explain judgments of beauty in nature and art, as well as teleological judgments of purposiveness in nature, as resting on distinct operations of various mental faculties.

In Kant's classic formulation, knowledge is a *product of conceptual synthesis* that takes the form of *propositional judgments* descriptive of the world. Consequently, aesthetic experience, which he regarded as subjective and based on feelings, lies wholly outside the realm of knowledge. Simply put, aesthetic judgments of beauty in nature and art are not cognitive (and hence not conceptual), and so they issue in *no* knowledge whatsoever. Kant saw the value of aesthetic judgments as lying in the 'free play of imagination and understanding' evoked by artworks and beautiful natural objects, which is felt (*not known*) as a sense of harmony and right order. Kant's legacy was to

set much subsequent aesthetic theory on a path where art was valued for the feelings it evokes and the ways it stirs our imaginative musings, but most definitely *not* for any theoretical knowledge of man or nature. Neither the beautiful nor the sublime could rise to the status of modes of knowledge.

Kant's view is not just an abstruse theory intended only for philosophers and art theorists. At its heart, it represents the common view of art as not primarily a vehicle for human knowledge. If, as the commonsense view goes, knowledge is about acquiring certain true beliefs (expressible as propositions) that correspond to certain states of affairs in the world, then the arts don't seem to have this as their central function. Knowledge, on this view, is an accumulation of true propositions or statements about how things are and how they work, which can be verified by past, present or future experience. Within this framework, research can ultimately be evaluated by how much knowledge its methods generate.

The problem, of course, is that the arts always seem to come up short when it comes to providing knowledge, as defined by this traditional set of criteria. Therefore, in order to articulate a realistic notion of art research, it is necessary to rethink our received conception of knowledge and research.

What can arts research consist in?

Stephen Scrivener (2009b) has offered three reasonable conceptions of art research, based on his fairly traditional definition of *research* as '1) a systematic investigation, 2) conducted intentionally, 3) to acquire new knowledge, understanding, insights, etc. that is 4) justified and 5) communicated 6) about a subject'. Scrivener recognizes three principal relations between art and the conditions of research:

> The first, *research into*, identifies art as the *subject* of inquiry treating it as an object in the world to be examined, understood and explained. *Research through* art treats art as a *method* for understanding the world, which might be art itself. *Research for art*, … like research into art, treats art as the *subject* of inquiry, but with the *goal* of producing art that transforms art.
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> (Scrivener 2009b)

I assume, with Scrivener, that one important sense of arts research is the idea that good artists are engaged in an ongoing inquiry into the nature of their medium, into how to produce certain effects through it, and into how to expand the capacities of that medium. There can be no doubt, for anyone who has ever tried it, that this is an intensely rigorous mode of artistic inquiry into how to do certain things through art. It requires an arduous ongoing dialogue with your medium (or media), extending over the lifetime of an artist who remains open to discovering new things about the possibilities of her art.

Scrivener appears to recognize two forms of this art-centred research. The first, more mundane, process is what I have just called an investigation into how to make art and into the potentialities of your medium. The second process is what he calls 'research for' (and perhaps also, one type of 'research through art'), where the goal is to reconfigure arts practice itself: 'transformational practice produces new art by virtue

of new understanding of the limits and potentialities of art'. Research *for* art 'claims material interventions that transform what is apprehended as art, together with a claim to knowledge of the manner in which art has thereby been transformed' (Scrivener 2009b). By these criteria, a painting that gives us new knowledge of some aspect of our world might *also* be innovative enough to shape our very understanding of art and open up novel possibilities for future art.

Although I appreciate the importance of this art-centred conception of research, I want, instead, to explore more deeply Scrivener's less well-developed idea of *research through art and design,* that is, of the enhancement of knowing through art. In the present book, Scrivener (Chapter 15) introduces this idea by noting how certain memorable paintings can actually give us some knowledge of their subject. He cites as an example Stubbs's paintings of horses giving us knowledge of equine anatomy and Constable's landscapes exploring various meteorological phenomena. Knowledge of this sort is clearly something we sometimes get from a painting, although I doubt that we care about painting mostly for this reason. I shall have a bit more to say about this later, in the context of Dewey's account of the working of art, but I am more interested in the idea that art might give us an understanding of our world that goes beyond particular subject matters like horses and clouds.

So, I want to explore an additional sense of 'research through art,' the articulation of which requires us to rethink our received understanding of knowledge. The basic idea is that we must emphasize the *process* of *knowing,* as contrasted with *knowledge* as a body of true statements. It is this process-oriented conception that I want to explore and defend.

Embodied knowing

As I see it, the best way to make sense of any notion of 'arts research' that is not limited only to explorations of the nature of artistic processes is to call into question our received views of knowledge as propositional. Fortunately, this turns out to be an important part of recent cognitive science, particularly in those approaches that study the bodily basis of meaning, conceptualization, and reasoning. There are two key aspects of this new 'embodied cognition' view of knowledge: First, we must release the stranglehold exerted by views of knowledge as a fixed and eternal state or mental relation, in order to focus, instead, on knowing as a process of inquiry rather than a final product. Second, we must recognize the role of the body, especially our sensory-motor processes and our emotions and feelings, in our capacity for understanding and knowing.

John Dewey (1984 [1929]) long ago observed the pan-human tendency to flee uncertainty in search of something allegedly fixed and eternal that never changes and that stands over against or behind the ongoing flow of our daily experience. This perennial 'quest for certainty', Dewey argued, has been the source of great mischief, not just in philosophy and theology, but also in the beliefs and actions of ordinary people. Such an ideal of absolute knowledge is predicated, in turn, on the existence of eternal essences and a metaphysical view of reality as ultimately changeless.

Dewey observed, to the contrary, that life is about change and growth. Clinging to imagined absolutes is one way people try to deny change, impermanence, and transformation. As we observed earlier, the propositional view of knowledge fits nicely

with absolutist thinking, giving rise to the ideal of universal truths as eternal quasi-objects (propositions) standing in determinate relations with other quasi-objects (states of affairs in the world). Dewey famously showed how our fear of change, and our correlative anxious grasping for absolute knowledge, is based on a dramatically mistaken view of human mind and experience and is also ultimately counterproductive in our ongoing quest to deal with the real problems humans encounter in their lives.

The crux of Dewey's view is that the locus of human being is a series of continually developing organism-environment transactions which, although always changing, nevertheless manifest certain stable patterns that we can become aware of and guide our actions by (Dewey 1981 [1925]). According to this view, knowing is a process of intelligent inquiry into and transformation of experience, in light of our values and purposes. Our values are not absolute givens; rather, circumstances may arise that call us to subject our values to scrutiny and possible re-evaluation. Therefore, intelligent inquiry can be both about means *and* ends. Thus Dewey proposes knowing as an activity of thought in the service of constructive change in the quality and character of our experience:

> If things undergo change without thereby ceasing to be real, there can be no *formal* bar to knowing being one specific kind of change in things, nor to its test being found in the successful carrying into effect of the kind of change intended.
>
> (Dewey 1973 [1931]: 211)

The locus of knowledge, according to Dewey, is experience, interpreted in the broadest sense to include both physical objects and states of affairs, but also everything that is thought, felt, hoped for, willed, desired, encountered, and done. The basis for Dewey's idea of experience is an account of an organism continually interacting with its surroundings. In the context of trying to preserve itself and to flourish, each advanced organism engages in recurring structured interactions (or transactions) with aspects of its environment. In the case of higher animals and humans, those recurring interactional patterns can be thought of as habits of experiencing, thinking, feeling, and doing. Much of the time we drift along through life in routine channels of thought and action that result from a combination of both our past experience and our culturally inherited habitual modes of engagement with our world.

However, since experience is not static, there are frequent occasions where our sedimented habits cease to be adequate for the structuring of our experience and the pursuit of our goals. Sometimes our habits are not adequate for realizing a desirable state of affairs. Sometimes we have incompatible goals or conflicting values that cannot all be realized at the same time. In either case, we fall out of harmony with our surroundings, and we feel this falling out as frustration, blockage, indeterminacy, and inability to move forward fluidly. The problematic situation we find ourselves in can then be an occasion for inquiry, in which we must reconfigure our habitual patterns of behaviour, in search of more constructive, expansive, and harmonious modes of action. In other words, we need to engage in forms of inquiry geared to the reduction of indeterminacy in our situation and geared to the achievement of a more constructive relation to our physical, social, and cultural surroundings (Dewey 1991 [1938]).

To put it briefly, for Dewey *knowing* is a matter of cultivating appropriate habits of intelligent inquiry that allow us to more or less satisfactorily reconfigure our experience in the face of problematic situations. The goal is not some illusory fixed and eternal *knowledge*. Instead, to call something 'knowledge' is simply a way to valorize certain *ways of knowing – ways of transforming experience* – that tend to actually enrich our sense of the possibilities for action, that deepen and broaden our grasp of the meaning of a situation, and that help us lead more humane, constructive, and creative lives. So Dewey urges us to turn our focus away from the substantive term *knowledge* (as a noun) and to focus, instead, on *knowing* (as a verb). In this way we emphasize the character of the *process* of inquiry instead of some final *product* construed as a body of knowledge.

Dewey recognized different forms of inquiry as basic to human living. *Scientific inquiry* operates principally through selective abstractions, in search of generalizations over a circumscribed set of phenomena. Typically, those generalizations are thought to take the form of causal laws of nature, which serve the values of prediction and control of experience. *Artistic inquiry* is less abstractive and generalizing than science, focusing more on grasping the qualitative unity of a situation. Art, in Dewey's view, does not so much *describe* or *explain*; rather, it *presents* or *enacts* the qualities, meanings, and values of a situation.

Dewey saw that his account of inquiry and knowing reveals a deep parallel between acts of knowing and the processes of experiencing, making, and judging art. The parallel rests on Dewey's idea that the starting point of any experience is the sense of a unifying quality that pervades the entire situation and gives it its distinctive character and direction.

> By the term situation in this connection is signified the fact that the subject-matter ultimately referred to in existential propositions is a complex existence that is held together in spite of its internal complexity by the fact that it is dominated and characterized throughout by a single quality.
>
> (Dewey 1988 [1930]: 246)

This pervasive unifying quality is what binds the various components of any given situation together into a unified complex whole that has meaning for us. Not surprisingly, Dewey often used artworks to illustrate his claims about the role of pervasive unifying qualities. Say, for example, that you enter a gallery of a museum and behold a Vermeer on the far wall. You know it is a Vermeer, even before you can confirm the artist by the label next to the painting, and you can see that it is a Vermeer through a certain quality of the whole work. There is no unique set of properties that makes some painting a Vermeer, but rather 'the quality of the whole [that] permeates, affects, and controls every detail' (Dewey 1988 [1930]: 247). Moreover, the pervasive quality is not just its Vermeer-ness; rather, it is the unique particular unifying quality of *this* particular Vermeer that draws you in.

Dewey regarded art as the skilful enactment of the qualitative dimensions of some actual or possible situation. Art presents (enacts) the meaning of a situation, rather than abstractly conceptualizing it. So, to return to Scrivener's example, one might say that one of Stubbs's paintings of a horse might realize, through felt qualities, something about our experience of horses that is missed by the more abstractive and selective

scientific accounts of horses set forth in a treatise on equine anatomy, health, and behaviour. There is something you come to understand through the painting that you could not fully grasp through the conceptual account of the scientific treatise.

The key point here is that only within this background qualitative unity are we able to select out the specific objects and structures that shape our experience, understanding, and response to the situation. In other words, it is the pervasive quality of any given situation that determines the meaning it offers us and the possible courses of action it elicits. This applies not just to artworks, but also to any meaningful experience. For example, I might be sitting across a table from you, vigorously arguing some philosophical point, when I become increasingly aware of a certain pervasive tension and disease characterizing our shared situation. Something isn't quite right, even though I cannot at this moment put my finger on what it is. Yet that felt sense of the situation can be the spur to further inquiry – that is, to my trying to figure out what seems to be wrong, and how I might possibly resolve some of the tension that pervades our situation. Perhaps you find the view I'm articulating offensive, or maybe my way of presenting it or holding myself puts you off. It is the quality of our shared situation, and not just my subjective response, that stimulates my wonder about what is amiss here.

Embodied meaning

Dewey's view of knowing requires us to give up any rigid dichotomy between what has traditionally been thought of as modes of conceiving and knowing versus modes of perceiving and doing. The rejection of this form of dualism has recently been supported by research in the cognitive sciences that challenges any such rigid distinction between the conceptual and the perceptual, and even between the perceptual and the motor dimensions of cognition. Cognitive neuroscientist Don Tucker summarizes the current view that our so-called acts of 'higher' cognition (such as conceptualization and reasoning) are based on structures of our sensory-motor processing:

> Complex psychological functions must be understood to arise from bodily control networks. There is no other source for them. This is an exquisite parsimony of facts.
>
> There are no brain parts for abstract faculties of the mind – faculties like volition or insight or even conceptualization – that are separate from the brain parts that evolved to mediate between visceral and somatic processes …
>
> If we assume that there is a nested structure of concepts that must take form across the – exactly isomorphic – nested structure of the neural networks of the corticolimbic hierarchy, we can then specify the structure of abstract conceptualization. This is a structure of mind based on bodily forms.
>
> (Tucker 2007: 202–3)

In short, there is no special set of faculties for 'knowing' that are entirely separate and independent from faculties for sensory (perceptual) and motor processing. Even before the advent of cognitive neuroscience, the renowned psychologist of art, Rudolf Arnheim, wrote extensively and brilliantly on the intimate connection between perception and conception:

> The cognitive operations called thinking are not the privilege of mental processes above and beyond perception but the essential ingredients of perception itself. I am referring to such operations as active exploration, selection, grasping of essentials, simplification, abstraction, analysis and synthesis, completion, correction, comparison, problem solving, as well as combining, separating, putting in context. These operations are not the prerogative of any one mental function; they are the manner in which the minds of both man and animal treat cognitive material at any level. There is no basic difference in this respect between what happens when a person looks at the world directly and when he sits with his eyes closed and 'thinks'.
>
> (Arnheim 1969: 13)

The relevant point here for thinking in art is that the visual arts operate according to principles and structures of cognitive processing that hold at all levels from the most concrete images and visual experiences all the way up to abstract thought using symbols, such as words. Though this is not my central focus, and I cannot argue this here, there is a great deal of evidence from the cognitive sciences that structures of meaning-making and understanding in art are the same ones that underlie our use and understanding of language and other forms of symbolic interaction. Our thinking is visceral and incarnate, whether that thinking is primarily artistic or primarily linguistic.

Art and the transformation of experience

One of Dewey's greatest insights was that art involves an imaginative, expressive transformation of the materials of existence in ways that enhance and deepen the meaning of our experience.

> In short, art, in its form, unites the very same relation of doing and undergoing, outgoing and incoming energy, that makes an experience to be an experience. Because of elimination of all that does not contribute to mutual organization of the factors of both action and reception into one another, and because of selection of just the aspects and traits that contribute to their interpenetration of each other, the product is a work of esthetic art … The doing or making is artistic when the perceived result is of such a nature that *its* qualities *as perceived* have controlled the question of production.
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> (Dewey 1987 [1934]: 48)

In other words, the value of a work of art is not objective facts it might reveal, not merely its expression of an artist's emotional state, and not that it captures some ideal, eternal formal rightness. Rather, the value of an artwork lies in the ways it shows the meaning of experience and imaginatively explores how the world is and might be – primarily in a qualitative fashion. Therefore, art can be just as much a form of inquiry as is mathematics or the empirical sciences. The principal difference is that art focuses more intently on the qualitative dimensions of experience that we tend to overlook in our other intellectual activities, which, by the way, are characterized as the activities they are by their distinctive pervasive unifying qualities. The sciences seek to formulate

generalizations over groups of phenomena and often need to abstract somewhat from the particular unifying quality of a situation, in order to focus on selected characteristics of a situation that seem salient and explanatorily robust. What distinguishes art proper, on Dewey's view, is the way it presents the qualitative dimensions of an experience, instead of only abstract features, such as causal relations.

The making of artworks is thus an ongoing exercise – an apprenticeship – in how to remake experience to enhance meaning. It shows us how things might be developed in the service of consummatory experience, more than it gives us a particular body of knowledge. It is not just enough to say that artistic making is more a *knowing how* than it is a *knowing that*. The reason this is not enough is that, as Dewey argued, *all* knowing is a form of *knowing how*, insofar as it is a matter of reconfiguring experience for the deepening of meaning. So, the key point here is not that art is a form of *knowing how*, which is to be distinguished from science's acts of *knowing that*. Both art and science are about the transformation of experience to enrich meaning, open up new connections, and help us harmonize our experiences. Art may focus more intently on the qualitative unity of the experience (the work), while science focuses more on causal relations and connections, but both of them are transformative modes of inquiry. They both give us important ways to go on, to go forward, in life.

As an example, consider van Gogh's famous *Starry Night.* If we were to follow Scrivener's tripartite classification of types of arts research, we might suggest that van Gogh's painting could be a form of *research through art*, because it presents a certain vision of astronomical phenomena. But, although perhaps true, this cannot be a very enlightening thing to say about *Starry Night!* What seems more significant is the way the painting powerfully enacts van Gogh's organic vision of the universe as a whole. *Starry Night* presents us with a living, pulsing, growing world. It invites us to *feel, qualitatively,* this vitality of the cosmos. It *represents* a village under a starry sky, but it *presents* a way of being in and inhabiting a world. And that way of inhabiting a world is a legitimate form of knowing how to get on in the world. It gives us a vision – an understanding – of the nature of our cosmos, our world, our situation.

Should we balk at calling this an experience of transformative insight and understanding? I don't think so. And should we balk at seeing van Gogh's explorations in painting as 'research'? I don't think so, even though van Gogh himself might never have described his paintings in that way. The artworks exist as enacted in and through us. That enactment is a way of organizing experience. That particular way of engaging a world can be a form of knowing, and it can be more or less successful in helping us carry forward our experience.

Arts research

It is only within such a framework that I can make good sense of the phrase 'arts research,' in a way that does not subordinate art to other activities of thought taken to be superior modes of knowing. The *research* here would not be geared toward the accumulation of empirical facts or propositional knowledge, although that might be part of the story. Instead, *arts research* would be inquiry into how to experience and transform the unifying quality of a given experience in search of deepened meaning, enhanced freedom, and increase of connections and relations. Students of art are

learning how things are and how they can be reconfigured to change the underlying quality of a certain experience. It is not too grandiose to say that, in their more successful moments, artists help us explore the possibilities of our world, our human relations, and our values and goals. And they do this, for the most part, through their grasp of emerging pervasive unifying qualities.

If, in our assessment of artistic activity, we would stop using models of knowledge and research traditionally applied to the sciences, we would be better off. The reasons we would be better off are, first, that what most people believe about the accumulation of scientific knowledge, about scientific method(s), and about how research actually works in the sciences is mostly inaccurate, if not downright false. Second, making strong contrasts between scientific methods and arts practices ignores the central role of the qualitative aspects of any inquiry, whether in the arts or sciences. Third, both the sciences and the arts are about modes of knowing, as opposed to bodies of facts and knowledge.

The idea of research as the progressive accumulation of objective knowledge is too impoverished a model to account for the full range of modes of human inquiry. It is overly narrow because it ignores the nature and varieties of human exploration and transformation of experience. It is a bad model because it ignores the reality of change in our lives and seeks fixity and eternal truth.

A more adequate conception of research would define it as ongoing inquiry aiming at the transformation of a problematic situation into one that is more harmonious, fluid, expansive, and rich in meaning. This view of research applies equally to science, mathematics, logic, and the arts. No matter what discipline we are in, we have to learn to rely on the cultivated judgment of accomplished practitioners in determining what counts as good work. If we were more honest and self-critical, we might acknowledge that, in fact, this holds true nearly as much for mathematics and the sciences as it does for the arts. True, there is no precise counterpart in art to what is called 'empirical testing' in the sciences, but sophisticated, experienced practitioners can very well distinguish between failed and successful artistic experiments.

Whenever I have served on MFA committees in Art or Landscape Architecture, I have always felt somewhat unprepared for the task. This is because I haven't developed the perceptual sensitivity, the sense of historical traditions, the 'language' of the arts, and sophisticated critical judgment appropriate to the art practices within a certain field. But the same could be said of any artist invited to sit on a PhD committee in Physics or Mathematics or Philosophy. In either case, one simply has to learn, through doing, the bodily and intellectual skills, forms of judgment, keenness of discrimination, and so forth that are at play in those disciplines.

Artists do 'research' via their continuing, laboured, persistent attempts to resolve problematic situations through the transformation of the materials of experience as a way of trying to realize certain satisfying pervasive unifying qualities of experience. Sometimes, indeed most of the time, their advances are very modest, consisting of subtle minor re-workings of a process. But occasionally something truly imaginative and transformative happens, and then we can experience new dimensions – new depths – of meaning, new possibilities for significant engagement with our world. It is consummations of this sort at which art research most spectacularly aims.