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SOMETHING ESSENTIAL ABOUT INTERDISCIPLINARY THINKING

by

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Abstract: The integrative thinking essential to interdisciplinary inquiry requires not only critical reflection concerning the points of convergence and dissonance between disciplinary insights, but also something more personal and less predictable that this paper describes as "holding in relationship different ways of knowing." Using the process of teaching a poem by Robert Hass as illustration and metaphor, this paper models its subject. Interdisciplinary "truth," the paper asserts, is phenomenological in nature, always partial and provisional, emergent as opposed to fixed. The paper gives readers an experience of a dialectical and nonlinear learning process, tolerance for confusion in the midst of complexity, and tolerance for the inherent challenges of holding different ways of knowing simultaneously in one's mind, all of which are essential characteristics of interdisciplinary thought. Both a celebration of interdisciplinarity and skeptical of intimations for exclusivity, the paper makes the case that the essential qualities of interdisciplinary thought are characteristics of creative thinking in many disciplines.

I: Introduction to a Poem

If you stare at something long enough most things reflect back in it. It could have been any poem. I chose one by Robert Hass to illustrate something essential about interdisciplinary thinking. I tell my students lots of stories

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about why I chose this poem, but the truth is most of those reasons are ones I discovered along the way. That in itself is an illustration of something essential about interdisciplinary thinking.

But I am getting ahead of myself.

In class I read the poem out loud before I let small groups tangle with figuring out what is going on in it. My suggestion to you, my reader, is to find a private place where you can listen to the sound of your voice. The acoustics in most bathrooms are surprisingly okay. The first time through, don't try to find meaning. Just hear the shape and rhythm. Here it is:

> The Woods in New Jersey
>
> Where there was only grey, and brownish grey,
> And greyish brown against the white
> Of fallen snow at twilight in the winter woods,
>
> Now an uncanny flamelike thing, black
> and sulphur-yellow, as if it were dreamed by Audubon,
> Is turned upside down in a delicate cascade
>
> Of new green leaves, feeding on whatever mites
> Or small white spiders haunt underleafs at stem end.
> A magnolia warbler, to give the thing a name.
>
> The other name we give this overmuch of appetite
> And beauty unconscious of itself is life.
> And that that kept the mind becalmed all winter?—
>
> The more austere and abstract rhythm of the trunks,
> Vertical music the cold makes visible,
> That holds the whole thing up and gives it form,
>
> or strength—call that the law. It's made,
> whatever we like to think, more of interests
> than of reasons, trees reaching each their own way
>
> for the light, to make the sort of order that there is.
> And what of those deer threading through the woods
> In a late snowfall and silent as the snow?
>
> Look: they move among the winter trees, so much
> the color of the trees, they hardly seem to move.
>
> *for Justice William J. Brennan, Jr.* (1996, p. 30)

Most people find this poem a bit foggy the first time through. There is a bird, a small yellow bird, and trees, and deer. But how the parts relate to each other, or even what the parts are, seems to flee just as you are ready to name it. I really want students to wrestle with it on their own before I offer any observations. I intentionally ask an open-ended and general question: "What are your first impressions? What's going on in this poem?" Inevitably students sit there in silence, reading and then rereading it. The poem has a habit of making people want to go back to the top and start over, as if the next time through meaning will start falling into place. But for most students it doesn't. Eventually I have to *tell* the discussion groups to start talking to each other. The conversations are hesitant. There is always some mumbling, when students think I am not listening, about how, "I don't really like poetry."

When the conversations seem to have tracked off the poem to other things, I draw the class back together and ask the groups what they have discovered. Working together, asking questions, we establish a number of things fairly quickly:

First, there is a collection of apparent dichotomies in the poem. Here are a few of them:

- spring/winter
- flame-like/gray
- bird/the woods or trees
- life/law
- "overmuch of appetite and beauty unconscious of itself"/"austere and abstract rhythm ... that holds the whole thing up and gives it form or strength"

On one level, I offer, this poem is an example of metaphorical thinking, where everything mentioned evokes something else. If I have managed to get the atmosphere in the class right, where people feel safe to challenge my authority, someone will express frustration with the indirectness of such a style of thought. Why not just come right out and say directly what he has to say? I ask, What might be lost by doing so? And what might be gained—at the risk of obscurity—in a way of engaging truth (which is what many writers try to do, after all) that talks about several things, all together in the same place, but may not appeal, at least initially, to our minds, to reason? Is there anything about the shape or form of this poem, about the way it engages us, or tries to, that might embody what the poem is about?

Second, someone is sure to observe that the poem happens at a particular point in the cycle of the seasons: right at the end of winter/the beginning of spring when one's mindset and spirit are still in that "becalmed" spot, but there is something exciting happening, some movement, some "life" that intrudes on our consciousness. I talk a little bit about who Robert Hass is, former poet laureate of the United States from 1995 to 1997, distinguished literary essayist and translator whose insights have helped form our collective appreciation of contemporary poetry, and a writer with deep interests in the natural world. On the surface the poem *is* a nature poem, about the experience of an Eastern hardwood forest in early spring. You can read it as a work of someone who loves the inherent and unsettling tensions in nature at a time of seasonal transformation. My question is, How do those natural tensions, that reading of this poem, parallel other possible readings, perhaps other kinds of transformations, that Hass hopes to stir and explore with this poem?

Third, the poem is dedicated to Justice William J. Brennan, Jr., a liberal Supreme Court Justice. I share that it was written around the time of his retirement from the Supreme Court and subsequent death. Sadly, few citizens of this country know much about the history of the Supreme Court. Technologically savvy students start Googling Brennan—that modern illusion of knowledge, as if the ability to find information is comparable to having enough familiarity with it to reflect on how isolated bits of information relate to each other. I suggest to my students that our reliance on technology for our memory is antithetical to one of the essential things about interdisciplinary thinking that I hope we uncover by spending some time with this poem.

Let me quickly summarize a few things about Justice Brennan. He was appointed to the Supreme Court by the Republican President Dwight Eisenhower, but turned out to be a champion of civil and individual rights. His gift was working with other Justices to patch together majorities. Many of the positions he held and decisions he wrote were subsequently attacked as "activist" by more conservative constitutional scholars. I ask another question, Why might someone want to dedicate a poem to Brennan?

Before I send students back to their small group discussions, I offer a couple of observations and some questions:

1. What are we to make of Hass's attitude about the law? He says the law is order. And implies that the law is what holds our society up and gives it strength. But what sort of order is it? And how do you suppose Hass would have us feel about that kind of order?

2. What is the law trying to bring order to? As we observed, he is setting up dichotomies, contrasts between two apparently different kinds of things. But how different does he think these apparent opposites really are?
3. I offer a clue to my reading of this poem, and hasten to point out that it is only *my* reading, in many ways a reflection of what I bring to it. He is, I think, pondering the difference between The Law, which we might think of as human order, and Nature, or natural order. Given that, what might Hass be telling us about how different these two forms of order are, to quote him, "whatever we like to think." Implied in that line of the poem is Hass's apparent belief that what we think the Law to be, might not be true; so we probably should think about what Hass thinks we believe the law is, about which we may be mistaken.
4. And lastly, what are we to make of his reticence, his resistance, to naming things at the beginning of the poem. Why not tell us trees and warbler right up front? What's to be gained in having the lush description first before he "give[s] the thing a name?" And having named the thing, I observe, he immediately qualifies it, and calls it something else. What might this have to do with what we humans would like "order" to be?

It should be clear by now that I much prefer asking questions to lecturing. That preference is a bit awkward to represent in an essay. This conversation I am having with you, my reader, is asynchronous at best. I am using the unfolding of a class discussion as a proxy for what I hope is a process of mutual discovery. As the students return to their discussions I always reread the poem for myself, and I often discover something new I have not thought of before, most likely in response to an observation a student made. In your shoes I would pause right now and reread the poem too.

II: How This Poem Means

The essential things about interdisciplinary thinking I want to explore in this essay are not so much answers to anything, not fixed or defined, and therefore beyond additional reflection, but rather processes of seeking to understand. In my view interdisciplinary thinking is both social and cyclic, with each new understanding tested through action and then reflected on again. The really interesting things are never what is established, never the

known, but rather the things we can't yet explain. Perhaps in a way unfair to Robert Hass's lovely poem, I am using it as a tool to illustrate something just a little bit to the side of what the poem is about.

I want to pause for a moment and describe my approach to understanding a poem—this becomes important later in this essay as I offer it as an alternate model for interdisciplinary thinking to other models in the contemporary literature. None of us are born with an ability to intuit the meaning of complex poems, at least I don't believe that we are. What I've learned over time is that the trick with poems is to be patient and present, to let the thing resonate, to watch, listen and reread (poems are designed to be reread, to be savored). It is a style of reading that runs very much against how we are trained to read in our age of sound bites and continual distractions, which is mostly a form of skimming to extract meaning. A good poem can not be skimmed. And meaning is seldom a linear affair, but rather something that results from the emphasis one hears on particular words, from images which might (probably do) mean several things at once, or from the relationship between parts.

I don't believe that there is one correct reading of any poem. We could say, in Robert Hass's poem, that the woods are the law and that the magnolia warbler is Justice Brennan, a breath of freshness in a stodgy world. We could say that the deer are other Justices of the Supreme Court, in Hass's eyes less adventurous and life-filled, but still more like the warbler than the trees. The poem would sustain that reading, but it would frankly be a less interesting poem if we insisted that is what it is about, particularly if in doing so we abandon the reading of the poem in which it gives us an experience of the woods in New Jersey in early spring. Rather, I believe that you can tell how good a poem is, or any art for that matter, by how fertile it is. By that I mean the better the poem or the art the more readings it will sustain—the more it reflects us back on questions we have about life.

On a deeper level, I think this poem is about our yearning for order in a world we perceive as chaotic—another theme I will return to later in this essay. We humans are constantly recording, sorting, classifying, and passing judgments on things. We are pattern-seeking animals. This is why, I believe, he describes before he names, to give us the experience of the thing before he allows our minds to put it in a labeled box and, thus classified, not really see it any more. In our quest for order, the first boxes we put things in often turn out not to be the most interesting ones, and as I will discuss in a moment, this has a lot to do with how this poem works, and for that matter, the things I want to observe about interdisciplinary thinking. The activities

of the Supreme Court are perhaps the ultimate manifestation of this yearning for order, trying to sort out the most intractable of chaotic situations, only the cases where other courts have failed to resolve the chaos. In my reading of this poem, the ecologist in Hass knows that what we perceive as a lack of order in nature is rarely as chaotic as we think (nature contains a great deal of order, though not always of a mathematical variety), and what we produce as order (the law, for instance, or the insights of our various academic disciplines) is likewise rarely as orderly as we would like. What we perceive as chaos and produce as order are really more like than different. In Hass's mind nature and culture are of a piece; we humans are embedded in the natural world and the order we produce in our finest institutions looks very much like the kind of order we find in nature. To quote, our order, our academic disciplines, in the case of this poem the law, is

> made,
> whatever we like to think, more of interests
> than of reasons, trees reaching each their own way
> for the light, to make the sort of order that there is.

That is, the dichotomies and separations between things that we set up in our attempts to understand our world accomplish two directly contradictory things: They allow us to think about complexities that would otherwise defy our ability to understand, and, because our distinctions are inevitably not the whole story, they limit our understandings. I like to think of this human impulse toward order as a kind of window frame: It helps us to make sense of what we are looking at, but our attention must always be on what's on the other side of the window, not the frame itself, not the theories or factual observations we have managed to pin down, which after all tend to exclude more of the overall vista than they include. Those photographers among us know well this struggle to construct partial or provisional meaning through what is included or excluded from the frame.

Thus Robert Hass's poem embodies for me an important aspect of interdisciplinary thinking. At the same time we need our "laws"—those temporary structures we construct to contain what we perceive as chaos—those insights are not enough to give us the fuller knowledge we seek. The experience of reading this poem for the first time is one of the ground constantly shifting under you. That's why it doesn't make sense the first time through. Every time you think you know what's going on, Hass changes the rules. Just when you think you have finally sorted it out, he throws the deer

in and leaves the whole thing on a question. For me the poem embodies—it gives form to—the process of trying to hold dissimilar versions of "truth" in your mind at once.

III: Essential Things about Interdisciplinary Thinking

This is what interdisciplinary scholars try to do all the time, and it turns out that this practice runs counter to a fundamental need we have to organize and classify things. Holding different ways of knowing simultaneously in one's mind, holding different and sometimes contradictory feelings, holding a variety of descriptions for an event, a thing, a social phenomenon, or a process for solving problems—these things are not comfortable as they contain inherent tensions that we instinctively seek to resolve. One of the things an interdisciplinary scholar must learn to do is not jump too quickly to resolution. We must live into those different ways of knowing that our academic disciplines give us, the tensions and confusions of complexity. We must examine what is produced by doing this, at least long enough so that we might see what we learn by doing so. And we must recognize that any order, common ground, or integration we construct in the course of making tools that help us to understand is, at least in part, a simplification, partial and provisional, one of many possibilities about which we must remain open and curious, always seeking a story to tell, a way of describing the view that takes in the greatest part of the vista we currently see.

As many before me have observed, interdisciplinary thinking is far more than simply knowing about something in two or more different ways. That would be multidisciplinary. This practice of holding different ways of knowing *in relationship* is how thinking becomes interdisciplinary. The ways of knowing act on each other—we can not predict how—but that process is often fertile, if we pay attention. But I must explain what I mean by holding ways of knowing in relationship.

Relationships are complicated, as all those among us who have tried, successfully or not, to sustain a long marriage well know. The results, at first, may be more confusion than clarity, for the terms of the discussion are often different and it frequently takes time for the differences in perception to work on each other in a way that is more than simply A and B. That's why we perceive an argument between the objective and the subjective, between culture and nature, between disciplinary insights, and seem to feel that one side or the other ought to win. My important point here is that the transformations that happen in deep relationships, like any deep

learning, often take time. Insights come slowly, often in response to what we experience as sustained conflict, though those apparent conflicts frequently have more to do with deeply held and cherished ideas or stories we tell about our selves and our world, or long familiar ways of interacting, than any real disagreements. As in Robert Hass's poem, we may see that culture and nature may have far more in common than what separates them. It frequently takes a while to uncover a more capacious approach to the problem. Sometimes what emerges is not common ground or a larger insight; sometimes the resolution, such as it is, is a deeper understanding of differences and how to usefully embrace them—in Hass's poem the bird and the deer, to say nothing of the trees, remain distinct, as do the different potential readings. I am proposing that this process of "holding in relationship" is a somewhat different process from seeking integration or synthesis.

Let's return, for a moment, to the way we made some sense of Robert Hass's poem. Rather than trying on and discarding interpretations, rather than working to combine or integrate different readings together, we let those readings ring, on each subsequent rereading holding simultaneously the version about the woods in early spring, the version colored by certain historical facts about the career of Justice Brennan that seems to celebrate his presence in the Supreme Court chambers as a burst of color and life in an otherwise drab and silent gathering (a reading which does some injustice to several of Brennan's contemporary Justices), and the version which may have something to tell us about the limits on our human yearning for order. In the end what keeps me rereading the poem is not a resolution to those understandings, but rather a fascination with the complex way all those readings resonate in the words; a creative tension, that in turn gives me an experience of the way my mind seeks to resolve that tension in simple, even at times in reductionist ways. And part of why I teach the poem, and share it here, is that I am ever curious about how others experience it.

Or, for a different example of what I might mean by "holding in relationship different ways of knowing," let me foreshadow the construction of this essay, layering as it does in a way that hopefully resonates, the literary analysis of a poem, with certain philosophical considerations, that with any luck will illuminate for you, my reader, some particular qualities of interdisciplinary thinking, that may also be characteristics, when viewed from a different angle, of creative thinking in many disciplines.

One of my students wrote to me, "If presumably overlaying different truths gives us a deeper or more accurate/layered/complex picture, why is

this 'knowing' any richer than the original? Isn't it just different perspectives of the same thing but that doesn't necessarily add up to the 'truth?' Because each of our 'knowing' is not really truth but our own perspective, tainted by our experiences, aren't we just layering shades of gray on top of shades of gray?"

What she is poking at here is a question about the nature of "truth." All academic disciplines come with an answer to the question, "How might we know the truth?" These are methodological and epistemological questions. In part, what we are exploring here is the answer given by interdisciplinary thinking. To do so we need to take a brief detour into some big ideas, necessarily somewhat simplified.

Truth, as my student was using the term, is a singular or essential thing. That is, she is operating from the assumption, as many in our positivistic, scientific age are, that there is a singular, monolithic, external, and objective reality, and that if we can strip away the taint of our own perspective and experience as in scientific experimentation, we might know the essence of it. This assumption has a long history in Western philosophy and was explicitly called into question over the course of the 20th century by various philosophical schools of thought. It is not my purpose to trace that history here, but rather to observe some important landmarks. Foundational for interdisciplinary thinking, in my view, is the work of Edmund Husserl (1929) and other phenomenologists. Phenomenologists tell us that experience does not "taint" our own perspective. Rather our experiences shape our perspective, and we transform experiences into something to which we give meaning, not only while we are having the experiences but after the fact, sometimes over and over again. That's not a good or a bad thing, it simply is. There is a lot of disagreement among philosophers of the last 100 years about exactly *how* experience is transformed into meaning, but the core insight is that there is a process—some see an internal cognitive process and others one dominated by one's culture and epoch—a process that can be studied. There are, as we saw in Robert Hass's poem, "laws," temporary structures we construct to contain what we perceive as chaos. I assert that in a similar way we can understand the rules or habits of inquiry, the assumptions about the nature of knowledge common to an academic discipline, and the information and insights produced by workers in that discipline, as a collection of different solutions for giving meaningful form to experience.

Interestingly, neither Husserl nor the hermeneutical thinkers (Heidegger, Gadamer, Ricoeur) who built on and critiqued Husserl's phenomenology—

and each other's work—and were particularly interested in the way interpretations were situated in history and in culture, neither saw their project as calling into question an absolute or essential reality. Rather, their work was in many ways interpretive; they hoped to provide a way to understand the very different perspectives that come to the fore when one acknowledges the validity of lived experience and rejects scientific realism as the *only* path toward encountering the objective truth. However, phenomenology, as Thomas Schwandt has observed in his *Dictionary of Qualitative Inquiry* (2001), is not a single unified philosophical system, and later qualitative researchers have understood their work of describing the subjective experiences of respondents as being "phenomenological" even though in all likelihood the originators of the phenomenology would not have seen it that way. Whatever his intent, Husserl opened the way for later thinkers (about whom I will say more in a minute) for whom truth is not monolithic, for whom there is not one indivisible, objective reality.

This, I assert, is the interdisciplinary perspective. We might yearn for objective truth, for order, as we saw in our analysis of Robert Hass's poem. And as we saw in his poem, such order is at best partial and provisional, constructions that help us to understand our world but are never the whole story. Nor is the world relativistic mush with no discernable meaning or values. Among the insights Husserl's phenomenology offered about differences in lived experiences was that our understandings are constructed intersubjectively, socially constituted through deep awareness, even curiosity about, how others around us perceive similar experiences. Interdisciplinary thinking embraces this concept of intersubjectivity, and allows us a way to encounter new understandings in which the "real world" is seen as a collective field of intertwined perceptions, that is, a truth that is an evolving or emergent, multi-faceted phenomenon, encountered over time by intersubjectively holding in relationship different understandings of it. "Relationship," in this context, implies more than the layering process my student described. Rather, the interdisciplinary approach is interested in the differences between disciplinary perspectives, and curious to learn about those differences. How can they exist? What does that tell us about the nature of our world? How can we go forward embracing those differences in a way that does not ask either to be untrue to the experiences—the assumptions about knowledge, the habits of inquiry—which produced it? I don't pretend that there are always clear answers to such questions. Only that from an interdisciplinary point of view such questions are always worth asking.

IV: A Word or Two about My Own Frames

And here, my reader, is this essay's sleight of hand: the essential thing about interdisciplinary thinking I wish to convey is that *there is nothing essential* about it. Interdisciplinary thinking is not a singular thing, with set processes or methods, but a modality of thinking as varied as its practitioners. Yet it offers us a suite of related processes that can help us to understand our complex world in complex ways. I confess I am speaking as someone deeply formed by study in the humanities. My sensibilities tend easily toward the humanities side of the two cultures examined by C.P. Snow in his famous 1959 lecture of the same name, the side of the dialogue that critiques the other for a misguided faith in the possibility of absolute objectivity. I see academic disciplines as transitory historic artifacts frequently arising from an interdisciplinary impulse only to become institutionalized over time. Not many today, for example, give much credence to physiognomy—the study of people based on their outward appearance—though the discipline flourished in the 18th century, only to lose favor as the implication of its premises ran out to their logical conclusions. Or consider Roger Smith's account in *The Norton History of the Human Sciences* (1997) of the late 19th century origins of Sociology—growing out of political economics, race theorists, and those struggling to understand human nature in statistical ways—or of the early 20th century split between physical and social anthropologists. Or again, consider Joe Moran's account, in his book *Interdisciplinarity* (2002), of the rise of Cultural Studies in the mid-20th century, drawing on anthropology, linguistics, textual criticism, political science, and various movements for social change along with a small handful of other disciplines. Moran's work is particularly useful in showing the role university politics plays in the institutionalization of what was once new interdisciplinary thinking into named fields of study. In his view, "interdisciplinary movements will tend to acquire the institutional and intellectual characteristics of disciplines as they become recognized and accepted" (p. 111).

Moran, Rick Szostak (2011) and others note that this view of the changing nature of disciplines is not unlike that advanced in Thomas Kuhn's 1962 book, *The Structure of Scientific Revolutions*, in which he observes a distinction between normal and revolutionary science. Moran seems to place interdisciplinary work squarely as a revolutionary science, seeing in it "a radical awareness of science as the product of institutional politics and cultural contexts, in which 'there is no standard higher than the assent of the relevant community'" (p. 154). Szostak struggles with that classification,

understanding that in Kuhn's terms paradigm shifts are rare and that, "to identify interdisciplinary scholarship with revolution is then to suggest that only a very small minority of scholars can be interdisciplinarians." He yearns for "some third form of scholarship between normal and revolutionary" (p. 6).

Such dualistic constructions, of course, are the simplest form of order that we humans create. Yet we are drawn to dichotomies, because such constructions help us make sense of things—as we saw in Robert Hass's poem a series of apparent dualities provides a frame that allows us to think about complexities that would otherwise defy our ability to understand, and, because our distinctions are inevitably not the whole story, often limits our understandings. More nuanced, perhaps, are the French philosophers Gilles Deleuze and Felix Guattari's (1980/1987) explorations of decentered, horizontal, or smooth spaces, as opposed to hierarchical ones. Their favorite images are of plateaus or of rhizomes, plant structures that spread at or just below ground level and create large webs of a single plant, like irises or alders. Rhizomes make many forks; they are detachable and each fragment may make a new plant. They have no beginning or end; a rhizome is always in the middle, between things. In Deleuze and Guattari's view, rhizomes ceaselessly establish connections, and they describe workers in such spaces as nomads. According to Deleuze and Guattari, a great many of us are nomadic thinkers, moving horizontally between more hierarchical structures. They define nomadic thought space as dynamic, heterogeneous, and continuously variable. Hierarchical organizations have the characteristics of trees (and it is interesting to note here Hass's portrait of "the law" as a forest of trees), individual plants that put down deep roots and are quite difficult to move, and then only when they are young. Rhizomes, on the other hand, are easy to cut up and transplant, and are infinitely interconnected even when physically separated. The nomads are contrasted with the royals, those operating within hierarchical structures, yet Deleuze and Guattari insist they are not merely offering another dualistic understanding: They comment, "Royal science continually appropriates the contents of vague or nomadic science, while nomad science continually cuts the contents of royal science loose" (p. 367). Kuhn saw scientific paradigms as singular and dominant in any given historical period. He offered a description of scientific change, but his conception of paradigms has been extended and applied more broadly than he intended, in a similar way to Husserl's phenomenological insights. Nonetheless, his is a singular world, one dominant paradigm succeeding another; the 21st century is more complex, with many centers of thought and many kinds of power. Deleuze and Guattari describe a world with many

royal sciences, and nomads moving between and amongst them on infinitely forking rhizomes. To deliberately mix ideas (I'm an interdisciplinarian, I get to make a bit of useful chaos among the toys in our sandbox): The paradigms that define Kuhn's normal science are likely not nearly so fixed as he saw them, and nomads not nearly so rare.

Like many of my postmodern contemporaries I tend to see reality, to see truths, as constructed. As Immanuel Wallerstein observes in The *End of the World as We Know It*, Snow's two cultures are converging. The sciences are embracing complexity studies which sees the universe as a collection of complex adaptive systems and asserts that any understanding of such systems is very much dependent on where observers stand and the technology they are using to measure. At the same time, in the humanities, cultural studies tells us, for example, that meaning and truth for the colonizer is fundamentally different from what is significant for the colonized. And in contemporary human sciences, some are drawn to a participatory form of inquiry[1] in which the investigator is conscious of and explicit about assumptions they bring to the table and open to having the inquiry process reframed by differing assumptions and insights of other participants, most especially those being studied.

Thus, I tend to see the difference between disciplinary and interdisciplinary thinking as not being fundamentally different in kind, but rather as a manifestation of how deeply one is wed to particular historical institutionalizations of knowledge. Many creative thinkers are engaged in what we might describe as interdisciplinary thinking—which Deleuze and Guattari might describe as nomadic—whether they self-identify that way or not. I will point out that this rather ecological view of people working in and around disciplines is not unlike Robert Hass's description of "trees reaching each their own way/for the light, to make the sort of order that there is," in which things perceived as different may tell us as much about the sensibility of the perceivers as about the actual nature of the things themselves.

I am among those who mistrust attempts to systematize interdisciplinary research, not because doing so lacks utility. Far from it. In the interdisciplinary program I chair we teach Allen Repko's (2008) integrated model of interdisciplinary research as a valuable reminder of issues and processes that need to be considered. Repko's is a good process, but at best one among many. My fear, however, is that as we use such tools, we forget that the originators meant them to be iterative and non-linear. I fear over time that the process may be reified, that institutions may grow around the theory,

[1] See, for example, John Heron and Peter Reason's "A Participatory Inquiry Paradigm."

and we will begin to treat a deeply useful tool, a constructed insight into our collective interdisciplinary processes, as if it was indivisibly real.

As William Newell (2011) observes, many in the humanities, and I would include myself among them, share a mistrust of the penultimate stages in Repko's research process, the creation or discovery of common ground and the integration of insights. It is not that I argue with such stages as a vital part of interdisciplinary thinking, though I choose to describe them differently. My struggle is that there is an implied value judgment in the way some interdisciplinarians describe their work, seeking an integration that is "inclusive and expansive." Sometimes, it seems to me, there is no singular integrated understanding, no common ground, or at least that the things we most need to think about are the ones that resist the discovery of common ground. I deeply mistrust the impulse to seek integration too quickly, believing as I do that the first intellectual boxes we put things in, the easy categories for understanding, are often not the most fruitful. Sometimes we must seek ways to think and talk about insights that stubbornly refuse to integrate. We need to find ways to tell stories big enough to embrace differences in a way that honors the separate visions and experience at their core.

Rather than seeking integration, my description of this process is of holding different insights, different ways of knowing, in relationship. My goal is not necessarily a harmonious music. I am fascinated by dissonance and try to hear the many voices in the symphony. I don't so much see a progress of knowledge, insights accruing steadily over time in a way that advances human understanding. Rather it seems to me that all our insights, and not just those in the humanities, are deeply bound to time and place. As we have seen with Husserl and Kuhn, ideas which resonate over time often do so in ways other than how they were originally intended, that is, they take on new meanings, or are applied in unforeseen ways. I am inclined to think in metaphors with layered meaning, and don't imagine that the sense I make of things is any more or less valid than what others might understand. I am fascinated by the natural multiplicity of truths. In the end I am probably less interested in integration, or even in the stories of dissonance or confusions I manage to tell, than I am in the mysteries. I am interested in finding ways to talk about what I can't yet explain. That is where the juicy stuff lies. Given these sensibilities it is not unexpected that I would much rather try to open a space in which you, my readers, might think with me than I am in convincing you that my ideas are correct. Though I write this essay, centered on a poem I find resonant, I don't expect you will necessarily agree that the best way to conduct interdisciplinary inquiry is similar to the way I read a poem: an

approach to thinking in which meaning is seldom linear and it is unwise to cling to early understandings, in which finding the truth of anything is an individual act and you can tell how durable an idea is by the number of interpretations or applications it sustains, by its ability to reflect us back on relevant questions we have about life, and in which we must be patient and present, to sit with whatever remains mysterious, and pay careful attention to the relationship between parts, relationships that can only be understood over time by listening closely to the way things resonate inside.

Notice that I keep harping on this idea of *relationships*. Plato had a notion that the idea of a thing was more real than the thing itself, that there existed one true form of a thing: All physical chairs are but imperfect manifestations of the idea of Chair. Interdisciplinarians, I insist, say, Hogwash. To understand the purpose, the essence, the *truth*, of a chair you have to sit in it, or perhaps design and build one. A chair only means something in relationship to someone who uses it. Alone its purpose may not be at all obvious; or alternatively, it might well have many different potential purposes or meanings. After talking about this in class another student wrote me, "My cousins and I routinely turned the rocking chair over to create our fort house with a blanket on top. It was not a chair to us, but it was very real, and its purpose to us was obvious, a perfect hiding place for eating cookies and telling stories."

This tension, this difficulty in holding potentially dissimilar ways of knowing in relationship, is something Hass portrays well: The becalmed spot that winter produces, the order, that state of everything being dormant that we resist being pulled from—waking up each morning we are a bit groggy after all, why should waking in Spring be any simpler? At the same time, the burgeoning of new life and possibilities is something so exhilarating that every major religion has long marked it with a ritual of transition. In a world often described as shrinking, in which we are increasingly aware of the abiding complexities of living with our differences, a mode of thinking which allows us to embrace different ways of knowing without requiring a singular synthesis may be among our best hopes for finding ways to survive.

Examining that tension—the tension between established ways of knowing and new ones, growth, or change, something the best thinkers among us, whether self-identified as interdisciplinary or not, do all the time—turns out to be no easy task.

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