

# All Knowledge is Carnal Knowledge: A Correspondence

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## Abstract

What follows is a reconstruction of an e-mail correspondence that took place between November 1999 and February 2000 between a Canadian professor of education and an American philosopher and ecologist. This conversation glances through schools and mathematics and suggests, in the end, that even this seemingly most abstract of human disciplines just might be a (carnal) body of knowledge.

## Résumé

Suit la reconstruction d'un échange de correspondances par courriel qui a eu lieu de novembre 1999 à février 2000 entre un professeur d'éducation canadien et un philosophe et écologiste américain. Cette conversation donne un aperçu des écoles et des mathématiques et suggère, en définitive, que même cette discipline humaine en apparence des plus abstraites peut s'avérer un ensemble de connaissances (charnelles).

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*David Abram:* Hi, David! Here I am at last. My sweetheart and I have been wandering through the American West, snooping around for a potential community, and although no place reached up through our feet and grabbed us, we've landed for a time in the high desert of northern New Mexico—in the midst of a mongrel community of activists I know fairly well from years spent living and loving in this dusty terrain before moving to Washington State three years ago. We had hoped that island realm would claim us, but the combined effects of Boeing, Microsoft, and the city of Seattle generally sprawling all around us, sprawling up into our noses and our ears, finally forced us to flee. We embarked on this most futile of quests in turn-of-the-millennium America: the quest for wildness—wildland and wild, earthy, close to the ground community. Slim pickin's these days. Development everywhere, clearcuts even in the back of the backcountry, streams ravaged by effluent from abandoned mining operations. It's not all

hopeless: there's still plenty mystery out in them thar hills, but I was mostly shocked by how *the same* all the towns are becoming. Ah well . . . I suppose Canada's a decade or two behind the States, and if only we could get visas to live and work in Canada, we prob'ly be there in a flash.

Anyway, David, I've just finished reading, for the second time in three days, your little essay "Birding Lessons and the Teachings of Cicadas" (Jardine, 1998). I read it again only because, on reading it a few days ago, it brought me such pleasure, and I wanted to experience that pleasure again. And did. That whole little essay just makes me really happy—to know that someone is thinking and writing like that, saying these things as gently and gracefully as you are. I mean, I was really struck by the writing style that you've been forging for yourself, and it got me thinking about the ways of languaging that seem to reign within academia, and within Western education generally, and ultimately within our civilization at this curious moment.

Seems that you and I both are engaged, whether implicitly or explicitly, in trying to nudge the collective language—to loosen it up, perhaps, in hopes of making room for various other non-human voices to enter and influence the general conversation. No matter that these other voices do not speak in words (but rather in honks, or trills, or croaks, or whispering rattles)—what's important, as your essay on "Birding Lessons" seems to show, is that our own words be awake to these other styles of expression, these other bodies, these other shapes of sentience and sensitivity. But, to let my words and my thoughts stay awake and responsive to these other voices entails, it seems, that I speak more as a body than as a mind—that I identify more with this breathing flesh (this skin and these hands and this ache in the gut) than my culture generally allows, and that I let my words and my thoughts blossom out of my limbs. That I acknowledge and honour my own animal presence, this curiously muscled form with its various affinities and cringes, and its apparent ability to echo, or reverberate off of, any other body it encounters—a sandstone cliff, or a water strider, or a wolf howling out in the forested distance.

For me, the whole reason and worth of reclaiming the body—or rather, of letting the body reclaim us—is so that we may find ourselves back inside this delicious world from which schooling had exiled us, rediscovering our embedment in the thick of things, remembering our real community and being remembered by that community. I mean, how long did we think we could go on without the necessary guidance that herons and toads have to offer?

*David Jardine:* So, what if we try to think of our human inheritances, our cultural, disciplinary, textual . . . our mathematics, our buildings, our schools of art with their pulls of paints, the oddly named “language arts” found in schooling . . . as somehow, somehow *bodies of knowledge*? Given (and it is perhaps this seeming “given” that is the sorest point) the mandates of schools and the entrusting of the human disciplines to teachers and children, can we draw into those places the Earthly, bodily images and the sorts of sensuous, bodily encounters you suggest? What often happens when “environmental education” penetrates the school is that we come to understand the Earth as a special topic (distinct from but still) among others (language, mathematics, social studies, the fine arts, each with their own curriculum guide alongside the “environmental education” curriculum guides). We then pursue the delicious thick of things like sandstone cliffs, or water striders, or wolfy howlings and the guidance of herons and toads, but we have such a hard time finding our human works bodily delicious. All the rest of schooling is left behind (in the wake of “environmental education’s” desire to “get outside”) and, to be brutal about it, school subjects are drained of their body and life and blood. They have, in a weird way, been abandoned.

So, is it possible, is it even feasible, is it even *desirable* that the Pythagorean Theorem become something off which we can echo and reverberate? That it, too, might be a *body of work* we might remember and be remembered by, a real, living community of conversation, of contestation, of shared and contested histories, of shoals and sedimented layers and evidences of erosion and restoration and longstandingness, of signs, sniffy tracks, pointing, a place that must be entered with care if it is to show itself and not be scared off by our interloping, leaving only math worksheets in its wake? I’m not sure where it is from: someone suggested that “it is language all the way down,” and someone responded: “if it is language all the way down, then it is also Earth all the way up.”

*David Abram:* Um, I vaguely remember that it was my philosophical colleague Jim Cheney (1989), responding to a statement by Richard Rorty that “it is language all the way down,” who said something to the effect of “well, yes, but it is also earth all the way up.”

Earth all the way up—of course! So there’s really no realm of our experience, no layer of reflection so rarefied that it definitively breaks free of the Earth’s influence. No artifact that has not also been authored, or at least enabled, by the curious mix of minerals, winds, and waters that comprise this wild planet, no “virtual” reality so virtual that it is not tacitly

informed by the tastes and textures of *this* reality. Not even language is immune to the influence of gravity! All of which becomes apparent as soon as we return to our senses and acknowledge the sensuous, corporeal character of all our experience. Even the most outrageous visions are still visual, still granted—that is—by the bodily eye in its dreaming or delirium, and hence already infected by the visible world.

And so why not mathematics, too—I mean how could it be otherwise? Does not all our mathematics grow out of the proportion between our bodies and the round earth? Is not “geometry,” as the very word suggests, the measure of Ge or Gaia—the way the earth measures itself in relation to the human body?

I find rather odd the common assumption that another thoughtful species evolved on some other planet would somehow come up with the same mathematics that we have. Heck, even another species on this planet, if they chose to codify their sense of order, would surely incubate a different mathematics than this that we’ve hatched. Indeed, the sea urchin who once inhabited the delicate calcium matrix that now rests on my windowsill, to say nothing of the giant undulating jellyfish I once came upon (while diving off the coast of Thailand) who had a whole school of hundreds of little, fluorescent blue fish living under the protection of her transparent and pulsing umbrella—these radial folks seem already to be practicing a mathematics very different from the one we two-leggeds seem to be pursuing. It is our breathing body—with its symmetries, its rhythms, its vertebral sequences and distances and digits—that infiltrates us into the field of numbers and numerical relations—and so of course the body will lend something of its character to the mathematics that it glimpses and explores.

And yet the sea urchin’s mathematics would not be entirely alien—indeed it would be weirdly complementary to any human mathematics we might devise, intimately familiar in its strangeness, since both we and the urchins, for all our corporeal differences, can only dream in relation to the same Earth, the same sphere, the same vast and spherical flesh. Our small bodies are so different, yet our larger body—our larger flesh—is the same.

That’s an exercise I would love to have been assigned in high school math class: “What sort of mathematics might an octopus (or a consortium of octopi) devise?” Or: “Consider the web-weaving spiders: what might be one or two of the basic theorems of arachnid mathematics?” And plants: “Do individually-rooted trees, like oak and fir trees, enact a very different arithmetic than do those who propagate in a more rhizomal fashion, like aspens?” The chance to ponder such questions in the classroom would link mathematics to the bodily imagination as well as to the analytic

intellect—would likely help students recognize early on, that mathematics is an imaginative endeavour as well as a ready-made set of abstract tools.

I mean, it's plenty obvious that even different human cultures (China and Europe, for example) can come up with different sciences, different mathematics, different ways of relating to the common Earth. And so I am in utter agreement with your sense that these institutions are *bodies* of knowledge—that our schools, our sciences, our most refined arts are all living bodies of knowledge, with particular habits, rhythms and styles of comportment that have been grappled-over and handed down from generation to generation. That these are not fixed and finished sets of facts but corporeal practices, styles of engagement, ways of seeing, active ways of knowing. Of course this does not mean that they are arbitrary, since they are ways of relating to the actual Earth. They are not merely “socially constructed”—at least no more than the particular grasses we eat are constructed by the Earth .

In this sense your notion seems important to me, radically so—that we should teach even such a taken-for-granted truth as the Pythagorean Theorem as a living body of knowledge, a richly sedimented bunch of fleshly encounters and contested practices that we have inherited and, perhaps, can reactivate and contribute to. What a shift that would bring to contemporary culture, if mathematics began to remember itself as a sensuous, breathing, carnal field of earthly interactions! I mean, what were Pythagoras and his secretive sect up to if not cultivating a set of bodily practices, of ways of looking and listening—to the world, to numbers, to the night sky studied with lights.

But then again, wasn't it Pythagoras himself who was early among Westerners to so segregate the realm of number and proportion from the sensuous world to which our animal bodies give us access? Wasn't it Pythagoras who, in our tradition, first insisted upon the purity and eternal nature of mathematical truth relative to the shifting, dangerous, and hence less real world of generation and decay in which we find ourselves bodily ensnared? Wasn't it he, enamoured of numbers and their apparent generality, who first set the human mind lusting after a purity that was not of this Earth?

*David Jardine:* “Lusting for a purity that was not of this Earth.” I think you've got it there. Maybe, to really understand mathematics as a *body* of knowledge, we need to understand something of the lust for immortality that hides in its axiomatic allures. It wouldn't be so alluring without its odd, inhuman promise that has aroused us humans so often.

Wouldn't it be something to meditate upon *this* sort of thing with our children in schools? I remember one grade 7 kid out in the school yard, near

winter solstice, talking about how low the sun had got, and how, even so, even with this sort of bodily evidence of the grand circles of change, somehow, the tree and its shadowcasts still carry Pythagorean proportionalities.

So, after your meditations on octopuses and rhizomatic aspens (hmm, juicy phrase, that!), I've been thinking about standing upright and how it lends itself to Pythagoras' musings. That kid and me standing upright, spooked by how the raise of the height of the sun meant it hit the tree top at a sharper angle and therefore splayed out its treeshadow towards us differently, shorter, but (spookily) perfectly so, in *The Same* proportion. Little wonder we might have imagined that mathematics portended an unearthly, everlasting life. A great glimpse of *The Same*. So mathematics becomes a distention of our desire to know what *pertains*, what *remains*.

This is the bodily energy I've seen when math gets taught right—students spooked and spirited by somehow glimpsing *The Same*, something that *pertains*.

Been thinking the odd similarity our work has, that both of us tell bodily tales, but we both also share a philosophical tradition that, for me anyway, handed me back my fleshy life out of a career in philosophical ideation. Phenomenology, the sensuous presence of the lived world, hermeneutics and the embodiment of ancestry and a seriously finite human subject . . . it is clear in your book (Abram, 1996) that your tale is somewhat similar.

When, in your work, you take up Merleau-Ponty and his visibilities and invisibilities (or Plato and his), it becomes clear that the ancestors can help us experience more deeply, more thoroughly. That is the feel I get from your book, that knife edge, where what presents itself to the critterbody, the sensuous spell, the sensuous *Speil*, is not just felt, but mulled-over, taken seriously enough to not just be stimulating, but thought-provoking as well. There is a Dharma-glimpse here: some things *pertain* in the roiling interdependencies of the flesh. For me, this is really the knife edge that I want my own work to have—the felt immediacies of the ancestors howling in the flesh. Robertson Davies once suggested that the outcome of education is that you become haunted by more ghosts. So when I think back to your words about Pythagoras and his motley, secretive crew, their work, even their formulae, become like old, odd inheritances passed down through many warm hands, and even though he might have aspired to otherworldliness, I can feel the fleshheat of that aspiration as a deeply human one.

So, let me try this. When Merleau-Ponty states that the eye that gazes out at the visible terrain is also visible, and hence is entirely a part of that visible field, so that, as you've written in *The Spell of the Sensuous* (1996), I and the world share a common flesh—a common animate element that is

at once both sensible and sensitive, perhaps even sentient—well, as we read and ponder this, it is some aspect of our embodiment that takes in these words of his and yours: we read them, we speak them out loud, we remember them, we write them out by hand in order to remember them, and they affect our thinking. Similarly, when we turn away from our books and tune in to the cicadas thrumming outside—well, some aspect of our bodies takes in that experience as well. To be sure, the latter experience has a different character, it is less verbal and more auditory, having to do with the dips and volumes of air and its humidity between me and these trees. But the tales told are analogous, somehow, even akin.

When some theorists speak of “embodied knowing” they want to set up some sort of fight at this juncture, claiming, without often saying so in so many words, that academic work (like reading Merleau-Ponty), is *in principle* “disembodied,” that all those ancestral-bibliographic searches in what James Hillman (1991) called “the old place” (p. 101) are to be disparaged in favour of some image of immediacy. But I don’t think these two encounters are necessarily at odds here, or that one is any less embodied than the other. They are simply two different aspects of the body, or two different ways of being body.

*David Abram:* This must be a quick missive: I am in the grip of some intense sickness misery at the moment, and trying to fathom how to deal rightly with it before it deals overmuch with me, so I ask your patience for a few days. I’ll climb back into the conversation as soon as I can think straight (or, better, curved—as soon, that is, as I can curve my thoughts again without flying into a tailspin).

But your last comments about “disembodiment,” and how maybe what seems “disembodied” within the academic world is perhaps not really disembodied at all, unquiets me. I mean sure—a lot (or at least some) of that scholarly textual tracking of phrases and forgotten foibles and bibliographic peering after “who was quoting who and why and where” is indeed a kind of marvellous mudra for the muscles—a way of communing with long-dead ancestors and ancestral haunts, and of learning from them how to haunt the library stacks in style when we, too, have transmogrified into a trail of traces. I mean *of course* everything felt or sensed or even thought is felt and thunk by a body (whether that body is furred, or feathered or made of bricks). But shucks, man!—the question is whether that body blossoming into song is singing in a way that blesses the other bodies that abound, or whether it’s proclaiming only and endlessly *itself*, at the expense of all else, by pretending it’s not a body in blossom but a burst of brilliance from beyond Alpha Centauri, a burnished piece of bombast that

wants to blast the bodily world to bits, despising its own density and texture for being vulnerable to the wind and the wet (and the withering away). The abstract intelligence, I think, is a sheer delight when it's in service to the earthly dance, but reckless and stifling mean when it strives to certify its dominion, terrified of noticing that it's enmeshed in the world it seeks to control. The terror of being vulnerable, and the consequent wish to disembody oneself, to stand forever outside the sensuous world—to possess the world in thought, to comprehend it and own it and finally to control it: that is the sad dance that I'd call "disembodied." It's still a dance, yes, but one that has forgotten the pleasure of the thing.

Drat! I seem to have forgot my resolve to hold off on these thoughts till I'd felt a bit better in my limbs, and a bit more limber in my brain—feel free to ignore the above paragraph if it's just ranting without grokking yer main point, which I sense is a kindhearted one. The problem, David, is this: schooling did indeed hurt me, wounded me bad. The schools I went to didn't leave any room between their four walls for such folks as myself, "dyslexic" they'd probably call it now, and maybe also "attention deficit disorder" or some other dysfunctional label—'cause they didn't recognize any value in the sort of delicious somatic empathy I inadvertently felt in relation to creatures and grasses and rock faces, and in general, every sensorial thing I met and pondered, which translated into a kind of slowness in regard to less tangible matters like logical theorems and abstract principles. And so I guess I've got a chip on my shoulder, one that sends splinters into my flesh every time I remember sitting, shaking and sweating, in front of yet another timed test while the clock on the wall ticks away, or whenever I remember the frogs pinned to the dissection boards by students who'd never gazed at a live frog in wonder (classmates laughing as they flung a few severed limbs around the lab).

Yes indeed, there is a rich kind of scholarship and a yearning to learn that knows knowledge is a way into a deeper relationship with things. But there is also a type of learning that accumulates knowledge solely in order to acquire a new power over things—a kind of scholarship that by its exercise hopes to avoid and indeed to vanquish the difficult ambiguity of relationship (with all its attendant vulnerability and responsibility). This is a strategy one can pursue only by denying or forgetting one's bodily embedment in the thick of things. This is what I'd call a disembodied approach—the approach of a body trying to pretend its not there.

Crisp, crisp stars out tonight . . .

*David Jardine:* Hey, look, get better. Actually loved your last message because it broke something for me and is precisely the sort of slap I often need in my work and my life. I used an image ages ago in a paper about the loss of the fourth R in environmentalism (Jardine, 1994). We've still got "recycle, reduce, reuse." The R that got lost was "refuse:" not simply "refuse" in the sense of "garbage" but refusing some things. Your lovely ire in your last message—that is the sword that compassion required to prevent what you graciously called "tenderness" above from being what Chogyam Trungpa (1995) called "idiot compassion" (p. 122). You're right: some of what the academy suggests is ecologically and spiritually insane and must be refused. Much of what goes on in schools is horrifying in its violences against children and against this great inheritance and great task of bodily remembering. That is why Merleau-Ponty's words of flesh are worth our love and attention, because of their character, because of what they say and what they ask of us and our lives. We must learn again to refuse, to say "no" now from deep down in the belly breath.

Your school wounds are tethered to wounds in what could have been the sensuous beauty of geometry, for example—itsself, like you, in a schooled desk, tied down to tests that hate the lovely ambiguities and allures of its body, as much as school hated you and your body. School(ed) child / school(ed) mathematics: *each* bears a wound.

I've attached another recent paper called "All beings are your ancestors" (Jardine, 1997). The title is from Hongzhi Zhengjue (1091-1157), in a text called *Cultivating the Empty Field* (1991): "Transforming according to circumstances, meet all beings as your ancestors."

Enjoy. Later.

*David Abram:* Thanks for the paper, David. It's an interesting piece, written with style and precision. As in this line of yours "Giddy sensation, this. Like little bellybreath tingles on downracing childgiggle swingsets." Hah! What a precise muscleskin memory in my belly, yet not named from outside before.

*David Jardine:* That line you mentioned is one I also really like—because, as you say, it voices such an intimate bodyplace that is so rarely said out loud. It is such a schoolyard image, as if children, out of school, had some secret not-school knowledges they were secreting away into bodily recesses at recess. Each of us knows something of this, down on hands and knees with yer snout in the tall grasses in intimate bug worlds and dirt smells, knowing something, something carnal, that no one seems able to admit. So we

experienced it, all of us, and never ever said anything at all about it. Secret Knowledge. Perhaps something we shouldn't leave to schools, perhaps we shouldn't even let them know, given what they've often done with so many other things.

*David Abram:* Yeah. I call it “shadow knowledge” since it's gathered or gleaned outside of the officially sanctioned spaces, away from the gaze of the adults, out of the spotlight cast by those ostensibly in charge of what's worth knowing.

Here's another thing I thought I would mention, in case you've met other kids like this. You know, as a kid I actually loved numbers and their mysteries, but I got befuddled by the way mathematics was taught in high school. Whenever there were timed exams, I discovered that I was unable to simply memorize formulas and simply plug them into equations wherever needed (though I certainly tried to)—because, for some reason I felt I had to work those formulas out afresh every time, reacquainting myself with them, bodily, (almost as though I were working them out on my fingers, but it was rather like some strange metaphorical extension of bodily space) before I could deploy them in any particular instance, which usually made it impossible for me to finish any test in the allotted time (although whatever I did complete, I always got correct). I simply had to experience each formula in my muscles, had to feel how it moved, how it acted, in order for it to make sense to me. (Similarly with reading: I was and still am unable to abstract the meaning of a printed phrase directly off the page, but rather have to feel it in my flesh, have to sound it out or at least feel it in my tongue-muscles, and it is this bodily experience that discloses the meaning to me. Hence I am a really, really slow reader compared to everyone else that I know—I read at about the same speed at which I could read aloud, and indeed any text I'm really interested in I do read aloud). If mathematics had been taught to me more in the way that you advocate—as a living body of knowledge, with a corporeal history—well, it sure would've opened mathematics up to me and others like me, instead of effectively closing it off to us. It took many years before I was able to regain my appreciation and fascination with that field.

*David Jardine:* You ask if I've met other kids like that. Can you keep a secret? I'm that other kid. And so are many of the children I see squatted in desks, and many of the teachers I meet, their eyes bloodshot with trying to keep up the charade they don't even know they are in.

Let's rest here for a bit.<sup>1</sup>

## Notes

<sup>1</sup>An earlier version of this conversation can be found in B. Hocking & W. Linds (Eds.) (in press), *Unfolding Bodymind: Exploring Possibility Through Education*. Connecticut, New Jersey: Holistic Education Press.

## Notes on Contributors

**David Jardine** is a Professor of Education at the University of Calgary. He is the author of *To Dwell with a Boundless Heart* (1998) and the forthcoming *Under the Tough Old Stars* (2000) and numerous recent articles in various academic journals. The author would like to thank the Social Sciences and Humanities Research Council of Canada for their generous support of his work.

**David Abram** is the author of *The Spell of the Sensuous: Perception and Language in a More-than-Human World*, which was awarded the Lannan Literary Award for Non-Fiction. David is an environmental philosopher and cultural ecologist whose work is taught widely in a host of divergent disciplines—from environmental studies to literary theory, from religious studies to cognitive science. Nomadic by nature, David circulates between the high desert of northern New Mexico and the coastal northwest. He maintains a passionate interest in interspecies communication, and in the rejuvenation of oral culture.

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