Poetry and Science: Understanding and Knowledge

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Proem

For this special issue of The Ethnographic Edge, titled ‘The Ethnographer/Poet: Breaching the Humanities/Science Duality,’ the remit for the call for papers was quite broad: "The call . . . include[s] 'think' pieces about the direction(s) of poetry and poetic sensibility within research paradigms, poetic-influenced ethnographies, and ethnographically-based poetry." While the basis for this so-called humanities/science duality has been questioned by a few scholars down through the ages, there is nonetheless a tacit and hegemonic agreement that, socially-constructed or not, the divide is real.

Mary Midgley termed science's hold on contemporary society a "strange, imperialistic, isolating ideology" (2000: 1); Nancy Nersessian points out that creative scientific practice has seldom been imagined holistically:

... cognitive processes are most often studied in isolation from one another, such that the research on analogy, imagery, mental modelling, conceptual changes, and so forth, are not treated in an integrated fashion. (2014: xi)

However, the so-called 'divide' between science and poetics/poetry, when examined more than superficially, merges and blends into what Lorand Gaspar (1969) sees as very similar language systems.

Gaspar compares "scientific prose in the non-technical sense," a "degree zero of writing!" (1969: 34) with poetic writing. After discussing the phonic and the semantic ("that is to say a level of sound and a level of meanings" [34]), he points out that the language of science itself has its own limitations: "ordinary language seems never to be able to describe how an atom works to emit or absorb light" (45). I would posit that science language, as delivered by scientists, when it reaches these linguistic impasses, moves to explain, demonstrate, identify, and suggest its explanations to non-scientists through the use of poetic language, or, as some reduce it, metaphor.

As an example, the metaphor for the brain has been: for Hippocrates, a hydraulic pump, conveying the four humours (black bile, yellow bile, phlegm, and blood), and for Galen, a similar pump conveying ‘animal spirits’ which resulted in temperaments (Stelmack and Stalikas, 1991); for Descartes, Hobbes, and even Freud, machine-like, sometimes resembling a clock (de La Mettrie, 1960[1748]); for nineteenth-century scientists, an electrical ‘machine,’ including telephone and telegraph metaphors; and contemporaneously, a computer (e.g., Turing, 1950). These metaphors demonstrate how scientists—and lay people—came to view the brain, in the context of their certain times.

Anna Vlasits (2017) points out that, while helpful, sometimes the metaphors themselves fail to describe the complexities of the human brain. This suggests that poetic language works with science
to explain connections between the known and the unknown: the imaginary of the poem and the poetic often is not precise but more suggestive, pushing thinking forward. Contemporary examples abound: Carl Sagan's *Cosmos* (2013), Stephen Hawking's *A brief history of time* (1988); even popular books like *Wired to create: Unraveling the mysteries of the creative mind* (Kaufman and Gregoire, 2016). Metaphors, then, invite engagement by readers and audiences. By comparing two relative ‘knowns,’ we are stimulated to imagine where they may connect and intersect—and where they may not. Our *engagement* with the thinking, and thereby creation, of how we view the brain is both critical and a part of the scientific process.

As well as utilizing metaphorical and poetic language to describe complex scientific notions, many contemporary thinkers eschew the compartmentalization of units for study, particularly within the human sciences and humanities. Paul Virilio sees a relationship between philosophy and artistic impulse: "...to me, philosophy is spread out over the arts. Take Marcel Duchamp: for me, he is a philosopher who happens to paint. Shakespeare is a philosopher who writes plays. . . . But philosophy transcends all this" (in Armitage, 1999, p. 34). If we follow Verilio's logic(s), then, science shares many of the same philosophical impulses as do the arts. Grounded in values and polished in worldviews, the ‘philosophies’ of Duchamp, Shakespeare—and Einstein and Hawking—share core philosophies.

Of course, proponents of an actual humanities/science divide primarily are discussing hard science and *literary* poetry. There are quite a few exceptions to this simplistic binary stance, however (e.g., Richardson and Adams St. Pierre, 2005; Bachelard, 2014[1958], 2014[1971]; Dewey, 1934; Faulkner, 2007, 2009a, 2009b; Haack, 2004, 2007; Richardson, 1988, 1992a, 1992b, 1997a, 1997b, Wheatley, 1992). These scholars argue for the vitality of poetry, poetic expression, and a poetic sensibility in everyday life and particularly in research—sometimes justified by similar arguments as the justification for literary poetry.

But, while scientific research has taken a hegemonic hold on research claims, can poetry—and poetic expression and dissemination of research through poetry—equally be justified as research?

Clearly, by editing this special issue, I feel there is room for discussion, exemplars of poetic research, and examination of the ‘in between’ work that is being produced in the qualitative world. I received an outpouring of thoughtful, sensitive, and rigorous work exploring facets of ethnographic poetry. Authors sent poetic expressions—from literary/research work to (auto)ethnographies written in poetic forms—and thoughtful philosophical renderings and essays that were grounded in concerns for progressive social justice. In short, the work submitted cut across disciplinary boundaries and ‘looked’ at researched ethnographic work in new and fresh ways: the use of poetry obviously generated a wonderful outpouring of takes on the research process. More later on the submissions that *TEE* have chosen to publish in this issue.

**Poetic Ethnographies**

We know that ethnography has branched out from its anthropological roots an enormous amount since the late 1980s. The so-called—and highly nostalgic—premise of a ‘golden age’ of anthropology (cf., Bruner, 1997; Denzin, 1997) is now seen by most qualitative scholars as something that simply reifies and "reproduces Malinowski’s conception of ethnography, the cultural transmission model that fits ways of thinking and feeling to institutional structures" (Denzin, 1997, p. 261). The historical listing of golden age ethnographers would include such (Euro- and Anglo-centric) anthropologists as Evans-Pritchard, Levi-Strauss, Malinowski, Firth, Boas, Mead, and the Hungarian Gábor Szinte.1 Their work—as is ours differently—is steeped within problematic times and contexts, and often reflects taken-for-granted assumptions of the age.

However, as we have seen via Malinowski’s private diaries (1967), much of social-science's positivist fervour, belief in a value-free objectivity, and rigid ontological positions come to resemble, in fact, Erving Goffman's notion of the public performance (1959). It is not that they don't believe in what they are saying; it is more that they have not considered the value of self-reflection *in their own work.*
The anthropologists of these times—as, arguably, all researchers do—worked both deep within their own scientific paradigm, in their own researched and lived contexts. For good and bad, they were shaped by social science traditions: the consideration of publicizing their own doubts would have been antithetical to their self-images, their careers, their 'lab-coat' superiority. Too, there was a shared belief in a strict divide between science and poetry (Restivo, 1988). Thought they likely practiced poetically in their creative efforts of the mind, there was no question whether plain language and poetic language—two bifurcated ways of apprehending the world—should be merged. These were (and are: let's look at ourselves as well) naturalized positions, and the fact of them is not remarkable.

Ironically, to do what Malinowski did, to admit (at least to himself) that he was uncertain, that life was complicated, that he held non-politically-correct viewpoints, was likely very common: but recall that Malinowski never wanted his personal diaries published. That he presented himself publicly as objective and value-free in his deep curtsy to the scientific method was his dominant worldview: that he was a human being, deeply flawed, sometimes insecure, often unsure of his strongly-voiced opinions, was meant to remain within his private realm, embedded in its nineteenth-century frame. His project was one in which he found himself—though never publicly admitted—to be more plural in his thinking than singular, more complicated than simplistic, and more value-laden than value-free. Thus, until C. Wright Mills blurred the lines of public-private discourse in 1959 to shocked accolades, social scientists were largely not given permission (by themselves) to breach the divides of public and private within their work.

The infallibility of scientists has been questioned, particularly in the 20th Century (Haack, 2004). Some of the skepticism followed on more transparent public discourse, ethnographic research about what "scientists" do, discovery of the private lives of "great men," and a concomitant understanding of heretofore clear-cut, modernist authoritarian institutions (cf., McLuhan, 1962; Restivo, 1988). Post-World War II, particularly in Europe and North America, was a time of the emergence of a strong and valued middle-class. The merging of authority into more egalitarian roles meant also that the dominance of science while remaining entrenched, became subject to critical analysis (Knorr-Setina, 1983; Law, 2004). The critical analyses, Susan Haack points out, have swung from Scientism—"uncritical admiration"—to Anti-Science—"denigration and outright hostility," with a middle point being "distrust, resentment, and envy" (2004: 28). Attitudes towards research poetry, if I may say so, follow a similar trajectory.

After Kuhn, in 1962, reaffirmed the hegemony of science and the scientific method, scholars began (re-)considering the "social constructedness" of science itself (Feyerabrand, 1978). One example comes from Restivo (1988): he suggests that "people have been seduced by the icons, myths, and ideologies of modern science" (p. 208).

Sal Restivo traces the emergence of "modern science," from the European conflation of science, technology, and society in the 16th Century by means of a "superiority at sea . . . [by] deliberately blending science and practice" (1988, p. 213) to a contemporary state where "we have learned to think the way the machines around us act, . . . [we have] learned to see progress where the values of machines reign" (pp. 217-218). As a result—and rather counter-intuitively—we have marginalized some of the naturalism of poetic inquiry in favour of the strategic, capitalist-based

. . . scientific revolution [which] organized the human and cultural capacity for inquiry in ways that stressed laws over necessities, the value of quantity over quality, and strategies of domination and exploitation over strategies based on an awareness of ecological interdependencies. (pp. 213-214)

These contemporary, science-based 'values' (albeit steeped within capitalist, competitive culture) have reached a sort of nadir within an early 21st Century audit culture that stems from policies that non-reflexively seek solutions before understanding. McLuhan reminds us, "...the twentieth century step beyond this method of invention. . . is not the backtracking from product to starting point, but the following of process in isolation from product" (2011[1962], p. 52). The end has truly come to justify the means.
In this cultural climate, product becomes paramount; process matters much less. Short-term attitudes venerating ‘might makes right’ as a controlling philosophy seem, as Restivo (1988) believes, to fall neatly within the hegemonic *Weltanschauung* of a capitalist-driven ecological ravaging of the planet, and within the rates of accelerations of speed in decision-making and results-oriented endeavours (Virilio, 2006[1977]; Hauer, 2014). The latter event termed "dromology" by Virilio (cited in Armitage),

... is the science of the ride, the journey, the drive, the way. To me, this means that speed and riches are totally linked concepts. And that the history of the world is not only about the political economy of riches, that is, wealth, money, capital, but also about the political economy of speed. (1999, p. 35)

How does the acceleration of culture work to co-produce a tertiary market-based culture that is more concerned with the latest and most up to date (disregarding issues of quality) research outputs? How might poetry—research poetry, poetic sensibility, and poetics, as apprehended by scholars—inveigle itself into the dominant consciousness of ethnographic scholarship?

Laurel Richardson has famously written, "...for years I had yawned my way through numerous supposedly exemplary qualitative studies" (2005, p. 959). Earlier, she wrote a piece which, in my mind, parallels much of Sal Restivo’s thinking. It traces the trajectory of poetics and the humanities in ethnographic and social science writing: it is about the concurrent "assault on poetic language" which began, in Richardson’s view, in the 17th Century (1988, p. 201). As this assault continued, there grew a "historical separation between literature and science"(p. 202). But Richardson concurs with Restivo that the separation is a socially-constructed one (just as the formulations of science, humanities, and technology themselves are social constructions).

The social-constructedness of the divide of the sciences and the humanities (and more specifically, poetics) is simply an outgrowth of the dominance of science as a hegemonic world-system. Where, then, does poetry and research poetry particularly, find itself within this ready-made world? Where is the subtle fit between poetry and science?

Anne McCrary Sullivan (2005) points us forward by example. She, a high school teacher and later a university professor, writes poetry about attending. Being present. She shows readers how her mother, a marine biologist, taught her by going down to the tide-pools, being still and noticing. And McCrary Sullivan reflects that that is what research poets—and literary poets—do: they pay attention, and they notice patterns.

That is one of the premier ways that research poetry can move us forward, can embed "knowledge about complex relations" (McCrary Sullivan, 2005: 222):

> Many in the academic community, not having been taught to read aesthetic forms, reject them as representations of knowledge. If, however, we are to become literate in a wider range of the forms in which knowledge may be encoded, we must give attention to these forms. We must stare at them, ponder them, arrive at an understanding not only of what the forms contain, but also of how form informs. (223)

I must add that we need to slow down in order to stare and ponder; we need to think about what affective knowledges we may be missing by concentrating on content knowledge. Poetry—and gazing at poetry—will help us to "get" that kind of knowledge, but also lead to understanding.

And now a brief introduction to the pieces within this special issue:

In "'What [I] Talk about when [I] am Running': Revetment Running, Ethnography and Econarratological Poetry," a kaleidoscope of sensory, poetic, geographic, and technological inputs, Kalle Jonasson traces his revetment patterns (running across boulders), auditorily and temporally (). He interrogates puzzles thrown-forward by uneven cadence, linking arrhythms with steady-state running, referencing the musicality of movement even when as is delayed, spaced, asymmetrical, with added maps using RunKeeper and Google® maps that seemingly bridge the intellectual synapses between verbal and non-verbal, felt and re-imagined.
Katie Fitzpatrick's suite of three poems—"Gender, body, poetry"—speaks to the paradox of control and embodiment of women, by women, and for women. The haunt of a disembodied, unarticulate agent lurks behind each of our tensions within the world: and yet, to touch and taste and smell—to recognize and feel, one ever-present facet of being a woman or a girl, of being feminine in a patriarchal culture—is highly empowering. This contribution will resonate with readers in their gut. Savor the words, imagine the space.

In the series of poems "Finding Home in Memory: Stories of Immigration, Diaspora, and Dis/location," Miryam Espinosa-Dulanto evokes the struggles of an awakening child immigrant in a new land. These are stories, told poetically, of immigrants arriving in a country, invisible and erased institutionally ("Maria Whatever"), territorialised and colonised, connected to family and history and holidays and language and their own singularities. These are stories of disjuncture and rending, connection and celebration.

The in-between-ness of Māori families (whanau) negotiating a dominantly-Euro-centric (pakeha) medical model is the stuff of Jacquie Kidd's "Māori research(er) in three poems." Jacquie, having stated elsewhere that she was in transition, a part of a larger process that works to deconstruct simple labels, has, through the three poems, shown us insight into her own sense of ‘hybridity,’ and evoked some of the emotional outlays of whanau of Māori patients as the men received palliative care during their illnesses. In speaking the poems, Jacquie, with permission and blessings, has entered into private worlds to demonstrate how a large (often) bureaucratic system may treat Indigenous individuals.

In a brilliant blend of poetics and (auto)ethnographic form, poet/academic Terry Locke (After a Life in the Provinces, Home Territory, Maketu, and Ranging Around the Zero) artfully weaves together an oral ethnography which brings to life a group of poets living in Rotorua, Aotearoa New Zealand. Titled "Rotorua Mad Poets Society: Words of Their Own," this poetic ethnography blurs the lines of participants' own words and Locke's craft. Their rationale for poetic impulse, their passions and interests, their humanity: all emerge in a series of ethnographic poems that insist on showing, not simply telling.

LeConte J. Dill, Bianca Rivera, and Shavaun Sutton continue a project delving into how female African-American, Caribbean-American, and immigrants from West Africa can use poetry as a tool, a forum, and a sounding board for their experiences to come to life. In “Don’t Let Nobody Bring You Down”: How Urban Black Girls Write and Learn from Ethnographically-based Poetry to Understand and Heal from Relationship Violence, the three authors (and their "co-authors") have offered both a participatory method of discovery that cuts across science and humanities and a small window into how urban Black girls live their lives and understandings of relationship violence(s) into being. This is, as well, an offering of how these young women not only cope but often come out on the other side of the experiences more resilient—at least in part through a series of poetic—and cohort—coping strategies.

While Dill, Rivera, and Sutton used arts-based-research as a tool for their delivery of violence prevention program sessions, Kerry Earl Rinehart, in "Researcher Decisions in Presentation: Using a Painting Scheme to Stage Research Poetry," has investigated how the use of Chinese brush painting may be a worthwhile metaphor for poetic research. Chinese brush painting is evocative and suggestive of more than its tracings; the poetic effort is equivalently compressed and requires an active ‘reader’ to bring it together. This essay is a fascinating look at how one arts-based-research modality may inform another.

Bridging official reports and documentations by means of recapturing an oral and poetic tradition is the stuff of Cali Prince's "Poetry of Bones: Listening and Speaking from the Ground." By evoking Aboriginal people's stories through poetry, through voicing, yarning, and uncovering of interconnective 'bones,' Cali has mapped out revivification of the teller's lifeblood. This contrasts with more traditional forms of historiographical ethnographies.

With "The Poetic Generation of Place: Ethnography for a Better World," Mike Hayes has brought us full circle: we are meant to examine ethnographic writing, truth claims, creativity from its Greek roots, mythopoiesis in ethnography, and an eco-utopian vision for the future by means of a generative
poetic ethnography. It is a bold work, fitting for thought as we use the exemplars from the others pieces within this issue to come to grips with how and why poetics may benefit human-and other-kind.

References


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1 Most of these names are well-known. However, Szinte might be an exception for many readers. Gábor Szinte (1855-1914) was a Hungarian teacher who promoted visual ethnography: one of his most famous projects was of the "Székely Gate," in which he took photographs, drew sketches, and wrote about the ornamental gates of the Franciscan Monastery of Mikháza. Among the "men in the field" who were targeted by the Museum of Ethnography, Szinte... conducted investigations into folk material culture, architecture, lifestyles, customs, and other areas of research rooted in an interest in the nation's past" ("Folk Culture of the Hungarians [A magyar nép hagyományos kultúrája]," 7 September 2015).