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A story of bodying in science education

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Abstract

In poetic dialogue with *Becoming Alive within Science Education (Research): Thinking with Life History(ies), Bodies and Stickiness*, stories of bodying and body(ies) of work are playfully explored.

Keywords Poetic inquiry · Science education · Posthumanism · Affect · Research-creation

A lived story. A body of work. Or is it, was it, the other way around?

In their article, *Becoming Alive within Science Education (Research): Thinking with Life History(ies), Bodies and Stickiness*, El Halwany et al. (2021) provide science educators and researchers of science education much to consider. We use this space to accomplish three objectives: (1) respond to the posthumanist invitation set out by El Halwany et al. (2021); (2) illuminate a body of work that has been in the making; and (3) amplify El Halwany et al.'s (2021) call to explore life history(ies) as ripe with pedagogical possibility to be/live differently. Building on El Halwany et al.'s (2021) use of *thinking with nature* (Higgins et al. 2018), we further complicate the relationship between nature, culture, and the work of research on science education.

The entangled relationship between the stories we live, the work we embody, and the bodies of work we live has enduring implications. Whether those stories capture affective experiences producing the conditions of science education or (as we show in this piece) multispecies encounters (Haraway, 2007), life history(ies) render the affective experience (ill)legitimate. Also inspired by Whatmore (2006) we recognize:

This review essay addresses issues raised in El Halwany et al. (2021) paper entitled: *Becoming Alive within Science Education (Research): Thinking with Life History(ies), Bodies and Stickiness* <https://doi.org/10.1007/s11422-020-09994-4>

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Figure 1, a data assemblage, exemplifies the countless “threshold moments” we have chosen to intentionally reside within since 2016 (Nordstrom, 2015). The cellular text messages, email exchanges, manuscripts drafts, titles, and images depict pieces of our story triggered by more-than-human entanglements. Specifically, one moment in 2018 at a museum with preservice elementary science teachers and a horseshoe crab resonated. This moment, like the stories shared by El Halwany et al. (2021), has remained on the move ever since. Wayfaring alongside these authors, we weave our own body(ies) of work together where (new) life, and/or a body of work for (or of) science education emerges (Ingold, 2011).

A Body of Work (Christie & Maria).

Becoming Alive (El Halwany et al., 2021).

The way that light is caught
absorbed reflected
spoken back
in shimmer
moves, is moving
differently
on-through this and that
moves me
moves into me
moves with me

I-we do feel it.

*An invitation
for movement
that refuses
containment*

Then also comes
the felt necessity of rain
an accumulation, a weight:
the too heavy to hold on to,
the too much to push on,
the too much to float with,
the too much to contain anymore,
a drip drip drip¹

*A sense of dissatisfaction
grew out of those initial encounters -
accumulation of
affective value²*

a dimming, a puddle, a sorrow, a leak³
with the too much of this,
the too much of that.
Cloud bodies growing heavy and
finally just letting go -
a sobbing.

Yet there is also always
the return of the sun
a sunbeam, the shimmer,
a shimmer: a bodying of sunlight and water,
“water capturing and reflecting the sun,
the sun glinting on the water”⁴

And so an uplift,
a what’s next? a what else?
a splayed out stretching
in-with the splendor of it
a moving-on-with it all.

*Life as movement:
a viscous becoming
in time space*⁵

Wings extending
claws scratch, scratching
vines reaching
desiring, thriving
flourishing-in-through-with
sunlight;
growing, warming up
climbing in-through-with
air.

The power of the weather
an idea, a word
a sound
a drip drip
a shimmer
the shaping of a cloud
unshaping again
the twisting of a tendril
the sudden uplift singsong of a bird;
an unexpected invitation
of liveliness
from a horseshoe crab⁶

*An overarching wonder:
What might it mean to become alive
in one’s pedagogy
and one’s research?*

Minor gestures⁷ of-from life itself
in its always movement-moving⁸
reaching out and touching
skin-shell-feather-claw-wing

breathing in and out
in-and-through one another⁹
aliveness living
other-word-ing
other-world-ing
beckoning a becoming
other-wise.

*Becoming alive could be regarded
as a continuous state of striving
an invitation to think with lives;
an incessant coming into presence¹⁰*

The power of moments
of wonder
of-at-with-through
bodies moving
to move bodies
to story a bodying
toward what else might be possible
is felt -

*Life history as it is
lived in the moment
unraveled-in-the-moment
could be equated to the world
(or the real)*

And yet, also felt,
are the scratch scratch
moment-memories
of other stories,
sadder songs
tales of hurting or giving up,
leaky sorrows
like the one about
the once lively striving bird
discouraged now and so
peck pecking with
less vigor;
or the horseshoe crab
exploited weakened
and now swimming with
less blood¹¹

*Thinking with life history(ies):
An invitation to
think with lives
with what exists*

*and could exist -
yet at times
'other' lives are
made lifeless*

To feel, to be felt
to affect
and be affected.¹²
These are bodies.
This is bodying.

What then is/or could be
the power of a body?
the capacity of bodies?
the why of bodies?
the more of bodies?

*Some perceive the body
as biological and/or social¹³
an object, container, or vehicle
for emotions: reactive*

Bodies of water, of sunshine
of blood, claws -

*Or the body as
the flesh of the world¹⁴
sentient and sensible
a site of knowledge
and perception*

The growing, knowing, becoming
the moving-with;
I mean, what else is/of a body?
This body? Our bodies?
What else can this-these bodies do?

*Others claim
there is never a body as such;
a body is its movement¹⁵
threading through the world¹⁶
moving through others*

Are we really *bodying*¹⁷ with-through this sunshine,
this shimmer,
this heavy rainy day?
that flowing rivulet?
the stillness of this puddle?
that grassy field?
this prehistoric 'crab'?

*Who is dancing?
Who is becoming beauty?
Who is moved by who?*

I mean, did we really
see-feel-move-with-through
those bodies becoming-capable?
That moment of light
moving across-on-with
a pool of,
the flow of,
the still of
water?

If so, how long—what is the duration of
this com-position(ing)¹⁸ of bodies?
What is the shape
of this presence-moving,
the in-forming of bodies in
a present moment?¹⁹

*The chronological progression
in time and place of lives
is predictable and comforting;
we felt attached to practices
which supposedly legitimized
our research—grounded it
made it strong
gave it meaning*

Some days I feel
I want my body -
(and yet can I even say *I* want, or *my* body?)
I mean, how far and how wide and
what else is 'this' body?
In-with a bodying of water and sunshine,
where is the boundary of *my* body?
A body?

*We were haunted
by a search for meanings*

Some days I feel ready
for this bodying,
this shaping of
moments-moving and
wonder-world-worlding
with bodies.

Other days
I just want it-me, the body
the constant body-ing
a body +
to dissolve
to become sunshine²⁰
to melt like snow
to just seep softly
into grass.

An-other kind
of bodying?

I mean, how much
can a bodying body really do?
Bodying bodies grow older
and tired too.

*Wayfaring: These lives are not traced
across a world already laid out,
but through a world
in perpetual formation²¹*

But maybe after a little joy
some movement across (through)
a puddle -
maybe a little bit of sparkle
or sudden birdsong reminder
of what else is possible

I-we might feel inspired to
make a little scratch scratch scratch²²
leave a mark
sing a little song about it
write a poem together:
a story of bodying

*A body: that which comes into existence
from its encounters with other bodies,
emerging through acts of storying
what comes to matter
(and matter less)*

Tell it, tell the story
leave, share, speak the story
create a story
with the fullness of a body,
our bodies.

A story of bodying
with sunshine and water
horseshoe crabs and blood²³
with birdsong
backgrounded,
foregrounded.

*Points of contact
of being with nature
of being touched by nature -
here nature touches plays
(with) humans*

But then also,
(we can't really help it,
can we?).
I-we may feel
the return of
the heaviness of rain
the sogginess, the sorrow
maybe a little bit of
hopelessness,
loneliness.
a why why why
tell a story,
this story?

*We wondered how human life
may usurp rights
of non-human others
to come to life,
limiting opportunities
for storying life histories
otherwise*

And so comes a washing,
a washing away again
a soaking of bodies
a monsoon feeling of
drenched drippy sullen
soaked, soakeness;
I-we hurt, are hurting, and are soaking wet.
Freezing.

Some days I-(we?) just want to
dissolve, melt away
like those old limestone tombstones
disappearing slowly
the chiseled words,

the scratching, etching
attempts at meaning-making, sense-making
purpose, purposing.
hoping, creating, saying, becoming
something
Some thing of value?

*What is science?
What does it mean to learn science?
For what?*

Something is always being valued.
Something is always being cared for.²⁴

*His three science teachers
they only cared about the right answer;
what life is thought to be
affects the ways
we care*

Some bodies might continue persisting, caring.
A persisterhood of might.
Might: A collective of
strength and possibility.
Hope?

Strong bodies. Resilient bodies.
Bodies of sensitivity and grit.
(stay interested²⁵
stay with the trouble²⁶
the scholars say)

450 million years of bodying other-wise, a persister,
and now bodying with us? Bleeding with-for us?²⁷
Our bodies?

*Bringing bodies-meanings
together*

This is persisterhood.
And this is trouble.
Stay with it?

*Make an ontological move
towards increased social
and ecological
justice?*

What are we valuing and caring for
here/now/then

as we body?
As we are bodying
in-with-this trouble?

*Enact forms of care
that lie outside
what is formally
cared for?*

For now, as a body of persisters,
feeling other-wise
we might:
write a little something
leave a record, a recording
a story
a restoring
a restoration
a scratch,
scratching away

*A mutual telling:
in methodological striving
one might encounter
this work*

Like her pushing up the shoreline,
and though perhaps feeling tired,
exploited, blood-drained²⁸
we-she might still strive
to leave a little mark,
make a few scratched lines
sing a little song
leave a tiny cluster
of jiggly green jelly-eggs,
(to be half-eaten by red knots²⁹)
nourishing a journey
of bodies leaving
a leaving of bodies
leaving a body
a body of work
that others
might digest.

*Becoming alive:
a continuous state of striving
gesturing toward pedagogical possibilities
for being/living differently
with nature, science, and
science education*

Remember me, my blood
my blue blood, your red blood
(or is it, was it, the other way around?)
Purple.
Our bodying together.
a vibrant, lively gesture -
an orientation³⁰
a movement, a moving-with
and on toward
something else.

*Life history(ies), bodies, stickiness,
sticking to what is normal/natural
and what is not.
Some forms of stickiness are about
holding things together.³¹
Some are about blocking
or stopping things
moving.³²*

'I—my body—our bodies
were here bodying
but now I-we are
leaving waning,
maybe letting go
un-bodying

There is a warmth, a relief
in the letting go³³
in the flowing out,
dissolving
in-with sunshine
in the spreading out, dispersal
(maybe like dandelion seeds?)
a de-composing of bodies,
of leaving stories
storying leaving
being partially eaten,
or just carried away
by wind, on wings,
with air.

Finally a landing space?

*Stepping into risky terrains:
haunting fears mixed with
desires for belonging*

And perhaps a seeping in at last,
a feeling deeply just
for a moment (again)
the quiver-shimmer of light on water -
of touching earth, grass -
of gently slipping into soil
of bodying and un-bodying
no-bodying
back to *a life*³⁴
(worth living)

*completely release
from that which has turned
so sticky*

a felt feeling of relief,
done striving
 just wonder(ing).

Notes.

1. See Ahmed (2021)
2. See Ahmed (2004)
3. See Ahmed (2021)
4. See Rose (2017, p. G53)
5. See Vannini (2015)
6. See Byers, Jones, & Wallace (2019)
7. See Manning (2016)
8. Ibid.
9. See Weber (2017)
10. See Biesta (2010)
11. See Byers, Jones, & Wallace (2019)
12. See Spinoza (1994), Deleuze & Guattari (1987), Massumi (2015)
13. See Lupton (1988)
14. See Merleau-Ponty (1995/1945)
15. See Manning (2014)
16. See Ingold (2011)
17. See Manning (2013)
18. See Massumi's prelude in Manning (2013, p. x)
19. See Stern (2004)
20. See Manning (2016)
21. See Ingold (2011))
22. See Ahmed (2021)
23. See Byers, Jones, & Wallace (2019)

24. See Elliot, Spruill & Volpe (2021)
25. Jesse Bazzul, email correspondence (2020)
26. See Haraway (2016)
27. See Byers, Jones, & Wallace (2019)
28. Ibid.
29. See Funch (2017)
30. See Ahmed (2006)
31. See Ahmed (2004)
32. Ibid.
33. See King & Valentine (2015)
34. See Deleuze (2005)

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