# Poetry Formations in a Resonant Sky 

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A Thesis
in

The Department of English

Presented in Partial Fulfillment of the Requirements
for the Degree of Master of Arts (English, Creative Writing option)
at

Concordia University on unceded Indigenous lands of the Kanien'kehá:ka Nation<br>Tiohtià:ke/Montréal, Québec, Canada

April 2020
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## Concordia University School of Graduate Studies

This is to certify that the thesis prepared
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Entitled: $\quad$ Poetry Formations in a Resonant Sky
and submitted in partial fulfillment of the requirements for the degree of:

## Master of Arts (English, Creative Writing option)

complies with the regulations of the University and meets the accepted standards with respect to originality and quality.

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Abstract<br>Poetry Formations in a Resonant Cloud<br>\section*{Deanna Radford}

This poetry thesis undertakes to trace language-use in English surrounding cloud computing and cloud computing itself by considering its physical, historical, and environmental aspects. What began with the desire to find out what the term "the cloud" means and identify its material contours was a way of questioning my own and mass internet consumption; to make "the cloud" more visible in interest of climate crisis and to contribute new possibilities for understanding. This research-creation is guided by these sets of questions:

How is cloud computing marketed? The dominant narrative of "the cloud" centres lightness, access, ease, and ubiquity. It appears entrenched (it always has been and will be) and simultaneously in motion (it goes everywhere the user goes.) The implication is unsound. What is cloud computing's relationship to the Internet's physical infrastructure? What are the physical components? Where do they come from? What happens when people finish using them? What sources of energy powers it? How does it intersect with the well-being of living things, of earth's elements, and weather systems?

How is cloud computing connected to historical and social processes? How can the cloud be read in conjunction with colonialism, racism, decolonization, precolonial land use, global warming, "population displacement," (UNESCO,) surveillance, and multinational violation of privacy and big data?

How is everyday human communication entangled with these concerns? How I might trace my personal position in this context? How can I show intimacy, disconnection, and links between people who benefit from operating within the cloud with those who are excluded?

## Acknowledgments

I would like to acknowledge the following from Concordia University for awarding support towards the research and creation of this project: The Department of English, the Faculty of Arts and Science, the Graduate Students' Association, and the School of Graduate Studies. I am grateful for the opportunity to have shared my work and exchange with leading writers, thinkers, and makers in my area of interest.

Thank you to the organizers of the following conferences and symposium where I presented variations of this work:

Large Objects Moving Air Conference organized by CRiSAP (Creative Research into Sound Arts Practice) at the London College of Communication, University of the Arts London, Elephant \& Castle, London, January 2018.

TEXT/SOUND/PERFORMANCE: Making in Canadian Space Conference organized by Dr. Gregory Betts, the Craig Dobbin Professor of Canadian Studies at University College, Dublin, Ireland, April 2019.

Mind The Gap! The ELO (Electronic Literature Organization,) Conference E Festival organized by Dr. Bertrand Gervais and team at Université du Québec à Montréal, Montréal, QC, August 2018.

L'AGIR: Act(ion) in the Hyperconnected Condition: Art $\mathcal{E}$ Images at Work Symposium organized by committees from McGill University, Université de Montréal \& Université du Québec en AbitibiTémiscamingue, in collaboration with Mediatopias and Studio XX, Montréal, QC, November 2017.

Gratitude to my friend and band mate Jeremy Young whom I have performed many of these poems with. Doing so in collaboration has been a thrill and given me the chance to better understand the poems and my voice.

Thank you to the Concordia Department of English for awarding the Ann Kerby Scholarship. Thank you to my poetry cohort and my teachers, Jesse Arsenault, Nathan Brown, Jill Didur, Mary di Michele, Sina Queyras, Darren Wershler, and Kathleen Winter.

I am indebted to my supervisor, guide, and mentor Sina Queyras for their editorial insight, their belief in my work, and for challenging me.

My heart of thanks to my parents Donna and Tom, siblings Meagan and Shawn and Sean and Reshal, niece Hannah, and Buddy, Fred, and Gar.

For my partner in life and love, Peter Burton.

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I-METEOROLOGICAL CLOUDS

## Untitled

Clouds Es snow are a form of meteor. Snow is a form of nimbostratus but it is not a cloud. An ensemble of falling particles.

When the winter weather is mild, when it is snowing, when clouds hang low and I stand outside, it's my chance to be fully within the clouds.

## An introduction to cloud genera

Not all clouds are the same.
Clouds are always evolving.
Clouds gather and not. Quiet and
Sea loud. Visible as mass or loose. Ice or watery vapour.
When clouds cluster in miasma
From dust, steam, fumes, smog, gas, powder, and `it's Of nebulous skies.
Cloudiness what is cloudiness?

Of the sky's floor,
I Cirrus is strands, filament, hooks detached.
전 Cirrostratus' full body hair-like or smooth.
$\overline{\text { I }}$ Cirrocumulus a hair-like heap. Cotton wool or ice crystals. Is it a lining?

No one type of cloud is right for everyone.
$\underset{\rightharpoonup}{\text { u Altostratus high sheet, halo, hell, no. }}$
© Altocumulus high heap. Laminae, round mass, roll.
$\bar{\Sigma}$ Nimbostratus rain-bearing sheet. Blots sun.
Is it a roll?

Several cloud models have evolved.
Stratus sheet for drizzle. Makes ice prisms, snow grains.
$\geqslant$ Stratocumulus sheet-like sheet with dark parts.
$\bigcirc$ Cumulus symbol-of-all clouds heap.
Cumulonimbus thunder-storm heap.
Is it melting?
Title adapted from, World Meteorological Organization, editor. Manual on the Observation of Clouds and Other Meteors. Rev. ed, Secretariat of the World Meteorological Organization, 1975.

## Airbus 321

On spending 40 minutes in an airfield.

Holding space unfixed. View from window over Iceland.
Thundersnow. Snowicane. Atmospheric circulation.
Moon surface and snow dunes.
Horizontal air stream pendulate.
Low light burns through cirro-stratus.
Air stairs choppy. A canoe craft on
jagged sound waves. Piercing. Silent.
Still moving not not still. On current.
Hover. Hover. Hover. Over airfield.
Then through alto-stratus. Thick cover.
Current rampant. Raging. Light slake
altogether electric.

## The speed of sound. A trail of airplane exhaust slowly.

Long note stretched so far across, not elastic.
No consequence but also, Doppler shift.

Close up delay. Letters in strings.
Bordering, but not close enough.

From lips. F-, f-, f-, falter. Flounder. Founder. Flutter.
Audible range of embouchure plus consequence
is vibration into shock diamonds.
Spastic. Locked then dissipated
by breath on the horizon of a soft and hard palette, with lips shut, or
cast in molten lava. Words as traces.
If there isn't anything to come out of
lip shapes such as words of mouth, cohesive, quick, succinct and using
$\mathrm{p}^{-}, \mathrm{p}^{-}, \mathrm{p}^{-}$, plosives and
$\mathrm{t}-$, $\mathrm{k}-$, p-; voiceless and d-, g-, b-; voiced,
then hands conduct pantomime.
Damned and panicked.

But between words a flood.
$\star \quad$ Torrent but with nuance and inflection
using teeth and tongue
with which to draw traces across the sky.

II - CLOUD MIGRATION

## Untitled II

I tell myself, do not be afraid. The cloud is as beautiful as the sea. The upper surface of a layer of cloud may be flat or it may show fairly well-defined undulations of varying width [ 10 to 1000 metres ( 33 to 3300 feet)], suggesting ocean waves ("sea of cloud").

## If a high speed mobile internet connection can be accessed on a high speed train, will it make my connection faster?

On network lines and edges, eyes
Read signs. Signs project buying. Desires
Make insides fold over outsides.
Outsides fold in conditions close. Cold. Climate. Cuts.
People sleep on benches. Dis-rest next to movement
On network lines and edges. Eyes
Scan devices, tools for the band w/ languages for the face.
Eyes focus. Touch. Swipe. Tap. Type. Reply. Connections
Make insides fold over outsides.
Interiors in here: Sub-streets, yes. Substrates, yes and
Clickbait, yes. Heart rate, yes. Stimulates, yes.
On network edges and lines, eyes
Close. Close eyes ambient. Body-tool-body proximity.
Pass time. Travel fast. Hold still. High speed lines
Make insides fold over outsides.
Inside lines gates close
on global position of moments and
On network edges and lines, eyes
Make insides fold over outsides.

## Everyene-executives, colleagues, partners-is telling you to migrate to the cloud.

After the Google Data Centres of the Americas
Lost in the noise and the pressun to migrate to the cloud are field words, terms related to weather disturbance: erratic, stray, melt.
Heat builds displacement swells, giant gustr Tidal. Then freezing squall. Cloudwash disavows batch loss, privy leaks, network ills, bandwidth grabs. Typic.

Words, terms related to weather disturbance: erratic, stray, mel and heat—prime portent pow. Hybrid computing and federal systems baxue blurred active, ubiquitous cloud with clouds, climate and gold-rush goals. Sd. When to pack assets, send data, switch platforms, trash plastic, ore? Or, with heat? Prime portent. Pow! Hybrid computing and federal systems have ambient access and license to thermal springs, cosmos' drink.

## NORTH

B@rkeley County, South Carolina Council Bluffs, Iowa

The Dalles, Oregon

Douglas


HCnderson, Nevade

Jackson County, Alabama

Lenoir, North Carolina

Loudqun County, Víginia

## The sound of birds migrating when -404 not found- arises

Moments of dead air tender end connection. No signal received.
SPACE
Cloud source broke, dry. Stream dropped. Bounced back through sky to the troposphere where
Weather makes. Local. Wind. Temps, cloud, humidity, pressure. A cocktail
Circumstance at annexed nests extra inclement. Big. Double plus
Intense. Charms aslant. Of flocks, words so muddled. Fall under the weather, Land on spec. Slow. Songs drift through cracks on ancient veins. Pegmatite of

Feldspar, quartz, mica. Quartz. Ex- species -tract. Silicon. Industry
Standard of purity ultra. Host. Wafer from ingot for Intel.
From a grain of sand.

SPACE
STRATOSPHERE


## Reach out and touch someone across the Atlantic

As if Marea was parish of your throat and vibrated ahh-cross your lips and your loins. Like her name was inland, a corpus-yours, tongueyours and corp-yours. As if she was irrational, anceps in your charge. And on your found frontier. She is loaded as cable. She is
loaded as rubber. As copper. As twin lines: eight optical fibres.
Waterproof plastic coat. Iron scent, metal jolt. Rubber balm's stench
buoyant and cable bales buried awake in Atlantic's bed. Titanic.
Streaming in video-cresting high-peaking is seventy-million,
dead-heat cache. Cable port landing Virginia Beach. Cable port landing

Bilbao shore. Footprint on beach-sand, on manhole, at selfie-spot, on
mother earth, mother board. Data $\infty$ weightless.

Title adapted from "Reach Out and Touch Someone," AT\&T, 1987. Commercial. YouTube, https://www.youtube.com/watch? $\mathrm{v}=\mathrm{O}=\mathrm{MapWdc} / \mathrm{VqE}$.
Accessed 15 Oct 2017.
Italicized text in stanzas $2 \& 3$ from Bach, Deborah, "Microsoft, Facebook and Telxius complete the highest-capacity subsea cable to cross the Atlantic." News at Microsoft.com. https://tinyurl.com/yak7kknb. Accessed 15 Oct 2017. Italicized text in final stan

## Breath of fire

Breath control to fight against anxiety, nerves, fear \& pain

Inhale deeply.
Draw
warm computer room air through
chilled water coils
filled
with chilled water
rotating.
When heat lifts, exhale.

Push hot air out
of your stomach
until it's empty.

Heat removed from
IT environment
will flow out with
now warmer chilled water
exiting computer room
air handler and
returns it
to the chiller.

Inhale deeply again while
the chiller removes
heat from the warmer
chilled water.
Transfers it to
another stream of
circulating water called
condenser water.
It flows through the cooling tower.

Exhale.

The cooling tower
rejects heat from
the IT room to
the outdoor environment
by spraying
warm condenser water
onto spongy material called fill
at the top of the tower.
The water spreads out.
Some evaporates as it
drips and flows
to the bottom
of the cooling tower.

Push heat out of
your stomach swiftly
as if pressing
your lungs downward
until your stomach
is empty.

III-ANCIENT COMPUTING [SOME THINGS NEVER CHANGE]

## Pharos of Alexandria

For an imaginary walk from the Great Library of Alexandria to Pharos Lighthouse in Alexandria, Egypt, probably between 285 and 246 BC in order to transmit an information signal.

Rubbing hands. Friction. Heat. Amplitude. Beacon from flame. Flare. Flash. Sign. Martial in message a beam from hands. Radiant address 'cross sky.

Sliding thumbs. Index. Soft tension of muscles, back. Battery fever! Ick! Sweat! Exuding front muscles. Lap top. Surge. Connection sparks synapse. Dopamine.

Light of palms. Quickening. Contact, pings, echo requests. Beacon's lead thrills as lips brushing. Feeds. Ancient as signals. Everything is everything and sealed with heat.

Bibliotheca Alexandrina to Lighthouse of Alexandria Walk $4.0 \mathrm{~km}, 49 \mathrm{~min}$ https://goo.gl/maps/R8SK4aqMg5CWPotR7

4. Use caution-walking directions may not always reflect realworld conditions
Bibliotheca Alexandrina
Al Azaritah WA Ash Shatebi, Qism Bab Sharqi, Alexandria Governorate 21526, Egypt
$\uparrow$ 1. Head west on Emtedad Dr. Abd Al Hamid Sayed toward Ali Moustafa Moshrfah St

- 2. Turn right onto Ali Moustafa Moshrfah St

ヶ 3. Turn left onto 26 July/El-Gaish Rd

- 4. At Qaitbai Sq., take the 1st exit onto Kayetbai $\longrightarrow 160 \mathrm{~m}$
7 5. Slight left to stay on Kayetbai
$\longrightarrow 19 \mathrm{~m}$
$\boldsymbol{r}$ 6. Turn right to stay on Kayetbai

These directions are for planning purposes only. You may find that construction projects, traffic, weather, or other events may cause conditions to differ from the map results, and you should plan your route accordingly. You must obey all signs or notices regarding your route.

## Lighthouse of Alexandria

## The sound of magpie song when all devices are ready

From a grain of sand
An ancient sheen beams flush in
Moments of self recognition and echo.
Source for single truths
From beneath The Appalachians, From fifteen miles down,

From a long moment of movement with heat two-thousand degrees, From three-hundred million years ago

And one-hundred million years of cooling. The emergence of words and

Pearls or jewels or crystals. Or better, patterns of pegmatite.
Feldspar, quartz, mica, with purest other traces
So select. Just so. Super elite
For a data depository.
From beneath The Appalachians slow motions surface then
Sown from wind, waves, weather, wear. A
White powder so soft as soft as clouds. So
Smooth as fibre glass cables stitched under the sea.
Tiny as next gen silicon chips.
$\infty$ Lucent as ocean of screens when
All devices are interfacing for
Broad data access. For data literacy and
No memory errors. No memos, no re:s, no more.
No errs, nor ers, nor heirs, nor ors, but ore
For roses.
For Eros in
Decision making.

# When my lover is across the ocean 

Exhale. Whisper. Speak. Voices airborne. Talk talk. Into microphone. Keys. Pictures of keys. Signs. Logic board. Vocal folds vibrate. We. In chatter streams. Through earth. Through air. Big water. Whisper modulation. No land line. Breath. To phone mast. Sea signal. High sign.

Tiding. Marconi. Signal Hill. Poldhu. Breathing. In data ocean. Ocean ocean. Troposphere. Voice heat. Ours. Clouds. Ours. Condensation. Ours. The weather. Ours. Islands. Shore. Beach sand. Cable landing. Man hole. Gun Beach. Bilbao. Lan Tao. Brest. Electric Beach. Palm tree. Base station. Monopalm. Monopole. Steeple. Tower. Bell sound. Call change. Scramble. North. South. East. West. Wind. Words. We. Water. Winnings. Worship. Workmanship. Rock solid. Broadcast. Radiation. Quiet zone. Signal storm. Word switch. Ring system. Network. Word bundle. Word packet. Love charge. Cable load. Bandwidth. Wow. Video flutter. Screen light. Moonlight. Starlight. Sunlight. Day. Data less.

Less wire. Wireless. Microwave. Back haul. Transceive. Call me. Transmit. Receive. Failed HD. Frequency channel. Fail.
Cobalt. Earthen. Display. Ectoplasm interface. Flow. Expanding. Server farm. Expanse. Cooling system. Fever. Parched. Rapt. In keys. Cable routes. Trees. Garden. Gutta percha. Resin. Rubber tubing. Thermoplastic. Number armour. Amour. Handsfree. Gear. Soil. Earth. Terrestrial. Body. Vocals. Invisible. Aerial. Alien. Transatlantic. Sub-sea. Sound. Listening. Bitstream. Channel. Literal radio.
We whisper. Lip to ear. Through glass. Walls. Plastic. Light scope.
No rock dove. Fibre optic translating through hair size Through time. Cable. Copper. Coaxial. Compac. Complex. Industrial. Strength. Breadth. Breath. Hearts beat. We speak.

I inhale your words.
My words.
Your breath. My breath. Ours.

$$
\text { A puff. } \quad \text { Exhale. }
$$

A flurry on my tongue.
And an acid cloud event.
Rain - it tastes
of territorial traces.

## A computer wanted

Key parts of world brain, of CPU, gndrd-source. Lady. Computer.
Computing machines arise from blood, breath, hands, minds to giants as
Colossus, Paragon, Apollo, Monolith, Atlas, ACE, Bombe,
Sabre, Sage, Logic Machine and Connection Machine. Megas lap
All tops, lick indices, palms, wrists with tongue. Licks smart. Single swipe sends Rocket to yotta, sends chemicals, gases to sublime-type places.

Meantime, heat-reject machines cool giants, heap cast-off stew through Rack space, containerized server rooms, data farms, critical for

Missions and tender to tropos, to stratus, to mesos spheres so blue.

## IV-WHEN BROKEN COMMUNICATION \& LANGUAGE APPROPRIATION COME TOGETHER, EXCESSIVE EXTRACTION CAN OCCUR

My words to you-once in a letter, upon a postcard, as message in a bottle, or answering machine and now, as SMS, a tag on social, as photo from my smartphone, as my geographical position information embedded in my photo, my WIFI history, my cookie collection-are priceless gems. They are diamond dust.

Stretch out your tongue and you will be able to taste. These crystals, which are visible mainly when they sparkle in the sunlight, give rise to generally well-marked halo phenomena.

In diamond dust, visibility is very variable

## A letter from the cloud eternal network

I am not wanted by any authority but,
A lot of people see me like a friend to a dethroned leader.
Many thrones see me as an unfriended leader.
I have been followed by authority.
I am seventy-eight years old. I am eighty-seven years old.
My eye frames are growth rings.
You can't even count them.
My eyes burn like the sun.
I am the sun.
I am seventy. I am eighty.
Seven. Eight. Zero. Zero. Two. Zero. Twenty.
Twenty.
My vision is clear.
My sight is unspoiled by my double-vision.
My double-vision gives me abilities you may not be aware of.
I am stealth. I am present. I bring depth of connection.
My health condition does not permit me to run around for business like I used to. My business does not permit me to use my health condition like I used to. This is why I am calling on you. I need your business cooperation.
I want to invest with you.
Let's make bank notes.
Paper files. Supply. Rubber stamp it.
Let's handshake. Will you agree?
You and I are speculators.
I have 45 million in my trust with a private vault.
I want you to partner with me to put this fund in place.
You will amass a fortune. My investment is in your ideas.
If you are into other good ideas and guarantee a good turnover, it is fine by me.
I cannot health due to my bad travel.
I want you to chance with me.
If you are interested let me know. We can exchange an agreement.
We can follow one another.

We can start a business relationship immediately.
We can start a relationship business immediately.
We can make a pile of paper.
We will make a pile of time.

## A whisper to a screen

To trace an echo chamber when the body is a source for extraction.

Mouth. Cave. Flesh diamond. Breath. Whisper to screen. Shield.
One chamber. Echo court. Whisper in whisper.
Add mouth, two mouths, caves. Chats swell. Warm murmurs make Layers. Three, then more-shining pearls glow, wet,
get transmissions. Tongue, words. Sibilant chorus.
This dispatch bombinates, liquid as crystals
in fibre optic glass. Carries from pharynx
through plastic films that guard light. What fluorescence;
red, green, blue. Tiny lamps dazzle ' $n$ capture
pic-vid-txt-feeds. Talk back. Fast. Loop gains volume, shape. Copy close, rote, roar. Rhythm gives rise to no reason for repeat. One loop and more loops.

If edgewise among, tongue that
propriety.

# Google powering Finnish server farm with Swedish wind farm 

For one basic cloud type.

On gaining solar accreditation, begin arrangements to lease a private cloud. Assistances and space are included with opportunities to own. Resources
for deep data storage are here. They're natural: Solar power. Wind power. Cloud power. Wind. Sun. Cloud. Wind could. Wind can. Cloud can. But, what contours the private
cloud? Floating, stratus, cumulus plumes or fog? Somewhat. Also-Cloud firewalls protect cloud projects except for rejection clause items like data loss from volatile
weather. Control personal cloud data
effectively. Build, upload and switch data
clouds. Private cloud can be fuzzy. Private
cloud hosting is desirable. Private cloud
is ready to acclimate to your needs.
On gaining solar accreditation
and reviewing conformance details, private
cloud can help anyone to the outer
sphere and worries about security are dissipated.

## I feel so close to you right now

I want to make things right from the way the bent officials made it.
My first priority is to deliver your payment award in full, plus the unpaid gains and benefits without my waking your heartbreak.

I am well pleased to tell you the delivery man has come with
Your cash trunk valued at eight point three million. He now waits for you.
You must stop dealing with people who contact you telling you your
fund is with them. It is not one bit with them. They want to take advantage.
I know whoever is contacting you by this address is fake.
They're not with your fund. They will dry you up until you have just nothing.

# When the hand moves quicker than the eye 

Messages for financial and other security

Subject: CONFLICT
Aug 31, 2017, 6:45 PM is Reply:

Dear Client,
Please allow me to introduce myself.
As I lay on my sick bed, there was an attempt to forever deleting.

So you see, we have to limit your account for careful policy reasons.

I have been touched to protect your information. With my personal legacy fund, we will resolve this together.

Fill in your data please. Please click HERE.

In safety,
Mrs. Mary Smith

Subject: Re: Subject
Reply:

Hello Subject,
There is unusual movement. In facts, your card.
We got this.
Plus, we have to limit your account to insure you secure your account now.
Hit "reply-all" and answer to enable your insurance protection.

SINCERELY,
CEO \& PRESIDENT
FINANCIAL CRIME DIVISION
(IMF)
INTERNATIONAL MONETARY FUND

To opt out of future emails click HERE.

Hello, You,
It's Ed. We spoke on the phone last week about the flexible low, low rates.
Remember those key features? They're fully circular.

- Forever deleting
- Delete forever
- Cutting out (extra)

You might ask, how can I make this oasis for myself? Take these steps:

- Click freely
- Do it now
- Re-touch
- Bonus clicks

Then, just reach me here for more details: ed.magic.life@gmil.com

Your friend Ed at Magic Life
[Message clipped] Click HERE to view entire message.

## Like the seashore clings to the sea

Yes, how my stretch streams. Spreads global. My personal traces farmed from key terms in ad words. I'm visible. Present in hereness. A proxy,
broadly. My body, crude. Measured feed. Filtered as water. As printspartial. Repeated. Fingers pressed to form whole print then scattered for future
service, entrusted, disclosed, incidental, behavioural, derived.
Body unsettled, my reach is organic. My past and now are
scraped as my image with sunlight spread evenly across my face, across the faces of everyone named on my contact list.

V-CLOUD-LAND CIRCUIT

## Capsized

I.

For available land, cheap electricity, and tax incentives.

## NORTH

Berkeley County, South Carolina

Council Bluffs, Iowa

The Dalles, Oregon

Douglas County, Georgia

Henderson, Nevada

Jackson County, Alabama

Lenoir, North Carolina

Loudoun County, Virginia

Mayes County, Oklahoma

Midlothian, Texas

Montgomery County, Tennessee

New Albany, Ohio

Papillion, Nebraska

SOUTH

Quilicura, Chile

## II.

Oh, how lines have curved to the earth over time.
Lines, they are not always isolated objective vessels
for transportation, mobility, shipping, borders, and other demarcation.
Lines, they can scaffold motions and gestures and acts upon the earth and its beings.
Sometimes a line isn't just a point from A to B.
Sometimes a line can be fully loaded.

## III.

Often I
wonder-when walking along tracks, rails, cables, tracts,
highways, paths, borders round stations, hubs, buildings, pits, quarries on sites, lands where creatures and people were
hard moved, removed by force
where now flows energy, traffic, freight, signals, spills, info, fire, transactionsif I can
call forth, breathe in those lost creatures, ecosystems, soil people, rock, flora and fauna so they know I can feel them.

These tracks, rails, cables, tracts, highways, paths, stations, hubs, buildings, pits, quarries on
sites and lands
were not placed randomly.
These lines for sending and receiving
are long used.

## IV.

Contests / / situations / our / A / before / Can / context / will / of / of / Physically / and / placed / lines / lines / lines / up / separate / be / simultaneously / lift / praise / serves / edges / surroundings / landing / Can / behind / transport / the / port / and / paths / the / circumstances / the / we / in / and / that / landing / performance / we / path / raise / them / all / the / to / raise / in / we / against / in / which / they / path / we / I / of / paths / made / in / infrastructure / / up / conditions / what / to / The / are / to / lines / lift / seemingly / improve / line / Why / to / under / and / their / a / as / advance / I / resistance / improve / the / the / would / But / and / Our / from / as / Can / them / So / the / homage / better / to / empathy / and / material / about / vessel / How / excludes / I / Can / upon / perimeter / want / We / from / this / building / Can / care / within / so / empty / for / port / with / sea / / vigil / gravel / leaves / from / object / / have / our / internet / systematically / can / cannot / part / their / as / telegraph / walk / it / and / Why? /

## V.

How can we raise our lines physically and at the same time in praise, to improve upon their value and acknowledge their relations?

Can we place our lines in better circumstances?
Can I have empathy for this seemingly neutral thing, a vessel?
What if we were to lift up the perimeter sidewalk around Place Ville Marie and carry all of those who and which are normally relegated to the margins? A gravel path?
The sand which supports the landing ports for internet cables sea-side? These things do have relations. Communities we may not be aware of.

I will walk in vigil and in tribute with and against these lines
which serve to transport and advance
as much as they function to exclude and leave behind.

## On the cuts we make

Tracking the Dominion Land Survey

Track. The mark.
Series of
marks left by
passage of
anything.
Trail.
Surfaced, I,
from the strip
up to the
road. Clothes soaked.
Water. Source.
Power.
Sky, from $\neq$ to concrete strip. rectangle.
Series of, arcades. Ground.
Unjustified.
Dashed lines on
earth un-bold.
Sequence of light. Ways of finding.
Sequins.
My track a course of stop action, start. Train of blooms sometimes

Track. The mark.
Series of
marks left by
passage of anything. Trail.

Little bau-,
little bau-,
hauses sans
serif on
prairies
make
rectangles.
paragraphs.
Matter as
words. Move. Words
matter. Make
change.
Dirt. Move from
surface. Arc
motion of
broom. This is
weeping earth.
Change.
Rough way, path
beaten by
feet, by men.
Animals.
Lines made of desire.

Grid's. It cares.
Does not care.
Listens to narrative. Nature and squares it down.
To no end.
Track. The mark.
Series of
Marks left by Passage of
Anything.
Trail.

Veins make heart,
Make with those
Arteries.
Survival
Lines. Beats. Of
Course.
Course of a nerve or blood vessel then skin partsintimate
exposed.
Pieces of
inside I
tried to pro-
ject to the
outside. A
motion.
Line there is
tissue thick.
Mark left by
passage of
glass on it.
Seam.
Netting.
There is so
much to be
seen. There is
no such thing.
A flickering
rack. A mark, series of
marks left by
passage of
anything.
Not nothing.

Passage of
fingers on
lines, acts, glass,
habits, vice,
Virtue. Wait-
Who's lines?
They
Draws eyes. Drive.
Will I pro-
Tect I from
What I want?
Will we pro-
Tect we?

Quickened de-
Cisions, mine.
Warp, woof-my
Hashtags' de-
Monstrative
Body.
Declare prints.
Voice. Thumb. Face.
Retina.
Soft swipes all
Deeply mine.
And infinite.

## Circuitry for places in Ohio

After Great Serpent Mound

For finding why, instructions I gave myself.
What names? And they ring.
Identified: 44,825 miles squared.
Akron. Cincinnati. Cleveland.
The shape of a waving flag,
These features part ink.
pixelated and squared. Gridiron.
Call letters flag
Also identified, transmissions for broadcast.
latitude: $38^{\circ} 24^{\prime} \mathrm{N}$ to $41^{\circ} 59^{\prime} \mathrm{N}$ and Code channels curve and send through forests, mind.
longitude: $80^{\circ} 31^{\prime} \mathrm{W}$ to $84^{\circ} 49^{\prime} \mathrm{W}$.
Not from my carriage.
I have made no straight path here.
Place names between rocks.
I have not no indirect path here,
Columbus. Dayton. Toledo.
(though not until my forty-second year.)
Energy over time and into words
and yet
illuminate on liquid time and crystal.
I come with these place names
Pulsing conductivity.
Installed in my mind.
Channels churn over surface features and space.
It has been such a long time.
Break rock.
Each place name

> They get human of a whole,
has a place in my lexicon.

> but place names not mapped in.

220 miles by
These pipelines audible within my chest and skin.
220 miles.
Sound force through veined eyelids as lit
Water runs across
by intimate jetsam.
3,877 square miles.

> The sun.

Columbus the capital and largest.
Words call on cotton for a time.

## Deep hub I: Moving toward a place where information flows from \& through

Along Parc linéaire du Réseau-Vert

| Ve Varn | Behold brick panorama. Brick red. Bricks together. Wide as a city block. |
| :---: | :---: |
| Horne viaduct. There are two northbo |  |
| lanes for cars and buses. There is a bi- | From ground level, a close distance, degrees of rotation my headfrom forward-facing to upward-about 23 . |
| directional bike lane, a major artery for |  |
| City cyclists. Adjacent St-Laurent and | If sun shines, if summer, if midday, branch of my body which is neck may rotate 15 degrees, left or right. |
| beneath the viaduct is L. Villeneuve \& Cie, |  |
| ation Centre, ${ }^{\text {cle }}$ vraie cour à | Brick sweep bends to oblique up close. |
| Piste des carrieres crosses St-Laurent | Beneath viaduct, rail flyover, south-side, shadow angles enact building to an island. |
| :longside the CPR tracks. The first time |  |
| Saw the water tower was in 1997 on the | Ground-level, rail-side, north side—gravel, dirt, weeds, shrubbery. Graffiti on brick. |
| cover of the album F\#A\#m by Godspeed |  |
| You Black Emperor! In 2008, I moved into ${ }^{\text {a }}$ | If ground-level. If track-side. If train passes, graffiti on freights. |
| place on St-Laurent two blocks south of the | Static then and moving, then. Letters in graf call. Call letters in graf. Speak and |
| Water tower. In 2012, 1 moved into a place |  |
| two blocks north of St-Laurent. North | Call in. Call off. Call out. Call up, |
| the water tower. In 2012, the CPR polices | And up. Atop the brick sweep a water tower. |
| began to guard the rail line and make arrests | Robust rust bucket with sun hat. With cell towers affixed, three by three by three. |
| the city of Montreal re-zoned the area for | Sun hat and cell towers painted brick red. As oxidized steel. |
| redevelopment without informing the public. | Cell towers send signals. Stream waves. Radio. Electromagnetic. |
| Over the years, more and more people have | Steel tracks, thickest wires, cover the earth. Send freight and |
| come to love walking under the viaduct on |  |
|  | Information weight. |
| St-Laurent. The water tower a romantic |  |
| Industrial shape on the cityscape. | 42 |

Deep hub II: Moving toward a place where people used to move toward to get information
Along Parc linéaire du Réseau-Vert

| On the territory commonly referred to | Freight trains pass two times a day. Horns sound dry chords. |
| :---: | :---: |
| ${ }^{\text {as }}$ Canada, "The Canadian Pacific Rallwey | There my field of vision couples with the width of the track to form a corridor. |
| Company's charter authorized the Company |  |
|  | Start and finish-Beaubien Ouest and rue Masson. |
| to engage in telegraph, telephone and other |  |
| means of communication, and in 1882 | The Canadian Pacific railway its familiar. |
|  | In summer the track is removed from heat, city traffic, urban concerns. |
| commercial telegrams were accepted for $\quad$ In summer the track is removed from heat, city traffic, urban concerns. |  |
| transmission over the Company's newly In summer, daytime there, heat blurs objects in the distance. |  |
| constructed lines between Winnipeg and | Activated urbans cut holes in the chain-link fence between the tracks and the track. |
| points in Western Canada where railway lines |  |
| already had been built | Many people see this track as a useful through-way. Vélo-route. |
| Pole mileage, 1886: 4,525 It is miter |  |
|  | It is not identified as one of the top five jogging sites in the city. |
| Pole mileage, 1936: 17,596 |  |
|  | Associates along the corridor: |
| Miles of wire, 1886: 14,508 |  |
|  | Sculpture garden. Disused metal assemblages. |
| Miles of wire, 1936: 173,341 |  |
|  | Water tower rust colour. Cell-phone towers affixed to. |
| Miles of cable, 1886: 50 |  |
|  | Modernist viaduct. Concrete a deep arc in parts. |
| Miles of submarine cable, 1936: 417 |  |
|  | Brewery and brewery aroma. Ferments. |
| No. of telegrams accepted for transmission, |  |
|  | Recycling centre with modernist vehicle bridge entrance and stench. |
| 1936: 4,491,266 |  |
|  | Smoke stack. Rusted and idle. |
| No. of cablegrams accepted |  |
| Tor transmission, 1936: 290,406 | Gravel and dirt sit at ground level. |

## Holding place

Often I
wonder when
moving a-
long tracks, rails, cables, tracts,
highways, paths, borders round stations, hubs, buildings, pits, quarries on
sites, lands where creatures and
people were
hard moved, re-
moved by force
where now flows
energy,
traffic, freight,
signals, spills,
info, fire,
transactions-
if I can
call forth, breathe
in those lost
creatures, worlds,
people, soil,
flora and
fauna so
they know I
can feel them.

When I was
young and made tracks to France
and to Spain,
thought I could
taste breath, bone, fossil and
blood gone long
now. As if
where I was
born had no
earthen cask
quite like it.

Now,
these tracks, rails,
cables, tracts,
highways, paths, borders round
stations, hubs, buildings, pits,
quarries on
sites and lands
where I was
born, where I
live were not
put in place
randomly.
Many lines like
these stretch back,
back, and back.
These lines for
sending and
receiving
so long used
and lived on.
Along. In.
Around in
full.

VI - INSIDE/OUTSIDE \& AROUND INFRASTRUCTURE.

## кちгiq

2:32 pm Wednesday-On the back of the coffee shop front door the letters to its name in adhesive vinyl in reverse. They are A, T, S, I, P. Three horizontal lines emerge from the letter P to indicate movement, speed. Below that on the back of the coffee shop front door are the shop hours in adhesive vinyl in reverse. Finger prints are smeared on either side of the front door. Condensation on the back of the front door that is wet and formerly wet or dried, that is wet and dries each day trails downward where it once dripped and is still dripping toward the shop hours and the floor.

The coffee shop is located across from a metro station. It is located at the corner, an intersection where buses and people cross the street to get to the metro station and bus stops there. An intersection where people debark from the metro cars in the metrostation and the bus stops where they cross the street to leave there.
2:22 pm Monday-From the banduette hot tears streaming to hexagonal floor tiles in black, green and white mixed with stones and melted snow. 心n


## Safety in numbers

This place is out of reach. This case is minus two dollars and cents. Windchill neg forty: raw blast force through bus hut for bodies. No ticket. No wicket. No keypad. No quick mart. But car park. But rapid transit mound. Call this is. Case this is. Place. It is out of bounds. Bound to
numbers. To units. Words twice. Air time stopped. Heel toe. Snow to bones. Packed on routes. Paths. I'm negative forty or sixteen bucks. Not numb, not I, No thing. But closer, come. Mini van. Taxi cab. In back seat. The driver's shield. Driver's side. From there his voice. His voice and, up front, dear. It's safe here. Near me, dear.

## After "Three Families, 14 Children on US 99, San Joaquin Valley, November 1938" by Dorothea Lange

Optic a prospect at close-grain. The breath's dew and stench. Dry sweat. Drought. Dust and yet and dust. Sky. Cover from. Under sun. Billboard perennial painted a pillow. Of feathers. Of cotton. And lattice lifts cumulus.
Message text-travel while you sleep. Then words beam speed. Business man dreams.
While soil storms. While bald grass. While wind wins. Wild sweat dries dreams and kids start on weeds. The foreground is hard ground. The billboard and highway all 'round. Gate place not gateway. Terminus non terminus.

## Body of work

The station from which my thoughts triggered, by that which my eyes had seen and processed, by what my hands had acted upon, is multilevel as rain clouds. Damp, expecting of wet and leaks. Vision blurred.

Yhe station embedded but not grounded by the line of my body to heel bones. That track kept me upright
even in sleep for the bolts as tokens. Remember, clench left, hold tight, squeeze. Cut. Remember, fingers
tap as spider's legstransmit in real-time. Muscle memories are the phantom actions of day-side. Bolt as
lightening cuts a deep linefrom the meat of the blades to the veins where hands should send current, should make for currency, makes forslow instead. It wakens. The shining station for word extraction and shaping is down, somewhere between conseryation and circulation on shifting ground. My breath a soft express into the sferics. It's canicule. In this small frame, air protrudes, super-loaded with heat strain.

Moves little. Draws heavy. Forces bodies from inside to outside. Back to inside. Forces outside bodies further toward the edges. One risk of precarity is health. A stress of the risk is to not have a job, to have a job or several jobs which pay too small, to have a half-time job which requires the effort and commitment of a full-time job, to get a job which offers a trial period. Stress of losing trial job and $f$ being invited to stay occurs simultaneously. A stress of the risk is to achieve active recovery in time off to find new job. Better work. Or smarter. To the edges I'll go.

## VII-CLOUD CLIMATE CHANGE

## It's possible to connect to \& use the internet in many different ways

 After canicule 2018What range of ways to link. Swipe, Visitor, signature. Your watch, your phone, palms wide. Iris less wires. Tethered. Make contact. Sign up. Touch yes. I-feels-net-ligatures as nests. Close. Warm. Pulls. Source cirrus. Celeste's feathers Full. Sky cameras feed mushroom flash. Cloud plumes.
Fixed service or mobile. Burgs turn small, crowd cloudlets. Whilst weightless, e-waste heaps. Precious ore juiced. Fumes. In Furnace Creek, sun peaks, fifty-one three. Cloudless.

On beach rests man hole. Port of your port. Cable. As glass twins. Fibre's packed. Garden hose holds four. With lining. Draped on sea's bed. Makes love line natal.
Device connects success.

## Triptych

## TRADE IN YOUR PHONE AND GET UP TO \$450 OFF A HOT NEW ONE

Move unwanted heat
To outside atmosphere.
It's precision cool.

## WHALEBONE

Ancient water web.
Infrasonic frequencies. Love songs sung in code.

## VAGUE DE CHALEUR

Cooling systems take. Metro lines down. Beads of sweat.

Plastic bottle balm.

## Attending the global event

Have you ever crossed the line?
Which lines will you cross?
Have you ever forged a path?
What path are you on?
How many paths have you not taken?
Is there a particular road you travel most frequently?
Have you ever hit the road?
Do you ever take the high road?
Have you ever crossed the tracks?
Have you ever gone off the rails?
Which streams do you follow?
How often do you them?
Do you tend to sit on the fence-yes, no, or maybe?
Where does your energy come from?
Is your energy also a source of power?
Which sources do you tap most often?
How do you react when you hit a wall?
How often do you come full-circle?

## When I'm drunk on the sun everyone I meet is either a poet or a medium.

HEAT

Sometimes I can see a person's aura when they speak.
It doesn't matter what kind of light the person is illuminated by.
This is true and it is untrue.
The homonyms from an empire of language lead me to believe that everything is everything.
The bus drove into the morning sun from Montreal to Ottawa via Papineau.
Narrow. North.
Toward Cremazie the sunlight flashed in my peripheral vision.
Buildings on the street were covered with sun's rays and were uncovered.
Sun on / sun off.
Flash of light and shadow in motion.
This is the inverse of being on the metro.
On the metro light emerges from within the cars.
Not from the exterior metro tunnels.
I am stroked by the sun. Stoked by the light and warmth and am cold when it is gone.
Flash on / flash off.
Sometimes I imagine I'm within a giant reel of film on the metro as it passes from one stop to another.
Smudges of colour and light rush by outside as other trains pass.
Photons with matter.
Sometimes I think everyone I encounter is either poet or medium.
I know this is true and I have no idea.

## LIGHT

Light comes from within the metro and not the tunnel.
Green line east, Green line west.
Its flood is chopped, smudged, absorbed.
Encased.
Footage of light to a film reel.
The length of the train.
Morning on the Green, but dark then.
Man, single, boards at St-Laurent.
Chain around his neck.
Giant seashell, a pendant.
Alternating light.
I am sitting on a bus moving at 60 mph .
Sun blocked.
North on Papineau.
Buildings on-off-on.
Stoked.
A person's aura.
We are sitting in a room.
I see it.
I am sitting in another room.
A person is standing onstage.
There it is.
Aura of trees.
A gathering.
Times of day.
I am there.

## Notes

Italicized text in Untitled, Untitled II \& Section IV taken from International Cloud Atlas, Volume 1. Revised Edition, 1975. Manual on the Observation of Clouds and Other Meteors (Partly Annex I to WMO Technical Regulations) Secretariat of the World Meteorological Organization, 1975. cloudatlas.wmo.int/docs/wmo_407_en-v1.pdf

At the centre of, Poetry Formations In A Resonant Sky, are a number of poems written in dactylic hexameter (or broken dactylic hexameter) following Guy Lee's translation of The Eclogues by Virgil. The Eclogues, "inspire[d] the whole European tradition of pastoral poetry," and was, "grounded in political reality," ${ }^{1}$ of the day. Though this thesis isn't immersed in the pastoral, it is concerned with living beings of the human and non-human kind, the natural environment, and is likewise grounded in some of the political realities of our contemporary moment.

Poems in dactylic hexameter are: Everyone...Is Telling You to Migrate to the Cloud, The Sound of Birds Migrating When -404- Not Found Arises, Reach Out \& Touch Someone Across the Atlantic, Pharos of Alexandria, Computer Wanted, I Feel So Close to You Right Now, Like the Seashore Clings to the See, On the Cuts We Make, Safety in Numbers, After 'Three Families...', and Holding Place.

The concept of information in motion and of people moving toward information in "Deep Hub I" and "II" was inspired by Neal Stephenson's article, "Mother Earth, Mother Board," in Wired, 1996. www.wired.com/1996/12/ffglass.
"Everyone-Executives, Colleagues, Partners-Is Telling You to Migrate to the Cloud" and "Reach Out and Touch Someone Across the Atlantic" are inspired in part, by the 1872 John Gast painting, American Progress, as it relates to westward expansion in the US.

The laying of railroads and telegraph lines was inherent to colonization of what is now North America. I'm interested in the gesture of movement affiliated with westward expansion and examining key sites along the way which facilitated colonization of land, resources, and peoples (e.g., ports of entry, railway hubs, sites of energy production.) In doing so, I wish to highlight these historical sites for their proximity to or as being locations for internet data centres and what it means for information to undergo expansion by way of these sites. I wish acknowledge the relevance of these sites for their contemporary use and the historical impact they have in relation to this language I write and speak in.

Drawing from the context American Progress comes from, one such key site Jamestown, Virginia, where the first recorded ship of enslaved peoples or, "20 and Odd Negros" arrived in August 1619. ${ }^{2}$ Today, Virginia is home to more than, " 55 data centres across 17 campuses" operated by Amazon Web Services alone, ${ }^{3}$ and to the Marea cable discussed in "Reach Out and Touch Someone Across the Atlantic."

With these poems, I wish to honour the African peoples of the Transatlantic slave trade and the traditional custodians of the lands and waters of Turtle Island; Indigenous Peoples, the First Nations, Inuk/Inuit, and the Métis peoples then and now.

## Footnotes

1. Virgil. The Eclogues. Translated by Guy Lee. Penguin Books, revised edition, England, 1984, back cover copy.
2. Berlin, Ira. Many Thousands Gone: the First Two Centuries of Slavery In North America. E-book, Cambridge, Mass.: Belknap Press of Harvard University Press, 1998, hdl-handle-net.lib-ezproxy.concordia.ca/2027/heb. 00069
3. Cook, Gary \&. Elizabeth Jardim. Clicking Clean Virginia: The Dirty Energy Powering Data Center Alley. Greenpeace, 13 Feb 2019. www.greenpeace.org/usa/wp-content/uploads/2019/02/Greenpeace-Click-Clean-Virginia-2019.pdf

## Bibliography

Agamben, Giorgio. The Open: Man and Animal. Stanford University Press, 2004.
Balkin, Amy \& Megan Prelinger. The Atmosphere: A Guide. Exploratorium Bay Observatory, 2013-16. tomorrowmorning.net/atmosphere.

Bratton, Benjamin H. The Stack: On Software and Sovereignty. MIT Press, 2015.
Brown, Kevin, \&. Wendy Torell. Why Cloud Computing Is Requiring Us to Rethink Resiliency at the Edge. White Paper 256. Schneider Electric's Data Center Science Center, 31 Oct 2016. download.schneider-electric.com/files?p_Doc_Ref=SPD_VAVR-AF3NSM_EN

Browne, Simone. Dark Matters: On the Surveillance of Blackness. Duke University Press, 2015.
Burrington, Ingrid. Networks of New York: An Illustrated Field Guide to Urban Internet Infrastructure. Melville House Books, 2016.

Carpenter, J. R. An Ocean of Static. Penned in the Margins, 2018.
Carpenter, J. R. The Gathering Cloud. Uniformbooks, 2017.
Carson, Anne. "The Gender of Sound," in Glass, Irony and God. New Directions Books, 1995.
Collective. Tactical Tech, 2019-20. tacticaltech.org.
Cong, Wanshu. Digital Surveillance Eo the elimination of human rights encounter. Doctoral dissertation, McGill University. 2019.

Cook, Gary \&. Elizabeth Jardim. Clicking Clean Virginia: The Dirty Energy Porwering Data Center Alley. Greenpeace, 13 Feb 2019. www.greenpeace.org/usa/wp-content/uploads/2019/02/ Greenpeace-Click-Clean-Virginia-2019.pdf

Drew, Stephen C. \&. Alan G. Hopper. Fishing and Submarine Cables: Working Together.Second Edition. International Cable Protection Committee, 23 Feb 2009. www.iscpc.org/information/Openly\ Published\ Members\ Area\ Items/ICPC_ Fishing_Booklet_Rev_2.pdf

Wong, Rita. Interview with Heather Milne. "Rita Wong." Prismatic Publics: Innovative Canadian Women's Poetry and Poetics. Eichhorn, Kate and Heather Milne, eds. Coach House Books, Toronto, 2009.

Evans, Tony. Fundamental Principles of Air Conditioners for Information Technology. White Paper 57, Revision 5. Schneider Electric's Data Center Science Center, 2014. download.schneider-electric.com/files?p_enDocType=White+Paper\&p_File_Name=TEVS-5TFNU8_R5_EN.pdf\&p_Doc_Ref=SPD_TEVS-5TFNU8_EN
---. The Different Technologies for Cooling Data Centers. White Paper 59, Revision 2. Schneider Electric's Data Center Science Center, 2012. download.schneider-electric.com/files?p_Doc_Ref=SPD_VAVR-5UDTU5_EN

Gast, John. American Progress. 1872. The Autry Museum of the American West. collections.theautry.org/mwebcgi/mweb.exe?request=record;id=M545330;type=101

Government of Canada, Treasury Board of Canada Secretariat. "Government of Canada Cloud Adoption Strategy: 2018 Update." Aem, 29 June 2016. www.canada.ca, https://www.canada. ca/en/government/system/digital-government/modern-emerging-technologies/cloud-services/ government-canada-cloud-adoption-strategy.html

Haraway, Donna. "Situated Knowledges: The Science Question in Feminism and the Privilege of Partial Perspective," in Feminist Studies, vol. 14, no. 3, 1988. www-jstor-org.lib-ezproxy.concordia.ca/stable/3178066.

Hu, Tung-Hui. A Pre-History of the Cloud. The MIT Press, 2015.
Iliadis, Andrew, and Federica Russo. "Critical Data Studies: An Introduction." Big Data छ" Society, vol. 3, no. 2, SAGE Publications Ltd, Dec. 2016. p. 2053951716674238. SAGE Journals, doi:10.1177/2053951716674238.

International Cloud Atlas, Volume 1. Revised Edition, 1975. Manual on the Observation of Clouds and Other Meteors (Partly Annex I to WMO Technical Regulations,) Secretariat of the World Meteorological Organization, 1975. cloudatlas.wmo.int/docs/wmo_407_en-v1.pdf

Kahn, Douglas. Earth Sound Earth Signal: Energies and Earth Magnitude in the Arts. University of California Press, 2013.

Marshall, Kate. Corridor: Media Architectures in American Fiction. University of Minnesota Press, 2013.

Mavhunga, Clapperton Chakanetsa. Transient Workspaces: Technologies of Everyday Innovation in Zimbabwe. The MIT Press, 2014.

McDonough, William, and Michael Braungart. Cradle to Cradle: Remaking the Way We Make Things. North Point Press, 2002.

Me and My Shadow, 2012. myshadow.org.
"Population displacement," in Social and Human Sciences, International Migration, UNESCO. wayback.archive-it.org/10611/20160908121114/http://www.unesco.org/new/en/social-and-human-sciences/themes/international-migration/glossary/displaced-person-displacement.

Mosco, Vincent. To the Cloud: Big Data in a Turbulent World. Paradigm Publishers, 2014.
Peters, John Durham. The Marvelous Clouds: Toward a Philosophy of Elemental Media. The University of Chicago Press, 2015.

Ruparelia, Nayan B. Cloud Computing. The MIT Press, 2016.
Shukin, Nicole. Animal Capital: Rendering Life in Biopolitical Times. University of Minnesota Press, 2009.

Simmon, Eric. Evaluation of Cloud Computing Services Based on NIST SP 800-145. NIST SP 500-322, National Institute of Standards and Technology, 23 Feb. 2018, p. NIST SP 500-322. DOI.org (Crossref), doi:10.6028/NIST.SP.500-322.

Starosielski, Nicole. The Undersea Network. Duke University Press, 2015.
Stephenson, Neal. "Mother Earth Mother Board," in WIRED, 1996.
www.wired.com/1996/12/ffglass.
Taylor, Gavin. "HIST 251: United States before the Civil War Era." November 2017, Department of History, Concordia University, Montreal, QC. Lectures.
van Wyck, Peter C. The Highway of the Atom. McGill-Queen's University Press, 2010.
Virgil. The Eclogues. Translated by Guy Lee, Rev. ed.--, Penguin, 1984.
Watts, Vanessa. "Indigenous Place-Thought and Agency Amongst Humans and Non Humans (First Woman and Sky Woman Go On a European World Tour!)," in Decolonization: Indigeneity, Education $\mathcal{E}$ Society, vol. 2, no. 1, May 2013.
jps.library.utoronto.ca/index.php/des/article/view/19145.
Weather Facts: Accessory Clouds, Weather Online Ltd. - Meteorological Services, 1999-2020. www.weatheronline.co.uk/reports/wxfacts/Accessory-clouds.htm.

Robertson, Lisa. Xeclogue. New Star Books, 2012.
Zuboff, Shoshana, "Surveillance Capitalism and Democracy" on Data Eo Society Podcast, 19 Feb 2019. listen.datasociety.net/episodes/surveillance-capitalism-and-democracy.
---. "Surveillance Capitalism and the Challenge of Collective Action," in New Labor Forum, vol. 28, no. 1, Jan 2019, pp. 10-29.

## Poems Published \& Honours

"Safety in numbers." carte blanche, \#34, Fall 2018. Online.
"An introduction to cloud species." Headlight Anthology,"[BLANK] Realism," Issue 22, 2019. Print.
"Google powering Finnish server farm with Swedish wind farm." Vallum: Contemporary Poetry, 16:1, "Connections," 2019. Print.
"When my lover is across the ocean," shortlisted for The Capilano Review's 8th Annual Robin Blaser Poetry Contest. Judge: Fred Wah. Fall 2018.
"When my lover is across the ocean." The Capilano Review, Spring 2019. Print.
"Safety in numbers." carte blanche nomination for poetry, Best of the Net 2019 Anthology, Sundress Publications, September 30, 2019.
"After 'Three Families," "Everyone—Executives, Colleagues, Partners-Is Telling You to Migrate to the Cloud," and "Reach out and touch someone across the Atlantic." Accepted for publication in Women and Environment International, (102/103,) 2020. Print.

Cloud Circuit. "A Letter From the Cloud Eternal Network," "Airbus 321," and "The Speed of Sound. A Trail of Airplane Exhaust, Slowly." Bur Sting Brea K'r. Archive Officielle Publications, 2020. Vinyl and MP3.

