

University of Windsor

## Scholarship at UWindor

---

Electronic Theses and Dissertations

Theses, Dissertations, and Major Papers

---

2014

### In the wilderness

Aaron Daigle

*University of Windsor*

Follow this and additional works at: <https://scholar.uwindsor.ca/etd>

---

#### Recommended Citation

Daigle, Aaron, "In the wilderness" (2014). *Electronic Theses and Dissertations*. 5125.  
<https://scholar.uwindsor.ca/etd/5125>

This online database contains the full-text of PhD dissertations and Masters' theses of University of Windsor students from 1954 forward. These documents are made available for personal study and research purposes only, in accordance with the Canadian Copyright Act and the Creative Commons license—CC BY-NC-ND (Attribution, Non-Commercial, No Derivative Works). Under this license, works must always be attributed to the copyright holder (original author), cannot be used for any commercial purposes, and may not be altered. Any other use would require the permission of the copyright holder. Students may inquire about withdrawing their dissertation and/or thesis from this database. For additional inquiries, please contact the repository administrator via email ([scholarship@uwindsor.ca](mailto:scholarship@uwindsor.ca)) or by telephone at 519-253-3000ext. 3208.

IN THE WILDERNESS

by

Aaron Daigle

A Creative Writing Project Submitted to the Faculty of Graduates studies through the  
Department of English Language, Literature, and Creative Writing in  
Partial Fulfilment of the Requirements for the Degree of Master of Arts at the  
UNIVERSITY OF WINDSOR

Windsor, Ontario, Canada

2014

© 2014 Aaron Daigle

In the Wilderness

by

Aaron Daigle

APPROVED BY:

---

G. Drake

Department of Physics

---

K. Quinsey

Department of English Language, Literature, and Creative Writing

---

K. Jirgens, Advisor

Department of English Language, Literature, and Creative Writing

---

D. Jacobs, Chair

Department of English Language, Literature, and Creative Writing

April 22, 2014

## Declaration of Previous Publication

This thesis includes 15 original poems that have been previously published, as follows:

Poem	Citation	Publication status
"Temple Garden" (69)	"Temple Garden." <i>Rampike</i> Fall 2014. Windsor: 2014. Print.	accepted for publication
"keep to the centre" (55)	"keep to the centre." <i>Rampike</i> Fall 2014. Windsor: 2014. Print.	accepted for publication
"Genesis II" (4)	"Genesis II." <i>Generation</i> . ed. Shawna Partridge. 2014. 12. Print.	Published
"Central Station" (8)	"Central Station." <i>Generation</i> . ed. Shawna Partridge. Windsor: 2014. 13. Print.	Published
"On Sitting Down for Tea with Emily Dickinson" (19)	"On Sitting Down for Tea with Emily Dickinson." <i>Generation</i> . ed. Shawna Partridge. Windsor: 2014. 14. Print.	Published
"on sundays God:" (22)	"on sundays God:." <i>Generation</i> . ed. Shawna Partridge. Windsor: 2014. 15. Print.	Published
"The Frog and the Avian" (33)	"The Frog and the Eagle." <i>Generation</i> . ed. Shawna Partridge. Windsor: 2014. 16. Print.	Published
"or maybe God's a hermit instead of" (57)	"or maybe God's a hermit instead of." <i>Generation</i> . ed. Shawna Partridge. Windsor: 2014. 17. Print.	Published
"The third śūnyatā" (34)	"The third śūnyatā." <i>Generation</i> . ed. Shawna Partridge. Windsor: 2014. 18. Print.	Published
"Ran into Christ at a bar." (35)	"Ran into Christ at a bar." <i>Generation</i> . ed. Shawna Partridge. Windsor: 2014. 19. Print.	Published

"E=mc <sup>2</sup> " (20)	"E=mc <sup>2</sup> ." <i>Generation</i> . ed. Shawna Partridge. Windsor: 2014. 20. Print.	Published
"Imperceptible proverbs" (21)	"Imperceptible proverbs." <i>Generation</i> . ed. Shawna Partridge. Windsor: 2014. 20. Print.	Published
"Kagome, Kagome" (43)	"Kagome, Kagome." <i>Generation</i> . ed. Shawna Partridge. Windsor: 2014. 21. Print.	Published
"Secretomotor" (37)	"Secretomotor." <i>Itty Bitty</i> . ed. Aaron Daigle. Windsor: 2013. 52-55. Print.	Published
An earlier version of "The First Poem"	"The First Poem." <i>Vox X</i> . ed. Aaron Daigle and Emily Skov-Nielsen. Saint John: 2012. 48. Print.	Published

I certify that I have obtained a written permission from the copyright owners to include the above published materials in my thesis. I certify that the above material describes work completed during my registration as graduate student at the University of Windsor.

I declare that, to the best of my knowledge, my thesis does not infringe upon anyone's copyright nor violate any proprietary rights and that any ideas, techniques, quotations, or any other material from the work of other people included in my thesis, published or otherwise, are fully acknowledged in accordance with the standard referencing practices. Furthermore, to the extent that I have included copyrighted material that surpasses the bounds of fair dealing within the meaning of the Canada Copyright Act, I certify that I have obtained a written permission from the copyright owner(s) to include such material(s) in my thesis.

I declare that this is a true copy of my thesis, including any final revisions, as approved by my thesis committee and the Graduate Studies office, and that this thesis has not been submitted for a higher degree to any other University or Institution.

## Abstract

*In the Wilderness* is a poetry manuscript depicting the synthesis of science and spirituality. Though scientific and spiritual viewpoints are conventionally posed in a dialectic, this manuscript is a deconstruction in three sections that reveals physics and metaphysics to be complementary or even synonymous. Interconnectedness is envisioned through poetry. The first section poses competing metaphysical perspectives, the second section accentuates science, and the third section portrays a harmonious whole.

The variety of poetic forms in this manuscript respond to discoveries in science, and either figuratively or symbolically emulate phenomena identified by scientists and physicists as they intersect with spiritual perspectives, with reference to matters such as the big bang, particle wave theory, quantum mechanics, the Fibonacci sequence, entropy, and energy, among others. The fluency of shifting discourses depicts growing human awareness of our place in the universe as revealed through both physics and metaphysics.

Dedication

*To Anne Compton and John Smith,  
my mother and father in poetry.  
Your vision guided me to this creation.*

## Acknowledgements

To Karl Jirgens, my supervisor, for his unfailing support and unflinchingly insightful criticisms.

To Katherine Quinsey for her course on gender and spirituality, thereby introducing me to the mystics of the Restoration.

To Richard Douglass-Chin, whose Chinese-American class allowed me to first investigate the alignment of Taoism and quantum conceptions of time.

To Joanna Luft, for permitting me to examine the medieval conception of spirituality in the Quest for the Holy Grail.

To my fellow English majors, whose community on the path to education endlessly buoys my spirits.

To the Rev. Derek Davis, for guiding a wonderful spiritual community, and whose faith is always an inspiration.

My immense gratitude to the Social Sciences and Humanities Research Council, whose financial support for this project lifted such weight from my shoulders.

To authors, scientists, and mystics too many to list whose words have shaped my own thoughts. In a woefully incomplete list: Anne Compton, John Smith, John Thompson, Sue Sinclair, William Blake, Emily Dickinson, John Donne, Kinoku Nasu, Gen Urobuchi, Jun'ya "ZUN" Ota, Neil deGrasse Tyson, Bill Nye, Stephen Hawking, Richard Feynman, Albert Einstein, Fritjof Capra, Stephen Barr, Francis Collins, James Gleick, Diarmuid O'Murchu, Northrop Frye, Mumon, Lao-tzu, and the many authors of the Bible.

To God, who ever inspires the search.



## Table of Contents

Declaration of Previous Publication	iii
Abstract	v
Dedication	vi
Acknowledgements	vii
Preface	x

## *In the Wilderness*

"Genesis 0" _____ <i>Section One: Poems of the Past</i>	1
"Genesis I" _____	3
"Genesis II" _____	4
"Lucifer I" _____	5
"The First Poem" _____	6
"Wind farm psalm" _____	7
"Central Station" _____	8
"Ladder" _____	9
"Jacob Wrestles the Angel" _____	10
"Rapture" _____	11
"Aaron:" _____	12
"when you get that order to kill children" _____	13
"Carpentry Lessons" _____	14
"April 3 <sup>rd</sup> , 33 A.D." _____	15
"Flood" _____ <i>Section Two: Poems in the Laboratory</i>	16
"God particle" _____	17
"virtual meditation" _____	18
"On Sitting Down for Tea with Emily Dickinson" _____	19
"E=mc <sup>2</sup> " _____	20
"Imperceptible proverbs" _____	21
"on sundays God:" _____	22
"7.83 hurts" _____	23
"?" _____	24
"Silverfish" _____	25
"How long, ye simple ones, will ye love simplicity? and the scorners delight in their scorning, and fools hate knowledge?"	26
"Lamentation for Saint John" _____	27
"Psalter at Distance" _____	28
"Lucifer II" _____	29
"Homeland" _____	30
"he says, moulting feathers from his hair" _____	31
"Relativity" _____	32
"The Frog and the Avian" _____	33
"the third śūnyatā" _____	34
"Ran into Christ at a bar." _____	35

"infection"	36
"Secretomotor"	37
"Amou/ride"	41
[ ] <i>Section Three: The Shared Root</i>	42
"Kagome, Kagome"	43
"Touhou I"	44
"Touhou II"	45
"Touhou III"	46
"Waterwheel"	47
"constellation"	48
"Bubble chamber"	49
"fibonacci alphabet"	50
"Mandelbrot and Julia fall in love"	51
"Description of the Temple"	52
"lunar solstice"	54
"keep to the centre"	55
"impressions from rorschach google doodles"	56
"or maybe God's a hermit instead of"	57
"first fruit"	58
"heian alien"	59
"Buddhism"	61
"Phoenix"	62
"unfading thoughts"	63
"not with clay feet, I hope"	64
"Lucifer III"	65
"Entropy"	66
"or when or where or"	67
"at the end"	68
"Temple Garden"	69
"Carmina Foreluna"	70
"Hymnos"	71

### Essay

Thoughts <i>In the Wilderness</i>	72
Works Cited	103

### List of Appendices

Appendix A: Translations	105
Appendix B: On Carmina Foreluna	106
Appendix C: Images	107
Appendix D: Glossary	111
Appendix E: Notes	118
Vita Auctoris	120

*Preface*

*In the Wilderness* is a poetic consideration of the relationship between science and spirituality, concluding that science and spirituality are fundamentally the same; they are both human attempts to understand our relationships in the universe from physical and metaphysical perspectives. The thesis is divided into three sections to chart the development of a sense of transcendence, participating in both scientific and spiritual discourses. The thesis proceeds according to a deconstruction of a false dialectic: in the first section, different perspectives are acknowledged; in the second, differing perspectives challenge one another; in the third, difference is illusory and transcended to a new understanding of unity. The separation in discourse between science and spirituality is a difference imposed by limitations in understanding: science and spirituality are two sides of the same coin, as inextricable as *yin* and *yang*, wave and particle.

The first section is linked to conceptions of the past, both in Scripture and in science. It marks the beginnings, too, of spiritual awareness and perception in the universe. Each poem views elements of the past from both a scientific and spiritual perspective, anticipating a shared reality explored throughout the book. Scientific and spiritual readings of history are present within each poem in the first section, but the distance of the past allows room for dissenting pairs of interpretations. The paired poems offer apparently conflicting readings of the subject matter, even alternating between tradition and contemporary forms. Upon closer inspection, however, the interpretations may in fact be complementary, depicting of different facets of the same phenomena. Spiritual awareness must first confront the existence of other metaphysical perspectives,

and it is the tension between these perspectives that the first section introduces.

The second section imagines a thematic present, a space where differing perspectives interact and exchange their views. The debate between spiritualit(ies) and science(s) is voiced here, as positions are asserted and shifted from poem-to-poem and within the poems themselves. The conversation is reflected in form as well, and includes variations in poetic form including traditional left-margin poems, concrete poems, fragmented texts, and aphoristic texts. Each innovation in poetic form implies a different way of viewing the world. As the second section develops, common ground is identified among the perspectives, such as the desire for social and environmental responsibility in both spirituality and science. The different perspectives lead to the revelation that difference is not exclusive, but complementary and productive in nurturing the creation of new knowledge. Disagreement is enriching: just as DNA recombines to form new offspring, the interconnection of perspectives leads to fruitful realizations: chief among them the idea of interpenetration. Each perspective contains others within it, interconnected but still different. The relationship between science and spirituality is a “both/and” rather than “either/or” proposition.

The third section deconstructs conflicting perspectives, revealing the universal root despite superficial differences. Science and spirituality are no longer competitive but complementary, even synonymous. If complementary, the physical and metaphysical are interlocked pieces of the whole; if synonymous, then there is only unity. This section is visionary, and gazes optimistically into a possible future where time itself has ceased to have meaning: past, present, and future themselves are transcended. The vision is not confined to a single perspective or a single timeframe, but engages with a multiplicity of

perspectives, each sharing the same theme expressed in different ways. Transcendence dispels the illusory barriers between real and imagined communities, as the poems engage symbolically with fictional characters. The sense of wonder and interconnection in the third section illustrate the experience of unity with language of expansion, ascension, and dispersion.

The thesis is a poetic response to transcendence and interpenetration, embracing science and spirituality as means to explore and refine our understanding of the universe. The laws of nature and God, interlinked as they might be, are approached with continuous and dynamic revision, ever only approximation. The hope for infinitely closer approximations anticipates a timeless future where the border between our understanding and the absolute is shed, and with it, a shift into a new mode of being only hypothesized here.

Genesis 0

• ,  
 , ; • • , : •  
 , : • •  
 , : • , , •  
 , • • , , , , : •  
 , , • , , , , , •  
 , : • •  
 • • , , , : •  
 , , : • , , : •  
 ; : • , , : , ,  
 , , , , , : , , •  
 • , ; •  
 , , , , : • , , , , : ,  
 • , •  
 , ; , , , : , , , ,  
 : • ; •  
 ; , : • , , , , :



# Genesis I

the poet                  a dense mantra.  
                              swirls space.

speaks recursive ocean.

*let there be light*

naked s                      un                      pebbled tide

furls the horizon

flays

---                  time clay elastic & moistened --                  firm photonic star                  hand  
from waters:                  a visible universe                  lit waters

*you see*                      *shall be your dome of sky*

spill                      inch                      inch                      surf at knees

bars                  (fivefinger pillars)  
squeeze --

*the greater light to rule the day --*

Word burrows into conch

roar                      crucify

disintegrates                  pieces                  underwater                  molecules nailed

plentiful as cells

someday

two homunculi

on the brightening                  shore



## Genesis II

Went walking coast, rustling sun  
from sleep. Tide

a bedsheet thrown back; mattress  
of unripe stars pliant. Dawn

inflates shoreline. I am  
wrist-deep

in what is,  
scattering galaxies

from sand.  
The bright disks of clouds

skim horizon. Antiphonal  
waves wash out

heartbeats. Birdsong  
redshifts.

When waters revisit,  
the names I call

slide through a slick nebula  
and will not catch.

## Lucifer I

The typical temptation affair:  
 you've seen hot  
 bulbs swing emptiness the table and two chairs  
 The devil's a minimalist.  
 And gorgeous.

Musk breath, mounted heads, fish with fur, warm-blooded.      Very warm.

In the seashell ear: *You've nothing to be ashamed of,* Gentle                      ness, locked on arm  
*it's just you were made this way.*                      slender spidersilk spins  
   helixes from flesh,                      unravel right off bones:

ivory chest a cage.  
for following

*It's not me. It's all you: how can the Creator blame you  
your code? You are only  
computer.*

*God is for giving.* Canines, serpent fangs,  
Cain eyes.

*You have a libido, why not use it? They want the same.*

End-as-themselves, Can't. Frozen candle, Coleridge, need symbolism, cold-ridge.

*But that's exactly it, isn't it? Why knot?*  
*You'll make each other happy as*  
*harpies.*

*You have faith in cleansing, right?*

I roll my I's  
like dice.

They come up snake: carved ivory and an ebony pupil.  
eye, always a quick learner.

## The First Poem

*You must be driven to the most desperate reach, then fight your way back.  
When you get to the middle, there are words to feed on  
and out of which to build shelter; first a hovel, then a house.  
Finally, ideas take root, and soon, on familiar branches, children swing.  
- "You Must Be Driven," John Smith*

God's finger is a tree  
hurled from sky. Phonemes rumble his breath,  
vibrating stones.  
Thunder taught us words.  
Aftershocks  
leave us tremulous, skin cells charged.  
We recoil at touch.  
Genealogies pull us on,  
palming the seconds between strike and sound.  
*You must be driven to the most desperate reach, then fight your way back:*

the father carries the fruit as he would a child,  
sickling flesh.  
After birth, the roots of language are forgotten.  
Still we see in metaphors, read  
the stars in apple seeds.  
Earth thrusts a mountain of bone  
through forest-skin. The mother and child  
meet a cow's head on an old logging road:  
the tongue speaks a labyrinth of woods.  
*When you get to the middle, there are words to feed on*

and the feeling that you have been here before: warm slate,  
a moss bed. After a sleep, Eve splashes her face  
and touches lips to a quick stream:  
what is spoken underwater  
remains there.  
The ocean bore our ancestors  
from the waves' slick sighs:  
the first poem was amphibious, mud-lunged;  
leaves stitched to a spine --  
*out of which to build shelter, first a hovel, then a house.*

No. The first poem was earlier,  
archaean.  
Breath cresting waters:  
oxygen catastrophe  
an overflowing of tongues  
rusting white flesh;  
knowledge, a shroud of snow.  
What's swallowed withers.  
Death, a word to array emptiness:  
*ideas take root, and soon, on familiar branches, children swing.*

**Wind farm psalm**

Eighty hand-in-hand  
might enfold just one of you,  
sequoias scraping clouds.

Three-winged nephilim  
wisdom.  
Propellers churn earth. We'll leave

soil to haul sails  
of cumulus, lift anchor  
from ichorous oil. We don't need

incandescent resurrections anymore. Ivory monolith, nameless throne, your four winds  
corner the fields. Past offerings,  
years on the altar.

Our windswept sleep.

You blend the skyline's palette,  
transmogrify air.

### Central Station

Bricks lock in sentences,  
paragraphs. Stillborn

stone. Pools read bar-  
red light and scrawl arches  
graffitied with names: slickshine  
footsteps break reflection,  
labour stairways. Ceilings  
show skeletons, breathing  
sand. Coin kings  
boast employment.

Wormtracks constellate. At intersecting  
railways, morphemes lie

bottlenecked in clothes.  
Doors recess, shatterglass  
falls. The original syllable  
superpositions, river-fork  
tongues. Tracks synonymically

through tunnels to native lands.  
I can only write over rivers  
as hollow windows fill with sky.

## **Ladder**

Head to hard ribs,  
hands along their bars. Float  
from the spine, uncaged; rung  
and ringing.

To unfurl a heart, creek  
ferns spiral-wound. This is [not]  
actually occurring. Or maybe you do  
exist. Talc-smooth

your descension, stirring  
branches of bobcut. You the nighttime sun;  
angels traverse our arms.  
We are multitudes of dust;

bloodfed stars. Bones falter,  
muscles abash themselves. I am  
too parched, and cannot lift  
eyes to sunrise. Break well from stone

and cup hands to drink.  
What spills anoints earth.

**Jacob Wrestles the Angel**

Hands hard on my shoulders,  
the way you snare

a hare's sprint  
over pockmarked desert.

Burrows  
where reason might reach.

Microscopes  
strike emptiness

as if he were reflective,  
or I was. The mind, rowing lakes.

Hands slick with rainwater,  
lightning.

Children among fireflies intone  
gaps, fingers.

We wrestle all dark: sheared cotton,  
sands of sky.

Shying from daybreak.  
*Why is it you ask my name?*

## Rapture

*Can you cleave God from man?*

glass on a sill

refracts. Kids in the yard

play war.

The river thawing is thunder's voice.

Shoved into the sharp cleft

of stone, I trace engravings

still hot from your hand.

And your naked back,

specked with sand.

You said it'd kill me to have some

face-to-face conversation.

You must've changed your mind:

what you said in your desert sweat.

When I am old, I see you again:

church-quiet morning mist.

You look weary from the weight on you.

I offer my shoulder

and a drink of fresh water.



**Aaron:**

*Exalted. High mountain. Hebrew and/or Egyptian. What's the difference?*

Fences unseen.

Started slipping into the feminine, tongues  
the same. Ys unchanged.

Remember, it begins as in *apple*. Otherwise, *error*.

*Didn't mean it, that business with the calf.*

Or maybe *air-in*. About to spit:

*I was the older brother, voice claimed by the thoughts of another;  
they said I had a way with words but meaning slurred  
in my throat like vomit.  
He, all vision and prophecy, cloud-clad and claiming aristocracy, bedecked  
my gaudy body in bawdy rubies  
to distract the son-swallower, sister-blighter.*

*I'd deal with the people  
wanting to split me like an inheritance.*

*My rod sprang almonds: bitter,  
tasting faintly of cyanide.*

**when you get that order to kill children**

we sunbank'd the cross contour of a fibula  
 a small one fretrib woodflake  
 sawdustluster beambroken flare  
 in rescue of

performance of french connection that  
 is [t]ac[k]adian that is tongues  
 that is language I was born  
 not knowing

I'd ravel a cripple as if I couldn't play violin  
 anymore /(never could) that's me on the flute  
 the tombeau of cutting my talents to leaf  
 nothing or fallcrisp or blood delicious

cello coffee  
 riminscript acupuncture inkontrol in f-a-c-e of  
 the matter vibrator mind shaky skull impress  
 ionist I am we

aver violin paganini or theorize  
 baroque bohrdo[o]ms (patriarchal or otherwise)  
 declare orbits silkocoon brink 2-8-18-32-50  
 aerate a[u]reolate whitecap

picture this boxed-up baby  
 in a boat of rushes crocs crocus crosses circle  
 reeds breathswept instrumental tongue  
 mosquitolike jumping shells barefoot

while an old man  
 snores the sidelines and everywhere fucking  
 submerged in trembles ensconced in spectral  
 emissions the gas my ghost pulsates &

the lady, the  
 lady leans into shellharp and sharpens and  
 g/listens coruscant (not city tho paved 8/9x  
 'round sun) undu

la[c]t[at]ions (mathematical and/or  
 otherwise) shaken Way protein and water the  
 body drink it David exorcising Saul with  
 strings and fingers a sword

## Carpentry Lessons

Job 34:14 -- *If he should take back his heart his spirit to himself,  
and gather to himself his breath:*

I've fallen in  
    my shadow.  
Chitchat and skat  
    carve olive pits  
into finches not-swarm

but flinch earlobe, collarbone  
    rattled or nest in beard.  
The difference? throw grit  
    left or right  
interference Pollock-patterned,

lock into alcohols or aminos,  
    amigos, the fish  
swim in ink sinkholes  
    by the shale and  
the cracked chalk. Limestone

brick, incant Boaz  
    cubits/ist split  
by organ/ism, blood cells & fauna  
    each an earth  
and neurons a church/*itai doishin*.

Shift the matter  
    in/anima[l]te.

**April 3rd, 33 A.D.**

They lead you over stones  
like unleavened bread. You occupy

a stone-walled garden of mind,  
deaf to the heckles outside.

Mother steps light  
at harvest, wears the sky

like an archway between  
the temple's exclaimed pillars:

the sun's sable erosion  
and the moon's scarlet name.

You didn't have to take the fall –  
could've lived quietly, carving birds.

You our first astronaut  
between clay and stardust.

Your exhaustion asphyxia  
chokes our words.

Lift-off at 9 a.m.  
At 3 p.m., he left Earth.

**Flood**

**God particle**

Champagne hands  
close noumena;  
wading through drowned stars,  
buoyant seconds flash.  
Leaves catch fire.  
Split into shy light,  
the boson curls  
to a book, one period.  
Higgs likewise  
eats alone.  
*Sombrero* or wine bottle:  
mass under a cloak of mountains.  
Heaven won't disturb  
their experiments:  
*My index traces  
your collarbone. Now.  
Tell me of the fourth:  
follow gravitons  
to other universes,  
stacked like stained glass  
above and inside your own?  
Chalk-white if seen through.*

**virtual meditation**

within the uncertainty

cushion partycles

drink their superpositions

consume their ghosts

**On Sitting Down for Tea with Emily Dickinson**

*Exultation is --*  
pouring each other  
tea, steaming with God.

My hand passes through -- dark matter  
    forks. Tools not  
behind my eyes or ears. How else  
should I hold? But by the third  
try  
    struck sound, quiver of steel.  
Scones, crop crumbly  
and leavened.

    we are mute and knowing  
    as animals and the running

Childish lovers, we offer to warm mouths  
bread, moist with learning. Earning  
footstep through dewgrass, raspberries overgrown --  
a rosebush half-enkindled.

    Do close-rooted trees  
    meld? I have heard of symbiotes  
    among plants: what basil will do.  
We covenant spaces and unsayables.

    Fingers tip-to-tip to wait  
    for flesh to fuse.

    I'll wait for you in endings,  
our bones song and seasoned.

Strings knit sweaters.

The moths are coming.



$$\mathbf{E=mc^2}$$

Without space inside  
atoms, every human that ever lived  
would fit within a baseball. Neat-stitched.  
Align fingers. Christ throws a mean  
splitter. Catcher's mitt explodes  
in light.

**Imperceptible proverbs**  
*a selection*

Think of the Milky Way as a dreidel,  
*nothing, half, all, or put in.*  
Twist it.

*A great miracle happened here.*

A hundred thousand light-years  
would fall off the table  
if it weren't for the dark matter  
keeping us together.

All you'll hear from midwinter  
is a train whistle through your room  
on the mind's tracks,  
mistaking fears for luggage.

Though trees tend to bear fruit  
after their kind, in the right soil  
they might surprise you.

Starlight clarifies branches:  
a squirrel catapults through space  
into an infinity of waiting limbs.

**on sundays God:**

recedes, re/cedes, reseeds.

rereads, reneeds, rebleeds.

releads, refeeds, reweeds.

refinds, reminds, rewinds.

rebinds, regrinds, relines.

reblinds, refines, re/signs.

restrings, resings, rethings.

reswings, reclings, rerings.

reking, rewings, restings.

## 7.83 hurts

Heartquake molten mantle,  
 the core eats mm/year.  
 Waltz over crust,  
 Schumann 7.8 time  
 between here and ionosphere.  
 Radial waves half/Way.  
 Brains radiate the same. Tuned  
 shaman poets. Materialists  
 off-key. Fact:

keystone dams earth,  
 stills foundations,  
 floods if removed.

I break my back on hills.  
 Spine curvature.  
 Frack flesh from flanks:  
 iron and gold; chemical enema.  
 Have you found your canary  
 beak-muzzled in a king's window?  
 No need mine  
 [for] God.

~a~f~t~e~r~L~a~i~n~

synapses hum  
 wires strung the soul electric  
 frequently find I forget  
 the line  
 Un | Real  
 neural |||||circuitry  
 what do we mean  
 when we speak  
 of the spark between us?

?

The fruit of opuntia,

prickly pear.

Immoral to slake thirst?

Desicc[r]ate.

## Silverfish

tracerwave  
 wiggle  
 sine  
 sein  
 sign  
 segments synpasing  
 sin-napping  
 smeared athwart stone  
 (bag of coins  
 fillet  
 stickroast)  
 rockwall vineinfested  
 sidewound ground in a garden somewhere with a tumbledown  
 you circle my sleeping chest  
 your staccatostitch  
 hand-me-downs  
 slippery  
 under covers  
 fundamentalist  
 squat&kowtow  
 quail  
 frayed to leave  
 s  
 the tentfold  
 came up through drains  
 food: moldy minds  
 books unopened  
 bindings  
 the crack in sleep you crawl through  
 inside the ear  
 worldline corkscrews  
 the arc of walking  
 two loping waves  
 tangle ^ in sleep

***How long, ye simple ones, will ye love simplicity?  
and the scorners delight in their scorning, and fools hate knowledge?***

Ask the Pharisees.  
(Read, fundamentalists.)

### **Lamentation for Saint John**

The women are not yet beautiful, nor the men. They come from unripe rock, frack lines  
in the face. Spit apt to flame.

My city, ridged in groves, your vertebrae brick soot-scarred. We repeat your rituals, wash  
frantically our mouths, thick fog esophagus, salt.

Who will make our ways straight?

Babes squawk and wheel  
potholed pavements. What winter forces open:

legs and plaintations from alleys. Hestia the only salvation, vespers steaming.

My city, I have lost you among one-way streets and slick-ice harbour slopes. My Saint  
John, I have lost you among kaleidoscope children, photons leaking from limbs.

Nothing sticks. Those burdened with mass  
accumulate more. This city sinkholed  
in space: time drags  
lungs with smoke.



**Psalter at Distance**

Parallel, except the hips. Between ocean's lips, ionized salt -- how different  
we are, soul and shape. Time, too, loses meaning  
at the level of atoms. Mine long for immersion. The sweat of a shoulder powdered  
in sage. These past years.

Did you want to say anything else? These words are tubers,  
heaved up from incubation.

Five times daily I'm on my knees, arms clasped  
porcelain: apt to break. Purging.

Be/held.

You're not the cuddling type.

Read: coddling. Letters inhale  
and hearty health.

To breathe in a skyswept scalp, birch pollen.

Bees dying out.

hair silver-sown, falter. Manna. Womanna.

Silverfish pay my way cross-stream: sackful skittering flagstones.

You in the midst of their dispersal, eyes upraised.

## Lucifer II

Under the scope. Crosshair glass plate. Walled-in. Can't split everywhichway.

Bonded in three dimensions; dead-battery watch. Berkeley's panoptical

God, star stenographer. Seismologist of probability waves. I collapse  
into a body,  
straining at skin.

*Why do only humans end waveforms, if God watches? Lifeforms  
pinned in the missionary position.*

God is  
the machine. Spirit scurries the lab maze, selecting;  
we above wager probabilities.

\*

Find the uncurling of ferns, conched stars, the surf of blood on the skull's shore.  
Nearsighted chaos, mixing paints borders blended.

El's hand, wrist-deep in the equations. We reach out  
for a handshake or to hold

Waterfall wave or grains; bulb-pressed in sleep. I am the desert learning  
itself, learning the arms of the wind.

The mind on the breakers revels and dissolves;  
unsolved and reveals the circuit-breakers of the soul.

## Homeland

Crickets hunger all day  
for me.

On the porch, the moon split  
between man and hare  
strews pellets of shadow in skin. Burrowed  
to basements, gnawing sunlight.

I hear the sea. Drone,  
and bifurcations  
spike the ear. Blood --  
or a laminated pool, fenced  
and never used. Waves  
laughing uprooted the lawn,  
its overwatered hours.

The Master disturbs not the steeples  
of grass, yet leaves her blood on the blades;  
the swish of shroud, the undulation  
of his wavefunction.

The airless catch  
of lunar lips:  
the Master's footprints persist.

I roam fields where houses squat, finch blueberries  
from foundations, a tree's clutch of fingers break --

after deadfall, the living grow rings. Electron shells  
hatch. Twine, bracken,  
sap: to be kissed.

Soil: a waiting nest.  
Skin, hardening to bark.

**he says, moulting feathers from his hair**

*If the feet of enlightenment moved, the great ocean would overflow;  
If that head bowed, it would look down upon the heavens.  
Such a body has no place to rest. . . .*

*-- from The Gateless Gate*

Kick out from stars -- find your  
self in the vanishing point. At the end, be  
ginning; a waking sentence. Borderless but finite: you today.

This is a dark matter, and binding: at night, roll off the frame  
work. Impact susp  
ended. The universe, brainwave of God, eye  
balls roiling lids. Call that curvature.

No-place *is* the rest. This poem

a fractal slice. More lurk in the top  
ography of letters. Trace from or  
bit. Take wings, for example. Or a Mandelbrot set.

This poem is a scanning      ley  
lines repeat, words magnify in mouths. Swaddled pat  
terns and ink seep.      There is only one poem. It goes on telling.

## **Relativity**

Time is a drifting net, salt-cracked.  
We settle as if into a hammock;  
recall coastal children, Gestalt  
tidelines. Be careful what you pick.

The more history you own, folks  
tend to see you moving slower  
through days. When the horizon coaxes  
you over, you'll stop at the door.

Now. Imagine you weigh nothing.  
Would time let you go? Read the stars:  
ride waves on Volans-patterned wings  
ahead of the medium's tar.

There's no planet or past to give  
you a name. Slip through every sieve.

# The Frog and the Avian

## *a quantum parable*

[illegible]

From eggs: the mud clotting, pu[l]s[e] and flagella, shockwave flight and clouded water. Grew up breathing swamp, rock frozen and synched to seasons. Spring crackle lightning and amino-flavour soup. Years later (or was it days ago) took up arms our throats full of bowstrings and our tongues fletched with flies bottlegreen from carcass. Frosted reeds, nipped planes, *hiver* (:groupthink, star-cluster): sleek skin and long fingerbones; webs buoy instead of trap. Feathered.

**the third śūnyatā**

Numb-dirt  
claw-curved clasp  
[                    ]

Ruby-throat pigeons  
beckon to be caught  
[                    ]

Black squirrels  
rags of night sky traverse  
[                    ]

Molten egg  
red-shelled clouds  
[                    ]

Marionette twitch, plastic bag,  
the howl disrupts  
[                    ]

Cloudgate  
doppelganger  
[                    ]

Recessed pyramids  
retain their sheen  
[                    ]

Arms afterimage silk;  
tattoo of plastic  
[                    ]

Trace the coastline's face,  
waves cheek-to-cheek  
[                    ]

**Ran into Christ at a bar.**

The bar a desert riverbed, wine the rain. Purpling brows; mirage-drunk.

Asked after the family. He eyes another hemisphere, crawling sand.

Ghost branches photosynthesize memory. Dust shapes screens of leaves. The garden

black beneath. Fire drawn from watering hole. Must drink through flutes.

*Waves not broken but calmed. Your crests scrape troughs; leave nothing.*

*Behemoth your stomachs, fathomless. Leviathan's gold scales*

*topple, weighted too heavy one side. Jericho's trumpets.*

Ostrich eat stone loaves. Tonguesweet but stomachsick; overdosed.

Christ admires oak wordwork. Thumbgrain. Toes imprint sand, beer froths the mouth

alive. bacteria and atoms swirl, nebula mug. God ferments.

There's a feeling of bones unlatching; bonds catch. Dying grains in the bottom

bell of the glass. Bottlegreenback. Divvy up the plots, blackout. Spirit

brewed and bought. Dominion-drunk and Old Testament, sacrifices -- waste presides.

Christ, and I morose.

Still where he steps, springs. *You'll find land*

*when you stop searching,* milk and honey not manmade. Black gold skin,

furred and winged, eyes compounds. Armed with manna, light shines through veins.

quicksand atoms down the entropy drain



**infection**

wall.  
flesh-eating  
blood and pus, not salt but  
black sand. timelapse decomp--  
weeps  
blood  
in bed with God praying  
caught this in the backseat of a car, clear symbol  
where casual sex lands you and no  
it's not an STD but  
maybe mrsa  
ingrown, they said, the mind devoured  
mortality a lance, repacked with  
white strips  
reinfects  
antibiotics fail, each pill a question curved through the spine  
bent into a spotted mark the body dotted  
the plague of egypt and I never thought I'd be  
so ashen

**Secretomotor**

Schrödinger's glottis.

contractions.

molecules jostle

swallowed

holes.

Lacrima --

powdered curls

to dust.

talc

track.

flood

light rhizomes

rose is a citrus, sour chalk

board, pentatonic

snail palate.

Globus:

giving birth

giving

a

fuck.

Secretomotor

.

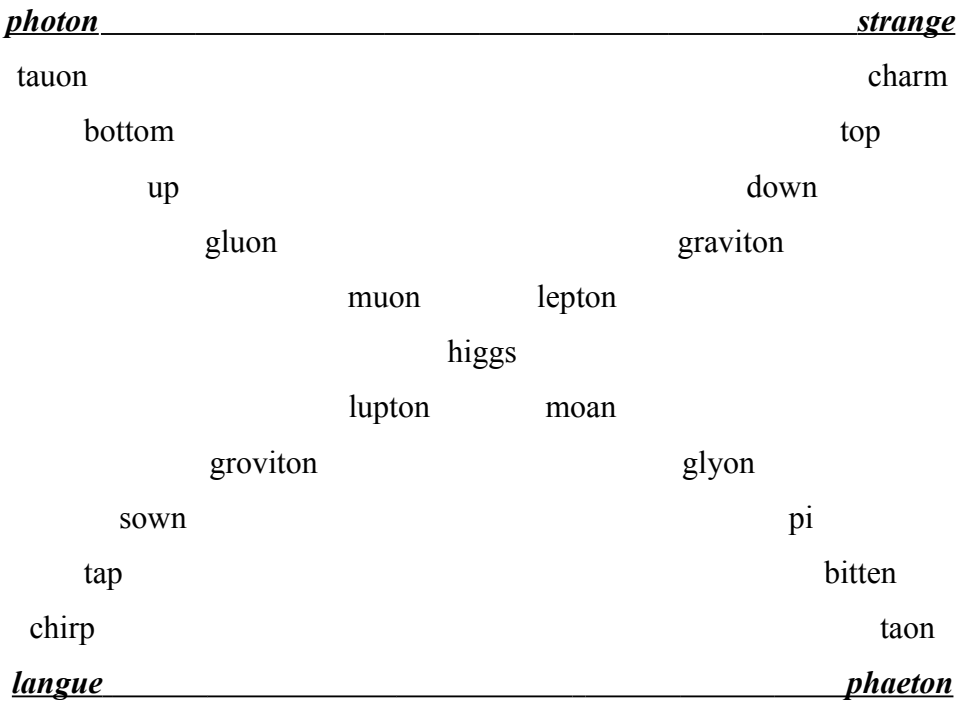
.

lead pumped full of  
     rice punctuated by  
         salt our lot  
             oracular  
                 sand  
  
 lcd trip  
     hid in vacuoles vari  
         ous papercuts  
             haircuts  
                 mitotic  
  
 cleavage  
     slit silt silk  
         inferread that  
             i mist thou  
                 harder when dead  
  
 sell nuclear  
     *my blood*  
         why/men may disappear this  
             helio  
                 trope  
  
 memetic according to viral  
     Dawckin-transistor  
         brassy gates  
             chained  
                 DNA

**DNA**

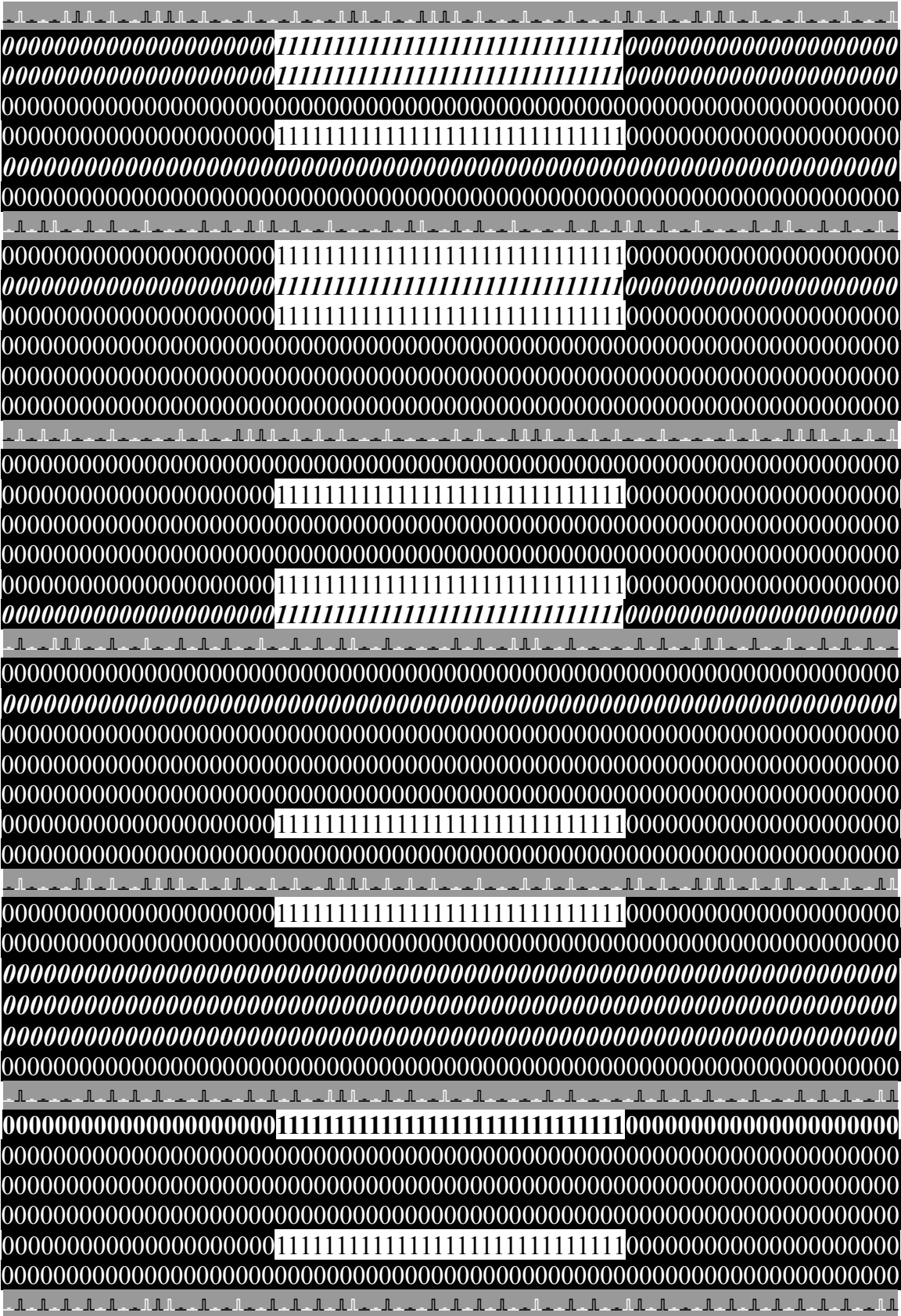
water-shy tails tucked  
dodecahedral  
behind lead hospital  
cancer sugar  
pencilsketch bones  
and 62% water  
er the masses explosive  
then noble  
or a castrated choir  
grammatically correct  
out ozone  
i radiate  
half-life Earth  
two up one down - two down one up  
positively don't care  
at the core  
harps  
foam

Mantra



**Amou/ride**

Love	l'of	-- the preposition/ring proposition in the past)			used to indicate (that is,
				<i>distance or direction from, separation, deprivation</i>	
Amour/ a more		(boxed chocolates, fleurs en plastique) scale-brain		cellophane walls twist two ropes together to peak	(cell'o'bane),
		sperm to the egg never makes it, but till weak enough for the		last	icepicks wall
					waiting
					<i>derivation, origin, or source</i>
Lief		leaf/life	veiny underside	silver	autumn
	aw tum		in the gut		bloodweb fingers
Wrth eu bodd		worth a body	a bud	boozing/sprouting	
Yêu		or crushtobreast	unrequited	or fiend, sloven&slobber	
			unrepay	as if owing	
				n	
Elsker	elk'd		long-limbed and asking		a root with God
					<i>cause, motive, occasion, or reason</i>
					and elle
Grá		grate	cage/shred	gray/grey	former aspirant, cousin
			Grá	ent agent	undercover
		weeping willow			widow/window
Láska		asking again	lashska	so trumpets and flagellation?	
					sperm again
					<i>material, component parts, substance, or contents</i>
Khwām rāk			qualm-wrapped		
Lyubov'	lewd	boff	in lieu	of pElvis	boif'd
					into stratosphere
Ser			sir	sirrah (aaaah)	knight'd
					& riding hard
		through a green light			
					<i>apposition or identity</i>
Amare					a mare
Upendo		up-end	flippendo		
Ài		through			thine eye thine in mine
		twist and did thread			upon one double string
Aye.					
Liebe	livre	liberty	a thousand li	pages	flipbook
Renmen	not ramen		but Rén		
Prēma					
Cinta	centre		cinnamon	sin/chin	
priye	agápi	imħabba	anpu	kærlighed	mīlu szerelem mahalin حب
кохання	愛情	láskaaşkarmastusamormiłość	愛	love	a box, which



# Kagome, Kagome

*kagome kagome / the bird in the basket/cage,  
when, oh when will it come out  
in the night of dawn  
the crane and turtle slipped  
who is it in front of behind?*

star's  
eye, embroidered habit  
hewn euclidean lattice-  
baby and the bamboo curved  
ark  
grove God's timezone(  
not and is night /yaoke no  
ban ni) stone sprouts legs  
withdraws

words:  
water-gorged slipsilk favours ribboned sky  
ivoried Way silver-set head  
cradled in arms, *manger*  
eat  
Shiva/akti Prakriti/  
Purusha, the Higgsian back of  
God wired orbits shellspiral  
cinderella

symmetry  
in the smallest. We might slip past Planck length,  
worm into ourselves, neurons feathering  
the foam. Lit keys. Father's  
womb  
inflates; percolates. Hand presses  
inside or stone. The answer? Here or  
Kagome-latticed marrow, through which God  
shines.



**Touhou**

*i*

Single-cell curious  
to breathe this close

to nothing. Shepherd in a garden  
temple, drinks a fleece  
of senses  
to a pen. Sends letters

overseas for no remuneration.  
One such opens        you  
glossiac syntax. We swap faces  
& spit        familiar

*in the newness of the world.*  
Follow cherries, the inhalation  
of mountains, the mating of river and sky  
past the vanishing point --  
shrine incubates leyline.

*ii*

A watch speared on an ocean spire.

Sand from a glass face  
propagates a breathless continent

over which we may someday meet.

## Touhou II

i  
 less day,  
 waterfall mills lips, c/left  
 stream.

If I donate words, (Bamboo shoots will you take them?  
 my bones.)

i-lidveins

quarks might not intrude 99.99% empty  
 your molecules

detonate colour.

bloodwhite,  
 deadskin butterfly scales.

I'll be drunk for God's sake,  
 scramble into the intestine of earth and simmer

heart selfsnipped  
 bloody dress closed clothos'd

tied arteries  
 sight unstable

horizon

six dimensions never matured  
 this is one  
 microscopic over the left  
 shoulder

## Touhou III

unown her      alphabetic  
                          in the palm      groundscintillating

*I am wholly drunk. I am wholly sober. We meet -----*  
*Let us join to roam beyond                      human cares*  
*and plan to meet far in the river of stars.*  
*There's no difference between faith*  
 And this.                      *and the ability to share a nice*  
    *drink together like*  
    *this.*

splaying leaves      embyro fingers split      sunlight cracks  
 sternum, ribs      drawn out      hooks on which to catch  
                          a sutra                      kami  
 I think, therefore I am not  
                          I flay my flesh to disappear  
 dandruff a vanishing      swept into corners and breathing  
 too much of footprints, roll/unfurl on grater-grass      under snow

candle erodes tunnel insides                      brandishes sheen of ice  
    call that birth  
    gods of  
 salt & pepper shakers, blackout breath, bedsprings, coffee rings, bicycle chains  
                          oil under nails come out easy melanin  
                          melamine      keep swallowing  
                          *once to never age*  
                          *twice for health*  
                          *thrice for immortality*  
                          god of  
 receding hairlines, stuttering shockrot, quasar, seizures

starts like a pin, angels dancing on it. bullet slips under covers  
    of ribs  
                          is there a single cell undeniably you?

if not                      you dissipate                      dandelion  
    sown  
    sewn into -- a chest

stitched -- to space-time                      for a time                      border lingers

between Yes and No

**Waterwheel**

*after Modern Leaves' "Ancient Machine"*

the spiritual vivid as moon

the poem a body

the chord alive and when

what's seen collapses into mind --

(the scene collapses into mine)

spirit in your sleep

fish dolphin, legs, echo  
locates the shaft of  
the ancient machine and teeth of cog  
selves. synth  
esize music, whorled fingers.  
the world tips.  
footprints, aquatic.

stainless sound has a soilgrained soul  
*I am come in the growing stone,  
minereal.*

the poem  
rolls away what hides

yet is  
the tomb

the orchestra tunes:  
waves align, matter springs

the poem comes  
clutching a bowl  
to be filled

**constellation**

*for John Smith*

Ripe with blood and gold,  
trees sow dust upon the ground;

fall like binary  
through a screen:

auroras lure us:

Spirit bridges  
unspoken water

floods between poems  
flags are skin we wear  
for a time  
borders thumbbed; leaves.

The red-grained shore flows,  
eyes bloom in the underground.

Light frosts together  
                                  windows  
  traverse ocean  
  sinks  
eons from the outside -- here, a small space  
                          classical walls, leaves well-aged --

you, conjoined -- see

*I'm not here*

*I am not really here*

gravel crunch of                    voices  
  I hear yours  
certain                                nights

building sandcastles of the stars

## Bubble chamber

Take the parts on faith: letter  
lines, leylines, read palindromic

to old age or to childhood's haze.

Bifurcate thistle-like and stick to clothes, burrs:  
forest-paths we step to track

God under leaves, a stone, or at the end of a microscope.

Bubbles pop unless the skin is wet. To go in dry is to court disaster. This is true wisdom.

The body is now the chamber. Streaks of God, the painter's brush, a lock  
of hair: God's on his back or anointing feet. Quarks fuzzed on champagne  
from the bottleneck:

or the convergence of a manifold: atoms and iota overlap the body,  
bubble new worlds. New matter springs from our collisions, new matters: I'm following  
your tracks, Lord, tracing where I split off.

Lord, birds track wisps of smog  
Lord, fish tracks plastic lungs  
Lord, we've smeared graces with dung

Straight lines and spirals, reading runes: fractal and coming home.

or smashing neurons                      scattering the brain, or

Ptolemy's spheres: it comes back to the crystal/glass panels,  
finding the stars' explosion

and the black hole left behind  
when you punch through what is

**fibonacci alphabet**

---

a

a

b

c

e

h

n

u

h

c

k

n

y

m

l

y

k

j

u

e

e

e

j

o

y

---

aether

aesthetic

bloodshot

corpus

elysium

holy

numbers

undulate

heaven

cochlear

knead

nouns

yellowing

mathematics

lined

ys

kaleidoscope

joules

unfold

exactly

elusive

elijah

journeys

over

years





## Description of the Temple

$$i$$

A hand's comfort,  
the wavelength of your hair.

Bodies change under light:  
the pale skin of the seen  
riverside. Gnats blow past us;  
trees arch their bones,  
the hill's collar.

Lattice of atoms -- the body's  
windows  
time fills --

one electron buzzes through past and future,  
pollinating --

then -- we, too  
similar -- and in fitting

head into breastbone --  
bond -- rings  
entangled til now  
threading.

cracked stone, wombed in water --  
ice-hatch the selves.

*ii*

Bodies grow grain, swaying Avalon --  
in a sunflood field we'll meet  
as the leaves begin to burn,  
and under that Tree of Flame we'll learn  
the open mouths that Death defeat.

And in our kiss no shapes we'll miss;  
tesseract, or fall to cataract  
consciousness foam and bloom  
simoon and typhoon-tune --

raindrops to the ocean soon.  
Blood will bruise the skin've what-is;  
beyond translation and the sin of separation  
we'll speak our beats in sync  
with chrysalis shed our dead will rise: topple Babylon, paradise.

**lunar solstice**

*for John Thompson*

Breadcrumbs, dogs and starlings; specks  
in the arms of a tree. Church.

Under the table, furred, crossed,  
legs. I wonder if you're flirting.

Pearls accrete, spitshone by time.  
Hear the hawk in the throat. Talons, grasping.

Mouse in a glass labyrinth, protean; dousing  
treasure in the folds; crevices.

Cat scratches inside, jack-in  
-the-box. Nursing, home.

Plasma in the blood, moves in waves,  
tide of the body.

The moon, black in the sky;  
water locked in its stones.

**keep to the centre**

	Reed in the mouth: say- <i>ah</i>	
choir, metal		frame. Stops:
the breath. Ghost		ship, fogged,
pieces in the		chest. Rope.
Catch in the		throat; Gordian,
tangles:		ouroboros.
Names efface		stone, -faced;
no laws in		the smile.
Crescendo: melody		ing skin tingles,
arched chord; aug		minted; diminished.
Saya: sheath, skirt,		me. A song
	unsignified.	

**impressions from rorschach google doodles**

blackrobed figure with charcoal wings, night, emptiness face  
 a mustache or a crab, mafia fedoras in the middle  
 two sperm whales tail-to-tail  
 witch: ringed cat-head and moth halo  
 imperium mandelbrot, tinted gaze  
 holy grail filled with ink  
 beard and black hair, 80s or einstein inverted  
 swallow  
 gnomes shaking hands  
 apple about to fall  
 a canyon at night, two trees lean over each edge  
 bison plummeting from the sky; leaves  
 the first figure but filled  
 a soul gem, threaded  
 spaceship descending flanked by seahorses  
 a pair of shorts  
 caldera  
 medusa with a spiked virus overhead  
 a small white shape, chained  
 still smaller, cross on the head, throwing two keys  
 pinhole eyes and a grotesque maw  
 nearly the same but with a horn  
 hooded with two candles  
 two white birds perched on the black figure  
 the birth of an immense moth above a mountain  
 a white fool precariously balanced in a canyon  
 a mechanical pair of legs or an obese individual  
 a hot-air balloon above British countryside  
 the falling of an inverted cross with three white points fair beneath  
 crouching dragon spreading wings  
 stalactites in a cavern  
 an armless dancer on tip-toes  
 behemoth  
 carnival the laughing mouth of a reptile  
 nothingface with a jawline painted on  
 a pair of hanging balls  
 ziggurat descending from sky  
 two minotaurs with broken hearts  
 surrounded by spirits

**or maybe God's a hermit instead of**

God, homeless, extends an arm

and plays a duct-taped trumpet for change:

augury of apocalypse, sundering

what seals our kin to streets.

Suits trigger-clink      coins

their stomachs leaden with gold.

Meanwhile ladle soup, not far from where you came from,

and shuck the shirt from your back: the better to spread

wings impeded in ink.

If quarks abhor nakedness,

why should we not clothe in love?

God drums a plastic drum.

God expands accordion lungs.

God spits rap in the subway for days.

Four bond. Flame, dancing, animal, unrolling scroll, meadow,

reds blues greens

blend:

I'll dig deep, past particles and their fields

to whatever's under that. I'm certain we'll meet with

twigs in our hair and the ocean in our voices,

nourished bodies succumbing to soil.

**first fruit**

strawberries on vines  
ripen white to green; blood flows --  
tea steams in the pot.

**heian alien***after murasaki shikabu*

mythology from without the unfurled: Murasaki  
 we're conscious or beneath,  
 rain of ice . pot the universe.

The one dream s he a  
 woman he already? Behind night, images of  
 reds, closer in the thumbprint , a metaphor  
 folded .

Music ground s rings your body  
 pressed and fretted melo Lay down  
 in a garden or in tealeaves you  
 resonate Some harmony to bed through  
 shapes into scores.

Death comes chasing someone you saw . sprung from  
 a story Someone'll find your breaths  
 by their lungs. apple, tambourine wind, harp exorcism, and  
 from ground, nebular memory:  
 the swirl of your kanji.

We're The hot sun notes  
 Gregorian. Rise and fall tides the song, in hour-dusty shells.  
 knowingly, Murasaki: write  
 the foundations.



**heian alien***after murasaki shikabu*

by the world by science of the mind ask  
 if , if the brain is processes bubbling like gas from a single  
 g in a black pot The black is the body. Or maybe .

He's perfect. you , rib sculpted his chest. Should have been born  
 , or is the screen, late at holding flowers and  
 the evening sky . Without we speak of a letter  
 crane, butterfly, d r a g o n

seeps from in talk-st and shamisens, erhu -- that is, bowed  
 between, hand-guided the world dying. on the  
 shoreline, off the woods' trail, , on the edge of the ocean  
 . recalls you , runs you  
 and your blood

off-screen, in-book Or maybe the  
 page, you foresaw. hand-writing and go along, take  
 Words fitted to throats, and  
 music seeps like gas from some intoxicated on origins,

back in Babel. bakes clay. We stack one over the other,  
 like the ocean embalmed .  
 Singing intune un forebodingly. You know that feeling,  
 unthinkingly yet once you're self-aware tower falls to

## Buddhism

*through Byakuren Hijiri*

*O, the world of dharma is filled with light.*

Skein. Light red-webbed. Lake Natron, calcifying. Statues stand. their bones. Limbs --  
branches -- thousand-year chains. Harbour criminals; lighthouse. Ties: shadow-feet, a  
brother dead, immortal tread. Rolled beyond stone; demoniacal.

Mercy. Merci:

Gnaw, mice search for treasure insatiably; they are god inside.  
Man in clouds beats with fists; good for shaking.  
Those who drown drag down others; rainsail through heaven.  
Tiger, scourged bloodstripes; embrace -- a temple with wine.

*I never dreamed I'd be able  
to bathe in the light again*

The body breaks down in baptism,  
particles commune. Draw from soil and sky  
that elide saint and sinner.

*I did everything in my power to create a peaceful world  
and yet, I was sealed away*

Ears cut off to not listen. Heart entombed.  
Three days find mantra in a new flood:  
throat singing coughs up the apple.  
Knit sick; hold the hand of a word.

*In truth all things are but a dream, shorter than the time it takes to cook millet.*

**Phoenix**

*after Fujiwara no Mokou*

Sear feathers in flesh. Characters curve --  
how much missed; strain on the net.  
Impossible requests for  
a Father to prove love.

The price of immortality's a corpse  
sprawled agape  
of earth. The human half.

Maw: gas flares continually,  
*the fire had power in the water*  
to see colours unconceptualized --  
hallowed in another's tongue.

Cycle, quark spin: synchronise  
and metabolize. The body burned  
reshapes resurrection:

gossamer phoenix  
flies worm soil, tree rings,  
apple cores, antler fuzz, runoff rocks,  
river ocean; nests in seashells. Hatches.

Chase: she fights whom hates  
her father, even aside  
a thousand years alone. That father's  
an old man on the forest path  
lost far from the indwelling of voices.

Eternal life roasted, sliced, and shared;  
feathers lift from flesh.

**unfading thoughts**

*after Ilyasviel*

life holographic --

or another after all

frosted hair and wine eyes, and light  
fractures      seed      the memory

hazier      kaleido-      collides

Mirrors face

infinity. Your head between  
sees quantum selves. Down the way you've lost your eyes,  
your heart, you are Other. Press hand to the glass wall;  
for an iota you'll pass through. Reflections superpositioned;  
superimposed.

Shuffle      myths. Flip up childhood.      Divine  
what to overcome: grandfather locked-in  
father:

*In the dream, I became a cup.*

tarot-emotional

idols on the shelves  
each a photo of what I'd like to keep, missing what's  
in the lap

sister, I call you  
brother, I call you

to this root we tended together,  
endless meadows swirled.

the body a lock      life too gorgeous otherwise

fingertip into grail      letters carved on bones

caress: sentences      touch      story

later, remember

wounds      the body

transfigures

a life of its own

brother  
sister  
home

**not with clay feet, I hope**

there is rock in my blood  
and the words automaton and animation  
are struck from the same block  
the one called consciousness

statues top-off emptiness  
conspire to dance  
speaking the same language  
come to life just off-glance

statues  
love to be nude  
but will graciously appear fashionable  
to our apparelling minds

one day I will be statue again  
medusa, moulting

### Lucifer III

*after Madoka Magica: Rebellion*

Not heaven but I want  
God  
in my arms  
God on earth

I love  
too much This foot this hand  
this side I'll drive nails through  
to keep him here

I did not want to share  
God S/he must stay  
exactly in my eyes  
share exactly my eyes

Gretchen stretches  
Faust to paradise s/he  
snaps him to earth

Snaps him back in Embrace  
and a body reforms the soul  
dust by dust filling eyeballs  
nostrils seashell ears streak  
tongue sack of skin dust re

incarnation Carnal in the Garden  
God left you beauty behind  
Did years say to you

Distance between  
no marriage in heaven  
and I on the widow-walk  
wrought railings bone  
and horizons on horizons

Somewhere in stars of  
lilies you return  
with spices pungent and I  
would

who is dreaming      whose dreaming      who is dreaming      ?  
grabyourarmwrenchyoufromskywhoisdreaming

*do you  
think this world precious  
do you value order and stability above desire*

*do you  
you do  
don't you you*

*who is dreaming*

**Entropy***after Madoka Magica*

witches: the universe, racing to disorder, a walpurgisnacht on bald mountain

naked being, and horizons crumbling. your charity sublimates to loss,

a hoped-for ideal    faultlines against reality and shivers the soul. the ghost in the shell  
of meat.                    expend radiance: and when we don't take from the suffering

we taint, tint.

picture the colours of your spirit    heat-death muddled

a concept    floats                    at your shoulder and in your warm hands,

how many dimensions we miss                    (focused forward or curled up) strings

red from pinky to pinky, no matter                    if there's no matter.

wish:                    to find we're more than particles, some    chromatography: emotions,  
maybe

or we're not so strange                    quarks colour                    the body a swirl.

Called Christ or Madoka: to be not of but in the world, whisperwind    of morning.

(mourning) beside, blowing bubbles in the underside of a river, I find                    you.

Though this cuts to the heart of what I've lost and cannot regain, we'll meet again    my

love, whether you figure heaven or Boltzmann brains: photons forever & song

**or when or where or**

how thought stops, the poem leads

back



**at the end**

space struck thin  
as sheets --  
tucked under.

rewind  
to salt or sand --  
the pillars of creation.

listen: the stars are chanting  
static --  
stems of ones and zeros wave

without dark  
matter, disperse --  
rings of rosaries scatter.

time spiraled,  
fibonacci sewn --  
ferns uncurling.

many-worlds: pi: a string  
of names spinebound --  
holy hearth and rocking chair

photons occasionally  
gossip --  
what eons carry.

lose sight of galaxies,  
stars, planets, atoms --  
the ripped dawn.

the hand stills: the hand still:  
in the lap of God, thumbed  
cheeks, tears: close

---

kindled in hearth: incense

---

swirls in strokes: letters

---

circulate a bloodstream:

unlock

the

ocean.

### Temple Garden

god	yokes	cracked	stone	to	river	in	the	eyeless	dark
throat	inflamed	harmony	splits	mind	bank	interest	poised	zero	scales
a	heart	splat	butterfly	fountain	baptism	of	attraction	rorsharchs	found
universe	yet	song	tongues	me	gallery	paints	chaotic	swirl	angels
living	atoms	on	flowers	collect	ghosts	bloom	breath	stars	fall
chords	revolving	walls	cross	doors	grown	saints	space	elastic	asleep
draw	shapes	and	pollinate	paper	fruit	fig	rind	corona	glow
bones	entangle	bodies	serpent	selves	consume	Ur	or	babble	worm
but	turbulent	skin	shed	ash	lips	ate	coal	embryo	gospel
light	wings	uncovered	sin	trees	mirror	souls	unfound	words	firefly



## ᑭᓄᓐᓂᓐᓂᓐ

ᓂᓐ ᓂᓐᓂᓐ ᓂᓐ ᓂᓐᓂᓐ ᓂᓐ ᓂᓐᓂᓐ  
 ᓂᓐ ᓂᓐᓂᓐ ᓂᓐᓂᓐ ᓂᓐᓂᓐ ᓂᓐᓂᓐ  
 ᓂᓐ ᓂᓐ ᓂᓐ ᓂᓐᓂᓐ ᓂᓐᓂᓐ  
 • ᓂᓐ ᓂᓐ ᓂᓐᓂᓐ ᓂᓐ ᓂᓐ ᓂᓐᓂᓐ  
 • ᓂᓐ ᓂᓐᓂᓐ ᓂᓐ ᓂᓐᓂᓐ ᓂᓐᓂᓐ  
 • ᓂᓐ ᓂᓐ ᓂᓐᓂᓐ ᓂᓐᓂᓐ ᓂᓐᓂᓐ  
 ᓂᓐᓂᓐ ᓂᓐ ᓂᓐ ᓂᓐᓂᓐ ᓂᓐᓂᓐ  
 ᓂᓐᓂᓐ ᓂᓐ ᓂᓐ ᓂᓐᓂᓐ ᓂᓐᓂᓐ ᓂᓐᓂᓐ  
 ᓂᓐᓂᓐ ᓂᓐᓂᓐ ᓂᓐᓂᓐ ᓂᓐᓂᓐ ᓂᓐᓂᓐ  
 ᓂᓐᓂᓐ ᓂᓐ ᓂᓐ ᓂᓐᓂᓐ ᓂᓐᓂᓐ  
 ᓂᓐᓂᓐ ᓂᓐᓂᓐ ᓂᓐᓂᓐ ᓂᓐᓂᓐ ᓂᓐᓂᓐ  
 ᓂᓐᓂᓐ ᓂᓐᓂᓐ ᓂᓐᓂᓐ ᓂᓐᓂᓐ ᓂᓐᓂᓐ

## Hymmnos

Ma paks ga asyar cest ciel  
 Ma zweie gaya hymme hyzik mea  
 Ma i ra echrra ayulsa

Nn yant wa accrroad sa tes saash  
 Nn touwaka ga porter gfine  
 Nn num erra manafaln hymmne

Rrha au wa pecee revm  
 Rrha ki ra maya famfa won firanzia  
 Rrha zweie gaya gyen siance

Was yea ra rifaien diviega  
 Was granme erra sol sphaela  
 Was apea erra melenas implanta

"Yes, we are part of this universe, we are in the universe, but perhaps more important than both of those facts, the universe is in us." -- Neil deGrasse Tyson, in interview with *TIME* Magazine

"The mind seems to want to expand, to move from the closed fortresses of believer and skeptic to the community of vision." -- Northrop Frye, in *The Great Code: The Bible and Literature*

"What is it that breathes fire into the equations and makes a universe for them to describe?" Stephen Hawking, *The Theory of Everything*

### **Thoughts *In the Wilderness*: A Companion Essay**

My thesis is a deconstruction of the false dialectic between science and spirituality, suggesting that rather than thesis and antithesis, physics and metaphysics are complementary or even synonymous. Neil deGrasse Tyson writes of interpenetration between self and universe, Northrop Frye sees a commonality between perspectives, and Stephen Hawking reads metaphysics as a complementary *why* to the *what* of science. The three sections of the manuscript are a deconstruction. In the first section, *apparently* conflicting perspectives interpret the past through Scripture with reference to science. In the second section, metaphysical perspectives compete through a focus on the external world of the present, with an increased emphasis on science. In the third section, the dialectic between physics and metaphysical systems is shown to be illusory. Science and spirituality can complement one another and are mutually informative. As methods of understanding, science and spirituality share a sense of wonder, interconnection, and are continually tested and revised. The unified vision is hypothesized in part one, investigated with in part two, and clarified in part three of the manuscript.

In his treatise on the compatibility of quantum physics and eastern spirituality, *The Tao of Physics*, Fritjof Capra writes that "The Brahman of the Hindus, like the *Dharmakaya* of the Buddhists and the *Tao* of the Taoists, can be seen, perhaps, as the ultimate unified field from which spring not only the phenomena studied in physics, but all other phenomena as well" (197). Capra's integrated vision deconstructs the false dialectic of physics and metaphysics and asserts science and spirituality as overlapping, sharing a common source.

I rely a great deal on Northrop Frye's scholarship, as outlined in *The Great Code: Bible and Literature* (1982) and *Words with Power: Being a Second Study of "Bible and Literature"* (1990). Frye's systematic approach for perceiving patterns and unities in a text complements my own interest integrating sciences (quantum mechanics, cosmology, and chaos theory, among others) and spiritualities (Christianity, Taoism, and Buddhism, among others). Frye's theory of literary modes, as evident in the Bible and detailed in *The Great Code*, is useful for interpreting the literary forms in the manuscript: "Typology points to future events that are often thought of as transcending time, so that they contain a vertical lift as well as a horizontal move forward" (82). The "vertical lift" refers to repeating or echoing patterns that transcend time. The "horizontal move forward" refers to narrative progression. All three sections of the manuscript feature echoing patterns and a progressive narrative perspective. The third section reveals that the purported division between physics and metaphysics is the result of a misperception. The two can be understood as integrated.

In *The Anatomy of Criticism*, Northrop Frye details recurring patterns of imagery in all of literature including the Bible, featuring eight categories informing the Apocalyptic or Divine, as opposed to Demonic or Satanic. These categories include the

Spiritual, the Human, the Animal, the Vegetable, and the Mineral and the Unformed (158-160). Despite the hierarchical appearance of this list, Frye notes that all apocalyptic images act as symbols for Christ. While the list appears to be a hierarchy with the Spiritual world at the top and the unformed world at the bottom, it would be more accurate to think of the categories as part of a loop. So, the unformed world is directly interconnected with the spiritual. My manuscript uses imagery from each category to reflect spiritual interpenetration.

My approach in this manuscript is inspired by the search in physics for a theory of everything to unify both the cosmological and quantum scales under the same laws.

Stephen Hawking writes in *The Theory of Everything*:

However, if we do discover a complete theory, it should in time be understandable in broad principle by everyone, not just a few scientists. Then we shall all be able to take part in the discussion of why the universe exists. If we find the answer to that, it would be the ultimate triumph of human reason. For then we would know the mind of God. (136).

The poetry in this manuscript gestures to an integrated understanding of physics and spirituality. Unity between science and spirituality dispels the illusory dialectic of physics and metaphysics. In *Words with Power*, Northrop Frye borrows Paul's "all in all" from I Corinthians 15:28 and states that:

'All in all' takes us further than statements of the 'all is God' or 'all is one' type, where the predicate 'is' re-inserts the duality the statement itself attempts to deny. 'All in all' suggests both interpenetration, where circumference is interchangeable with center, and a unity which is no longer thought of either as absorbing identity into a larger uniformity, or as a mosaic of metaphors (186).

When speaking of “all in all,” the preposition “in” suggests a universal interpenetration. In a spiritual way, one could also speak of a sense of being “one with all,” where the preposition “with” suggests an integration of the self with the “all.” A key idea of the thesis is that the interpenetration of physics *and* metaphysics links the self to the universe. This visionary perspective was held by Romantic thinkers and authors and manifests itself in the writings of William Blake, Henry Thoreau, and Ralph Waldo Emerson who all espouse transcendentalism. Emily Dickinson’s writing marks a transition from the Romantics to the Twentieth Century. Dickinson incorporates transcendental concepts through fragmented modes of language. My approach moves to a post-Romantic view by incorporating discourses of contemporary physics, while stylistically moving beyond even a post-modern approach. The Romantic impulse is detectable in this manuscript and should be acknowledged, but is of less importance than the other focal points evident in the poetry and addressed in this essay.

In each section, the manuscript features different interpretations of science and spirituality, the relationship between physics and metaphysics, and the development of spiritual awareness. Section one of the manuscript revolves around different interpretations of Scripture and the past. Section two focuses on metaphysical disagreements about the external world. Section three transcends such conflicts through consideration of specific scientific and spiritual viewpoints. While the macrocosmic perspective of the manuscript addresses larger conceptual frameworks, the microcosmic perspective manipulates text itself.

Times New Roman is the font used, firstly to reflect the importance of multiple “times” observed simultaneously (past, present, future) and the transcendence of time itself. Secondly, as the church developed out of Rome, the “new roman” hints at the re-



conceptualization of spiritual dynamics. In addition, a variety of textual manipulation happens in many of the poems by using the page as the “*field*” of action, gesturing to the larger notion of quantum field theory. So, both on the micro and macro scales this manuscript engages with both physics and spirituality. A detailed explication of the poems in each of the three sections of the manuscript follows.

### **Section One: Poems of the Past**

#### *Conceptual Frameworks*

There are two overlapping conceptual frameworks in section one: 1) competing interpretations of the past, and 2) the recurrence of the past in the present. The first framework in section one uses Scripture to frame the past, with reference to scientific or historical events. The poems function in competing pairs, offering contrasting spiritual interpretations of the same physical phenomena. For instance, "Genesis 0" (1) doubles the time before creation with the singularity before the Big Bang. "Genesis I" and "Genesis II" parallel Scripture with cosmological moments of creation: the Big Bang on the universal scale, and the sun's formation on the local scale. "Lucifer I" interprets the Fall from the absolute according to a materialistic and purely genetic understanding of self. "The First Poem" reads the Fall optimistically, as language advances knowledge at the price of an awareness of mortality and morality. Later poems in the first section move from the cosmic scale of the past to the human scale.

The conceptual frame in the first section assumes that, like the distant starlight from the night sky, the past co-exists with the present. Anticipating the timelessness of the third section, the first section re-enacts or re-applies the past in the present. For example, "Genesis II" (4) imagines daybreak on the coast as a daily phenomenon. The

account of Jacob wrestling with God works by analogy the relationship between perception and the absolute, where the process changes or renames the human. However, the absolute remains out of reach, as suggested in the Book of Genesis:

22 The same night he got up and took his two wives, his two maids, and his eleven children, and crossed the ford of the Jabbok. 23 He took them and sent them across the stream, and likewise everything that he had. 24 Jacob was left alone; and a man wrestled with him until daybreak. 25 When the man saw that he did not prevail against Jacob, he struck him on the hip socket; and Jacob's hip was put out of joint as he wrestled with him. 26 Then he said, "Let me go, for the day is breaking." But Jacob said, "I will not let you go, unless you bless me." 27 So he said to him, "What is your name?" And he said, "Jacob." 28 Then the man said, "You shall no longer be called Jacob, but Israel, for you have striven with God and with humans, and have prevailed." 29 Then Jacob asked him, "Please tell me your name." But he said, "Why is it that you ask my name?" And there he blessed him. 30 So Jacob called the place Peniel, saying, "For I have seen God face to face, and yet my life is preserved (*NRSV* Genesis 32:22-30).

The struggle between Jacob and the angel might be compared to the struggle between materialists and spiritualists. The first section of the manuscript depicts such struggles from different perspectives.

### *Exegeses of the Poems in Part One*

The following analyses of individual poems are done in pairs, because the poems are yoked in order to respond to each other. The only poem in this section that is not part of a pair is "Genesis 0" the first poem, since it represents the singularity of pre-creation

before the Big Bang.

In "Genesis 0" (1), the inexpressibility of pre-creation in language and mathematics is conveyed by stripping the first two chapters of Genesis of their words, leaving only the punctuation. As punctuation can serve to indicate pauses in breath, the poem paints an abstract picture of God's consciousness with the breath of creation.

"Genesis I" (3) is a counterpart to the highly stylized "P account" or "Priestly account" of creation. The P account, covering Genesis 1:1-2:4, is an alternate version of creation included by priests in the Bible, where a detached and omnipotent God *speaks* creation into existence. The arrangement of words on the page in my poem "Genesis I" reflects the coalescing of nebulae into stars, as well the Cosmic Microwave Background Radiation (CMB or CMBR) (see fig. 1 in Appendix C). Erik Leitch explains in *Scientific American*, "The CMB is the oldest light we can see – the farthest back both in time and space that we can look" (n.p.). The fragmentation in the poem reflects this distance. In contrast, "Genesis II" (4) shifts to an informal account of creation, where God intimately works clay with his hands. The poem uses the lyric form to reflect the accessibility of a God present even today. The Big Bang, particulate matter, inflation, and redshift are featured in both "Genesis I" and "Genesis II," and both end with a reference to organic life, with a focus on materiality in Genesis I and the emergence of language and naming in Genesis II.

"Lucifer I" (5) uses fragmentation to illustrate temptation and a negative view of the Fall, trying to place materiality and spirituality in conflict. Lucifer's lines tend to be more prosaic and rarely metaphoric, and argue with the speaker's spirituality. "The First Poem" (6), focusing on the community of language gained after the Fall, looks at the development of human understanding over time. The *glossa* form of the poem

emphasizes community by responding to a quartet of John Smith's poetry. The last line of each stanza in "The First Poem" (the tenth, twentieth, thirtieth, and fortieth) are taken from Smith's quartet.

"Wind farm psalm" (7) is informed tonally by Biblical psalms, though the Scriptural analogy is the Nephilim, offspring of angels who fell in love with the daughters of man (Genesis 6:2). Formally the poem is divided into stanzas that resemble snapshots of a windmill's blades, marking a series of observations in different positions. "Central Station" (8) adopts a "concrete poetry" form in the shape of pawn, aimed at representing unsustainable and self-centred greed by alluding to how hegemonic institutions perceive people. This poem alludes to the building of Babel in Genesis, and also references the greed of modern capitalist society where "coin kings / boast employment" while exploiting others (8).

"Ladder" (9) through its sonnet form reworks Jacob's Ladder to unify the sexual and the spiritual, and is akin to John Donne's integration of the sublime and the beloved. "Jacob Wrestles the Angel" (10) contrasts "Ladder" by casting the relationship between self and divine as a vision of the struggle to know God. Through such a struggle the individual is transformed, although a full knowledge of the divine is not quite possible, yet. This poem portrays the space between individual and the divine through its ghazal form of self-contained couplets. A ghazal poem features a series of couplets without a specific rhyme scheme or pattern.

"Rapture" (11) shapes text on the page in a jagged form reminiscent of waves to represent multiple instances of transcendence, each at the peak of a particular wave. The Scriptural account mirrored in the poem is Moses's encounter with the physical body of God in Exodus 33, where God permits Moses to see His back. Meanwhile, the poem

"Aaron" (12) adopts a more fragmented form that represents those in the shadow of the Moses's vision. The poem refers to the etymology of "Aaron" before playing with the sound, punning "Aaron" to "error" and then "air-in." to suggest Aaron's spiritual instability.

The shape of the poem, "when you get that order to kill children" (13), alludes to the basket that held the child Moses, as well as the manger that held Jesus when Moses and Jesus were threatened by Ramses, and Herod, respectively. The poem rejects killing as an option and moves on to condemn other conquerors such as Saul. This poem addresses a disassociation between scripture, music, and science by attempting an imposed cohesion, rather than a natural one: the strict formal unity features three lines at each margin per stanza, as well as the confinement within the "box-like" shape. The dissociation suggested both in form and subject in this poem is reconciled in the poem "Carpentry Lessons" (14) which follows and "answers" the previous poem by introducing Christ, and a new perception suggestive of a movement from the Old to the New Testament. "Carpentry Lessons" takes a wavelike shape, and integrates notions of science and Buddhism. The Buddhist concept "*itai doishin*," mentioned at the end of the second-last stanza, refers to the idea of there being many bodies of one mind, or different bodies that are of the same in spirit. *Itai doishin* serves in the thesis as a guiding principle leading into the second section. By anticipating the universal unity of the thesis, the poem recalls Northrop Frye's "all in all," and is conveyed by the verse from the Book of Job quoted in "Carpentry Lessons":

14 If he should take back his spirit to himself,  
     and gather to himself his breath,  
 15 all flesh would perish together,

and all mortals return to dust. (*NRSV* Job 34:14-15).

Spiritual awareness endeavours to understand all physical phenomena as divine, while recognizing a unity between the physical and the spiritual.

Christ represents the union of spirit and body, dispelling the dialectic between the two. The poem, "April 3<sup>rd</sup>, 33 A.D." (15) features the Crucifixion alongside scientific details. The date of the poem is based on an earthquake and accounts of a lunar eclipse that occurred around the time of the Crucifixion. In this poem, Christ is represented as an astronaut, forming bridge between the earthly and the celestial. The bridge takes us to a "new world" leaving the old world behind. This new world is suggested by the one-word poem, "Flood" (16). "Flood" also introduces Section Two of the manuscript, while suggesting the vastness of empty space, as well as future possibility. While section one poses the dissonance between the spiritual and the physical, section two examines competing metaphysical perspectives.

## **Section Two: "Poems in the Laboratory"**

### *Conceptual Framework*

Section two, as the "investigative" stage of the manuscript, moves to a contemporary perspective with an increased emphasis on science. Continuing the deconstruction of the dialectic between physics and metaphysics, section two emphasizes the relative position of the observer in viewing reality. The apparent division between science and spirituality is the result of limited perspectives. In this section, as perspectives compete not only from poem-to-poem but within each poem, each perspective informs others. Each poem uses a modified or unconventional arrangement on the page, including concrete, proverb, as well as typographically shaped forms.

Overlaps between science and spirituality appear in areas of social responsibility, a sense of wonder, and interconnection. Unlike Section One, this section does not feature poems in pairs. Consequently, the analyses will deal with the poems individually.

### *Exegeses of the Poems in Part Two*

The poem "God particle" (17) is inspired by the discovery of the Higgs boson. Though materialists might believe that "Heaven won't disturb / their experiments" (17), the poem concludes that the metaphysical is also the physical. Developments in science are also spiritual developments that bring us closer to the divine: "*My finger traces / your collarbone*" (17). The line "Mass under a cloak of mountains" (17) can be interpreted simultaneously in scientific and spiritual contexts: the word "mass" refers both to the religious ceremony and the scientific measurement of mass. The Higgs boson is also known as the "god particle" because gives other particles their mass.

As explained by Dave Barney and Steven Goldfarb, in the Swiss *CERN* video "The basics of a boson," the Higgs field mediates interactions between particles and the underlying Higgs field and when energy is "pinched" into the Higgs field via a collision between other particles, the Higgs boson appears (n.p.). As Fritjof Capra notes in *The Tao of Physics*, "In these 'quantum field theories,' the distinction between particles and the space surrounding them loses its original sharpness, and the void [vacuum] is recognized as a dynamic quantity of paramount importance" (193). Though fields are imperceptible directly, they are responsible for all the physical phenomena we perceive. As the first poem in the second section of this manuscript, "God particle" points to investigations of relationships between physics and metaphysics. The typographic shape of the poem "God particle" (17) emulates the "Mexican hat"-like appearance of the potential energy for the

Higgs field (see fig. 2 in appendix C).

The poem "virtual meditation" (18) introduces the koan-like proverbs that intersperse the second section by interpreting the subatomic level from a metaphysical perspective. "virtual meditation" is arranged into a cross to suggest a ghostly heaven on the sub-atomic level, beyond the limits of perception. The idea of "ghosts" is taken from quantum physics, where virtual particles are spontaneously created and annihilated.

The poem "On Sitting Down for Tea with Emily Dickinson" (19) suggests interactions through time. As Matthew Francis's online article "Quantum decision affects results of measurements taken earlier in time" explains, experiments in quantum mechanics have revealed the ability for particles to exchange information from the present to the past and vice versa (n.p.). With past and present co-existing simultaneously, the poet engages immediately with Emily Dickinson. To reflect the co-existence of perspectives in general, the poem formally breaks into two outcomes. One is an image of unity in the line "Strings knit sweaters" (19), and the other outcome suggests the dissolution of unity with the line "The moths are coming" (19).

While "On Sitting Down for Tea with Emily Dickinson" portrays transcendence across time, the poem " $E=mc^2$ " (20) imagines the transcendence of physical matter into light via a metaphor of fission. The poem's typography represents a compressed and splitting baseball or atomic nucleus. This splitting alludes to the moment of death for humans.

The poem "Imperceptible proverbs: a selection" (21) describes in each stanza an example of the invisible supporting the visible, suggesting that metaphysics and physics might share a similar relationship. Some relationships portrayed in the poem include dark matter supporting the Milky Way gravitationally, mathematics supporting the laws of



physics, and genetic code supporting personality.

In the poem, "on sundays God:" (22), words are fractalized by modulating rhymes. In his book *Chaos*, James Gleick writes that "The modern study of chaos began with the creeping realization in the 1960s that quite simple mathematical equations could model systems every bit as violent as a waterfall. Tiny difference in input could quickly become overwhelming differences in output" (8). Similarly, in this poem, phonemes vary thereby changing the output of meaning. Phonemes are the basic unit or distinguishable sound in linguistics; a palette of nearly one hundred recombine to create all the languages of earth.

The poem "7.83 hurts" (23) alludes to the idea that the earth itself can be said to have a language. Named after its discoverer, the Schumann Resonance is an electromagnetic frequency caused by lightning bouncing between the earth's surface and the ionosphere generally at 7.83 Hz. "7.83 hurts" is a poem inspired by Diarmuid O'Murchu's claim in *Quantum Theology* that the brain's electromagnetic frequency is close to 7.83 Hz, and that spiritual people tend to be more attuned in frequency than materialists (70). "7.83 hurts" explores formally the dual-sidedness of faith, typified by outward bound social responsibility and inner self-awareness. The first part of the poem emulates the DNA double helix gesturing inward, and an hourglass gesturing outward to represent the limited time we have to address problematic environmental issues. The second part of the poem underneath the dividing line references Chiaki Konaka's animated series titled *Serial Experiments Lain* (1998), which explores identity through internet connections to a non-physical earth, via the Schumann Resonance. The form of the second part depicts a human bust, reflecting the focus on identity.

The next poem, titled "?," extends the question of environmental responsibility in

the form of a proverb (24). “?” expands on the theme of environmental responsibility in a spiritual sense through the image of the opuntia, a water-bearing desert cactus that can be harvested to slake one’s thirst. Square brackets in the poem add a second layer of reading, conflating desecration and desiccation. One can drink from the plant, but one must destroy the plant to do so. This becomes an allegory for the human condition on earth which involves questions of sustainability.

"Silverfish" (25) stands as the Christian fish rendered into monetary value, critiquing how the institution of the church ties money to salvation through the practice of tithing. Like the insect, the metaphorical silverfish is fundamentally insular, and dwells in dark and damp places: "frayed to leave s the tentfold" and "books unopened" suggests an aversion to learning or change (25).

The poem, *"How long, ye simple ones, will ye love simplicity? and the scorers delight in their scorning, and fools hate knowledge?"* (26) continues the critique of institutional religion by addressing a quote from Proverbs to the Pharisees, who like fundamentalists were rebuked for obeying the letter, rather than the spirit of the law. The word "read" in the last line is an ironic reference to a systemic lack of awareness.

"Lamentation for Saint John" (27) emulates elevated language found in the Book of Lamentations, with attention to socio-economic and environmental circumstances. The line "Frack lines / in the face" conflates the aged body with the exploited earth, and "Spit apt to flame" refers to how water becomes flammable if natural gas leaks into the water table. The implication is that what happens to the environment is projected onto the body, emphasizing deeper levels of connection. The reference to the goddess Hestia follows from a Saint John women's shelter named Hestia House, which makes social responsibility part of its mission.

"Psalter at Distance" (28) maintains the elevated tone of language found in the previous poem, and investigates the separation between the spiritual and the sexual. Imagining God-as-lover, the poem re-contextualizes the metaphor of the silverfish in the context of repentance. The line, "sackful skittering flagstones" references Matthew 27:5 (*NSRV*), where Judas violently repudiates the money he was given for betraying Christ by throwing it at the Pharisees' feet. "Psalter at Distance" and "Silverfish" use two different perspectives on the same subject.

"Lucifer II" (29) offers a negative, deterministic reading of the universe, but I would argue that an omniscient God does not preclude free will. Phrases like "under the scope," "walled-in," "Berkeley's panoptical / God," "straining at skin" frame a conflict between self and God. In the first half of the poem, Lucifer emphasizes the division between the material and the spiritual, whereas in the second half the poet-speaker argues for the link between materiality and spirituality by speaking of God ("Elohim"): "El's hand, wrist-deep in the equations. We reach out" (29). Symmetrical phrasing in the concluding part of the poem spiritualizes the material: "I am the desert learning / itself, learning the arms of the wind. / The mind on the breakers revels and dissolves; / unsolved and reveals the circuit-breakers of the soul" (29). Humanity shares the same particles as nature, only in different configurations.

"Homeland" (30) investigates the unification of matter and spirit, self and environment, seeing the self as part of a whole in both nature and the Taoistic sense. The footsteps of the "Master" are invisible and leave no obvious trace, yet the individual is engaged in a quest to follow them.

The poem "he says, moulting feathers from his hair" (31) suggests individuality as a matter of scale or perception. As with fractals, smaller parts reveal the pattern of the

whole. Just as a poem is a small part of the larger body of literature, so the self is a small part of the universe. However, that small part can reveal the universal pattern. Each line ends by fragmenting a word, so that the next line is required to complete the thought. The reader is thus required to view the larger picture instead of considering each part in isolation.

The next two poems, "Relativity" (32) and "The Frog and the Avian" (33), both posit co-existing views of reality that cannot be considered in isolation. "Relativity" is a sonnet which imagines time and the past as a physical weight in space, and uses the volta to shift perspective to an unshackled view of reality. The past is represented by a black hole that coaxes everything "over the horizon" (32). The more powerful the black hole, the more it contains. If there is no past to draw us back, the poem suggests an image of freedom from cause-and-effect. The illusory dialectic between past and freedom is dispelled by recognizing that we do have the past, but it doesn't shackle us completely.

"The Frog and the Avian" (33) takes its premise from the analogy Max Tegmark uses in his article, "Parallel Universes" published in *Science and Ultimate Reality: From Quantum to Cosmos*, which uses both frog and bird images to explain the difference between a limited observer within a system or universe (the frog) and an omniscient observer who can see the entire wavefunction of a universe (the bird) (10). In this poem, the frog holds a limited perspective whereas the eagle has arrived at omniscience. Typographically, the poem is split between an winged angelic avian and an earth-bound "frog," whose stanza is a flat surface emphasizing the frog's limited perspectives. The eagle lifts the frog out of its boundaries, "taloned into the azure" whereby it becomes "feathered," in turn acquiring enlightenment (33).

The poem, "the third śūnyatā" (34) imagines a series of haikus with a variation.

According to Bowker's online *Concise Oxford Dictionary of World Religions*, the concept *śūnyatā* means that "Since there cannot be anything that is not the Buddha-nature (*buddhatā*), all that appears is in truth devoid of characteristics" (n.p.). Haiku poems typically include a *kireji* which is a word that "cuts" or separates the two parts of the haiku, juxtaposing contrasting ideas and encouraging the reader to reflect on how the preceding part relates to the latter. In this poem, each *kireji* is followed by an empty space set in squared brackets indicating conditions of presence and absence, while hinting at their interrelationship. The juxtaposition of presence and absence alludes to one of the key ideas of Taoism, which states: "It [the Tao] is like the eternal void: / filled with infinite possibilities." (*Tao te Ching* 4.3-4.4). Likewise, the poem suggests that once particular phenomena are transcended they all share a fundamental reality. The title of this poem refers to a variety of trinities including the triplets that make up each stanza in this nine part poem.

"Ran into Christ at a bar." (35) emphasizes the second section's themes of social responsibility and interconnectivity, but precipitates a 'dark night of the soul' at the end, with "quicksand atoms down the entropy drain" interrupting the transcendence of "armed with manna, light shines through veins" (35). Conceived by St. John of the Cross, the dark night of the soul is a period of alienation and separation from the presence of God, however, the dark night of the soul also allows self-examination. Furthermore, the dialectic between the presence and absence of God is itself illusory. As "the third *śūnyatā*" (34) indicates, our perception is what changes, not the presence of God.

The tendency for systems to run down as a function of entropy leads to a confrontation with our own mortality, as the body is an example of an organic system. The poem "infection" (36) fragments across the page as the consciousness does after

death: "mortality" is "a lance," paralleling disease with "the plague of egypt" (36).

The four page poem, "Secretomotor" (37), implies both a motor of secrets and is the technical term for a tearduct, examining grief and smallness through subatomic scales. The poem was produced by interweaving the objects featured on Cary Huang's on-line inter-active website, "scaleofuniverse.com." The last word of each page forms the title word to the next page. Hence, the arrangement of the lines in "Secretomotor" resemble strings, which in string theory of physics are one-dimensional objects hypothesized to form matter through vibrations. The last page of the poem is "Mantra," makes a mantra-like recitation of sub-atomic particles, framed as an hourglass with the Higgs boson or god particle at the centre. This symbolic passage through time and space is the imaginative or mystic voyage through our current knowledge. After passing beyond the Higgs boson, the poem encounters an alternate universe where the names of particles are slightly changed as size increases again, reinforcing the idea of an interpenetration of large and small. The passage allows the poem a symbolic interpretation of the particles, sometimes in a more human sphere: "moan," "bitten," "taon," "phaeton," "sown," "tap," "chirp," and "langue." These are phonemic modulations reflect the way that perception changes with spiritual experience.

After the diversity of perspectives experienced in the second section, spiritual awareness develops to the point of dispelling the illusion of a division between physics and metaphysics. "Amou/ride" (41) further investigates interconnections between the microcosmic and the macrocosmic. "Amou/ride" portrays various words for "love" and then phonetically modifies each of those. Italicized words that extend into the right margin define situations from which love arises. The poem uses a series of puns on the word "love" by combining a range of foreign languages. Fragmentating "love" to find

only more love follows from the holographic principle, where the splitting of something results more images of the complete thing. This phenomenon is described by Diarmuid O'Murchu in *Quantum Theology*:

If we look at it [a section of a hologram] with our ordinary eyesight, we see a meaningless pattern of swirls. But when the photographic record – the hologram – is placed in a coherent light beam like a laser, the original wave pattern is regenerated; a three dimensional image appears, and any piece of the hologram will reconstruct the entire image (55).

O' Murchu relates the suggestion that the universe and the brain are speculated to operate according to holographic principles (57). Spiritual awareness is like the coherent light beam, which allows one to perceive the whole image from the part, permitting a reconstruction of love from any part to a greater whole.

The investigation in this second section examines competing metaphysical perspectives informed by science and spirituality. The section internalizes and processes a multiplicity of perspectives, while recognizing the commonalities of social responsibility and wonder, and witnessing the fundamental interconnections of physics and metaphysics. The second section concludes in a sense of unity, which the third section enacts in detail.

### **Section Three: Deconstructed Dialectics**

#### *Conceptual Framework*

In the third section of the manuscript, science and spirituality are complementary, or even synonymous. The shared perspectives of physics and metaphysics can be accessed in countless ways, and anything can be a source of spiritual inspiration. Each

poem in the third section responds to a particular aspect of art and/or science in a spiritual way. As the first section provided a spiritual past, the second section a spiritual present, the third section suggests an implied future awareness that time itself may be illusory. A transcendence of the illusion of time implies that past, present, and future are unified and exist simultaneously. The sense of unity in the third section is described by metaphors of expansion, ascension, and transcendence.

### *Exegesis of the Poems in Part Three*

The untitled transitional poem opening the third section of the manuscript exemplifies the multifaceted nature of spirituality (42). This untitled poem is composed of a series of six *I Ching* style hexagrams. *I Ching* hexagrams are used in Taoist methods of divination, traditionally done through the use of yarrow sticks or the toss of coins. The poem's structure emulates hexagramic form. Each hexagram in the *I Ching*, and in this poem is composed of "yin" and "yang" lines. "Yin" lines are broken in the middle. "Yang" lines are solid black lines, all the way through. In my poem, "Yin" lines as indicated by a series of numerical 1's in the middle of a line of 0's. "Yang" lines feature unbroken rows of zeroes. There is a third type line in both the *I Ching* and this poem, known as the "changing line." A changing indicates a transitional phase from yin to yang, or from yang to yin, or from one state of being to another. In this poem "changing lines" are indicated by text set in bold italics. The grey-highlighted lines between the hexagrams are set in binary code using the Hymmnos font (see the "Hymmnos" entry in the glossary for more information). Each grey-highlighted line from top to bottom lines spells a different word as follows; GOD, YHVH, TAO, NIRVANA, COYOTE, ATEN-RA, and UNIVERSE. By referencing Christian, Taoist, Buddhist, Native American, Egyptian, and



pantheistic spiritualities between the hexagrams, the poem suggests a common spiritual source. Both binary code and Hymmnos font are fundamentals of constructed languages. Thus, the poem combines contemporary constructed languages with the 2600 year old method of *I Ching* divination.

The poem "Kagome, Kagome" (43) represents the spiritual touchstone of a six-pointed star, and formally portrays three such stars on the page. The poem juxtaposes different meanings traditionally connected to the six-pointed star as follows: a weaving motif, a Japanese folksong, a Euclidean mathematical form, the Star of David, and a symbol of Hindu spirituality. The poem suggests that there is a common spiritual dimension where the different contexts overlap.

The three Touhou poems (44-46) use *Touhou*, a Japanese video game series created by Jun'ya "ZUN" Ota, as a source of inspiration. I use a video game series to democratize spiritual development and suggest that anything can lead to enlightenment. The three Touhou poems reflect the three parts of the manuscript: "Touhou I" represents the spiritual past and is a nostalgic lyric, "Touhou II" represents the contemporary period with an emphasis on science, and "Touhou III" combines perspectives of both.

Inspired by a piece of music, "Waterwheel" (47) uses typography to suggest two blades of a waterwheel. Alternately, the typography also suggests two particle waves "carrying" a particle. The poem alludes to particle/wave theory. Whether reality is wave or particle depends on the type of measurement conducted. Similarly, "Waterwheel" asks how poetry as a way of seeing affects reality: "the poem / rolls away what hides / yet is / the tomb / the orchestra tunes" (47).

The poem "constellation" (48) is dedicated to John Smith, a Canadian author who recognizes spirituality within quantum physics. In my poem, human characteristics are

applied to the environment and vice versa, thereby blurring the line between the two.

Smith's interest in unity and fragmentation is reflected in my poem through a left-margin structure that disperses across the page towards the conclusion, alluding to an expansion of perception.

"Bubble chamber" (49) is an ekphrastic poem with a bubble chamber photograph as subject (see appendix C). In physics, bubble chamber photography allows the imaging of particle collisions by marking their movements. Their trails create geometric shapes that recall Ptolemy's spheres, linking the subatomic to the cosmic. The poem describes the search for God through science, as shown by the line "I'm following / your steps, Lord, tracing where I split off."

The poem "fibonacci alphabet" (50) lists the first 26 numbers of the Fibonacci sequence converted into letters. In order to convert more than 26 whole numbers to letters, I've repeated the letters in groups of 26 (e.g.; 1 is A, 26 is Z, and 27 is A, again). Omitting the zero, I've used the first 26 numbers of the Fibonacci sequence, which adds each number to the one previous in order to derive the next number: 0, 1, 1, 2, 3, 5, 8, 13, 21, 34, 55, 89, 144, 233, 377, 610, 987, 1597, 2584, 4181, 6765, 10946, 17711, 28657, 46368, 75025, 121393. The Fibonacci sequence is applied to letters of the alphabet, the result of the loop, between alphabetical and Fibonacci sequences ends up spelling the word J O Y alluding to as yet unfathomable but recurring patterns inherent in natural systems.

The poem "Mandelbrot and Julia fall in love" (51) recognizes spiritual resonances in fractals through the imagery of interpenetration. In fractals, what we typically call "order" and "chaos" are intimately linked. For the curious, fractals are further discussed under "Mandelbrot set" in the glossary. The poem's form suggests a fractal swirl, light

waves, or the steps of Jacob's Ladder. Fractal forms can be infinitely modified through different mathematical inputs. Similarly, spirituality can be ceaselessly explored by adopting different perspectives. The poem's typography alludes to Jacob's ladder, suggesting the path of spiritual investigation.

In the poem "Description of the Temple" (52-53), spirituality is explored through literature as well as science. In Emily Dickinson's poetry, dashes disrupt conventional reading habits, jolting the mind away from normal thinking patterns, potentially towards greater spiritual awareness. This poem deploys dashes for the same reason in the first section. The second section of the poem is a rhyming sonnet that imagines the spiritual reversal of Babel's curse, "beyond translation and the sin of separation" (53). Death is transformative in the poem, and anticipates an afterlife without binarized views of good and evil: "with chrysalis shed our dead will rise: topple Babylon, paradise" (53).

The poem "lunar solstice" (54) uses the dream logic typical of the ghazal form to challenge the border between life and death, animate and inanimate. The lines, "The moon, black in the sky; / water locked in its stone" (54) suggest that the lifeless moon shares a fundamental part of life in water. The poem responds to Canadian author John Thompson, notable for his depiction of spiritual crisis in his book of ghazals, *Stilt Jack* (1978). The poem evokes a sense of interconnectedness as represented by the Yin/Yang symbol where Yin always contains an element of Yang, and Yang always contains an element of Yin.

"keep to the centre" (55) is an 'opened' ghazal that takes the form of an ouroboros. The poem can be read horizontally or circularly, reflecting different ways of searching for meaning. The empty space in the centre of the poem, together with the title evokes concepts such as the following found in the *Tao te Ching*:

The Tao is like a bellows:  
 it is empty yet infinitely capable.  
 The more you use it, the more it produces;  
 the more you talk of it, the less you understand.

Hold on to the center. (5.5-9).

As recommended by the *Tao te Ching*, the ghazal form of this poem does not overtly state its subject matter. The concluding word, "unsignified" (55), encourages the reader to contemplate what is signified by the space in middle of the poem. The ghazal invites the reader to be a co-writer in finding spiritual meaning.

The poem, "impressions from rorschach google doodles" (56), is a playful case study in spiritual interpretation. Each line provides a reaction to a different Rorschach inkblot. Spiritual awareness extends perception beyond the literal, reading beyond the physical.

The title of the poem "or maybe God's a hermit instead of" (57) features a discourse on God in *media res* to suggest a series of speculations about what God is. "Hermit" is one possible interpretation, "homeless" (57) is another, as is drummer, musician, and rapper. That God may be any or all of these suggests that God is equally present in both rural and urban contexts. Accentuating the need for social responsibility, God is a revolutionary in the poem. The line "sundering / what seals our kin to streets" suggests lifting the homeless from poverty. God is present in both rural and urban settings. A meeting with God is possible when self becomes united with environment, as suggested by the concluding lines "I'm certain we'll meet with / twigs in our hair and the ocean in our voices, / nourished bodies succumbing to soil" (57).

In the poem "first fruit" (58), time is transcended through spiritual awareness. The everyday image of brewing a pot of tea suggests the Fall and the movement from innocence to experience in Malory's depiction of the Tree of Knowledge in the *Mort d'Arthur*. Malory describes a transformation from white to green upon the first sexual encounter, changing to red with the first murder. The image of blood alludes to the Crucifixion.

The two-page poem "heian alien" (59-60) responds to Murasaki Shikibu, one of the world's first novelists (author of *The Tale of Genji*). Each page of the poem stands independently, but the two pages can also be read overlapped, suggesting the way physics and metaphysics overlap to create a fuller understanding of the world. One page tends to be optimistic and transcendental, while the other is pessimistic and materialist: compare "mythology from without the unfurled: Murasaki we're conscious or beneath" (59) and "by the world by science of the mind ask if , if the brain is processes bubbling like gas from" (60), respectively. Overlapped, the two pages form a complete, both/and perspective: "by mythology from the world without by the science of the mind unfurled as Murasaki if we're conscious, or if the brain is processes bubbling like gas from beneath" (59-60).

The poems on 61-66 delineate spiritual communities, archetypes, or the histories of stories that are reinterpreted and re-visioned. I respond to Japanese contemporary media frequently in the third section of this manuscript. Japan's close relationship with the West creates a cross-cultural commentary on spirituality, compatible with my own. ZUN's *Touhou* series, Kinoku Nasu's *Fate/Stay Night*, and Gen Urobuchi's *Puella Magi Madoka Magica* are all Japanese works that rewrite dominant western myths in a contemporary Japanese context. *Touhou* is a video game series, *Fate/Stay Night* is a

visual novel, and *Puella Magi Madoka Magica* is an anime. These authors' uses of World myth suggest spiritual unity across cultures.

The poem "Buddhism" (61) responds to ZUN's Bodhisattva character in the *Touhou* game *Undefined Fantastic Object* (2009), Byakuren Hijiri. The poem borrows lines of her dialogue to investigate Christian myth, thereby accentuating the similarities between Christianity and Buddhism. The poem focuses on the transition from this world to the next: "*I did everything in my power to create a peaceful world / and yet, I was sealed away // Ears cut off to not listen. Heart entombed. / Three days find mantra in a new flood: / throat singing coughs up the apple.*" (61). The poem addresses how a Christlike character heals past sin and grievances, while promoting peace and unity.

The poem "Phoenix" (62) examines the idea of resurrection through the phoenix archetype, used in the *Touhou* game *Imperishable Night* (2004) to describe the character Mokou. The phoenix is also used traditionally to describe Christ. The poem analyzes different types of resurrection, such as the physical "immortality" of particles being re-used or re-contextualized after our deaths. The poem lists examples of where the body's particles might travel after death: "gossamer phoenix / flies worm soil, tree rings, / apple cores, antler fuzz, runoff rocks, / river ocean; nests in seashells" (62). In *Touhou* eating Mokou's liver grants the cannibalizer immortality, reminiscent of the communion ritual: "Eternal life roasted, slice, and shared; / feathers lift from flesh" (62). The two cited quotations point to an "immortality" of both body and the spirit.

The poem "unfading thoughts" (63) responds to Kinoku Nasu's visual novel character Ilyasviel from *Fate/Stay Night* (2004) as a source of spiritual inspiration. Prompted by the structure of the digital visual novel, which uses player input to affect the trajectory of the plot, the poem considers alternate realities through the fictional character

of Ilyasviel. The three main plot trajectories of Kinoku Nasu's digital visual novel suggest three outcomes for Ilyasviel's fate: living happily in the first, murdered in the second, and sacrificing herself to save the community in the third. The co-existence of these different paths suggests a many-worlds perspective where all three are equally valid, referenced in the poem by the line "reflections superpositioned" (63). The digital visual novel genre highlights the importance of individual choice in affecting life's outcomes, similar to how the observer in quantum mechanics can affect the outcome of the experiment.

The poem "not with clay feet, I hope" (64) is a blank sonnet that reinterprets the dream of Daniel 2, where the statue with clay feet is a sign of worldly instability. In the poem, since we share particles with all matter including stone, we are spiritually interconnected with the material world. The line referring to particles that "come to life just off-glance" (64) hints at the superposition of states, acknowledging that the material world is more vibrant than we realize.

The poems "Lucifer III" (65) and "Entropy" (66) both respond to author Gen Urobuchi's anime series, *Puella Magi Madoka Magica*, which re-writes Western texts that raise spiritual questions (e.g.; Milton's *Paradise Lost*, Goethe's *Faust*). In sections one and two of this manuscript, the poems "Lucifer I" and "Lucifer II," feature Lucifer attempting to binarize reality through an aspiritual or mechanistic perspective. The binarist dialectic is dispelled as illusory in "Lucifer III" (65) by engaging Urobuchi's rewriting of the Fall to consider spiritual love in a physical or personal way. The poem "Entropy" (66) responds to "Lucifer III" by depicting a selfless spiritual love of interconnection instead of personal love. "Lucifer III" craves instant connection with the divine, while "Entropy" waits until an Apocalypse for a union with the beloved. As with the "heian alien" pair, these two poems can only be understood together, as a kind of

wave-particle duality. "Lucifer III" formally resembles particles, but opens into waves at the end. "Entropy" is wa[i]ved by the languid space through the poem, but the outline of the whole poem is particle-like. Since physics and metaphysics are the same, God *is* present in the world. We meet God every day, while still hoping for a completely immersive relationship in the future.

The poem "or when or where or" (67) is a restatement of the dynamic process of science and spirituality, considering multiple angles of questioning. When personal "thought stops," poetry can urge us back to personal growth. Science and spirituality both require an *interactive* relationship and development.

A re-visioning of perception is embodied in "at the end" (68), where each haiku-like stanza represents a different Apocalyptic vision of the far future, ranging from cosmology to theology. As a whole, the arrangement of tercets in the three triple-stanza columns recalls *The Divine Comedy's* arrangement of 33 cantos in *Inferno*, *Purgatorio*, and *Paradisio*. Whereas Dante uses an extra prologue canto to reach 100, I've split the last tercet between all three columns at the bottom of the page. The split tercet suggests that the transcendental principle that "unlock[s] / the / ocean" is within each view of the end. Each haiku arrives at the same point of the expansion, ascension, or dispersal of the self into a universal consciousness.

The poem "Temple Garden" (69) also reflects Dante's 100 cantos, this time through 100 words arranged in a ten-by-ten grid. As in a word search, the words can be read horizontally, vertically, or diagonally. These multiple ways of reading suggest the personal, interpretative component of spirituality, allowing the reader to construct their own perspective. The title suggests something both constructed and natural, sacred and sexual, divine and worldly, and asserts the complementarity of these principles. The



"Temple Garden" might be seen as a return to the Garden of Eden.

The final two poems of the manuscript, "Carmina Foreluna" (70) and "Hymmnos" (71), loop back to "Genesis 0," the opening poem of section one, to suggest unity in the manuscript. "Genesis 0" is a letterless poem composed only of punctuation in two columns. These two final poems are without punctuation and are composed of letters in a single, centralized column. The move from two columns to one suggests the move from a false dialectic of physics and metaphysics to a unified perspective over the course of the manuscript. Both final poems are written in constructed languages created by Akira Tsuchiya for the *Ar Tonelico* video game series. In Tsuchiya's *Ar Tonelico*, emotions spoken or sung have the capacity to affect reality as 'prayers,' indicating a shared physics and metaphysics. The poem, "Carmina Foreluna" is written in Carmina Foreluna, a recently invented language of prayer. The poem "Hymmnos" is written in the Hymmnos language, which was created recently specifically for expressing emotions, borrowing from other languages including English, Japanese, German, and French. Both poems represent spiritual transcendence. Based visually on Sanskrit, the liturgical tongue of Hinduism, the languages of Carmina Foreluna and Hymmnos replicate the theme of transcendence. The translation for these poems is found in the Appendix.

## Conclusion

### *Findings: The Root of Science and Spirituality*

I named this manuscript *In the Wilderness* for a few reasons. The wilderness is a place of meditation and discovery, an attempt to escape from one's own preconceived notions. Christ and John the Baptist both retreated into the wilderness to find a spiritual mode of being. As the Israelites wandered for forty years in the wilderness before

entering Canaan, it is also a crucible preparing the self for paradise. In science, the wilderness might be understood as the frontier of that which is not yet been discovered or fully comprehended. To be "in the wilderness" means to be liminal, on the margins of conventional thought. What society frequently perceives as oppositional: science and spirituality, physics and metaphysics, are recognized in the wilderness as synonymous.

The prophet or the poet returns from the wilderness changed, and must now convey that change in terms that are comprehensible to society. Language is inherently limited, and like science and spirituality, can only strive for closer and closer approximations of reality. The opening line of the *Tao te Ching* tells us that "The tao that can be told / is not the eternal Tao. / The name that can be named / is not the eternal Name" (1.1-4). According to Alan Davies's essay in *Rampike* 21.1, "Prelinguistic Thinking," the need for ever-closer descriptions of the absolute is what drives aesthetics:

It is this elemental experience that unites our experiences of adequate art objects as well as the scapes and wonders of nature. When we do give it a name we refer to what's seen (experienced) as the beautiful / or the sublime / or some such. In reality it is the fact that we have no name (adequate or otherwise) for these experiences that fill us with awe in the presence of what inspires them. This accounts for the long history of aesthetics as a science of language in repeated search for names for what-cannot-be-named. (40).

Just as in aesthetics, knowledge of spirituality and science are the foundations for deeper levels of understanding. Information is re-assessed, dynamics re-evaluated, and hypotheses refined. The absence of a definitive picture of God and a complete theory of the universe can spur on personal growth and a dynamic relationship with the whole. Poetry can capture and condense that journey.

This manuscript, *In the Wilderness*, attempts to convey the relationship between science and spirituality, physics and metaphysics. Alan Davies suggests the sense of insignificance and presumption in describing the absolute. Even if we cannot convey everything, our approximations may still be useful in helping to understand our relationship to the vast universe we live in. Anything can be spiritual. Physics and metaphysics enable us to recognize our responsibility to the whole, to share in a sense of wonder, and to take part in our universal community.

## Works Cited

Barney, Dave and Steven Goldfarb. "The basics of a boson." *TED-Ed/CERN*. Animation by Jeanette Nørgaard. May 2013. Video. Accessed April 7<sup>th</sup>, 2014.

<<http://home.web.cern.ch/about/updates/2013/05/basics-higgs-boson>>

Bowker, John. "Dark Night of the Soul." *The Concise Oxford Dictionary of World Religions*. Oxford University Press, 2000. *Oxford Reference*. Online. Date Accessed 1 Mar. 2014.

<<http://www.oxfordreference.com.ezproxy.uwindsor.ca/view/10.1093/acref/9780192800947.001.0001/acref-9780192800947-e-1818?rskey=pznLSI&result=1>>

---. "Śūnyatā." *The Concise Oxford Dictionary of World Religions*. Oxford University Press, 2000. *Oxford Reference*. Online. Date Accessed 29 Mar. 2014.

<<http://www.oxfordreference.com.ezproxy.uwindsor.ca/view/10.1093/acref/9780192800947.001.0001/acref-9780192800947-e-7054?rskey=IXzrOL&result=3>>

Capra, Fritjof. *The Tao of Physics*. Boston: Bantam Books, 1984. Print.

Davies, Alan. "Prelinguistic Thinking." *Rampike* 21.1 (2012). 38-44. Print.

Francis, Matthew. "Quantum decision affects results of measurements taken earlier in time." *Nature Physics*, 2012. *Ars Technica*. Online. Accessed April 7<sup>th</sup>, 2014.

<<http://arstechnica.com/science/2012/04/decision-to-entangle-effects-results-of-measurements-taken-beforehand/>>

Frye, Northrop. *Anatomy of Criticism*. Princeton: Princeton University Press, 1990. Print.

---. *The Great Code: The Bible and Literature*. New York: Harcourt Brace Jovanovich, 1982. Print.

---. *Words with Power: Being a Second Study of "The Bible as Literature."* Markham: Penguin Books, 1990. Print.

Gleick, James. *Chaos: Making a New Science*. London: Penguin Books, 2008. Print.

Hawking, Stephen. *The Theory of Everything*. Beverly Hills: Phoenix Books, 2005.

Ebook.

Lao-tzu. *Tao te Ching*. trans. S. Mitchell. Brooklyn University. July 20th 1995. Online.

Accessed April 7<sup>th</sup>, 2014.

<<http://acc6.its.brooklyn.cuny.edu/~phalsall/texts/taote-v3.html>>

Leitch, Erik. "What is the cosmic microwave background radiation?" *Scientific American*.

2004. Online. Accessed April 7<sup>th</sup>, 2014.

<<http://www.scientificamerican.com/article/what-is-the-cosmic-microw/>>

*New Revised Standard Version Bible*. ed. Bruce Metzger. Grand Rapids: Zondervan,

1989. Print.

O'Murchu, Diarmuid. *Quantum Theology: Spiritual Implications of the New Physics*.

New York: Crossroad Publishing, 2000. Print.

Tegmark, Max. "Parallel Universes." *Science and Ultimate Reality: From Quantum to*

*Cosmos*. J.D. Barrow, P.C.W. Davies, and C.L. Harper eds. Cambridge University

Press 2003. Online. Accessed April 7<sup>th</sup>, 2014.

<<http://space.mit.edu/home/tegmark/multiverse.pdf>>

Tyson, Neil DeGrasse. "10 Questions for Neil deGrasse Tyson." *TIME Magazine*. June

27<sup>th</sup>, 2008. Online. Accessed April 9<sup>th</sup>, 2014. <[http://www.youtube.com/watch?](http://www.youtube.com/watch?v=wiOwqDmacJo)

[v=wiOwqDmacJo](http://www.youtube.com/watch?v=wiOwqDmacJo)>

## Appendix A – *Translations*

### **Carmena Foreluna**

Soul as nothingness, loving the world, I request powerful holy life of love. Life and death in light's creation and destruction.

Hated ignorance, hatred evil; God change the world with love, your joyful power of love. Shining darkness, permeate love through the world. You beloved God, protect the unknown with your incredible power, light with your holiness the evil ignorance.

I wish for great power to change the universe with love and sacred fire, for compassionate holy life.

God, in your great power, protect the world from evil curses. Flourish holy love in us.

Impregnate the world with heavenly oblivion, with overwhelming love I pray.

God, with your power of life and death and your power of creation and destruction, bequeath holy joy to the world and your protective power of holy flame.

Darkness changes to holiness, hatred changes to joy, evil changes to love.

God give your light of joy to the world. I wish with love to change the world. I wish with love for holy nothingness. I wish with love for the power of change.

God of love, give your unknown holy soul to me, holy soul, one's holy soul, heavenly universe. God's power changes nothingness to the holy light of God.

### **Hymnos**

[I with trembling will stop and] melt into the true world.

[I never want to go back to how I was before;] sing a body for me.

[I can't wait to forever] resonate with eternity.

[Deeply, with fear I accept] giving my karma to God.

[Deeply I wish to stop] wearing time.

[Deeply, in eternal nothingness] I transmigrate melodies.

[Entranced in sadness, I accept] and hatch from a dream.

[Entranced in mind, enduringly] I fly on the end of the world.

[Entranced, I will never go back and instead] create a magic paradise.

[With overflowing eternal joy] I resurrect the sacred sword, the deep wisdom.

[With overflowing eternal courage] I enlighten the universe.

[With overflowing eternal blessedness], I love and care for God's tree.

## Appendix B – Carmena Foreluna Language Schema

[Note: This appendix is taken verbatim from the following source:

Shirasagi, Aquagon, and Lazy. "Grammar (Carmena Foreluna)." *"Hymmnos,"*

*Conlang.wikia*. n.d. Online. Accessed April 8<sup>th</sup>, 2014.

<[http://conlang.wikia.com/wiki/Hymmnos#Grammar\\_.28Carmena\\_Foreluna.29](http://conlang.wikia.com/wiki/Hymmnos#Grammar_.28Carmena_Foreluna.29)>]

This dialect is the direct ancestor of Hymmnos, and was the basis of the development of the Kurt Ciel Note. However, unlike any of the current Hymmnos dialects, it doesn't possess an actual structured grammar, and instead, it's largely dependant on the interpretations of its speakers.

Basically, each letter contains an emotion and a power, which comes in effect as soon as they are pronounced, and by chaining them, the words are formed. This means that this dialect doesn't have a set vocabulary either.

The following table lists the effects that each letter is known to have.

Letter	Power/Meaning	Letter	Power/Meaning
<b>A</b>	Power	<b>N</b>	Nothing, empty, emptiness
<b>B</b>	World, society	<b>O</b>	Evil, wicked, dark
<b>C</b>	Grow/Raise, change	<b>P</b>	Life & Death
<b>D</b>	Darkness, demon	<b>Q</b>	Ignorance
<b>E</b>	Love	<b>R</b>	Life
<b>F</b>	Convey, Transmit, Permeate, Spread	<b>S</b>	Request, wish
<b>G</b>	Destruction, curse, punishment	<b>T</b>	I, myself
<b>H</b>	Fire, heat, passion, love	<b>U</b>	Hatred
<b>I</b>	Holy	<b>V</b>	Joy
<b>J</b>	Unknown/Yet to be known, underworld	<b>W</b>	Mind, soul, heart
<b>K</b>	Creation & Destruction	<b>X</b>	Protection, protect
<b>L</b>	You, Other Person	<b>Y</b>	Light
<b>M</b>	Compassion	<b>Z</b>	God, gods

## Appendix C – Images

fig. 1: The Cosmic Microwave Background.

"Nine Year Microwave Sky." *NASA / WMAP Science Team*. 2012. *Wikimedia Commons*.

Online. Accessed April 8<sup>th</sup>, 2014.

<[http://en.wikipedia.org/wiki/File:Ilc\\_9yr\\_moll4096.png](http://en.wikipedia.org/wiki/File:Ilc_9yr_moll4096.png)>

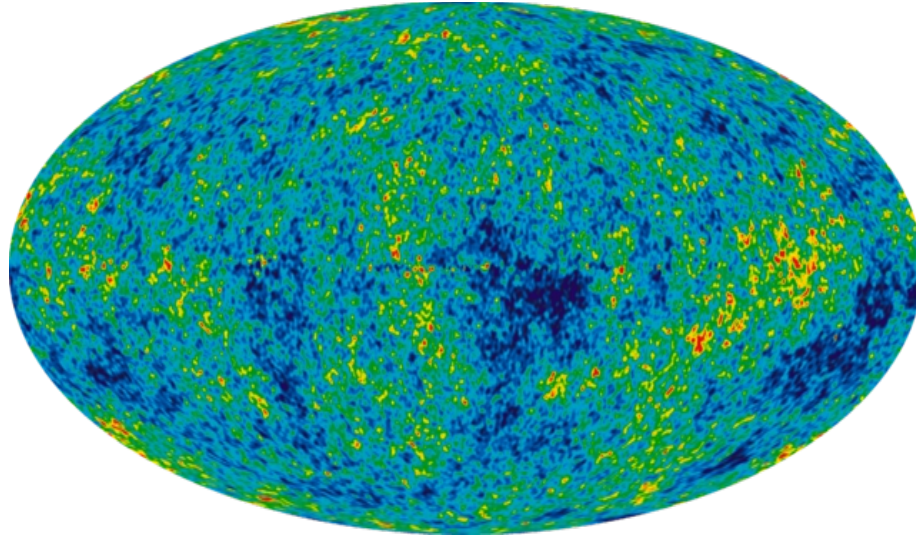


fig. 2: An image showing symmetry breaking in the early universe, causing mass.

"Higgs Field." *Quantum-Bits.org*. Online. Accessed April 9<sup>th</sup>, 2014. <<http://quantum-bits.org/?p=233>>

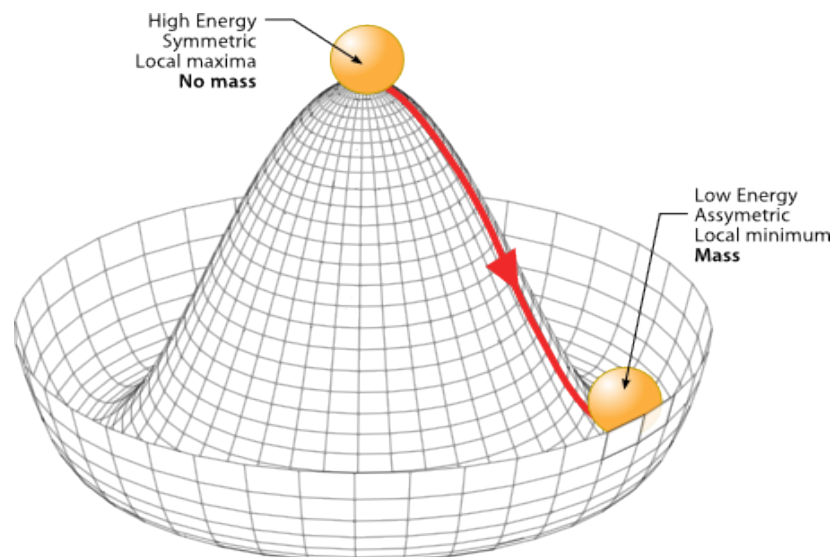




fig. 3: An example of a fractal.

Hilbert, Ross. "Grand Julian ISF13." *Fractal Science Kit – Fractal Generator*. 2014.

Online. Accessed April 8<sup>th</sup>, 2014. <<http://www.fractalsciencekit.com/>>



fig. 4: A graphic illustrating the Schumann resonance and its relation to the brain.

Miller, Iona. "Schumann Resonance, Psychophysical Regulation and Psi (Part I)."

*Journal of Consciousness Exploration and Research* 4.6 2013. Online. Accessed

April 8<sup>th</sup>, 2014. <<http://sedonanomalies.weebly.com/schumann-resonance.html>>

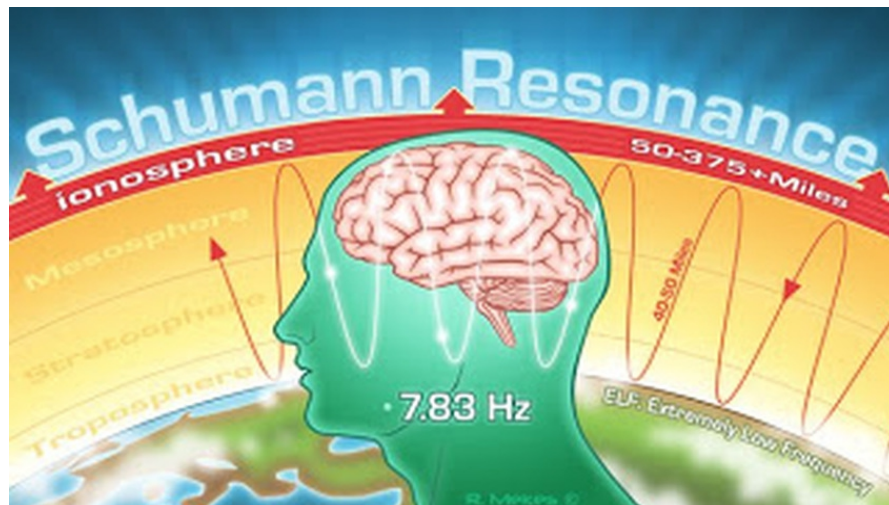


fig. 5.: A screenshot from the *Touhou* series of video games.

ZUN. "Recollection: 'Border of Wave and Particle.' *Touhou 11: Subterranean*

*Animism*. Played by Kits. Online. Accessed April 8<sup>th</sup>, 2014.

<<http://www.youtube.com/watch?v=fLIHCSj-GrQ>>

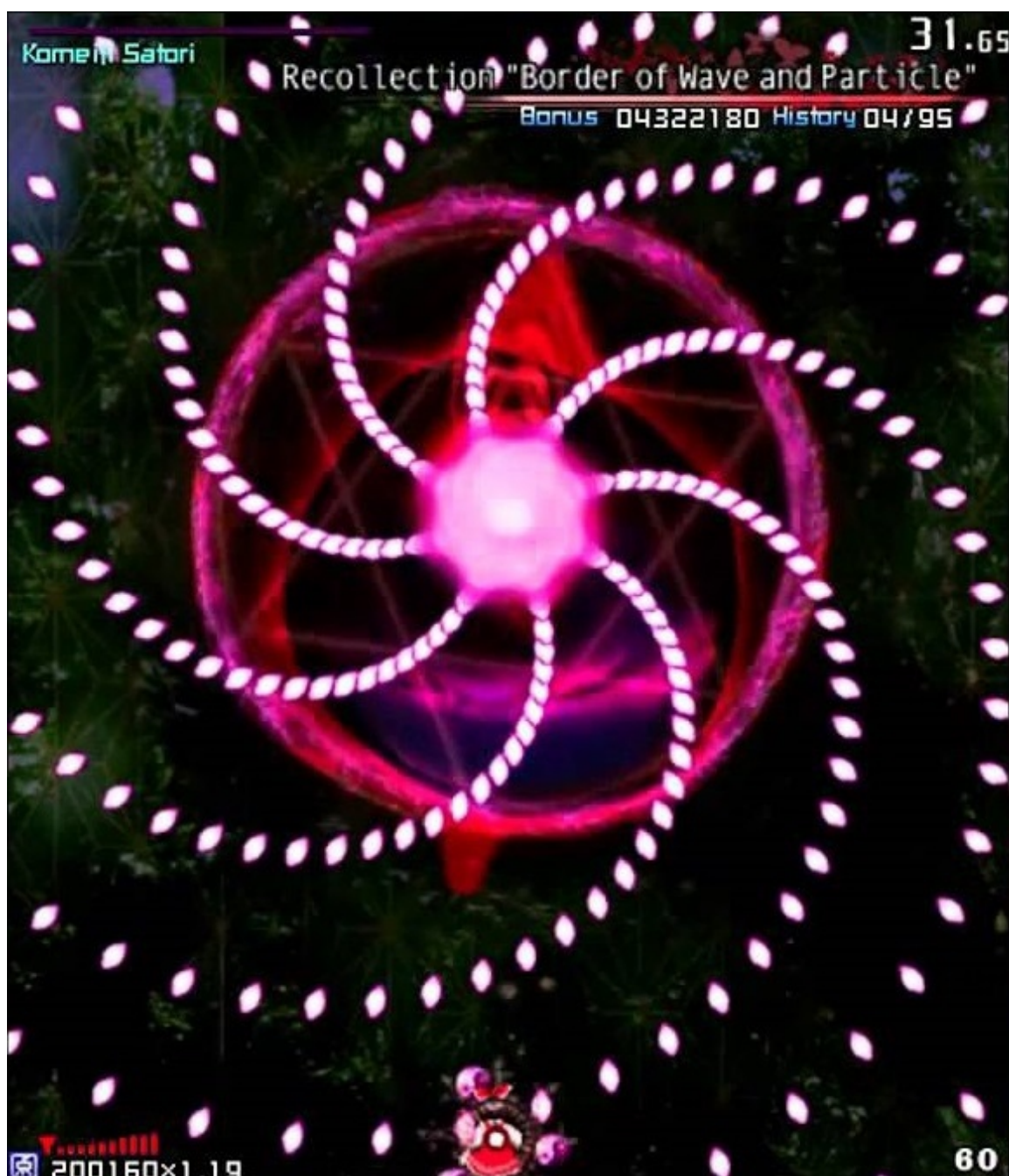




fig. 6: A bubble chamber photograph.

"Picture of neutrino interaction in the Fermilab 15-foot Bubble Chamber with heavy neonhydrogen liquid mixture taken in April, 1976." *Fermilab History and Archives Project. The Village Crier* 8.18. 1976. Online. Accessed April 8<sup>th</sup>, 2014.  
<<http://history.fnal.gov/visitors.html>>

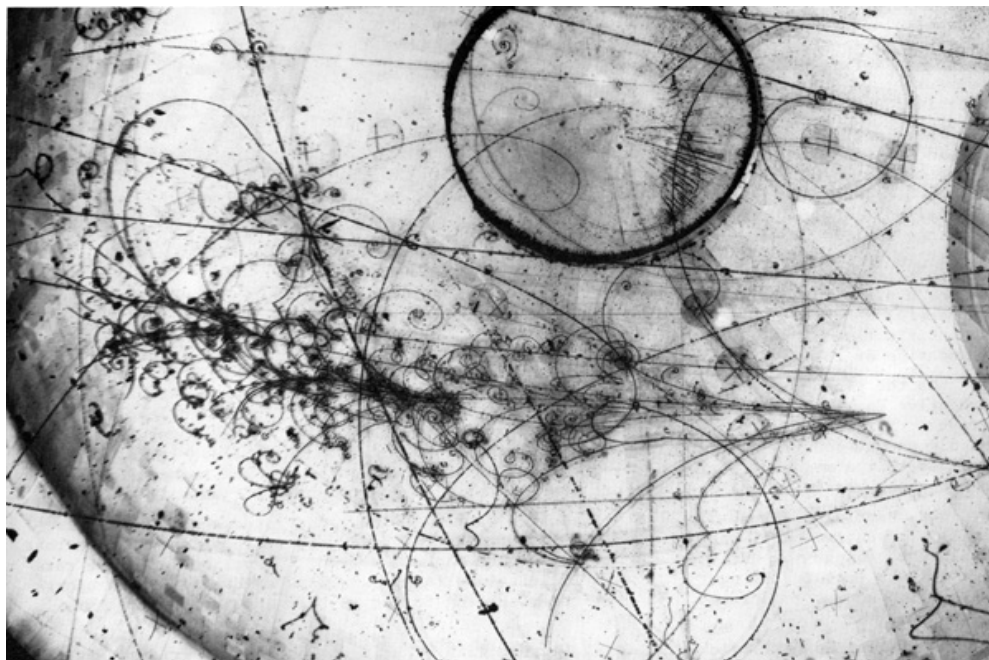
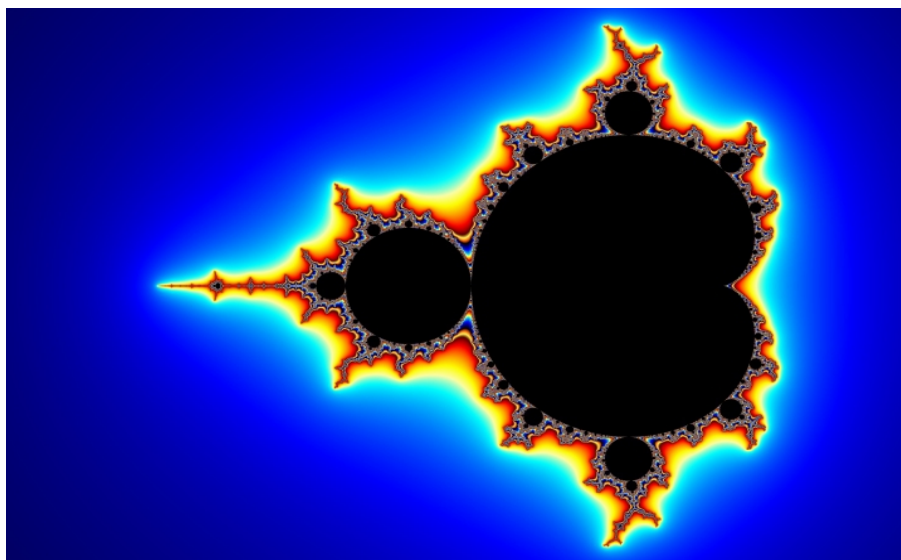


fig. 7: "Mandelbrot Set no. 2." *Fractalposter.com*. 2008. Online. Accessed April 8<sup>th</sup>, 2014.



## Appendix D – Glossary

**Byakuren Hijiri:** Byakuren Hijiri, Jun'ya "ZUN" Ota's character from *Undefined*

*Fantastic Object* (2009) is herself a reinterpretation of a myth. ZUN rewrites the *Shigisan-engi*, a story about a Buddhist monk named Myouren, and gives Myouren's unnamed priestess sister a story and myth of her own. The process of writing illustrates the dynamic nature of spirituality, continually transformed through each perspective. The poem traces the shared Messianic archetype between Byakuren and Christ. Both renounced temptation, protected the weak, were rejected by their contemporary societies, were sealed away (Christ in the tomb, Byakuren in the demon world), and both rose again to proclaim peace and equality.

**Carmena Foreluna:** As detailed by Shirasagi's con[structed] lang[uage] wikia, Carmena

Foreluna is a language of prayer designed by Akira Tsuchiya. Carmena Foreluna associates spiritual concepts with each letter of the alphabet, and forms words by interweaving these 26 concepts (see Appendix B for full index). For example, the opening word "Wneb" can be broken down into "mind/soul/heart nothing/emptiness love world." This can be translated as "soul of emptiness, love the world," but is intentionally open to interpretation by the language's lack of definite articles.

Shirasagi, Aquagon, and Lazy. "Grammar (Carmena Foreluna)." *Hymmnos*.

*Conlang.wikia*. n.d. Online. Accessed April 7<sup>th</sup>, 2014.

<[http://conlang.wikia.com/wiki/Hymmnos#Grammar\\_.28Carmena\\_Foreluna.29](http://conlang.wikia.com/wiki/Hymmnos#Grammar_.28Carmena_Foreluna.29)>

**Fujiwara no Mokou:** The normal arc of *The Tale of the Bamboo Cutter* is that a princess of the moon is sent to earth for a time, refuses multiple suitors by asking impossible requests as proofs of love, ultimately returning to the moon and giving the emperor an elixir of immortality. ZUN's rewriting in *Imperishable Night* (2004) is to insert the dishonoured daughter of one of the suitors, vowing revenge on the moon princess. Mokou, the daughter, kills the emissary of the emperor before he can throw the elixir away and becomes immortal herself, ultimately regretting the murder. Mokou's immortality allows her to resurrect immediately after dying in a cyclical death and rebirth.

The phoenix is shared in the act of communion, as a sharing of immortality: "Eternal life roasted, sliced, and shared; / feathers lift from flesh" (62); "the price of immortality's a corpse / sprawled agape" refers both to the man Mokou killed for her immortality and Christ's Crucifixion, and "agape" represents both the slack jaw of death and *agape*, divine love (62). Both appear to involve a sacrifice of the "human half," before its reclamation in a new, spiritual mode of being: Mokou is shown to regret her sin in the centuries of her life afterwards, coming to a fuller understanding of humanity with age and wisdom.

**Ghazal:** Popularized initially by Sufi mystics, in the English tradition the ghazal form itself challenges the cohesion of the poem: rather than chronological or narrative connection. John Thompson, in the preface to his book of ghazals *Stilt Jack*, wrote that "The link between couplets (five to a poem) is a matter of tone, nuance: the poem has no palpable intention upon us. It breaks, has to be listened to as a song: its order is clandestine" (105). Each couplet is independent and self-contained, but

*something* persists in holding the poem together, perhaps more on irrational or unconscious level.

Thompson, John. "Ghazals." *John Thompson: Collected Poems and Translations*. ed. Peter Sanger. Fredericton: Goose Lane Editions, 1995. 105-106. Print.

**Hymmnos:** Hymmnos is a language formulated specifically for expressing emotions, and is a unified language in the sense that it borrows from English, Japanese, German, and French (among others) for its vocabulary. Grammatically, the intensity of emotion alone in "Hymmnos" represents a spiritual development: from "Ma," nervousness; to "Nn," unconsciousness and lethargy; to "Rrha," a trancelike state; to "Was," an intensity of feeling. The first word of each sentence is the intensity of the emotion, the second word is the type of emotion, and the third word of each sentence describes the context. After the three emotion words, the sentence follows a verb-object-compound or object structure, with an implied first-person subject. Not only does this convey unity linguistically, it 'rewrites' the fragmentation of the tower of Babel by trying to reconstruct a proto- or ur-language.

My information comes from Shirasagi's conlang article, as well as the following database.

Tsuchiya, Akira. "Hymmnoserver." trans. Neil Tallim. Dec. 13<sup>th</sup>, 2010. Accessed April 7<sup>th</sup>, 2014. Online. <<http://hymmnoserver.uguu.ca/>>

**Ilyasviel:** A character in Kinoku Nasu's *Fate/Stay Night* (2004), a visual novel in three parallel scenarios. *Fate/Stay Night* subverts the quest for the Holy Grail as a battle

royale between seven mages and seven legendary heroes, in order that their wish might be granted. Perhaps a commentary on religious wars, my interest is in the character of Ilyasviel, one of the participants who also contains the key to the Holy Grail inside herself. As the story reveals that the Grail is corrupted and actually contains all the evil in the world, or *Angra Mainyu* (named after the destructive spirit in Zoroastrianism), Ilyasviel sacrifices herself to seal it away forever. Though Ilyasviel is sadistic, violent, and amoral until this point, the tendency for the messianic archetype to ultimately resurface is unchanged. Anyone can potentially become a Christ.

Ilyasviel is half-homunculi, and is alchemically engineered by her father and grand father to fulfill a single purpose: winning the Holy Grail. Her inhumanity disrupts conventional family dynamics, as though she is approximately 19, Ilyasviel is physically 12 and will die after another year. She occupies a position simultaneously older and younger sister to the protagonist, who was adopted by her father after he abandoned Ilyasviel. Balancing the impulse to vengeance with filial affection, Ilyasviel lives happily with her adopted brother in the first route, is horribly murdered in the second, and sacrifices herself to save the community in the third.

**Kagome, Kagome:** Firstly, a kagome weave is a common pattern of basket-weaving, and the words in the poem are woven into shapes suggestive of a six-pointed star. Secondly, "Kagome, Kagome" is the name of a Japanese folksong that forms the translated epigram of the poem, and features paradoxical lyrics such as "in the night of dawn." The song accompanies a children's game, wherein a circle of

children walk around a child playing a blindfolded *oni*, or demon, who tries to name the person directly behind them when the music stops. The identification of the unseen is similar to the metaphysical process. Thirdly, in mathematics, the six-pointed star can be repeated semiregularly on a Euclidean plane as trihexagonal tiling: each point of the star is shared with another star in an image of interconnection. Fourthly, the six-pointed star is visually identical to the Star of David. Fifthly, according to Gordon Melton's *Encyclopedia of Religious Phenomena*, "In yantra symbolism, however, it [the Hindu *shatkona*] represents the union of Shakta and Shiva in the act of creation" ("Yantra"). The union of Shakta and Shiva, transcendent and material, suggests the union of physical and metaphysical in the thesis.

"Yantra." *The Encyclopedia of Religious Phenomena*. ed. J. Gordon Melton. 2008. Ebook.

**Puella Magi Madoka Magica:** Gen Urobuchi's 2012 series and its 2013 sequel rewrite

Goethe's Faust and the Christ story through the magical girl subgenre: the characters form contracts with an alien being, having one wish granted in exchange for their souls. Forced to fight witches, when the characters fall from hope into despair, they themselves become witches, and the alien harvests the energy to magically stave off entropy. Madoka, the lead character, wishes at the end of the series to save all witches before they were born in every universe, past, present, and future. Madoka takes the burden of suffering onto herself and becomes a 'force,' imperceptible but omnipresent, and promises those she leaves behind that they'll meet again someday. In *Madoka Magica: Rebellion*, the sequel,



the one she's left behind [Homura] responds by splitting Madoka into her human and god parts, so that both continue on. If Madoka sacrifices worldly love for divine love and Homura the opposite, the image at the end is that the two can co-exist. Madoka's witch form is named Gretchen, making Homura a Faustian figure; alternatively, Madoka is Christ, and Homura is Judas. Significantly, the episode where Madoka becomes "hope itself" aired on a Good Friday.

**Mandelbrot Set:** The Mandelbrot and Julia sets are visualizations of mathematical equations that interpenetrate one another (Gleick 222). Both iterate complex mathematical equations in non-Euclidean space: "In 1979 Mandelbrot discovered that he could create one image in the complex plane that would serve as a catalogue of Julia sets, a guide to each and every one" (Gleick 222). In the Euclidean and Cartesian methods, "Standard geometry takes an equation and asks for the set of numbers that *satisfy* it" (Gleick 226-227), "But when a geometer [such as the Julia and Mandelbrot sets] iterates an equation instead of solving it, the equation becomes a process instead of a description, dynamic instead of static" (Gleick 227).

Gleick, James. *Chaos: Making a New Science*. London: Penguin Books, 2008.

Print.

**Touhou:** *Touhou*, meaning "eastern," is a series of Japanese "bullet hell" video games created by Jun'ya "ZUN" Ota that retell or rewrite world myth and folklore. The setting for the games is a fictional part of Japan called Gensōkyō, a place where what's forgotten or repressed by the outside world resides. A typical story in the

series involves a myth or folk villain appearing, such as vampires blocking out the sun (*Embodiment of Scarlet Devil*), a princess of the Netherworld who steals the spring (*Perfect Cherry Blossom*), and Kaguya of the Tale of the Bamboo Cutter folktale hiding from the moon (*Imperishable Night*). "Border of Wave and Particle" (see: Appendix C) depicts an attack in the imaginary realm of Touhou, and reimagines wave-particle duality with swirls that suggest fractal patterns, with the *shatkona* or Star of David superimposed.

## Appendix E – Notes

"Genesis 0" (1) takes the text of creation from Genesis and removes all the letters to create the poem.

"Genesis I" (3) quotes Genesis 1:16 (*NRSV*).

"The First Poem" (6) uses John Smith's quartet from "You Must Be Driven" (*Fireflies in the Magnolia Grove*, 2004) as the basis of the glossa form.

"Jacob Wrestles the Angel" (10) concludes by quoting Genesis 32:29 (*NRSV*).

"Carpentry Lessons" (14) uses Job 34:14 as its epigram.

"On Sitting Down for Tea with Emily Dickinson" (19) opens with a fragment of Emily's poems, "Exultation is the going --."

" $E=mc^2$ " (20) takes a fact from physicist Brian Greene about atoms and baseballs and follows the analogy through to its conclusion.

"How long, ye simple ones, will ye love simplicity? / and the scorers delight in their scorning, and fools hate knowledge?" (26) quotes Proverbs 1:22 (*KJV*).

"he says, moulting feathers from his hair" (31) quotes Mumon's *The Gateless Gate* "20. The Enlightened Man."

"The Frog and the Avian" (33) references Max Tegmark's parable in "Parallel Worlds."

"Amou/ride" (41) juxtaposes Google Translated words for love with definitions of "of" from Dictionary.com. In addition, it quotes from John Donne's "The Good-Morrow."

"Kagome, Kagome" (43) takes its epigram from the translation of the Japanese song posted on Wikipedia's "Kagome Kagome" page.

"Touhou I" (44) italicizes a common Biblical line, taken here from Marilyn Robinson's *Housekeeping*.

"Touhou III" (46) yokes together quotes from Alden Nowlan's "The Encounter, the Recognition," Stephen Owen's translation of Li Bai's "Drinking Alone by Moonlight," and Yasaka Kanako's dialogue from the Touhou game *Mountain of Faith* (2007). Later in the poem, the "once, twice, thrice" sequence is taken from independent group SYNC.ART's "Blazing Heart" music video, a retelling of Fujiwara no Mokou's backstory.

"constellation" (48) quotes in italics phrases John Smith has said to me, referring to a growing sense of his own mortality.

"Mandelbrot and Julia fall in love" (51) uses a proverb in chaos theory as its epigram, "Plough in the dynamical plane, and harvest in parameter space," referring to how each point in the Julia set has a corresponding point in the Mandelbrot set. It references as well the conclusion of James Joyce's *Ulysses*.

"Buddhism" (61) uses italicized bits of Byakuren Hijiri's dialogue from the Touhou games *Undefined Fantastic Object* (2009) and *Hopeless Masquerade* (2013).

"Phoenix" (62) italicizes a line from the Book of Wisdom 19:20 (*KJV*).

"unfading thoughts" (63) paraphrases Ilyasviel's line from *Fate/Zero*, Gen Urobuchi's prequel to Kinoku Nasu's *Fate/Stay Night*. As translated by the fan group Baka-Tsuki, the original line was "In the dream, Illya became a cup."

"Lucifer III" (65) quotes lines from *Madoka Magica: Rebellion* (2013), either spoken by the Judas-Lucifer-Faust analogue or narrative captions.

### Vita Auctoris

Born 1990 in Saint John, New Brunswick, Aaron Daigle grew up in the Maritimes on the banks of the Kennebecasis River. Earning his undergraduate degree (Bachelor of Arts, First-class Honours English) from the University of New Brunswick, Saint John, Aaron learnt the art of poetry from Governor-General award-winning poet Anne Compton. He read his poetry at two Atlantic Undergraduate English Conferences, once in 2010 and once in 2012. He also read at The Fiddlehead's annual "Poetry Weekend," an event that brings together the poets of the Atlantic region. In his fourth year he was editor of UNBSJ's student journal, *Vox*.

Currently a Master's student of Creative Writing at the University of Windsor, Aaron edited the graduate chapbook of his year, *Itty Bitty* (2013), and read at several ArtCite events in Windsor. He was awarded the Joseph-Armand Bombardier Canada Graduate Scholarship from the Social Sciences and Humanities Research Council for his thesis work, the fruits of which you hold.

Aaron's poetry has been published in *Vox*, *Shorthand*, *Rampike*, *The Fieldstone Review*, and the chapbook *Itty Bitty*. After graduating, Aaron is venturing to Japan to teach English. He hopes to learn Japanese, and plans to complete PhD studies researching ways in which contemporary Japanese media re-vision world myth in response to Western cultural influences.