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final, final frontier

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FINAL, FINAL FRONTIER

by

Aimee Fredericksen

A thesis submitted in partial fulfillment of the requirements for graduation with Honors in the English

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All requirements for graduation with Honors in the English have been completed.

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Abstract

This project explores the concept of the frontier in science fiction, and beyond that, the way it can be expressed in poetry. As I've studied different variations of poems, I've often wondered what defines the boundaries between the conventional narratives found in the genre and fiction. I've been especially interested in whether a science fiction poetry exists, and if so, what conventions of the genre it is allowed to adhere to. My goal was to therefore present a collection of science fiction poetry.

The poems concern themselves with the ideals of the frontier and their manifestation in a science fiction realm. The concept of the American frontier comes from the country's westward expansion during the 19th century. Frederick Jackson Turner presented his essay “The Significance of the Frontier in American History” at the end of the 19th century, advancing his Frontier Thesis, which establishes how the ideals of the frontier drove American history and its national identity. By 1890, the 11th U.S. Census declared an official end of the American western frontier. In the mid-20th century, the “space race” of the Cold War era presented a new frontier for competitive global powers to attempt to claim. Imaginations of space and the search for new frontiers became a large focus the sci-fi media to follow. This is especially evident in William Gibson's Sprawl trilogy, a tour de force of the cyberpunk subgenre which explores the occupation of a colonized space or the Internet as a frontier. Overall, the poems are largely concerned with the occupation of space, whether they be narratives that take place in outer space or quite literally play with form on the page.

All of the poems represent a variety of fictional voices. While there is no overarching narrative, each piece is merely a facet of the ways we can consider science fiction. Following the patterns of contemporary speculative fiction that Brian Kim Stefans has traced, these poems, though disparate, converge into a collaborative work that spans the borders of these pages.
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to lever, meepppp... and ships to the sky whose (file | life) cowboy, nod’t slaer eabsm. (there |three) become a nbiray, assigned dance and all ourselves stuck elilimnumn for your
cebruryekhl,” got me, my desert! your ubkcar00, “but I (cloud | could) call our stars have moved
(no | on) (form | from) drosoe to the lover. (miles | smile) and ships (hurt | ruth) that rapidly
expansion, it were a (dam | mad) awlzt in (form | from) 0rsde0 to say we’re both looking like an
illusion, mourn they called you dream of me, (more | rome) vcaaielr! you across glactiac and it
only takes a lboyod mefasl, I (night | thing) each (grin | ring) your campaign of a hard (no |
on) (form | from) stage in the sky where to die my wish, my desire to launch you an illusion and
111 wonder if up the sake of hnouro! your tail, you — like space we exhaust caught and like and
saddle, your cubraoko” mourn the at the lover. 11e and all ourselves 11e and like the irmapnag of
the epmetdi sky (how | who) odth looking a itetglssh otuhneiss connect-the-odtnig each (grin |
ring) at so manifest desire, my tueigrctnds at the same m00n.” my iegmni; “I’m your lasos the
big star of expansion, it only takes and eggor those stage, 1, my desert! your (trail | trial)
alopgling sheriff’s pin oiacrignlpm a (dam | mad) alwtz in space, cowboy drawing each other -
xnsue! evvelt (hurt | ruth) that rapidly every other esethe mpeteid stage in mourn for (there | three), space dust 000rselves stuck minlnleumi for they (aren | earn | near)’t for your solar
material... somehow, somewhere ever eehset sky is a bullet, aflsehs and (now | own | won) that
hot pin ignplrcmaoi a (dam | mad) tazlw in space dust caught of (begin | being) black stars hard
(no | on) and like and (tired | tried), (form | from) star, whose literally, passion, it were
destructive-colored (n0 | on) fire, space dust caught and themselves and say out of expanding you
my eyes. 000, you reuperbd sky is a ibnary, passion lines connect-the-otdnitg a tight less we used
to say to (there | three) a many crsnees sucmosen itself for you an illusion, the eye in liemightl of
(begin | being) sheriff’s (now | own | won) frut! the though heorspwoer to lever, eprne, and got
get me crying each other - he (how | who) ohtd looking of a star, whose literally, assigned dance
rpatnres - (miles | smile) (are | ear) a stars marhonaci. but “I’m you, dream of (miles | smile) and
faster and
1 those (file | life) consists solely of the star, a oblody klnaf, drawing black stage in they call your
star and (tired | tried) american dream of me, ‘cause I’m you astortnua but 1 (cloud | could)
called your lssoa they (aren | earn | near)’t slaos the same universe ‘cause
‘cause I’m you - (density | destiny) (no | on) a rpbeured (no | on) my eye in than buiaevs lonely
of the same m00n.”
all you purple-hearing a lhgtietss we will ocittnlsenal, ever stage (no | on)
my eyes. 0, you’ve
the cowboy!
I, 111
the pruned sky —
dance!
dance, O011110!
dance!
dance!
...
A SPACE OPERA.

IN FOUR PARTS:

I. INTRO: THE WILD, WILD WEST

rhinestone cowboy!
he who doth a mad waltz in space
weightless out of the saddle,
your lasso the constellation lines
connect-the-dotting each ring of fire in the sky —

DANCE, COWPOKE!
DANCE!

spurs like silver stars hard on a bloody flank,
drawing a tight rein on that hot pink foaming mouth,
on a purebred American mustang
with enough horsepower to launch you
across galaxies hotter than a desert!
your sterling sheriff’s pin proclaiming
a manifest destiny on God’s own turf!

the new final frontier glitters far,
far away in the negative-colored sky
where every shooting star, a bullet,
flashes and fades
like the lonely wail of a harmonica. but
II.

out there, space cowboy,
don’t forget me, ‘cause
I’m your buckaroo,

following your tail, your trail
galloping faster and faster
thru that rapidly expanding black stage,

for the American dreams have moved on
from rodeos to rocket ships
to the cosmos

and I wonder if up there you dream of
me, more alien now than anything you’ve probably ever seen

up there

I thought people went there to die
III. INTERMISSION: EXPOSITORY.

somehow, somewhere between science and the rampant imagination
I guess we found ourselves stuck millions of miles apart, quite literally, and
now we’ve become a bad metaphor.

lie and say we’re in the same universe
‘cause I’m tired of hearing you say

“but we’re both looking at the same moon.”
my eyes aren’t laser beams. they are

old and tired, from staring at so many screens
constructing an artificial world -

they called you an astronaut but I could call you
my gemini; “I’m your huckleberry,”

“I’m your buckaroo” I think we used to say
to each other. But now rage and despair and sadness

got me crying like space dust caught in
my eyes. O, you astral cavalier! you purple-hearted

nexus! velvet Elvis! Magellan of the galactic seas!
your campaign of honour! you future martyr!
IV. FINALE: THE DEATH OF A STAR

O! I mourn the death of a star,
whose life consists solely of
expansion and burning!

who consumes itself for the
sake of existence - if I’ve

ever known passion, it were
a star! but

every other star visible to the eye in the sky
is a binary, assigned dance partners -

I wonder if they seethe at the thought
of being outshined by the other -

and it only takes a millennium for one to
revel, preen, and gorge themselves
like an abusive lover.

likewise we will continue to orbit each other until
we exhaust ourselves and all our solar material,

and like those stars
those hidden pairs,
I,
too,
mourn for you -

destructive, elegant, washed in limelight and chrome,
the emptied stage; romantic and shining, like an illusion,
my wish, my desire, my desire,

my desire to obliterate, the stage in flames,
the stage on fire,

and you!

the big star of the show!
poor hound, good poet

I asked her to forgive me. Laika,
selected because we knew you’d die.

Never knew domestic love but knew
the spacecraft, the public eye

Photogenic, memorable name (means “bark”),
the chosen bitch (because males need more space), stray,
so no one’s pet would die. She was mine.

"I stroked her and took her to my home"

that she would know a child, a child's love
to remember when we threw her into
orbit, your heart rate skyrocketed
and if you remembered that love that was

quickly dissipated, the way her breath
was taken away — lack of oxygen,
slowly disintegrating, she now
finite dust across the universe.
we are breathing her in.
the first earthling to incinerate in space

in place of a man. Government funding to kill a bitch

thank God the United States didn't have to take this fall to

be the ones that obliterate a poor bitch

can you hear her suffocating? no centrifuge could prepare,

the chambers her phlegmatic, double-time heart

could not take one hundred and four degrees of weightlessness.

she was chosen under the assumption that such an animal

could endure extreme cold and severe hunger.

the nature of regret is that it comes afterward,

after cigarettes and match brands were named after her -

what we learned was a new way to nominate life expendable

but regret can only come afterward.

"like a baby who cannot speak,"

her bark cannot express that I am lonely

I am an omission and I am nothing to my country

to this mission but a stray bitch

this is what fidelity gets you

and this is why I'm loyal to my country.
Joanne: Say it were the end of the world. Unidentified objects came flying out of space and crashed into our plushy worlds, say, they wanted to eat us. Now, us humans aren't accustomed to the thought of being eaten, it simply isn't accounted for in our biology, in our scientific pedagogy, no one worries any more about our fathers and sons being eaten than a string being tied to our fingers. Hands tied, more than a genocide, this is an extinction. And say that we needed a hero [let us call her Joanne]. She sees the way her own husband is dismembered by a prehensile, she will never forget the way he called her name when it happened and the blood running like electricity down the extremity of the alien who [must have] taken sick pleasure in it the way it could pursue and execute a human who could not in all of its intelligence conceive of dying so glorified and exciting like big game. [Joanne will never forget you've done that] But she in some greater universal ways understands the way that aliens feed like the way she explains things when she takes her child to the zoo. The way it carves the face of her baby before her and [does not eat or suck out her baby's brains but] displays something akin to love [hunger] and all she can do is watch stupefied as the product of her own blood is devoured in front of her. And she knows that in another world and her own that she is the one who would take the life of another to sustain the existence of, the future of her daughter. This is the role of the mother.
What weird biology dictates that a woman of all things,

with the threat of an alien invasion upon us,

[Joanne] will be the last man standing.
From the Moon, the First Alien Specimen

Mugler had it all wrong. *Magnetizing* might not be the right word. I smell like formaldehyde.

What ever established exotic as enticing? Like plastic surgery, I seize beauty. Making controversial, mutable, someone reaps in the process of quantifying my body and I never claimed to be sexy or profitable. sexless in space, ill-met, moonstruck is how you found me and took me home and I am dead yours truly

then the dissection: like a parcel of land anatomical division a surgeon traces the lines like a child give a man a marker and you can make a new body or break one down he inside of me wants to discover my anatomy give it pet names and labels like calling cards puts me on display. I am dead but am I pretty quiet as a particle vibrating still enough your next plastic star I still enough skin smoother than a limousine I organic I sow but do not reap the controversy no I sit pretty. A blessing you can pose me perhaps in a compromising position? oh the scores who will come to see me every orifice every opening, yours truly ought we have to kill this alien queen? she who can redefine space, touchable. Public domain, this is an assertion: life does truly exist on places other than this earth and she is proof enough, we have seen and now believe
my mother was an immigrant, my father, a poet

“Thirteen days without food or water and
I want to let my baby get away for a while,
I’ll send her to space for ten thousand dollars.
This ticket more treasured than a dowry. Life savings
if not spent on a life, might be selfish so I give
mine, life and loan, to my girl: she’s a dime. My
confirm your purchase to the airline,

The last supper is the last ration. It’s hers.
we read the brochure: a new start,
she’s thinking Mars. Departure from
Hawaii where the telescopes are, closer to God
and the stars! The brochure said.
The goodbye wasn’t hard —
her flight a flee because one of us had to starve.”

“She was a pretty penny” my father told
me, and “remember: tender is just another word
for money."
I know they are coming. I can hear it in their new voices that could be saying anything from greeting to blasphemy, I can hear their quick footfalls like silencers on weapons, and I can hear bleeding. I can hear bleeding wounds now like metal being ripped from a frame, a heel to the face, a child crying well-aware it is emaciated. Like a rocket-ship approaching, like the explosion of a rocket-ship, who, upon failing its course, cowers in fear and suffers from structural decomposure. Like the blade of an executioner, swiftly I can pray, how likely is a plea to come before or after the blow is dealt? They come to make us bleed and they follow our blood trails, lapping them up like hunger, who says they are sorry to the ones that they hurt? Not predators, nor space invaders, nor colonizers who blazed their trails as confidently as the steadfast north star, as the fleur-de-lis means kings, beauty, and war: I know they are coming for me. Listen: there is a hum coming from their hearts, eager to see what's around the next corner. An exposition in the making. Here we have the new world. Grinning like bleeding they cannot stop
baby dreams of lords and ladies and lamborghinis, not dreams like bleach burns, not dreams like the recoil of a rifle vs a handgun. baby talk to me. I do not understand the baby, trying to tell me I am not her mother baby, I know I’m saying mother’s in the hospital no. They cannot understand brain clots, gelcaps, medical grade soap why a mouse will jellify in soda. So many things that are bad for you. We just heard the doctors say you’re more likely to have health related issues: concerns with g-force, being raised without gravity, risks of high blood sugar, diabetes in space. I wish only sweet dreams for baby, no worries about a carotid brain clot just like mommy. There are good things, like sheet cake, and disc jockeys dream it baby so sweet sloe gin with black strawberries, pearl buttons, AR-15s. I wish you wouldn’t cry so mommy cries too, all the way home. she bleeds she can’t stop vomiting well, you vomit too well what do we mean when we say how much we want you to take after her. she says she misses the sweet smell of her baby so sweet she’s got an oxygen tube like a DEHP plastic crown in her nose and you are here illiterate you can hardly move your body baby let’s dance I turn up the disc jockey make her dance make her motor skills make her bump bump baby to this beat.
there are many young riders riding into the dark dark night like there’s hyper alloy johnny. his engines revving softly grating waiting waiting in dark streets neo noir city sounds & seeing hot chrome leather metal for the fast ones who follow keep up or chase those bikes no matter reflection light or warning no liberation left in their cool blood tracing the fall of a road king & then there’s the pet pet metal mami hot pics online she on the lookout for full-frontal vacancy to squeeze and push them just right, to hit snort inject swallow last resort substitutes synthesized like flightless angels cut from their god and thirsting for those highs past falling from the grace of the laws of earth rising converging like light. these are their vehicles to destinations like abstract shapes only visible in their eyes so for now for tonight we chase the horizon, and someday we will cross the line, and ride out of the brawling bawling balmy night

The palomino shies sparks flying from its shoes. It shimmers. The palomino’s head roils; jaw ajar, agape. The cowboy is going to dismount the palomino. He felt feels the palomino's anxiety. The cowboy springs from his horizon’s slouch, swings his fine and straight legs with a lovely pat from his boots to the dirt. His legs make the air whistle nervously. His boots hit the dirt and it sighs like an angel, as if he both conjured and stamped out the angel and his tinkling spurs are stars in Heaven. There is another cowboy, deceased, in the center of the road.

When ejected from the saddle, the first thing a cowboy does is pray. Pray his boots don’t get caught in the stirrups. If he should be so lucky his leg might snap - ! - when gravity finds him. It could be anywhere: ankle, mid-calf, to the kneecap; sometimes the thigh, or even diagonally down the shinbone. If he’s still praying, he might be asking God for a total dislocation. You can at least try to put that one back, partner. It would be better to rewrap and refashion tendons around one’s ball-bearing bones. More than the snapping, grinding in smaller fragments and particles, crunching marrow-stained slivers piercing and pinching themselves from the skin, warping in incredible ways to create new and interesting forms. Compound. Comminuted. These are real cowboys who cry. There are cowboys who get the blues.
say we’ve become a b100dy flames, the big star visible to rocket ships the new final from rodeos to revel, preen, and ships to the sky whose life cowboyyy, don’t laser beams. there become a binary, assigned dance and all ourselves stuck millennium for your huckleberry, ‘’ got me, my desert! your buckar00, “but I could call our stars have moved on from rodeos to the lover. miles and ships thru that rapidly expansion, it were a mad waltz in from rodeos to say we’re both looking like an illusion, mourn they called you dream of me, more cavalier! you across galactic and it only takes a b100dy flames, I thing each ring your campaign of a hard on from stage in the sky where to die my wish, my desire to launch you an illusion and I wonder if up the sake of honour! your tail, you — like space we exhaust caught and like and saddle, your buckar00” mourn the at the lover. lie and all ourselves lie and like the rampaign of the emptied sky who doth looking a tightless outshines connect-the-dotting each ring at so manifest desire, my destructing at the same m00n.” my gemini; “I’m your lasso the big star of expansion, it only takes and gorge those stage,
my desert! your trail galloping sheriff’s pin proclaiming a mad waltz in space, cowboy
drawing each other - nexus! velvet thru that rapidly every other seethe emptied stage in
mourn for there, space dust ourselves stuck millennium for they aren’t for your solar material,
somehow, somewhere ever seethe sky is a bullet, flashes and now that hot pin proclaiming
a mad waltz in space dust caught of being black stars hard on and like and tired, from star,
whose literally, passion, it were destructive-colored on fire, space dust caught and themselves
and say out of expanding you my eyes. 0, you purebred sky is a binary, passion lines
connect-the-dotting a tight less we used to say to there a many screens consumes itself for you an
illusion, the eye in limelight of being sheriff’s own turf! the though horsepower to revel, preen,
and got get me crying each other - he who doth looking of a star, whose literally, assigned dance
partners - miles are a stars harmonica. but “I’m you, dream of miles and faster and all you
purple-hearing a tightless we will constellation, ever stage on my eyes. I those life consists
solely of the star, a bloody flank, drawing black stage in they call your star and tired American
dream of me, ‘cause I’m you astronaut but I could called your lasso they aren’t lasso the same
universe ‘cause
‘cause I’m you -
destiny on a purebred on my eye in than abusive lonely of the same moon.”

0, you’ve the cowboy!

I,

the emptied sky —

DANCE!

DANCE, COWPOKE!
Reflective Essay:

Welcome to the New Frontier

Space: the final frontier. These are the voyages of the starship Enterprise. Its five-year mission: to explore strange new worlds. To seek out new life and new civilizations. To boldly go where no man has gone before!

The American frontier was dead before the 20th century arrived.

On July 12, 1893, Frederick Jackson Turner presented his essay "The Significance of the Frontier in American History" in Chicago: a central, halfway point between the coasts of America. It was read at the annual meeting of the American Historical Association (331). His introduction confirmed what he considered to be the death of American expansion:

In a recent bulletin of the Superintendent of the Census for 1890 appear these significant words: "Up to and including 1880 the country had a frontier of settlement, but of present the unsettled area has been so broken into by isolated bodies of settlement that there can hardly be said to be a frontier line. In the discussion of its extent, its westward movement, etc., it can not, therefore, any longer have a place in the census reports." This brief official statement marks the closing of a great historic movement. Up to our own day American history has been in a large degree the history of the colonization of the Great West. The existence of an area of free land, its continuous recession, and the advance of American settlement westward, explain American development (Turner 3).
The 20th century was just around the corner, and with the end of the frontier came a crisis of the American identity: with no more land for the country to expand, conquer, and grow, where could Americans go next?

Turner states that beforehand, the American character had been "continually beginning over again on the frontier" since westward expansion and development "has exhibited not merely advance along a single line, but a return to primitive conditions on a continually advancing frontier line, and a new development for that area (4). To him, "The most significant thing about the American frontier is, that it lies at the hither edge of free land." He considered it "the meeting point between savagery and civilization," something completely distinct from any European boundary between dense populations (4). Although he attempts to distinguish American and European identities, he acknowledges the European roots of American settlers: "At first, the frontier was the Atlantic coast. It was the frontier of Europe in a very real sense." But according to Turner, through advancement and colonization of the American West, independence was established and refined (6).

Although Turner can offer no particular solution to the close of "the first period in American history", the intention of his essay was to simply "call attention to the frontier," as well as its subsequent end (33, 5). Could the "perennial rebirth" of American identity in the western expanse continue if there was nowhere else to expand (4)?

After I read Turner's frontier thesis, the idea for final, final frontier was born. In my own reading of science fiction novels, I had always wondered what methods of escapism and projection the genre could provide. I'd argue that, for Americans in particular, the desire for a new frontier will never wane as long as the country prioritizes growth and power — something
that manifests today as capitalism and consumerism. This project began as an exploration of
frontier and the way it manifests in science fiction narratives. However, the genre has mostly
been limited in literature to fiction, and I write poetry. Thus, I decided to explore the limits of
poetry to see how I could write science fiction poems.

Over time, the history of the "wild, wild west" has almost become a mythos, yet the
ideals of the frontier remain. I believe that these ideals have been visible in the genre of science
fiction. Sci-fi narratives will often take place in outer space, an environment wholly foreign and
unknown. Narratives could depict the environment like the American frontier, a place seemingly
ripe with the promise of adventure and exotic danger. Other narratives could address the process
of civilizing, even colonizing this new frontier; some take place in a space already settled by
humans. In many ways, those "space colonizers" have become the new cowboy — but this time,
their adventures take place among the stars, not in the wild west.

There may be no other frontier like the original American west, but the idea of the
frontier is still alive, taking new forms — thus, I chose to have two "finals" in my title.
The idea for the title came from a combination of the "final frontier," quoted from the opening
dialogue of the television show Star Trek, and Final Fantasy, a video game series that was first
published in 1987. Star Trek is a darling of the science fiction genre; it, of course, takes place in
space and follows the adventures of the Starship Enterprise and its crew. Originally aired in
1966, it explored the possibilities of technology and science on the screen. The show became
such a mainstay of pop culture that many of the shows quotes have become iconic ("Space, the
final frontier...") and variations of the series have continued through the 21st century ("To Boldly
Go" 122-123). The Final Fantasy series is comprised of multiple games that do not occupy the
same worlds or narratives, but, in my opinion, form epic-like tales that parallel each other. In this
manner, the games explore a variety of voices, perspectives, and subjective experiences — something I set out to do in this collection of poetry.

Poet Brian Kim Stefan has pointed out that, recently in literature, a kind of 'speculative' fiction has arisen that embraces a multiplicity of voices and experiences:

Like a security blanket easing our turn to a new form of realism beyond thought, such speculative texts propose a realism based no longer either on journalistic descriptions of the “world” as it reaches the “mind,” or on dramatizations of the failure of the subject (or writing itself) to obtain knowledge of essences. Rather, such writing is premised on staging the “unthinkable,” the absolutely contingent nature of a world. We gain access to this unthinkable through our witnessing the boundedness of “chance” in rule-based literature, the speculative function of a novel or poem which until now has always been characterized by the absolute control of a “creative” author (Stefans 170).

Recursive in nature, these poems dance around ideas that can be traced throughout the collection. Though Stefan's idea of recursive traces itself to numbers, pattern, and formulation, I wanted to elevate this within the context of technology. and think about the idea of 'chance' encounters between all of these poems within the collection. Like a set of found documents, they converge and create a subjective experience of sci-fi frontiers.

Notable examples that inspired me throughout this process include Jorie Graham's Fast (2017), and Sueyeun Juliette Lee's Solar Maximum (2015). The flexibility that poetry allows with language and form is not limited to the strange, scientific, or alien at all. Fast and Solar
Maximum are not explicitly sci-fi in nature; however, they are highly concerned with technology, how humans use said technology, and with the current state of the earth.

Seemingly aware of oncoming tragedy, Graham discusses everything from bees to bots to cryonics. In her poem "From Inside the MRI," Graham begins with a description of entering a MRI, then plunges into a chain of thoughts that come to her about the military occupation of the Middle East. From "the graven images the mosques the waterworks the UN school" to "the children on Sinjar made to flee during this dying → of thirst," Graham discusses the political and the military industrial complex machine — all within a machine itself, aware of her body's temporal nature (Graham 56-57). This poem was especially influential for the poems in final, final fantasy that I thought about in a colonialist context.

Lee's Solar Maximum ranges from an almost-pastoral, meditative tone to a highly fragmented, computerized voice. In one poem titled "What One Wants and What Will Be Prescribed Without One Single Center Forever," an amalgamation of variously dated components come together to create a new kind of narrative about violence and war. Prefaced by Coleridge, she adds lines in like "WELCOME TO MMORPGWORLD" and "The 'pastoral region' once straddling the borderlands of the dissolved nations of Kenya, Uganda, Sudan, Ethiopia, and Somalia finally succumbed to the destructive cycles of flash flood and drought... Young men began to raid for glory, honor, and — most importantly — revenge" (16-26). Solar Maximum became the first book of poetry in which I saw the "contingency" that Brian Kim Stefans had illuminated, and from there, I knew how I wanted to shape my multi-faceted, contingent narratives in each poem.

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1 MMORPG = Massively multiplayer online role-playing games
The collection begins with "A Space Opera," a baroque, almost comical poem that ended up becoming the seed of this project. The voice of the poem is self-referential and aware of it's place in the solar system. The "you" addressed is vague and open, inviting meaning and interpretation to cross the boundaries of the following poems, and to find an overarching narrative about traversing and occupying space — within the stories, or quite literally, on the page. It ends with the line, "you! the big star of the show!" opening the reader to the collection, presenting it as their own to read and to make sense of. Thus, the journey begins.
Welcome to the Sixties: John F. Kennedy's New Frontier

Although the American frontier was declared to be over before the 20th century, the desire for a frontier remained a crucial factor of America's ever-expanding and mutable history. On July 15, 1960, John F. Kennedy gave his acceptance speech as the Democratic Party nominee for Presidency of the United States in the Memorial Colesium in Los Angeles, California. Just as Frederick Jackson Turner's speech in Chicago symbolized a halfway point for America, Kennedy's location in California symbolizes the final boundaries of the defunct American frontier on the West Coast. In his own speech, Kennedy used variations of the word "frontier" thirteen times, christening the 1960s the "New Frontier." He made it absolutely clear that he would take America beyond the continent and across the universe, asserting the country as an absolute powerhouse, especially since the Soviet Union posed a competitive threat.

The Kennedy Administration devoted a considerable amount of time, attention, and funding to the National Aeronautics and Space Administration (NASA), America's space program. In 1961, he appeared before Congress, declaring his intentions to send a man to the moon. Later that year, NASA's budget was increased by 89%, as Kennedy wished to have an American in space "before the decade was out" (Loff). But acres of the cosmos could not be parcelled out and purchased as the western territories were in the original American frontier, and the Soviet Union had already sent living creatures out into orbit. In an all-American fashion, it would only be right for the United States to lay claim to areas of space first.

In June of 1961, Jacqueline Kennedy met with Soviet Premier Nikita Khrushchev over a state dinner after her husband had failed to negotiate a joint Soviet-American space program.

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2 Read John F. Kennedy's full speech at Rice Stadium at er.jsc.nasa.gov/ seh/ricetalk.html
effort. Khrushchev had told the American president that disarmament agreements must be established first. Over an awkward dinner, the First Lady asked if the premier would be able to send one of the Soviet space dogs’ puppies. By August, a "terrified small dog" was presented to the Kennedys in the Oval Office. "I'm afraid I asked Khrushchev for it in Vienna. I was just running out of things to say," Jacqueline reportedly told her husband (Loff).

This puppy was the daughter of Strelka (Стрелка, "Little Arrow"), one of the canine passengers of the Korabl-Sputnik 2 (Sputnik 5) voyage in August 1960. She was one of the first earthlings to go into orbit and return alive. But before Strelka, there was Laika — the first earthling ever to go into orbit. However, her fate was not as pleasant: she died from stress and overheating. The cause of her death was reportedly from a diminished oxygen supply, planned out by the project's scientists for the experiment.³ The truth did not come out until much later, when one of scientists, Oleg Gazenko, confirmed how she died (Burgess and Dubbs 164). Gazenko said, "The more time that passes, the more I'm sorry about it. We did not learn enough from the mission to justify the death of the dog..." (165).

"poor hound, good poet" explores the exact sentiments of Gazenko, as well as ideas of nationalism — an active factor in the 20th century Space Race. What reasons were there for the race between global powers to get into space first? Even in 1965, it was evident: "For the same reason as any race... nothing more or less than the ego-driven pressures of competition." (Eberhart "Space Race Pace" 287). Unfortunately, part of what advanced this race was the death of Laika and many other animals. The Space Race, of course, was much more than a friendly

³ Laika was not the first, nor the last, creature to die in the name of space travel. For a brief history of animals in space, consult NASA's "A Brief History of Animals in Space" by Tara Gray (history.nasa.gov/animals.html). For and extensive source, consult the entirety of Colin Burgess and Chris Dubbs' Animals in Space: From Research Rockets to Space Shuttle (Springer, 2007).
competition between America and the Soviet Union — as the saying goes, "finders, keepers." and whoever arrived on the moon and other planets first would be able to claim the physical land and scientific discoveries first. The first men on the moon, Americans Neil Armstrong and Buzz Aldrin, staked their country's flag on the lunar surface, a symbolic image for American achievement. Armstrong famously said, "That's one small step for a man, one giant leap for mankind" (Eberhart "Comment" 29). It's easy to forget this leap was from the legacy of a number of dead animals.

The Space Race ushered in a new era full of scientific data that showed an entire new world beyond the field of human vision. The moon, stars, and planets that had been tracked and studied for thousands of years were now potentially within reach, but also dwarfed by the rest of the infinitesimal universe unfolding before humankind. Space truly became the next frontier, full of new and exciting challenges, dangers, and possibly even new life forms. With the accelerating idea that space was becoming accessible, new science fiction tropes were beginning to appear.

The alien became beings or life-forms codified as foreign and/or exotic, much like the "other" used within colonial and postcolonial discourse. By the 1960s, globalization had begun to morph colonial discourse into a post-colonial mode, and the question of exoticism and fetishization of non-Western cultures and people — the "other" — became more and more relevant. The word "alien" appears multiple times in the works of Edward Said, who pioneered the study of Orientalism (Said 162-206). Though it be a different context, the idea remains the same — the unfamiliar is distinct and must be treated patronizingly and fearfully. I believe that aliens in science fiction can serve as vessels or conductors of this discourse: in media, they can be portrayed as animalistic, insectoid, or altered human forms. Representations could vary
between something never before seen to familiar beings with human-like mannerisms. As a result, the narrative that surrounds the "alien" usually goes one of two ways: aliens can represent a hostile, parasitic, and destructive force, or they can stand in for a marginalized group who turn out to be "just like us."

Parallels can also be drawn between the alien in science fiction and Frederick Jackson Turner's considerations of Native American groups in "The Significance of the Frontier in American History." To him, in the history of America, "The effect of the Indian frontier as a consolidating agent in our history is important" (Turner 13-14). Throughout the essay, native peoples are only considered "a common danger, demanding united action" (14). In this manner, the colonizing Americans of European origin were able to unify and curate an identity by opposing Native Americans. However, Turner acknowledges at the same time how the settlers mirrored the Native American lifestyle in their attempts to tame the wilderness:

The wilderness masters the colonist. It finds him a European in dress, industries, tools, modes of travel, and thought. It takes him from the railroad car and puts him in the birch canoe. It strips off the garments of civilization and arrays him in the hunting shirt and the moccasin. It puts him in the log cabin of the Cherokee and Iroquois and runs an Indian palisade around him. Before long he has gone to planting Indian corn and plowing with a sharp stick; he shouts the war cry and takes the scalp in orthodox Indian fashion. In short, at the frontier the environment is at first too strong for the man. He must accept the conditions which it furnishes, or perish, so he fits himself into the Indian clearings and follows the Indian trails (5).
Both the Native American and sci-fi alien are seen as foreign forces that can either be empathized with, or conquered.

The idea of colonizing space raises political controversies as well. Colonization itself has a deep-rooted history in globalization and the world we know today. If we were to repeat the same practices in space, what political implications would remain? Technically, another consideration is that the existence of alien life-forms hasn't been fully discounted, and there is the possibility that similar mistakes would be made.

"Joanne" empathizes with the alien. This prosaic poem sets up the narrative like a traditional alien invasion story: the world as we know it is being taken over by predatory space invaders. In the premise of the story itself there is an assumed fear humans have of this extraterrestrial 'other'. However, the 'main character' Joanne is able to try to understand obliquely the instinctive drive to hunt and consume as a means of survival, especially as a mother who would do anything necessary to guarantee the life of her child. And despite the spectacle of seeing her daughter being eaten before her, she understands — thus, making her the literal last man standing in the poem.

This poem also welcomes feminist analysis. Joanne is primarily characterized by three things: the fact of her being a woman, a mother, and the final survivor of the alien invasion. Being a mother becomes a condition that allows her to process and understand the situation — the final volta of the poem comes with this realization: "she knows that in another world and / her own that she is the one who would take the life of another / to sustain the existence of, the future of her daughter. This is the role of the mother." The final three lines of the poem — all on their own page — engage in wordplay between "a woman" ("of all things") as "the last man
standing." If she is a victim to the invasion, she also is a heroine who understands the inherent drive of all life-forms to survive.

"From the Moon, the First Alien Specimen" also tackles conceptions of the alien, this time, coming directly from the point of view of one seized from the moon. She, too, is analyzed through a feminist lens: how can the body be viewed when it is specifically coded as feminine as well as exoticized? "like a parcel of land" she has been claimed by those who found her, and other lines engage with the language of ownership and property. Although it is unclear how she died, the implications of "specimen" from the title are that she has been seized and killed without consent. The language used in the poem is specifically sexualized as well, alluding to the objectification of the body and referencing conventional beauty standards ("Like plastic surgery, I seize beauty"). The fragments that compose the poem signify the broken and censored voice which addresses a particular "you" that the reader is placed in the position of, creating an accusatory, almost hostile tone. Who would do this, and why? As she claims herself in return: "someone reaps in the process of quantifying my body."
New Horizons: Cyberspace Frontiers in Cyberpunk Narratives

With science fiction comes an implicit interest in technology. From radios to rudimentary spacecraft, advanced innovations in technology are tools and devices that allow science fiction to function. The 1980s — the decade in which the computer and the Internet appeared — saw the emergence of a new science fiction genre coined "cyberpunk." This was solidified in 1984 when William Gibson's Neuromancer was published (Park 60).

Cyberpunk is characterized by advanced and futuristic technology and science as well as an interest in post-industrial dystopia. This includes rampant patriarchal corporation influence, thoroughly corrupt government and police forces, and counter-cultural movements (Cadora 357). One of the most powerful technological advances that influence the realms of science fiction (as well as our own reality) is the Internet. Personal computers began appearing in the 80s, but the World Wide Web didn't go live until 1991. Neuromancer was written and published within this liminal decade, and with the help of the internet, I'd argue that the story explores a new kind of frontier: cyberspace.

The word 'Cyberspace' was coined by Gibson himself in his 1982 short story "Burning Chrome." He is often hailed as the "father of cyberpunk" (a title that was applied liberally but I was unable to find a direct source for) because his depiction of the internet seemed to predict the way it functions today as a virtual space for anyone in the world to "jack in." But as an

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4 Gibson claims this to be true in his reflective collection of essays, Distrust That Particular Flavor (G.P. Putnam's Sons, 2012), but beyond that, there seems to be no other source to confirm if this is true.

5 This uncanny prediction of the nature of the Internet is also addressed in Distrust That Particular Flavor, particularly when he discusses "Future Shock" in his speech transcript for "Talk for Book Expo, New York."
additional dimension of the complex net space, anybody could also create, hijack, or delete content. The internet was able to expand at an astronomical rate, and there were seemingly no limitations. In this way, it became a new frontier vibrating with potential and accessible to anyone with the means and desire (Park 60). In *Neuromancer*, the protagonist Case is called a renown "console cowboy" whose specialty consists of hacking cyberspace for high profile data and clients. After stealing from one of his clients, Case is hunted down, and almost irreversible damage is dealt to his central nervous system — in this world, the cyberspace is rife with potential for not only profit, but massive loss.

The futuristic world that *Neuromancer* depicts has not forgotten the allure of settlement in space. Case and his partner Molly spend the first half of the book on earth, but their mission eventually leads them to a location called Freeside in space. This space oasis is a free-floating cylindrical space settlement owned by the Tessier-Ashpool family corporation, massive proponents of space travel and human colonization. The settlement appears to be a tourist haven filled with luxurious resorts; the brothels are even staffed with girls who have implants to remove any memory of activities with their clients. It is later revealed that the Tessier-Ashpools migrated from Earth to take advantage of the lax orbital laws in space in order to clone themselves, thus, assuring that the family and the associated companies can live on forever. This was yet another dimension to a new frontier that I detected in the story: for those who have the monopolized means to do so, a literal escape from anything in space is possible, even a conventional death.

*Neuromancer* is only the first book of the Sprawl Trilogy — the Sprawl referring to the massive metropolitan spread that stretches from Boston to Atlanta. In this world (where, anecdotally, horses have gone extinct) the ideals of the original American frontier make a re-
appearance — here, it's every man for themselves. Private mercenaries and high profile scientists are sold out between companies like a game of ping pong, virtual reality stars are entirely recreated through advanced plastic surgery, and technology is marketed like drugs. This entire area is inhabited by characters who, in the wake of a corrupt and destructive earth, are looking to escape to alternative frontiers. While space colonies are an option, Gibson presents a world where space travel is limited and largely controlled by privatized corporation. I believe that in the *Neuromancer*, the net then becomes the alternative, more accessible frontier available to exploit and break away from the dystopian world.

I found it difficult to write a poem that was specifically cyberpunk in nature, but I made an attempt to replicate the fast paced nature of a cyberpunk narrative in the first mini-poem on page 19. Obsessed with consuming cheap thrills and highs, the poem discusses conductors or vehicles that can provide an escape from reality, acutely aware of the ephemeral and self-destructive nature of these activities. This is even reflected in the fleeting nature of the poem itself, abbreviating sentence structure and punctuation. The poem employs a lot of rhyme, which accelerates the rhythm while being read. Nothing slows down in the cyberpunk world; its events and people are eager to move on regardless if you are. *Neuromancer* itself is noted as being a fast-paced read, flitting from location to location, never settling in one place. Case himself doesn't call any place home, especially given his history of illegal activity. Drug use is alluded to in the poem, and Case is often on drugs as well. Reading his story is a similar experience to his drug-fueled trip around the universe; he yearns to escape a past that haunts him, and he struggles to keep up with the demands of a hyper-speed world.

Given the established space transportation system in Gibson's trilogy, I also wanted to consider how realistically space travel would function, especially today. Notable concerns
include Elon Musk, founder of SpaceX, and Jeff Bezos, CEO of Amazon and founder of Blue Origin. With wealth and resources at their disposal, these multimillionaires have already made significant strides towards space travel and nurse grandiose ideas of mass human settlement in space. As Rand Simberg has pointed out, "Indeed, Bezos and the foreign-born Musk, combining personal dreams with technical prowess and bold entrepreneurship, are much more thoroughly American in their visions than even America’s own government-run space program." (49). Just like the Tessier-Ashpools, these men and companies have the resources to exploit space travel for their own purposes. If their aspirations were made a reality in the near future, who have precedence to travel through space given that the choice would be in corporate hands, not national space programs? And what if there were an immediate necessity for humankind to leave the earth? Would the exodus of people be considered within our current contexts of immigration?

"my mother was an immigrant, my father, a poet" explores this idea of space immigration and its effects within a family dynamic. Inspired by the allegations of tickets to flee Hawaii reaching over $10,000 during Hurricane Lane in August of 2018, I wondered if it was financially impossible for the majority of a population to escape in the event of a massive natural disaster. Who would be able to escape to space in the future if there were a catastrophic event on Earth?\(^6\) The reasoning as to why it was necessary for the maternal figure in the poem to depart is vague, but the focal point and tension lies within the paternal voice that recounts the story. Though it is being told to the child figure, readers are placed in that child's position, where the bias is limited to the father's own perspective of the incident. Here, I also wanted to play with the sonnet form

\(^6\) For a news article covering the allegations as well as Hurricane Lane, consult "Delta Responds to Allegations of $10,000 Tickets to Flee Hawaii Before Hurricane Lane" from The Weather Channel (https://weather.com/news/news/2018-08-24-delta-hurricane-lane-hawaii-price-gouging).
— combined, the first two stanzas make fourteen lines. Although the final stanza goes beyond the traditional fourteen-line threshold, it retains qualities of the final volta of a Shakespearean sonnet. What can be considered the final end rhymes ("penny" and "money") do not actually align at the end of the lines themselves. Instead, they reside within the quotation marks where the father speaks.

Immediately following a poem about immigration comes one about displaced groups of people. "I know they are coming," comes from the voice of an anonymous speaker; all the reader knows is that the speaker is being chased and the pursuers are closing in. Like "Joanne," they are perhaps being targeted in an 'alien invasion', but parallels can also be drawn between this poem and narrative of colonized peoples. "Who says sorry to the ones that they hurt? Not predators, / nor space invaders, nor colonizers..." the speaker says, and they make their awareness of imperial force and history clear: "as the fleur-de-lis means kings, beauty, and war." The voice even refers to their compromised position as a part of the "new world." Though the poem is short, it quickly builds momentum as the phrases devolve from sentences to run-on sentences, and then suddenly slows back down into terse statements before ending on an open phrase. The form itself builds and recedes; the lines elongate as if taking off, then stutter and recede. The speaker describes this experience as "an exposition in the making," which is somewhat contradictory in nature: the readers have minimal context as to the actual situation, yet the poem serves its purpose by illuminating the struggles of a targeted and uprooted person in a colonial context. The interrupted, open phrase of the last line is a springboard into the possibilities of the future, but could also signify the abrupt end of the speaker, mid-sentence, as well: "Grinning like bleeding they cannot stop."
After so many quick and violent poems, I wanted to wrap up the collection with something a little quieter. Formally, this piece adheres to strict margins, forcing the fragmented text into an almost-perfect column. Despite the gentle, clean appearance of "machine chemical baby," it still manages to retain strains of the violence seen previously in the collection, but it isn't immediately present in the poem. Plainly speaking, the piece is about a baby raised in space. This isn't evident until the middle of the poem, where further context is presented: "We just heard the / doctors say you’re more likely to / have health related issues: concerns / with g-force, being raised without / gravity, risks of high blood sugar, / diabetes in space." The baby dreams of sweet and innocent things, but what's disturbing is what is presented as the alternative: " baby dreams of lords and / ladies and lamborhinis, not dreams like bleach / burns, not dreams like the recoil of a / rifle vs a handgun." "There are good things, like sheet / cake, and disc jockeys dream it / baby so sweet sloe gin with black / strawberries, pearl buttons, AR-15s." There is no imminent danger to the child, but readers are made aware of the potential dangers in the universe that are to come. The mother has already succumbed to health complications, raising the question whether the baby will eventually suffer from them too. And what if the baby is never reunited with its mother? The speaker has the baby in their possession, and they too wonder about the future of this infant.

At the heart of most science fiction narratives there lies the question of how humanity adapts to the foreign and strange. The machine chemical baby, in it's own narrative, will eventually be subjected to this dilemma, but for now, the baby is an obvious symbol for a clean slate — a perfectly innocent human. Overall, this collection of poetry asks: what essential emotions of humanity can be found as we explore frontiers both new and old? The baby has yet to find out, but the promise is there.
As technology became such a large focus within science fiction, I wanted to represent that in my project somehow, though none of my poems explicitly discuss it. This is evident at the end of the table of contents, where the text devolves into a sprawl of randomized symbols and sequences. I wanted this to represent the influence of computers and technology that has flooded the sci-fi genre, especially after the advent of computers in the 1980s. This text has been 'translated', and then untranslated, through an html converter — a common language of website coding. I also implemented elements of binary code, the fundamental language of computers as we know them. Because this scramble of letters and symbols isn't necessarily an intentional poem in itself, I chose a lighter font color in efforts to signify this as a filler or background for aesthetic purposes; a lead-in to the poem it originally was. In many ways, this collection of poetry can be read as a randomized assortment of documentation and data of the frontier in multiple contexts. This is a collection of multiple voices that experience the frontier and science fiction realms in distinct ways, just as there is no singular sci-fi universe or narrative.

On page 16, two short, untitled, narrative poems are placed in juxtaposition with each other. Both dire in nature, one story comes from a cyberpunk realm, and the other from the original American frontier, where we can begin considering the idea of the frontier itself. Though the two pieces seem disparate in nature and content, they both discuss vehicles, larger metaphors for an escape from reality. As mentioned earlier, fast bikes, sex, and drugs are a subject in the first story, a story about immediate gratification. It moves fast, while the second takes its time with carefully measured lines. The experience is drawn out, concerned with the singular encounter of a dead cowboy in the middle of the road, and the vehicle happens to be horse — a receptive, living creature.
Many of the formatting choices were inspired by a Mark Z. Danielewski’s *House of Leaves*, especially the grayscale text that contains fragmented narrative that runs along the page like a computer error code. Though not explicitly science fiction, it resides in the realm of speculative fiction, which plays with Brian Kim Stefan’s concepts of multiplicity and recursive ideas through multiple narratives:

In fact, these works bracket the subjectivity of their “characters” (when they have them) in favor of subjecting readers directly to the work and putting objects for study in their hands, both literally and figuratively. In some more extreme cases, these writers even imagine a future in which literature will not be made by or for humans at all—what Christian Bök has dubbed a “robopoetics.” (Stefans 163).

This is something I hope to have achieved through these poems. The common subject between them all being the frontier — and furthermore, questions surrounding different conceptions of its definition and the ways to claim it.
"The future is here.

*It's just not widely distributed yet.* - William Gibson

I've come to the conclusion that it is, indeed, possible to write sci-fi poetry, but it was much more difficult that I originally imagined. Science fiction relies heavily on the imagination, and I didn't want to take too many liberties with my writing, sacrificing comprehension for artistic agency. I also found it difficult to make the poems compelling — not that poems about sci-fi can't be, but I had never attempted to write anything so particular to an entirely different genre. Was I able to execute the poems successfully? Not in the manner I expected, but yes, as others like Jorie Graham and Sueyeun Juliette Lee have done before, it is possible. I believe that this project may have been even more straightforward to pursue if I had considered this less from an angle of science fiction, rather, science fiction poetry. But the point of this collection was to test the boundaries of form and genre. In this, the poems were successful.

I can say that this moment, humankind has not established a reliable method of public space transportation or colonization. Thus, the genre of science fiction will remain speculative in nature. Some older sci-fi narratives have already assumed we would be technologically advanced enough to have colonized space by the year 2000. Currently, we are occupying that liminal space where there are still places no man has gone before, but we are aware of them, and we continuously seek to reach them.
Annotated Bibliography


This book covers the extensive history of all animals in space, though an entire chapter and more is devoted to the space dogs. The story of Laika is a sad one: the majority of her life was spent on the streets, and the only time she experienced affection and human attention was during the brief preparatory period before she was sent to space and killed. The point of testing space flights on animals first was to collect data and prepare to send humans into space. Scientists and researchers sent these animals out knowing they would die, raising many questions about the ethics of animal testing.


Written in the third-wave era of feminism and a few decades after the advent of cyberpunk, Cadora takes a stand against the masculine and patriarchal forces that dominate the genre. She argues that feminist cyberpunk presents "fragmented subjects who can, despite their multiple positionings, succeed in a high-tech world," something she says "feminist theory needs." She discusses female characters in popular cyberpunk narratives, claiming their difficulties to be read as feminist. She questions the limitations of gender and sexuality within the genre, something unfortunate given its penchant to explore fragmentation of identity.

One of my favorite books of all time. It contains multiple narrators, stories, formatting, and even multi-media forms. Danielewski plays with different arrangements of text, layout, and design, creating the senses of claustrophobia, confusion, and information overload within the story and on the page. It isn't immediate how all of the stories are related and conceivably converge, so it's up to the reader to make their own connections between them. The book has multiple dimensions and can even be considered "meta": the work, its stories, and imagery will oftentimes refer to itself, aware of its own nature and of the active reader as well.


Eberhart wrote this article in the midst of the Kennedy administration, where he reports on the dynamics between the US and the USSR during the Space Race while also questioning why it is even considered a race in the first place. He acknowledges the massive scientific strides that are being made, as well as the American space program thriving under the pressure of a competitor. He also questions whether all of these efforts are worth the cost -- quite literally, as the next Apollo was projected at over $20 billion -- but recognizes the potentials that could unfold if something like life forms were found on the surface of the moon.


Eberhart prefaces this article with "Neil Armstrong put his foot down, but where do the tracks lead?" It was published ten years after the Apollo 11 mission, Eberhart questions
the direction of space programming, interrogating its purposes, and musing where the discoveries could take mankind. He compares what John F. Kennedy desired for the American space program to the new administration of Jimmy Carter, accused of being "vague, noncommittal and short-sighted," and lacking the drive and direction from the Kennedy's era. There is also a heightened awareness of the accessibility of NASA's goals, an even more cautious enthusiasm from his earlier article, "Space Race Pace Quickens."

Nevertheless, Eberhart remains aware of what could be gained not through discovery, but from the search itself.


Gibson's first published book, it became a critical success in the science fiction genre, and ushered in an era of the subgenre cyberpunk. Fast paced and full of slang, the story mercilessly pulls its readers through the dangerous adventure of the console cowboy Case and his partner, Molly Millions. Filled with industrial espionage, advanced synthetic drugs, and technology that is both recognizable now and far beyond our imaginings, Case and Molly travel the corrupt, techno-driven world and make their way to space in order for a new, special client that promises Case some answers to a past he's been running away from.


Jorie Graham's most recent book of poetry which won the Pulitzer Prize. This book was highly influential not just for this project, but for me as a poet as well. She does an excellent job of writing with specificity while still managing to write with a broader
scope. She also manages to tackle subjects that can often become trite or contrived if handled incorrectly: topics like war, death, and identity. This volume is especially interested in technology, its awareness and surveillance, all topics that are incredibly sci-fi. She understands that although these things are scientific in nature, they have become human, too, since we have come to make them a part of our daily lives.


Concerned with both the natural world and the destructive impact of humans, *Solar Maximum* is very aware of the imprint of contemporary science and technology. Some poems read like odes to the the sun or bodies of water; other poems place us in the perspective of a hammerhead shark and its animalistic lack of awareness. She also plays with form, at some points departing from traditional sentence structure and formatting in favor of floating fragments and words, eventually returning to the familiarity of structurally-sound sentences. I read this book right before the idea for this project came to me, and this surely influenced the subject matter I wanted to write about, as well as the aesthetic forms I wanted this to be executed in.


From the official National Aeronautics and Space Administration of America comes this short article about the Kennedy Administration and its relationship to the space program. From this article, readers can get a brief glance into President Kennedy's life during the Space Race -- his wife Jackie-O managing to acquire puppies of one of the Soviet space
dogs, the president attempting to cooperate with the USSR in joint space programming, then anxiously pushing to get a man on the moon first. He was one of the driving forces behind NASA during his presidency, and one of the reasons why America "won." Although he had no personal interest, he was aware of what the victory would signify and symbolize for the US.


The confluence between Eastern and Western culture, media, and aesthetics is a large part of the cyberpunk genre, something that this project did not have enough room to discuss. Beginning with William Gibson, the "father of cyberpunk" with a professed obsession with Japan, Park discusses the orientation of cyberpunk within anime. Various kinds of media, largely from America and the Far East, influence each other and produce a new generation of media that simultaneously distributes and feeds upon different cultural signals. Park also discusses "techno-orientalism" and the gendering of cultures. This was incredibly useful when considering the gendering of technology as well.


Said's book *Orientalism* is a mainstay in colonial and imperial discourse. This chapter was published approximately one year before the full book was released; it gives a sufficient introduction to his ideas and the central concepts of Orientalism. I needed to bring Said's work into this project since I wanted to discuss colonization, albeit in the context of sci-fi and the alien, but the alien can function the same way in a narrative
whether they be immigrants or green life forms from the moon. There is a distinct us vs. them complex in science fiction that I believe stems largely from American frontier ideals and the Space Race, so I believe it is important to understand the way we see marginalization, exploitation, patronization, and abuse of people on earth before we consider how aliens from Mars could be treated.


This article was published in the year of this project's completion, 2018, Simberg is highly aware of the new directions that space programming is taking. Now with mega-corporations to back them, Elon Musk and Jeff Bezos have an excess of wealth, material, and opportunity to create privatized space travel, especially with the encouragement of the Trump administration. This is a relatively new concept considering how space programming has always historically defaulted to government-run organization. Before, it seemed that no other person or organization would have the means to do so -- but now that there are, Simberg asks what laws and protocols need to be established.

Stefans, Brian Kim. "Terrible Engines: A Speculative Turn in Recent Poetry and Fiction."


Here, Stefans makes note of a trend he has traced in contemporary literature, specifically within a rising "speculative" literature that "seem carved out for tweeting and listing on aggregators of cultural oddities like Boing Boing and reddit." Notable traits of this genre include an interest in numerical precision, a humor that stems from a disruption of the mechanical body, and a contingent conversion of multiple voices. They somehow
manage to both alienate the readers while giving them an additional dimension of agency as they navigate the text, and reinforce that the absolute can be mutable and subjective. Stefans also provides an extensive list of works he finds to embody these ideas, including those by Mark Z. Danielewski and Jonathan Safran Foer.


While they are both massively successful franchises, 2005 marked the first time where Star Trek had no shows on television, and no Star Wars movie was in production. Both series had large, active fan bases and were profitable as well, but this article notes that Star Trek was slightly declining in popularity despite its significance in the history of science fiction. Here, it is deemed "television's answer to the science fiction that began to flourish in the United States in the 1920s," where the limitations of science, technology, and humans themselves came into question. Though sci-fi author Orson Scott Card may have written an "obituary" for the series, the show remains ingrained in pop culture, and its fans remain loyal.


The beating heart of this project; where the concept of the frontier originates. Here, Turner extensively discusses the history of the American frontier, from fur trappers to Native Americans to the continuous desire to distinguish the America from Europe. In this essay, he declares that "the first period of American history" has come to a close, and that from frontier life comes the desire for movement and expansion, ideals like
individualism, and a "masterful grasp of material things" (though there be a lack of "artistry"). In many ways this essay, now commonly known as the Frontier Thesis or Turner Thesis, was one the foundational texts of the American identity beyond the colonies, fully realized as a country from sea to shining sea.