Reversing the Undone

by

Meagan Woods

B.F.A., Rutgers University, 2009

Project Submitted in Partial Fulfillment of the Requirements for the Degree of Master of Fine Arts

in the School for the Contemporary Arts Faculty of Communication, Art and Technology

> © Meagan Woods 2020 SIMON FRASER UNIVERSITY Summer 2020

Copyright in this work rests with the author. Please ensure that any reproduction or re-use is done in accordance with the relevant national copyright legislation.

Approval

Name:

Degree:

Meagan Woods

Master of Fine Arts

Title:

Reversing the Undone

Examining Committee:

Chair Laura Marks Professor

Steven Hill Senior Supervisor Associate Professor

Peter Dickinson Supervisor Professor

Rob Kitsos Supervisor

Professor

Justine Chambers External Examiner Artist

Date Defended/Approved: July 17, 2020

Abstract

Reversing the Undone arrives in the mail as a series of letters engaged with moving and sewing in reverse. Each hand-crafted parcel contains a set of seven missives to be read over the span of a week, with accompanying "suggested pairings" for the time of day, place in home, or sort of snack to enjoy during each reading. The pages include researched reflections on reversal processes, articulated through the practice of sewing. Each day considers a specific facet of backwardation, offering handwritten and typed text, stitches and folds that interact with rewound concepts through an assemblage of thread, paper, and typography. *Reversing the Undone* operates as a score for the reader, who both enacts and witnesses its performance by reading, holding, and gesturing through movement invitations written within the text, or through the sheer need to unfold, untie, and even cut the work in order to fully enter inside. Created during COVID's closure of performance venues, *Reversing the Undone* is a piece made to be touched, a hopeful salve during a time of stymied physical contact and social connection.

Keywords: reversal; reverse motion; retrograde choreography; mail art; sewing; backstitch

Dedication

To anyone who has ever been called backward, this celebration of reversal is for you.

Acknowledgements

There are so many incredible people who have made this project and research possible. I would like to thank a few of them here.

Thank you to the cast: Brynne Harper, Ted Littlemore, Brian Postalian, Amanda Sum and Shana Wolfe. The curiosity, devotion and laughter that sprang from those rehearsals truly propelled this project, even as it headed away from our intended plan. I am indebted to you all for your imaginative contributions to this work, and look forward to the day when we can dance together again.

Thank you to my advisors: Steven Hill, Rob Kitsos, and Peter Dickinson. Our conversations brought me to places within this work that I never could have found on my own. I will continue to treasure what I have gained from our discussions.

Thank you, Sebastien Galina and Brian some more, for all of your help with the documentation and technical navigation of this project. I am so lucky to have friends as generous as you.

Thank you to my MFA cohort, for lending tremendous support, humor, and camaraderie along this journey. What a fine bunch of friends to make and share art with.

Thank you to my loved ones, for listening to me talk about reversal day after day, and for the many ways you showed that you cared about this work. You have kept me going.

And finally, thank you Jon Sock for letting the construction of this project take over our apartment during quarantine, and for always opening space for me to create what I love.

۷

Table of Contents

Approval	ii
Abstract	iii
Dedication	iv
Acknowledgements	v
Table of Contents	vi
List of Images	vii
Defence Statement	1
Project Overview: Mapping the Shift	1
What is it about Reversals?	4
Reverse Motion in the Studio	7
Writing and Choreography	
Where is the Dance?	17
The Work will be Mailed	20
Origami Origin Story: Opening and Closing the Show	
Bibliography	
Bibliography	23
	graphic and
Appendix A. Reversing the Undone: a stitcher's account of choreog	graphic and 24
Appendix A. Reversing the Undone: a stitcher's account of choreog cinematic reverse motion	graphic and 24 25
Appendix A. Reversing the Undone: a stitcher's account of choreog cinematic reverse motion Starting Out (at the end)	graphic and 24 25 27
Appendix A. Reversing the Undone: a stitcher's account of choreog cinematic reverse motion	graphic and 24 25 27 30
Appendix A. Reversing the Undone: a stitcher's account of choreog cinematic reverse motion	graphic and 24 25 27 30 32 34
Appendix A. Reversing the Undone: a stitcher's account of choreog cinematic reverse motion. Starting Out (at the end)	graphic and 24 25 27 30 32 34 35
Appendix A. Reversing the Undone: a stitcher's account of choreog cinematic reverse motion	graphic and 24 25 27 30 32 34 34 35 38
Appendix A. Reversing the Undone: a stitcher's account of choreog cinematic reverse motion. Starting Out (at the end)	graphic and 24 25 27 30 32 34 34 35 38 39
Appendix A. Reversing the Undone: a stitcher's account of choreog cinematic reverse motion. Starting Out (at the end)	graphic and 24 25 27 30 32 34 34 35 38 39 44
Appendix A. Reversing the Undone: a stitcher's account of choreog cinematic reverse motion. Starting Out (at the end)	graphic and 24 25 27 30 32 34 34 35 38 39 44

List of Images

Image 1.	Photo by Sebastien Galina	2
Image 2.	Photo by John Evans; Costumes by Meagan Woods (sewn and hand- painted reconstruction of Robert Rauschenberg's design for Trisha Brown's Set and Reset)	3
Image 3.	Photo by Sebastien Galina	4
Image 4.	Photo by Meagan Woods	. 11
lmage 5.	Photo by Meagan Woods	. 12
Image 6.	Photo by Sebastien Galina	. 13
lmage 7.	Still of pages 3 and 4 of R. Murray Schafer's The Soundscape	. 15
Image 8.	Photo by Sebastien Galina	. 17
Image 9.	Photo by John Evans; Costumes by Meagan Woods	. 17
Image 10.	Photo by Sebastien Galina	. 18
Image 11.	Photo by Sebastien Galina	. 19
Image 12.	Photo by Sebastien Galina	. 20
Image 13.	Photo by Sebastien Galina	. 22

Defence Statement

Project Overview: Mapping the Shift

I had been preparing my graduate project as a live dance performance, when suddenly a very different plan seemed in order. Enter, the pivot. ¹

Pre-COVID, I was fastidiously studying how sewing and choreographic reversal practices might reimagine perspectives of progress. Utterly fascinated by backward action, I was consuming, writing and generating copious amounts of material for the show.

I deeply value the process of rigorous study leading up to the creation of any work.

And then, there is something in doing the reverse.

A particular feeling of need was thickening, everywhere. Rather than pushing ahead to preserve the shape and scope of a project that was built for different times, I wondered how I could respond to this state of emptied days that were being refilled with anxiety and isolation. I thought maybe, just maybe, a small gift- a token of art in the mailcould soothe a tiny corner of another's ache.

While rerouting my project towards mail art, a field of practice I knew very little about, I kept reading about non-ICU medical staff called into urgent care units, or almost graduates pushed into certification to allow proper accreditation to practice medicine. My art was certainly not saving lives, but I heard a lesson in there distinguishing between expertise and acuity, the push to do before the call to prove.

¹ Founder of Kidd Pivot, Crystal Pite, as quoted in Nancy Shaw's *Lost and Found* and on the company's website: "Your actions are pivotal- each change of direction extends your perspective of the possible." Nancy Shaw, *Lost and Found: Kidd Pivot*, Dance Documenta, No. 2. Vancouver: Eponymous Productions and Arts Society (2006), p.14. kiddpivot.org.



Image 1. Photo by Sebastien Galina

I did not read the full manual on mail art before going to post. I was not sure of the historical and theoretical frameworks of letter art and concrete poetry, nor their part in broader conversations within contemporary art practices.² But I did know that, unlike the health risks that my live, in-person project posed for audience members, this work would not present them the same harm. As the world rapidly reordered itself, it seemed antithetical to the times to pause until I could recite the ins and outs of this new practice cold, when the work would be best delivered soon, and warm. Although the research I had already done was not lost and proved instrumental in negotiating a fairly speedy reversing of course, I often felt I was making first and studying second, a hindsighted procedure my object of study might not disprove of.

While the scope of this work may appear as a pivot, aspects of its making savour strongly of continuation. Costume design has been a critical part of my creative practice but, until recently, a quieter one, acting as an auxiliary aspect, very much in the wings. I have spent the past decade as a costume designer for scores of dance productions, revelling in the quiet, solitary practice that I could engage in, at home. When shows started getting cancelled during the lock-down, I along with other performance artists sought ways to create off-stage. Until now I have done a great job of reinforcing my

² My eventual study into the aesthetics, history, and current resurgence of mail art will be shared in the section "The Work will be Mailed" of this statement.

sewing practice to a position it already held- an act performed behind the scenes- by mentioning it as a practice only occasionally or shyly, feeling that my sewing forays could be conceived of as detractions from my primary work as a dance maker. Yet quarantine was a time for the sidelined, marginalized or humbler practices to be illuminated by a rerouted limelight, as center stage herself was sent to wait it out in the wings. Just when I had been finally returning to my "core" choreographic discipline, thinking that sewing would weave its way in as a supporting role, the center of my plan suddenly fell out and sewing was left standing in its place.



Image 2. Photo by John Evans; Costumes by Meagan Woods (sewn and hand-painted reconstruction of Robert Rauschenberg's design for Trisha Brown's Set and Reset)

As I found myself making costumes out of paper for a cast of letters, reversing and sewing surprised me by becoming stunningly relevant within a pandemic stricken world. Venice waters shed their brown hue for blue, gas guzzling vehicles were abandoned, replaced with such archaic modes of transportation as biking and walking. A renaissance of the domestic ensued as yeast became scarce amongst burgeoning bakers, seed supply ran low for budding gardeners, and breaking news detailed how to enlist your sewing needle in the battle against a virus. I was fascinated by the return of these pastimes and felt myself drawn to the crafting nature of sewing and folding letters that released me from screens and media's immediacy. But any of these nostalgic reversals were the pleasant underside of a cruel cause that would not reverse its infection rate fast enough. When would the case tally pivot? How much damage was this pandemic causing, and what would recovery entail, or even look like? So much of the world felt- and continues to feel- pushed backward. Alongside hopeful recoveries and blissful returns, reversing also threatens to devastate through an unraveling force of rapid destruction. Such paradoxical implications mark the prismatic complexities that drew me to reversal in the first place.

What is it about Reversals?



It really did all begin with the sewing machine.

Image 3. Photo by Sebastien Galina

Just a few weeks after moving to Vancouver, I took a part-time job as a seamstress sewing custom corsets at a local boutique. Often working and stitching alone, I circulated theory from seminar courses over in my mind as I pushed fabric through the machine. Those hours of solitary sewing and theoretical stewing began to interweave imagery and lessons from stitching into my academic studies. The act of constructing garments invited attention to the methods and metaphor of manipulating material; patterns and seams, warps and weaves grounded abstractions that were harder to hold, as I worked out their meaning on matter that I could truly grasp.³

One essay in particular stuck with me, a piece about time alterity by choreographer, scholar and avant garde filmmaker Maya Deren who celebrated cinematic reverse motion for its temporal manipulation: "when used meaningfully, it does not convey so much a sense of a backward movement spatially, but rather an undoing of time".⁴ Reverse motion in cinema- unlike a sleeve sewn to one armhole then the other, or a leap performed on the right then left, - does not show action performed "on the other side", but rather shows movement rewound through time. I turned over and over whether cinematic reversal was really an undoing of time or its rewinding. Whatever sly difference existed between these forms of return, I wanted to know more about those slivers of reversal distinction. These particular shades of backwards action continued to intrigue me as I noted variations amongst unsewing acts I performed. Diligently, I reversed a stitch to ground a seam, then bemoaned a corset I had to painstakingly unpick apart for alterations, or prepped a garment for a fitting with wide basted stitches, figuring I might have to undo the seams as I tried to care for my future, reversing self.

But the reverse pedal really cemented my fixation, through its manner of going backwards as a means of anchoring rather than undoing. This was not filmic reverse motion that presented a visage of total recovery; this backwardation ingrained forward action, rather than eviscerating it. I wondered where dance might fit in between sewn and cinematic reversals through the making, additive act of retrograde⁵ sequences that seem to neither cement nor necessarily unravel their referent material. These curiosities soon launched my investigation into other reversal processes that might move beyond a means of erasure.

It quickly became apparent how ripe the phenomenon of moving backwards was for investigation: very little scholarly work exists on dance retrograde, and few film theorists linger at length over the aesthetic and theoretical impact of reverse motion in

³ I deeply grateful to Storm Greenwood, whose luminous Stitch Theory has encouraged my own interests within sewn research-creation. https://www.stormgreenwood.com/stitch-theory.

 ⁴ Maya Deren, "Cinematography: The Creative Use of Reality," *Daedalus* 89, no. 1, (1960): 158.
⁵ Retrograde dance may be described as the "rewinding" of a dance sequence, where movements are performed in reverse (anti-chronological) order.

⁵

cinema.⁶ Even as this research entered scientific realms of reverse locomotion perception and memory processing as a reverse-ordered reconstruction, cases frequently mention how little scientific study has been done in temporal rewinds compared to their spatial inversion counterparts.

As a mover, I am interested in doing, and kept cycling back to the notion that you cannot opposite something. But you can reverse it.⁷ Spatial, static inversions still necessarily feed into this research but have not served as its center, nor have temporal reversals precisely, which may prioritize time travel and a reversion back to a time that is particular. This distinction encouraged me to abandon the term temporal reversal and adopt instead "flow reversal" and "reverse flow", eliciting movement which occurs through time but does not demand a return to the time of its original unfolding.

Positioning cinematic and choreographic (ir)reversible processes as operations of flow opened my research to other considerations of flow reversals, towards an engagement with time's arrow and entropy, palindromic phenomena, bookended journeys, and Western domination of reversing as the antithesis of progress, set against marginalized practices of retrogradation as a method of rewinding in order to move forward. Reversal itself has captured me most by its multifaceted, and at times paradoxical implications: yes it may unravel, but so too can it ingrain and fasten through recollection as a reimprinting. I began to value reversal as a fresh perspective on progressing, and wondered how I might re-approach the contradictions of making through the unmade within retrograde choreography's unwinding flow across its nonpivoting trajectory over time. How might I apply stitching, unpicking and backstitching to dance, whose material is far less palpable than the fabric of a garment? How does retrograde choreography speak to the sense of totalized, ever successful recovery within the restorative nature of filmic reverse motion? What reversal mechanisms within these

⁶ I am indebted to Andrew Tohline, whose PhD thesis on cinematic reverse motion proved a treasure trove of links to obscure references of reversal within notable film theory publications. Andrew Tohline, "Towards a History and Aesthetics of Reverse Motion." Electronic Thesis. Ohio: *OhioLINK Electronic Theses and Dissertations Center*, (2015). http://rave.ohiolink.edu/etdc/view?acc_num=ohiou1438771690.

⁷ With this delineation I am harping on the ability of "reverse" to act as both noun and verb, something "opposite" cannot quite muster without a change of form to perhaps "oppose", which moves away from the more neutral "to reverse". "Opposite" feels static, whereas my research has been interested in *movement* backwards rather than a potentially very still mirror image.

forms simply cannot translate across genres, and how might we enact them anyway, despite and through the spirit of irreversiblity's supposition of failure?

Reverse Motion in the Studio

While gathering reverse flow research, I kept track of experiments that I wanted to try in the studio:

How might you unjump? How do you return your dance? What is the material that you are retrograding? Where is it, and how do you undo all of it? What does it mean to unpick a step? How do you unhug? How do you reverse a fall? What movements refuse retrogradation? How can you improvise a phrase forward, then reverse it on the other side of your body while retrograding its sequence?⁸

Throughout the fall term of 2019, I spent time in the studio working alone through these dance reversal conundrums. But this expedition began to feel too solitary, and I was ready to travel in reverse with company.

In December 2019, I held a three-day workshop with Brynne Harper, Ted Littlemore and Shana Wolfe to explore dancing as sewing in reverse. The dancers boldly leapt towards these often unanswerable queries, responding to ridiculous tasks I proposed of inverting, retrograding and undoing movement sequences. We danced as a needle plunging through cloth, and then pulled ourselves out of those seams through retrograde choreography; we parodied reverse motion back-up dancers whose claps and snaps could not be heard when percussively gestured in reverse; we danced pas de deux with a sewing machine and performed palindromic phrases that trickily zigzagged back on themselves. Dancing about sewing in reverse was an exciting exercise, as we considered the rhythms, pathways and efforts of a practice within these fully embodied motions. Soon after the first workshop, I invited Amanda Sum and Brian Postalian into the project, wanting actors who could dance and overlap with the existing choreography,

⁸ The answer to this is to enlist Ted Littlemore. One choreographic scene that I lament could not be shared in letter form is the "Beeventoven", where Ted (in a frenetic orchestra conductor manner) does and undoes an improvised phrase, beginning with one side of his body then retrograding it immediately onto the other, all performed with a backdrop of Haydn's epic palindromic score "Symphony No. 47".

while offering comedic and narrative foils to the more abstract sewing engagements we had built. I wondered how dialogue could play into this work, particularly when phrases were heard in reverse. How could humor underscore some of the futility inherent within these irreversibilities?

Throughout all of this I was interested in the embodied experience of effort and ease, a spectrum device of Rudolf von Laban⁹ that has factored heavily into my research-creation process of retrograde dance. Could the performers train themselves out of the effort to find ease within these strenuous tasks? And conversely, how could we keep cultivating challenge within reversing and avoid a certain mastering of the labor to the point where effort has been drawn out of the once confounding retrograde? Where is the line between utter irreversibility and improbability and what wonder can be experienced in crossing from one liminality into the other? I was interested in the honest struggle of embodied reversal that reverse motion film did not capture. The absence of dance on screen for this exploration was essential- we knew filmic reverse motion could-poof!- reverse those motions, but what could be done without that mechanism, through the live enactment of these effortful, wondrously limited, spontaneous and inventive, inaccurate human bodies of technology?

While building these scenes of reversing, I turned to iconic dance works that use retrograde choreography to emphasize the interplay of effort and ease, along with reversed dance's tendency to slip in and out of recognition as aberrant.¹⁰ In Trisha Brown's iconic choreographic work *Solo Olos*, a performer calls out commands to the other dancers to switch between different phrases. One imperative is to "reverse", right on the spot, as the dancer must head back through the phrase's retro-chronology. With this blatant labeling of the reverse, I wondered if Brown called attention to retrograded

⁹ In reference to the movement fundamentals of "effort" from movement theorist, creator of Labanotation (movement notional system) and choreographer Rudolf von Laban.

¹⁰ Tohline introduced me to Deleuze's term "aberrant movement" to refer to movement of temporally manipulated cinematography. Modern dance can muddle the iconographic aberration of reverse motion. Demonstrated as an achievable flow (reverse motion in film does not purport its action *can* be accomplished in real space and time), performed retrograde, especially when done effortlessly, quashes the tell of unlikelihood. And further, modern dance often appears quite aberrant in its original "forward" unfolding, offering peculiarities and idiosyncrasies that are not associated with well-registered quotidian ways of moving, meaning the original phrase might look like as likely a reverse motion candidate as its retrograded derivative. Tohline, 20. Gilles Deleuze, *Cinema 1: the movement-image*, trans. by Hugh Tomlinson and Barbara Hammerjam (Minneapolis: University of Minnesota Press, 1986), 36.

moments to illicit a perception of symmetrical effort, as retrograde is "figured" seemingly effortlessly before us, pushing for embodied reversal to edge closer to the ease of mechanical rewind, and whether the material had been particularly selected so that it could neatly, symmetrically swing forward and back.

Renate Lorenz and Pauline Boudry articulate reverse action's dual capacities of defiance and defeat in their installation/performance *Moving Backwards*.¹¹ The piece features live and filmed retrograded choreography, as well as performers who wear shoes backwards in reference to female Kurdish guerilla fighters who reversed their shoes to throw off the direction of their movements as tracked in snow.¹² Through a manifesto addressed to the viewer, the artists dissuade a sweeping consideration of reversal as a sign of empowerment, calling attention to the reasons behind the need of backward motion, "for turning disadvantage into a tool".¹³ Even with reverse movement as a tool against reversed social movements, "[c]an its feigned backwardness even fight the notion of progress's inevitability?"¹⁴ Like *Solo Olos*, the original and the reversed directionalities of choreography become muddled, at times indecipherable,¹⁵ with the promise of deception looming as a tactic available for whoever walks with their shoes (and tracks) reversed.

Yinka Shonibare's filmed dance *Un Ballo in Maschera* articulates backwardation through a history that cycles upon itself, spiralized by social regression and progression, the act of going back not feared so much as the mark a reversal returns to. In her article "Gesture to Opera: Yinka Shonibare's Un Ballo in Maschera", Rebecca Schneider speaks to the reverse motion of Shonibare's film which appears to be film shown backwards, but is in fact retrograded choreography.¹⁶ The play of choreographic and filmic directionality within Shonibare's work, as well as Schneider's exploration of its discourse on history's near repeatability through re-cycled behaviors, speak to the twisting of backwards movements within a historicity which aims to maintain an

¹¹ Pauline Boudry and Renate Lorenz, (2019), *Moving Backwards* [Performance/Open Letter] Italy: Swiss Pavilion Biennale Arte.

¹² It feels important to note that the Kurdish fighters wore their shoes backward, rather than wearing shoes forward and *walking* backward.

¹³ Boudry and Lorenz, 1.

¹⁴ Boudry and Lorenz, 1.

¹⁵ Boudry and Lorenz play substantially with retrograde's masquerade.

¹⁶ Rebecca Schneider, "Gesture to Opera: Yinka Shonibare's Un Ballo in Maschera," *The Opera Quarterly* 31, no. 3 (2015).

appearance of ever-forward progression.¹⁷ The performed retrogrades are of course not perfectly replayed and rehashed units of respun film, but rather human-produced bits of history, rewound in vibrating mimicries of near but never complete symmetries. The choreography of *Un Ballo* also retrogrades unobviously; its likelihood as forward action is no doubt a commentary on the often imperceptible reversions society engages in that might not at first be recognized as socially backwards.

The use of retrograde choreography, particularly in Shonibare, Lorenz and Boudry's work, calls attention to the politics of moving backwards. I explored some of the power dynamics inherent within reverse action in the letter on Day 2 of *Reversing the Undone*:

I think of non-privileged, non-wealthy, non-heard cultures and communities whose backstitching has not been elected but prescribed, the reverse pedal pushed by another's hand. For the hailed normate, acts of looking back or going back offer less risk when an identity has roots to ground itself or enough resources to keep replanting itself in the present. For subsects of culture whose relevance in the present and place in the future feels more precarious, might that act of going backward jeopardize their place in the now, or even a promise of a future?

As a counter to perspectives of progress and convention as unidirectional, Foucault's concept of "tactical reversal" within the marginalized complicates and reorients power dynamics, survival mechanisms and culturally situated ideologies of backward action.¹⁸ Reversing may reflect action that has been made to move backwards, but it can also mark a method of rebellion, a tactic as in the case of the Kurdish fighter. Through this reversive/subversive complexity I continue to ask myselfhow can the ability of reversing be both of the privileged and of the undermined?- and usually return to distinctions between choice, necessity and enforcement: the ability to rewind without self-compromise, the call to reverse in order to secure what could so easily be unpicked away, and the unraveling reversions of social behavior that harken back(wards) to movements that reek of regression.

¹⁷ Schneider, 2.

¹⁸ Michel Foucault, *The History of Sexuality: Volume I: An Introduction*, trans. Robert Hurley (New York: Random House, 1978).

Writing and Choreography

The conflicting implications of backwards movement gnawed at me as I continued to dance and write my way through confusion and fascination over what it might mean to reverse. Holding all of these pieces- reversal's fickle personalities, the dance, sewing, and spoken material I was creating- was becoming a feat that felt hard to handle.

To manage this reversing matter, I wrote down bits of phrases that had been built in the studio, arranging them as text on torn paper that took over a local coffee shop tabletop in February 2020. Anchoring and arranging concepts with ink and paper was a stabilizing moment in this process. Looking back at my array of laid out letters, the procedures reveal some similarities.

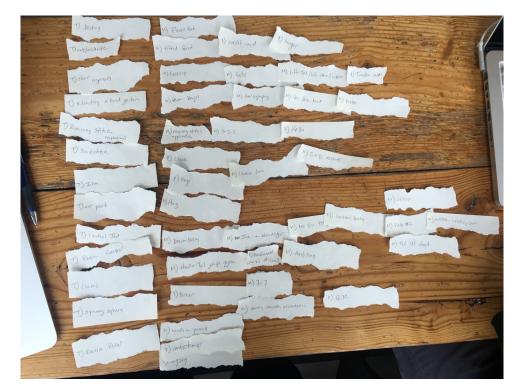


Image 4. Photo by Meagan Woods

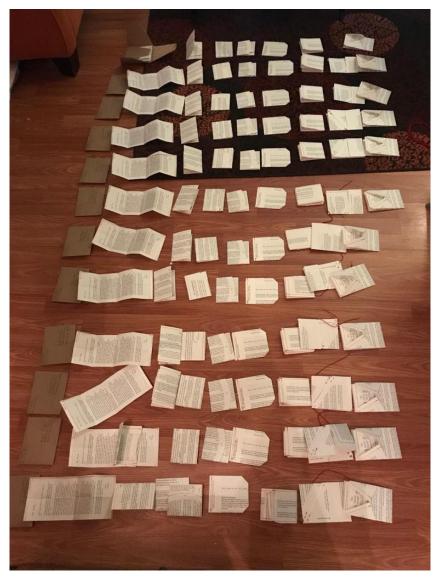


Image 5. Photo by Meagan Woods

So much of the language in the letter edition of this project came straight from text and imagery that we were playing with in the studio. Just as I had prepared for the live version of this show, I considered what bits of reversal material felt the strongest, and organized them into thematic sets that might offer a centralized "backward" idea, with a blend of stitching imagery, heady research, personal narrative, and anecdotal treats for each letter. Once the content was fairly settled upon, I dove into the choreographic potential of arranging these phrases in their new version of performance.

Shifting a dance project into letter form was less of an overhaul than I had imagined. The correlation between dimensions of an average stage and an 8.5 x 11 inch page had never dawned on me. What mimicking rectangles.

By considering the page as stage, the letter version of this project pushed deeper towards a choreographic ontology,¹⁹ where the visual arrangement of words, seams, and creases might act as performers, enlivened through the engagement of the receiver.²⁰ I felt I could truly choreograph the text with my use of punctuations as dynamic indicators of transition, spatial arrangements of each letter/dancer as staged formations on the page/stage, staggered lines that might replicate the measured delays of a cannon, linear and curved pathways for phrases to trace their way along, and sizes of font as insinuations of virtuosity. I was interested in the softened tone of the italics sections that I nudged to the other side of the page with right "justification", as the slanting letters slid their feet out gently to re-enter backwards a space they had been pushed away from. The regular font was the engine of the work, churning along narrative or thought so that the interruptions might have something from which to disrupt. I hoped the handwritten notes would bring the reader closer in through the tracing of my hand that left ink in its wake, and to the personalized quality of anecdotes and gratitudes that I scrawled as marginalia. Beyond spatial orientation, I could also orchestrate timing within these letters, considering the durational act of each reading, the ordering of first, middle, and last encounters on a page, and the use of sentence lengths to steer tempo and rhythm.



Image 6. Photo by Sebastien Galina

¹⁹ The etymology of "choreography" stems from the Greek *khoros* "chorus" or *khoreia*, "dancing in unison", and *graphia*, "to write". *Merriam-Webster.com Dictionary*, s.v. "choreography," accessed June 28, 2020, https://www.merriam-webster.com/dictionary/choreography.

²⁰ Not quite like the lifter of a jewelry box lid who instigates a ballerina's twirl, but not unlike it either.

I enjoyed the challenge within the parameters these letters presented, again feeling not far off from the restrictions for the original project:

Can you fit the work into Studio D, and keep it under an hour? Can you fit the text into 7 double-sided pages, and keep the reader reading for under 20 minutes a day?

I approached the arrangement of text on the page with sudden pleasure. Released from formatting fences of academic writing, I leapt into the field of concrete poetry, finding my way there through the help of Peter Dickinson and Jennifer Tham, guided by the words of Jamie Hilder, even as he declared "concrete poetry operates within a space that is particularly difficult to locate."²¹ Feeling unable to locate the entirety of a dance's "material", I felt at home in another genre which was not able to entirely locate itself either.

Through the game of fitting the work into seven letters and seven themes, creating a progression over the days, sifting words and thoughts into space and time parameters, I found enjoyment in the clarity of this project and the (re)configuring it entailed. The suggestion of a week-long duration emerged through its neatness and completeness as a time unit.²² One long missive about reversal felt too cumbersome and laborious of a read, and I liked the idea of delayed engagement, a tasting menu with staggered flavors and textures that might (hopefully) be paid closer attention to than the simultaneity of a buffet. By suggesting that this writing be experienced over an extension of time, the project entered into a realm of work that I had never created. My longest show ran roughly 2 hours, and now this one would take days.²³

For other choreographic projects I will often sketch and write out a score, mostly as a way to organize the piece for myself, but sometimes as a way to express the landscape of the dance's arc based upon the way I've written the typography of dance as topography on the page. Now, in letter form, the dance could not lose sight of itself as

²¹ Jamie Hilder, *Designed Words for a Designed World: the international concrete poetry movement.* (Montreal: McGill-Queens University Press, 2016), 188.

²² As the notion of travelling came to a halt, I enjoyed the sense that by mailing these letters I was "spending the week" with whomever opened them and entered into their seven-day span.

²³ Another perk of the audience member/performer already renting or owning the show venue.

score. Directives of where to begin, what to touch and how to move where offered to the reader/enactor.

In his book The Soundscape: our sonic environment and the tuning of the world, R. Murray Schafer offers such vivid invitations to listen to the sounds on a page through the scores:²⁴

Dear bp & Stere : Let us begin by listening to this boo THIS BOOKLET IS FOR YOU . IT IS A MUSICAL SCORE. IN PERFORMING IT YOU WILL BE REQUIRED TO MAKE SOUNDS. IT MAY BE PERFORMED ALONE, THIS BOOK, OR TO GETHER -OR BY FRIENDS -OR FOR AN AUDIENCE -NEITHER THE BOOK NOR THE READER. IS SILENT. LISTEN TO THE SOUNDS YOU CAN MAKE TOGETHER. PHOW?

Image 7. Still of pages 3 and 4 of R. Murray Schafer's The Soundscape

Much as Schafer emphasized paper and text's sonic capacity, I hoped that by asking the reader to attune to the dance of these letters, they might find and feel more of its dance, as Hilder writes, "[d]epending on how the reader imagines the movement of the poem".²⁵

The suggested pairings of *Reversing the Undone* were a means to cultivate a sense of event for the reader, furthering the nature of this work as a score. While I did not expect anyone to adhere to their specificity, I hoped that by calling attention to my offerings of spatial and sensorial surroundings, the receiver might take note of what they *did* choose to cultivate in terms of the phenomenologically rich experience surrounding

²⁴ R. M. Schafer. *The soundscape : our sonic environment and the tuning of the world / R. Murray Schafer* (Massachusetts: Destiny Books, 1993), 3-4.

²⁵ Hilder, 194.

any letter reading moment. And, while I could not brew a cup of tea for my reader, at least I could pour them the idea of holding and enjoying something warm.

These letters also generated a score for my own construction motions. Fold this crease along this sentence, then stitch, handwrite, refold, and stitch once more. Like other dance scores I have embodied as a performer, this one came with its own specific aches and pleasures. I enjoyed the relaxed positions I could take while hand stitching Day 6, but lamented over the tedium of cutting out well-formed semicircles on Day 3. I always started off Day 5 with gusto, but then the seven seams with dangling threads required so much stopping and starting to reload the bobbin, I began to feel my head spinning with this dizzying amount of stitching to be done. By the time I finished 20 sets of this project, my upper back was screaming from all of the hunching that folding and cutting required. I soon realized the handwritten components were the ultimate culprit of the pain, as I tightened my muscles to control a one-time-only inked performance, which often required tricky looped or linear patterns that I could not seem to manage unless my whole body tensed with attention. Over those weeks I was carrying- wearing- the imprinted ache of making this score. Like the oral tradition of a family heirloom recipe, my score was not written down, but rather embodied, its results the cooked-up letters I kept turning out. The repetitive nature of execution created both blissful rhythms and consistency throughout a time-warped spring, while also presenting a looming mountain of reiterative labor that I had set for myself. I loved the work, stressed over it, got lost in what it all meant, could not think of nor do much else, missed it when it was done, did a few more rounds, and then was very ready to move onto my next score, much like I am with other choreographic scripts that I concoct.



Image 8. Photo by Sebastien Galina

Where is the Dance?

I can see how, on the surface, this version of the project might seem like it dropped dance. But what if it did not, but instead waited patiently for spaces to open back up to dance, and in that time of holding, the choreography found a different place and a different manner of moving? By continuing to call this project a dance, I pushed my own curiosity about what else and where else a choreographer could choreograph.



Image 9. Photo by John Evans; Costumes by Meagan Woods



Image 10. Photo by Sebastien Galina

Imagine opening the letter for Day 3 (as pictured directly above), to find its thread sputter free from a spiralized form. Or look at how those circle skirts bloom with movement in Image 9. Off the body, on the hanger, those costumes just hang. But through human handling garments and letters may move in their own manner within a duet of dynamized matter. Crafting letters and sewing costumes has focused my attention on such animation of the inanimate. Humans may be the instigators who spin in that skirt or lift up a paper's fold, but the undulation of fibers is another material's dance that stands apart from human-centric choreographic dominion. Subjugating dance that may be initiated by people but is nonetheless un-accomplishable by bodies alone dismisses matter than dances with, through, and alongside side humans as negligible next to bodies moving bodies alone.²⁶ Might matter that is being moved by dance be of dance itself?

Costuming has cultivated my interest in locating dance beyond the dancer's body, where material keeps moving after dancers have stopped, and unliving textiles are enlivened through an unfolding co-composer. By seeking what- under some auspicesmight not be dance, how can we push the edges of dance's materiality further and find

²⁶ These notions begin to lean heavily towards posthumanist perspectives, particularly feminist new materialism. While this defense might not lend space to fully unpack these theories, I am particularly grateful to works such as Jane Bennett's *Vibrant Matter* for revealing the vibrancy, and dancerly capacity of matter that is beyond human. Jane Bennet, *Vibrant Matter: a political ecology of things/Jane Bennett* (Durham: Duke University Press, 2010).

where it sneaks into the cracks of stillness, the folds of paper, and the seams of the inhuman? In this way, dance encompasses not only the steps of its classically construed material/phrasing, but all of the material it activates; the motions of the mover cause many matters to dance through choreographic residue that may continue even after the "core" material has been completed.

I have wondered how thinking dance while reading letters may invite the choreographic capacity of this work. How can the overt yet hidden "other" choreographies of this project- its route from mail drop box to home mailbox, the nature of its unfolding, the dancing of text's pathways and rhythms, the gestures of its receiver, and my motions of construction- all call attention to the choreography that is not as often heralded by the spotlight as THE dance? What if this work was not a dropping of the dance, but the "also" of dance that readily exists but is rarely staged?



Image 11. Photo by Sebastien Galina

In a typical dance rehearsal, we'll often say something like "let's go over (or let's review) the material". *Where is the material of dance?* Inscribed on our muscles and memories, attached to the floor through gravity's insistence on our union, within the studio walls or carried upon airborne particles that our gestures sweep by, captured by the float of a sleeve, in the minds of the spectator, or on papers that keep track of the names of phrases and descriptions of their steps? And if one of these bearers should lose the material, how might the others remind it, or refind it? And most exciting, if we cannot exactly determine where dance material is, how can we determine where it certainly is not? If dance can fit on a screen, why not inside of an envelope?

The Work will be Mailed



Image 12. Photo by Sebastien Galina

I was not alone as an artist suddenly putting stamps on my work during COVID-19. Mail Art, the practice of sending small art pieces through the postal system, has experienced a resurgence during this period of isolation.²⁷ Inherently interconnected while at a distance, it is no wonder that others are finding solace in exchanges through the mail when we cannot share so readily through other outlets. Formed in the 1950s out of Fluxus and Neo-Dadaist ethos with Ray Johnson as its most iconic trailblazer, mail art sprung out as a movement of resistance, rejecting the institutionalized and commodified direction of the art world.²⁸ Circumventing the conventions of galleries and museums, auctions and economics, mail art was free, democratic, uncurated and often irreverent. Johnson frequently initiated chain mail letters that invited recipients to add to a comic or satirical collage to be passed along as a mailed exquisite corpse. The work was not centered upon an expectation of a return to sender, but rather on the intrepid peregrination of a work that might dance its way through the mail system with impressions of receivers pasted on along the way. Mail art operated apart from art institutes, and now in 2020, with those very institutes closed, the movement shows its

²⁷ "Mail Art- art term", Tate Modern, Tate Museums, June 28, 2020, www.tate.org.uk/art/art-terms/m/mail-art.

²⁸ Laura Dunkin-Hubby, "A Brief History of Mail Art's Engagement with Craft (c. 1950-2014)." *The Journal of Modern Craft* 9 2016: 35–54. https://doi.org/10.1080/17496772.2016.1183948.

ability to move during a time that shuts down the very pillars of art exchange that it abhorred.

As the internet threatened to kill the mail art movement in the 90s, Johnson buckled down, as did others, in preserving the analogue, haptic aspects of its countenance. With this spirit of rejection, I too found myself resisting a transference of live dance to screen, preferring instead to create something that existed offline, off camera, as was an initially critical feature of my un-mechanized vision for the staged project's embodied reverse motion. I resisted the computer's flatness, for even if paper is a plane, where is the verso of the recto screen? The page, like the underside of a fabric, has its opposite side that could not be pried from the other, their distinction and coexistence fused into one plane. Other surfaces I could dance or write on might engage with a reverse side- but not the screen. How welcome to work with something that has a back to speak to its front when I am writing and thinking about moving backward.

Mail art did and does more than resist the internet, it rejects the mantras of global exposure, digitized preservation, and the commercialization of something that is easily archivable and copy and pasteable. I read a quip that Johnson was the "most famous unknown artist in the art word",²⁹ and felt a bit of shrinkage myself as I packed letters into a tiny envelope, enacting the mail artist's fate by limiting the capacity of my show to the set of letters I would make (currently the count is 51), sending the work to the highly capitalizable and thoroughly exposed destination of a mailbox. But this intimate nature-what markets might call contraction- meant an intentionality and specificity that appealed to me for a work that I thought might call for close listening if it was to be ever heard (in each reader's own voice).

And then of course touch. We lost this crucial aspect of contact with lockdown, and I missed the ways in which partnering and nearness of bodies in dance emphasized the feeling of the piece. Screens might not encompass contact, but envelopes and letters could be touched, and their haptic power excited me. The materials also felt more alive, the recycled paper and threads, behaving with the irregularity of organisms as I tried to assuage them this way and that, like the manipulation of our own dancing limbs

²⁹ Roberta Smith, "Art Review; Famous for Being Unknown, Ray Johnson Has a Fitting Survey". *New York Times*. (1995): Section C, pg. 27, accessed June 20, 2020, www.nytimes.com/1995/05/19/arts/art-review-famous-for-being-unknown-ray-johnson-has-afitting-survey.html

that we try to fold along and against their will. It felt important that the readers could press the work into their hands and change it tangibly, through their own handling and holding. I hoped this power of malleability might heighten sensorial engagement, as readers made decisions about how to touch and alter the work. As irreversibilities emerged- a wrinkling or cutting of the paper, a snipping of the thread- the reader was not just witnessing them, but propelling them.



Origami Origin Story: Opening and Closing the Show

Image 13. Photo by Sebastien Galina

For years now, I have established a tradition of handwriting thank you notes to collaborators for every show. I do not believe this is an uncommon gesture, but it remains a critical ritual in my way of marking a moment of gratitude for all that has been made and shared. With this thank you note I will often include a folded flower- an origami lily on a pipe cleaner stem- as a nod to the tradition of flowers left in a dressing room or given at the backstage door. Despite their delicacy, these paper floras offer a premise to linger longer.

Creasing the paper and writing out my thanks has become an integral part of each show, intrinsic to my sense of a production's completeness, while out of sight for the audience. And now, how funny that the thing which honors the show has become the performance itself. An extended thank you note, an expanded folded token, a gift for the players, whom the patrons are now one and the same. Everyone gets a flower and a card. And that is the show.

Bibliography

- Bennett, J. Vibrant Matter: a political ecology of things/Jane Bennett. Durham: Duke University Press, 2010.
- Boudry, Pauline, Lorenz, Renate. Moving Backwards. [Performance/Open Letter]. Italy: Swiss Pavilion Biennale Arte. 2019.
- Deren, Maya. "Cinematography: The Creative Use of Reality." Daedalus 89, no. 1 (1960): 150-67. www.jstor.org/stable/20026556.
- Dunkin-Hubby, Laura. "A Brief History of Mail Art's Engagement With Craft (c. 1950-2014)." The Journal of Modern Craft 9 2016: 35–54. https://doi.org/10.1080/17496772.2016.1183948.
- Gilles Deleuze, Gilles. Cinema 1: the movement-image. Translated by Hugh Tomlinson and Barbara Hammerjam. Minneapolis: University of Minnesota Press, 1986.
- Hilder, Jamie. Designed Words for a Designed World: the international concrete poetry movement. Montreal: McGill-Queens University Press, 2016.
- Schafer, R. M. The soundscape : our sonic environment and the tuning of the world / R. Murray Schafer. Massachusetts: Destiny Books, 1993.
- Schneider, Rebecca. "Gesture to Opera: Yinka Shonibare's Un Ballo in Maschera." The Opera Quarterly 31, no. 3 (2015): 155–169.
- Shaw, Nancy. Lost and Found: Kidd Pivot, Dance Documenta, No. 2. (Vancouver: Eponymous Productions and Arts Society 2006).
- Smith, Roberta. "Art Review; Famous for Being Unknown, Ray Johnson Has a Fitting Survey". New York Times, 1995.www.nytimes.com/1995/05/19/arts/art-reviewfamous-for-being-unknown-ray-johnson-has-a-fitting-survey.html
- Tohline, Andrew. "Towards a History and Aesthetics of Reverse Motion." Electronic Thesis. Ohio: OhioLINK Electronic Theses and Dissertations Center, 2015. http://rave.ohiolink.edu/etdc/view?acc_num=ohiou1438771690

Appendix A.

Reversing the Undone: a stitcher's account of choreographic and cinematic reverse motion

Reversal first pricked me while sewing.¹ I was captured by the way a reverse pedal on a sewing machine sends stitches backward as a means of anchoring rather than undoing. I have since come to apply this method of backstitching² to film and dance studies by examining reverse motion and retrograde choreography, with a consideration for how these reverse processes might also offer something beyond a desire to unbecome. While sewing may not serve as the fulcrum of this paper, the methods and vernacular of stitching continue to imbue themselves into my reversal dialect, offering interstitial notions throughout this writing. Cinematic and choreographic (ir)reversible processes have opened my research towards an engagement with time's arrow and entropy, palindromic phenomena, aberration and magic, bookended journeys, and Western domination of reversing as the antithesis of progress, set against marginalized practices of retrogradation as a method of rewinding in order to move forward. Reversal itself has captured me most by its multifaceted, and at times paradoxical implications: yes it may unravel, but so too can it ingrain and fasten. This research intends to offer reverse motion as a fresh perspective on progressing, inviting contemporary societies to consider rewinding as a means to renew, a return with an intention to redirect, or a method of recovery with a desire to sustain.

¹ I think of Roland Barthes' punctum, as that "which pricks me (but also bruises me, is poignant to me)". Roland Barthes, *Camera Lucinda: Reflections on Photography* (London: Vintage 2000) 26-27.

²A mechanical backstitch sends stitches backward over a seam that has already been sewn in order to secure it. This is often done at the beginning and ending of a seam to prevent the ends from unraveling. A handsewn backstitch continuously loops forward then slightly backwards, circulating stitches in order to anchor them.

Starting Out (at the end)

It's funny that the reverse pedal on a sewing machine doesn't undo time, it cements it. You go backwards to make sure what you've done can't be undone, to anchor the precarious path of stitches into something locked, something to last.³

The phenomenon of moving backwards feels ripe for investigation: very little scholarly work exists on dance retrograde, and few film theorists linger at length over the aesthetic and theoretical impact of reverse motion in cinema. Even as this research has entered scientific realms of reverse locomotion perception and memory processing as a reverse-ordered reconstruction, cases frequently mention how little study has been done in temporal rewinds compared to their spatial inversion counterparts. Through encountering this drought of rewound discourse, I have wondered about our gravitation towards spatial inversions over temporal reversals. In dance, the reasoning of proliferation seems apparent enough: we have the mirror, the left and right side of the barre, of a combination, of our bodies. Dancers spatially invert constantly, and with relative ease. Retrograding- rewinding the chronology of a movement sequence- is done less frequently, and often implies considerable cognitive and physical effort if the combination is beyond the simplest of rote exercises. In sewing there are several static, spatial instances of reversing: the opposite side of fabric is called the reverse side (and also the *wrong* side), the lining is the reverse of an exterior, and symmetrical garments often require reverse components to mimic and mirror each other. Cinema might muddle its spatial and temporal reversals most thoroughly through its capture of both, initially through flipping its film strip entrapment of spatial and temporal imagery, and now by inverting its digital signal to reverse motion across space and back into time. Choreographer, avant garde filmmaker and scholar Maya Deren celebrated cinematic reverse motion for its temporal manipulation: "when used meaningfully, it does not convey so much a sense of a backward movement spatially, but rather an undoing of time".⁴ Reverse motion in cinema- unlike a leap performed on the right then left, a sleeve

³ These interstitial notes are taken from my journal entries on stitching and thinking through reversals, and may be found scattered throughout this composition, always in italicized passages.

⁴ Maya Deren. "Cinematography: The Creative Use of Reality" (*Daedalus* 89, no. 1, 1960), 158.

sewn to one armhole then the other- does not show action performed "on the other side", but rather shows movement rewound through time.

As a mover, I am interested in doing, and keep cycling back to the notion that you cannot *opposite* something. But you can reverse it. Spatial, static inversions will still necessarily feed into this research but these will not serve as its center, nor will temporal reversals precisely, which may prioritize time travel and a reversion back to *a* time that is particular. This distinction has encouraged me to abandon the term temporal reversal and adopt instead "flow reversal" and "reverse flow", eliciting movement which occurs through time but does not demand a return to *the* time of its original unfolding.

Flow reversal may also capture sequences that operate beyond a rigid linear model, as flow may progress in three dimensional expansions and contractions, such as memory reconstruction. A recent study by the University of Birmingham finds that our original, "forward" encounters with entities begin with details that we then construct into larger concepts.⁵ When recalling these events or specificities of the past, the process reverses as we recollect the gestalt first, followed by details. The study describes that "when we remember a past event, the human brain reconstructs that experience in reverse order".⁶ This articulates the expansion and contraction that flow reversal accounts for, as the plethoric stimuli of a given entity are contracted into a construct, then retrospectively expanded through reconstruction. The study also emphasizes remembering as a choreographic re-membering, a calling to mind members or limbs of a body, the appendages construed first in memory reversal before a whole entity can totalize itself to its core. Here, as in the reverse flow of film, dance, and sewing, concepts of motion, change, and journey are privileged above and beyond spatial or temporal qualities.

The following pages engage with a myriad of reversal desire splits: reversals that wish to return and stay, to return in order to understand the forward, to return with hopes of redirecting an alternative forward, and those that occur without a wish or against one;

⁵ Juan Linde-Domingo, Matthias S. Treder, Casper Kerrén, Maria Wimber, "Evidence that neural information flow is reversed between object perception and object reconstruction from memory" *Nature Communications* 10, no. 1 (2019).

⁶ Linde-Domingo, 179.

reversals that are additive, detractive, and zero-sum; reversals that take a thought or entity backwards with or without a promise of return; reversals that go back or merely think back, whispering towards the nearness of intention to futility in undoing. I am tracking these rewinds for their nature of operations, incompleteness through uncertainty, wistfulness of near achievability, and reimagination through counteractions of normativity. The more I turn over reversals, the greater expanse and deeper interior I find within these elusive and enchanting processes of flowing and knowing backwards.

At the point of reversal, I hold the garment, and myself, for a moment. There is a hovering reluctance for us both. And then the unpicking starts, slowly, always slowly to begin, undoing the backstitch first, then if I feel I can get through the mourning faster, a quick yank, jeopardizing the preservation of that which doesn't not want to be undone, but shortening the duration of pained, effortful release. In sewing it can be a sad task, to break apart the elements I had once willed to join.

Historicizing Irreversibility

In situating reverse processes of cinema and dance, we begin with film, for its ubiquity and prevailing impression on temporal epistemology and (ir)reversibility. The dawn of cinema at the turn of the 20th century marked an era whose ethos were inextricably linked to the filmic medium through their conditioning of temporality. In her iconic work *The Emergence of Cinematic Time: Modernity, Contingency, The Archive* film theorist Mary Ann Doane contextualizes cinema's emergence during a temporal shift away from agrarian models of cyclical, seasonal time toward a Western rationalization of time carried through and beyond the industrial modernist age. The unitization of time prevailed as transportation and production heralded the efficiency and compartmentalization of time, subdividing hours into minutes and seconds, as the measuring of time could signify assignment, ownership and accountability of its use (the first implementation of punch cards, for instance).⁷ With the proliferation of pocket watches⁸, time was seen, heard, and felt as not only something worn on the body, but

⁷ Mary Ann Doane, *The Emergence of Cinematic Time: Modernity, Contingency, the Archive.* (Cambridge and London: Harvard University Press, 2002), 5.

⁸ Doane, 4.

something *embodied* as consistency, efficiency, and timeliness⁹ of habits, gestures, events, and locomotion became ingrained with time stamps. This rationalization of time was further emphasized through the ideology of thermodynamics¹⁰, particularly the second law which marked time as irreversible, time's arrow invariably aimed towards entropy, which "engendered a conceptualization of time as the tightness of a direction, an inexorable and irreversible linearity".¹¹ Thermodynamics leant firm directionality to physics which until then, under Newtonianism, was temporally symmetrical and reversible. The rationalization of physics catapulted time irrevocably in one, asymmetrical thrust.

Doane situates the cinematic subject within these highly measured and synchronized parameters of modernist time as an instrument that both corresponds to and upends thermodynamic's proclamation of irreversibility. Doane writes, "[f]ilm, in its mechanical and unrelenting forward movement, appears as the incarnation of the thermodynamic law of irreversibility, and as such gives witness to time as the erosion of organization and the free field of chance".¹² Her consideration of "cinematic knowledge", particularly the ability to perfectly rewind motion, touches upon the mastery of cinema's illusionistic reversal of thermodynamics, entropy, and causality, something that could not have been witnessed with such efficacy outside of or before the invention of film.¹³ Doane positions that the otherworldly quality of reversal in film reinforces the firmly asymmetrical directions of time and entropy within the real world, rather than offering an alternative perspective on how each might flow. Even when played in reverse motion, film resists the Newtonian notion that time's arrow is bidirectional through its very appearance as strange, Doane claiming the "'true' directionality is ultimately incontestable. The 'trick' corroborates the dominance and determinant status of the

¹² Doane, 22

⁹ It now strikes me as amusing to compliment someone for their quality of time, as timing becomes a part of their personhood, something they own or embody, like wit, wealth or charm.

¹⁰ Doane, 113.

¹¹ Doane, 5.

¹³ Andrew Tohline also emphasizes the revolutionary ability of filmic reverse motion with the line, "Until nearly the end of the nineteenth century, no one had ever seen time run backwards." Andrew Tohline, "Towards a History and Aesthetics of Reverse Motion." (Ohio: OhioLINK Electronic Theses and Dissertations Center: 2015), 8.

rule."¹⁴ The oddity we recognize in reverse motion shows not what could be, but what cannot be, as we understand the directionality of entropy and causality as irreversible because we perceive the reverse flow of matter on screen- spilled milk *in*pouring into a glass, a wall undemolished¹⁵, cookies pulled from a mouth reformed whole from chomped crumbs-¹⁶ as proof of the *untrue* direction of time and flow.

Doane emphasizes the role of modernity, particularly capitalism, in equating progress with unidirectional growth, a trajectory of expansion that resists reversing.¹⁷ Modernity's relentless forward and upward drive cannot sustain a reversal, or at least repels the concept of reversing as it means less gain for its vectored aim, the rigid directionality of capitalism repulsed by reversal for its anti-progressive, retracted growth. Reverse motion film presents not only what is thermodynamically impossible, but that which is adamantly, economically feared. As Doane writes, "film moves forward relentlessly, reproducing the familiar directionality of movement with regularity despite its capability of doing exactly the opposite."¹⁸ Film *could* just as easily do the opposite and show a reversal of development, but for a society that abhors the idea of reversing progress, why should it? "Modernity was perceived as a temporal demand":¹⁹ to comply, to subsist, and to recognize its measurability, consistency, and irrefutable direction marks an economic, social and, in turn, aesthetic imperative.

During the early development of film, Western dance took a turn of its own as modernist considerations of time and gravity shifted the ontology of modern dance. The gravity of time, both its physicality and severity, constructed a weighted directionality, as

¹⁸ Doane, 112.

¹⁹ Doane, 4.

¹⁴ Doane, 109.

¹⁵ In reference to the iconic early cinematic work with reverse motion. *Demolition of a Wall* by the Lumière brothers. Louis Lumière (Producer), Louis Lumière (Director). (1895). *Demolition of a Wall* [Motion Picture]. France.

¹⁶ In reference to the reverse motion comedy *Happy End*. Milos Stejskal (Producer), Oldrich Lipský (Director). (1966). *Happy End* [Motion Picture]. Czechoslovakia: Central Office of Film Distribution.

¹⁷ The recession of the early 2000s for example, let alone the Great Depression, as a contractional reverse flow of wealth expansion, was framed as devastation and defeat, reiterating a capitalist binary between forward and back, gain and loss, desire and aversion.

"(t)ime was indeed felt- as a weight". ²⁰ Choreography too found its weightedness, embodying gravity in a reversal of the balletic tradition of levity. Rather than lifting out of the floor and resisting gravity through ballet's demands of held, upward actions- which were exaggerated even higher and farther away from groundedness through pointe shoes- early modern dance emphasized downward movement. The seated, floor choreography of Mary Weigman and later the contracted and deeply plied movement of Martha Graham presented choreography that reversed ballet's fight against gravity and instead lassoed it. This reversal of energy mortalized dance and rooted it into the earth, harnessing it from the celestial realms of angelic ballet by complying with the temporal and gravitational weight of modernism that it was subsumed by.

Effort and Ease

There's something soothing in reverse sewing in that I'm not inventing. As I unpick a seam I'm comforted by the certainty of where to go. The pathway of undoing lies before me. For measurable entities I can trace back the reversal so neatly, escaping choice and even thought. Effort and emotion are not so easily spared.

The asymmetrical effort²¹ of forward and reverse choreographic flow sets the reflexive ease of cinematic reverse motion as distinctly symmetrical. Reverse motion film exemplified the apparent balance of effort between action done and then undone, a mechanical (re)production of reversal. Even in early reverse screenings of movies, the film operator cranked the projection at the same rate, in the same direction, as the film strip was merely flipped end to end to achieve reversal. Congruent ease marks this palindromic effort as sterilely symmetrical. I am reminded of the reverse pedal on a sewing machine again, which sews stitches with equal ease backward as it does forward. While the symmetry of reverse and forward motion in cinema supports the perception of directionally congruent effort and content, it does so as an illusion, not an accomplishment, of symmetrical time and causality, as real time and entropy do not actually experience such swinging ease.

²⁰ Doane, 4.

²¹ In reference to the movement fundamentals of "effort" from movement theorist, creator of Labanotation (movement notional system) and choreographer Rudolf von Laban.

In thinking of vibrations and oscillations as miniature, palindromic reversals, Deren beautifully depicts the "necessary pulse" of operations for non-abstract entities, citing that "reverse motion, also, for obvious reasons, does not exist in abstract films".²² Exemplifying abstraction as a rotating triangle, Deren teases out inorganic entities from organic ones, along with our respective (non)expectations for vibratory rhythms and directions of flow.²³ Through anticipation of pulse, film may subvert oscillation rate and directionality to create the uncommon, the improbable, and the impossible. Our expectation of how matter behaves must then precede our recognition of it acting aberrantly²⁴ in reverse.

Deren also considers a mise-en-scène's ability to revert its entirety, emphasizing an undoing of time much more so than a retrograded piece of choreography performed live. In film, all matter is absorbed in a backwards dance- spilled milk returns seamlessly to its cup- whereas performed retrogrades are isolated to the mover and whatever matter she affects. The body and costume may reverse flow, but that milk is still on the floor, or at least an inpour cannot be performed as a precise rewind of its outpour. The totality of reverse flow so readily accomplished through the ease of mechanical production radically distinguishes it from live and embodied modes of retro-chronology. Deren's *Cinematography* posits the question of whether retrograde choreography, always made forward in time through the act of doing, promotes the degree of undoing that reverse film may achieve.

If film reversal restores an entire imagery to *its* past, performed retrograde is not a recovery but a temporally forward making of humanly accomplishable reversal. Retrograde dance may take on a range of effort reflexivities of its forward dance referent. The support of physics, momentum, muscular ease, joint mobility and gravity that enabled an initial piece of choreography to flow might thwart its reverse passage, as ascending from a fall, exiting from a lift, or reverse jumping may prove difficult or

²² Deren, 158.

²³ Deren, 158.

²⁴ Tohline introduced me to Deleuze's term "aberrant movement" to refer to the uncanny movement of temporally manipulated cinematography. Tohline, 20. Gilles Deleuze, *Cinema 1: the movement-image*, trans. by Hugh Tomlinson and Barbara Hammerjam. (Minneapolis: University of Minnesota Press, 1986), 36.

impossible through retrograde. The physical and mental tedium of reversing choreography recalls the act of unpicking a garment, reversing each stitch of a seam through meticulous actions that require embodiment; there is no mechanical method of unsewing, as a sewing machine does not unstitch stitches.²⁵ In encountering the futility that can beset choreographic retrograde, film marks the ability to reverse the irreversible: to do what human-led rewinds could not achieve; to recount the undoing of time and effort; to truly unwind a sequence to the point of its cause, or antecedent.

In Trisha Brown's iconic choreographic work Solo Olos, a dancer steps out of the piece and calls out commands to her cast members and instructs them with names of phrases to switch into- "branch", "limb"- or asks them to "reverse".²⁶ You see the movement just performed fold backwards upon itself in retrograded action. Current Trisha Brown Dance Company dancer Kyle Marshall describes how, in a balancing of ease between forward and reverse action, bits of movement in the retrograde phrase have been smoothed of pernicious edges, moving the material further away from a true reversal and closer to feasible action.²⁷ Does Brown call attention to retrograded moments to illicit a perception of symmetrical effort, as retrograde is "figured" seemingly effortlessly before us, pushing for embodied reversal to edge closer to the ease of mechanical rewind? And has the material been particularly selected so that it *can* neatly, symmetrically swing forward and back? I wonder if in making the retrograde phrases, some material was tweaked for efficacy, and then the "original" phrase underwent reflexive alterations to match. Either way, Brown plays with choreographic/cinematic, embodied/mechanical, and live/recorded reversals through means of retrogradations that are contained but still accomplishable.

Derivatives

I have begun to wonder whether reverse flow, positioned as a derivative, is bound to reference its original forward action. In his essay *A Precarious Dance, a*

²⁵ ...though how interesting to imagine buying a shirt and then running it through the sewing machine to unmake it.

²⁶ Trisha Brown. (1976). *Solos Olos* [Performance]. USA: Brooklyn Academy of Music.

²⁷ Kyle Marshall, in-person conversation with the artist, October 15, 2019.

Derivative Sociality, Martin defines derivative as a term to "refer to the transmission of some characteristic from an originating source to a consequent site, expression, or manifestation".²⁸ The resemblance of a derivative to its referent reminds us that we are seeing this work as an alternative rather than a nonassociative being. But for some reversals, their distinctness positions them less as a counterpart and more so as an other rather than the other; an iteration that has a bit more autonomy and distinguished identity. Scientist Neil deGrasse Tyson presents vivid examples of such variation through his discussion of chirality, the spiralized directionality of a molecule.²⁹ Tyson offers that "all life as we know it" spirals to the left, meaning that protein molecules within all living organisms twist in a leftward direction.³⁰ This chirality can be synthetically reversed, as has been done to atoms in caraway seeds to create a spearmint flavor used in Rigley's chewing gum.³¹ More devastatingly, in the 1950s and 60s thalidomide was used extensively to treat morning sickness, but then the drug inexplicably reversed its chirality, and the backwards version became horribly poisonous, resulting in thousands of birth defects.³² These accounts of reversed chirality speak to reverse flows which act not as a counterpoint of resemblance, but as removed derivatives that take on an ontology very distant from their referent.

Within the spectrum of likeness between forward and reverse flow, the phrases of *Solo Olos* reside visually and cognitively at odds. Marshall describes how the forward and retrograde phrases appear as related inversions of each other, but when taught and rehearsed they are treated as their own autonomous phrases, understood for intricacies that are particular to each and almost merely anecdotally related.³³ Marshall considers the reverse phrase not as a derivative of the original, but as a different phrase like any

²⁸Randy Martin, "A Precarious Dance, a Derivative Sociality," *TDR* 56, no. 4 (2012): 65.

²⁹ Jad Abrumrad and Robert Krulwich, hosts, "Mirror, Mirror," Radiolab (podcast). April 17, 2011. https://www.wnycstudios.org/podcasts/radiolab/segments/122613-mirror-mirror

³⁰ "Mirror, Mirror", Radiolab.

³¹ "Mirror, Mirror", Radiolab.

³²"Mirror, Mirror", Radiolab.

³³ Marshall, 2019.

other non-related piece of movement.³⁴ Though made through the process of reversed flow, time may have loosened the retrograde phrase from its position as derivative, now a stripped away entity that exists and operates with a name of reversal but an identity of its own.

Wonderment and Recognition

In citing slow motion, fast forward, and reverse motion in film- categorically temporal manipulations of cinema- Gilles Deleuze cites a shared mystifying impact achieved through the display of "aberrant" movement.³⁵ The unordinary and spectacular presentation of flow in reversed imagery often appears to us as recognizably "off". A study by Viviani et al. reinforces the notion that humans can readily distinguish between motion that has been mechanically altered to appear backwards (cinematic reversal) versus movement that is performed backwards (embodied reversal).³⁶ The case examined detection of mechanically produced versus embodied backward motion in film. Viviani et al.'s study manipulated forward and backwards movement through various methods and found that subjects were still able to decipher when backward actions was made "naturally", meaning performed live in real time, or made mechanically through filmic reverse motion. Viviani et al.'s findings speak to perceived backward actions as situated within thermodynamic perception and the human ability to detect naturally occurring rewinds versus fabricated ones, a skill that apparently develops in infants by seven months, as minds even this young expend more energy and attention on filmed movement that (mechanically) flows in reverse or against gravity. This study of directional locomotion detection describes a higher level of neuron activity within the brain as a subject (child or adult) perceives backward or gravity defying movement, suggesting that the appearance of reversals takes more energy to engage with. How might this early and deeply ingrained ability to register movement as compliant with gravity and directional expectations impact our reaction to backward actions? Might this

³⁴ Marshall, 2019.

³⁵ See note 24.

³⁶ Paolo Viviani, Francesca Figliozzi, Giovanna Cristina Campione, Francesco Lacquaniti et al., "Detecting Temporal Reversals in Human Locomotion." *Experimental Brain Research* 237, (2011).

speak to our favoritism of forward flow, or our reliance on time, entropy and gravity as consistent vectors of unidirectional orientation?

I wonder if the performed reverse motion in Solos Olos would have been recognized as backwards had the commander been silent. It seems to matter for choreographer Trisha Brown that we perceive the flow as reversed, perhaps calling attention less so to its aberrance and more so to the relation of reverse and forward as the vernacular of modern dance may twist in and out of movements in ways that camouflage which flow might be "original" and which is the reverse. The participants of Viviani et al.'s locomotion detection study watched a series of simple walking patterns that were reversed through mechanical and embodied methods; would they have perceived as accurately the retrograded and forward movements of Brown's choreography, as the complexity and non-quotidian actions complicate recognizable operations of "true" directionality? Or is Brown's work more about finding pairs, phrases that correlate through their chronology, the second deemed the reverse and the first considered the original, with labels that could easily be inverted as both appear equally aberrant? Still, Brown has us recognize reversal through labeling not by finding, a call that feels less redundant and more wondrous as our attention steers towards the unfolding of material that we might not have recognized soon enough as of the same choreographic fabric.

In London this summer, it was hard to not see the buses on the left side of the street as reversing when they moved forward. So many times I stared wide-eyed as city buses careened in reverse motion on highly trafficked streets. Their heads and tails were indistinguishable to me; flattened with no hints of trunk or engine, the backside was leading a reverse parade from what I could tell. I understand that forward is leftwardly oriented in London (in a sense, a driven inversion of my North American time's arrow). From where I stand, rightness is hard to break from, and so I see forward as reverse. Where else, I wonder, am I righting a left, mistaking forward and reverse for one another?

The Absurd and the Magical

The neurobiological strain of attending to flow reversal may speak to our relegation of reverse motion to the absurd or magical, the challenge of engaging with

35

backward action avoided by demoting reversed motion to a status of less than, otherworldly or phantasmagoric. Tohline emphasizes that early cinema *did* initially engage with reverse motion quite a bit before the mainstream industry pushed it aside for its inability to support "bourgeois realism".³⁷ At the turn of the 19th century, film advertisements included whether the picture would play forward or in reverse, a qualification hard to imagine in this age of non-reversible movie viewership.³⁸ Once a preference for narrativity overtook cinematic aesthetics, reverse motion could not support the demands of chronology, plot, and causality that story insists upon. As film became hailed for its evidence of reality, was reverse motion considered less indexical or narratively unintelligible compared to its forward motion companion?

Doane might choose a slightly different argument for reverse motion's fall from favor. She writes, "the emerging cinema participated in a more general cultural imperative, the structuring of time and contingency".³⁹ This rationalization of time, seemingly at odds with a regard for surprise and chance, existed according to Doane as a dualism of rigidity and enterability, supported by photography and film technology through their embrace of both precision and chance. Reverse motion may remain loyal to time's structure but evaporates contingency by inverting effect and cause. The stability of narrativity and the enchantment of contingency often work hand-in-hand: how often we read a book front to back verses back to front, wishing to chase after entropy rather than have it chase us. If through thermodynamics time had already been determined as unidirectional, did viewing early cinema in reverse start to resemble a depiction of Earth as flat- outdated and unscientific? Was the positioning of physics as irreversible a case for privileging forward motion and seeing backward action as a juvenile fantasy- a flat Earth, a backward spill?

In an era dominated by scientific reasoning, film and dance aesthetics began resisting magic as time became more and more rationalized: reverse motion and reverse gravity were treated as anti-modern in their fantastical display of otherness through unnatural flow and became associated with the sublime or the fictitious. Straining for one

³⁷ Tohline, 25.

³⁸ Tohline, 41.

³⁹ Doane, 3-4.

last grasp at magic to be held within culture's embrace, Doane suggests that "[t]he popularity of the magic show in the late nineteenth century...is the underside of fears about an encroaching science".⁴⁰ Magic counters "science in its celebration of mystery, of unknowability, of the impossibility of connecting cause to effect":⁴¹ magic, pitted against science, a fierce and beloved opponent of Western modernist epistemology. Before its fall from favor, however, reverse motion in early film was engaged with in wondrous ways, often gesturing toward the magical through the use of this technique. In The Artist's Dilemma,⁴² a clock is painted to remain fixed at 4 o'clock as the artist recovers a painting that has been tarred over, the work reversed back to life as a dancer appears to emerge from the canvas, the un-deadening of both painting from blackness and moving figure from stilled form.⁴³ The reverse motion in this film "seeks to reinscribe" the uncanny likeness of the cinematic image as magic", as events are held in the surreal space of dreamlike non-time.⁴⁴ In Jean Cocteau's final scene of La Belle et la Bête,⁴⁵ the title characters ascend upwards through reversed jumps, the movement of their limbs and the fabric of their costumes appearing as aberrant motions signifying temporal alteration while offering a sense of enchantment epitomized through their celestial power of ascension. A perception of vectored directionality of life promotes this sense of divinity through the figure's ability to reverse against the arrow of time (and mortality), magic in this case narratively supported despite and *because* of reverse motion.

Is retrograde dance the magical underside of rational forward choreography? What about the underside of fabric, the reverse side, the wrong side? Less frequently used, the wrong side is sometimes favored for its uncanny qualities of otherness, the beautification of the subjugated. This correlates with Doane's use of the word "true" in

⁴³ Doane, 109-10.

⁴⁴ Doane, 111.

⁴⁰ Doane, 135.

⁴¹ Doane, 135.

⁴² J. Stuart Blackton and G.E. Smith (Producers), Edwin S. Porter (Director). (1900). *The Artist's Dilemma* [Motion picture]. USA: Edison Manufacturing Company.

⁴⁵ André Paulvé (Producer), Jean Cocteau and René Clément (Directors). (1945). *La Belle et La Bête* [Motion picture]. France: Les Films André Paulvé.

film's directionality, reverse fabric chosen for its untrueness. Magic may be deemed the inverse of science, but could it not also be the reverse?

Journeys and Bookends

Through a potential for passages of locomotion, flow reversal savors strongly of journeys, departures and returns. In considering reversals within film and dance, I have been engaging with this idea of return, looking towards literature for the narrative use of reversal as a journey homeward, a return voyage perhaps most epically portrayed in the twenty year homebound journey of The Odyssey, as Odysseus backtracks to arrive at the point of initial departure. Penelope's tale, considered further by Margaret Atwood in The Penelopiad, is also replete with return narratives and unstitching methods of reversal.⁴⁶ as Penelope unravels her progress on a blanket to rewind a demarcation of time, reversing away from woven completion that would mean succumbing to suitors and perhaps surrendering her home. Penelope thwarts a forced journey and reverses herself away from the threat of an imposed departure. In her book Feeling Backward, Heather Love references literary instances of backward gazing while moving forward through Odysseus and the Sirens, Lot's wife in the story of Sodom and Gomorrah, and Orpheus's backwards glance for Eurydice.⁴⁷ While these tales reinstate the perilous fate of looking backwards, Love complicates the potentiality of forward-moving-backwardsgazing,⁴⁸ as strikingly depicted by the Sankofa, a West African mythical bird whose head twists backwards while feet face forward.⁴⁹ Its etymology stems from a Ghanaian Akan tribe, with the roots "san" (return), "ko" (go), "fa" (look, seek and take).⁵⁰ The Sankofa bird offers the homage: "it is not taboo to fetch what is at risk of being left behind", embodying a reverse gaze that accompanies forward action, emphasizing an

⁴⁸ Love, 8.

⁴⁶ The reverse narratives of these epic tales played strongly into my consideration of journey and home for this section. Margaret Atwood. *The Penelopiad,* (Toronto: Knopf, 2005). Emily R. Wilson. *The Odyssey /Homer*, trans. by Emily Wilson (New York: W. W. Norton & Company 2018).

⁴⁷ Heather Love. *Feeling Backward: Loss and the Politics of Queer History*. (Cambridge and London: Harvard University Press, 2007).

 ⁴⁹ Christel N. Temple 2010. "The Emergence of Sankofa Practice in the United States: A Modern History." *Journal of Black Studies* 41 (1): 127.
⁵⁰ Temple, 127.

engagement and awareness of the past for its ability to strengthen the future, a backward gaze backstitched for future's reinforcement, and a journey that moves through and witnesses its own going and coming.⁵¹

In considering the often oppositional flows of journeying, I continue landing on the express emphasis of reversal at airports, with glaring markers for "Arrivals" and "Departures". The round-trip ticket default reinforces the expectation of return, a oneway voyage more infrequent or even suspicious compared to a journey that returns home. But then again how strange this undoing of venture is:

So you wish to return? Are you sure you want to wind up right back in the same place? You are trying to go somewhere right, you're at an airport? It's kind of expensive to get a pair of things where one undoes the other- might you want to trade the two in for one that lasts?

Of course, the experience lasts, or the mission of the trip was accomplished, there are a range of rationales for this undoing behavior. Still, the infrastructure of journey, and of flow, often positions reversal as integral to our movement, a journey even considered incomplete without the return. As a form of reversing, the return incorporates turning, whether through a sharp pivot that about-faces a traveller to go back by leading with their front, or a subtle and gradual turn which may cause an ellipse (or any manner of winding path) that eventually refinds its way to the origin. Film and dance exhibit distinct takes on the return. Cinematic reversal is a more stringent form, as it reverses by recovering every one of its framed footprints, whereas retrograde dance, through its iterative nature, recourses with the potential for minor or major detours in achieving a physicalized return home in material, not necessarily in space and certainly not in time.

Tactical Reversal in the Margins

As a counter to modernity's thrust of progress and convention as unidirectional, a consideration of Foucault's term "tactical reversal" of the marginalized complicates and reorients power dynamics, survival mechanisms and culturally situated ideologies of

⁵¹ Temple, 127.

backward action.⁵² In her book *Feeling Backward*. Heather Love considers the concept of backwardation through queer theory, positioning modernist queer futuricity as "looking forward' while... 'feeling backwards". ⁵³ I am reminded of the Sankofa, and wonder if Love's queer futuricity is an inversion of the mythical bird, or might it be another way to describe the same creature who has yet to move? In both cases, the bird's head and feet would be facing in opposition, its composition identical at the predirectional hovering point before motion. Love's perspective of queer historicity recalls the forward moving act of retrograde choreography, where reworked materials of the past become actions of the next. Her discourse of mainstream, unidirectional progress has moved me to consider modern capitalist ideology as an emboldened running stitch. consumed with consuming fabric(ations?), rather than acknowledging past transgressions with the fastening of a backstitch (fastening as the dreaded halt of a capitalist sprint). I think again of Martin's declaration of the Western capitalist incentive "to go forward into the future unencumbered by historical claims". ⁵⁴ Speed is imperative and unyielding as the running stitch ravenously attaches itself to future materials, remaking itself by running forward towards producing actions. In her article "The Running Stitch", Katherine Lennard insinuates links between racism and the running stitch as she retraces the history of a quilt made from scraps of Ku Klux Klan uniforms, the full story of the stitcher unknown.⁵⁵ Her title sets a striking consideration of sewn intention: the running stitch is fast, forward facing, and imprudent. Without a nod towards preservation nor self awareness, it progresses onward with rapid ease, and is backwardless in care. Lennard comments on the apparent haste with which the sloppily constructed guilt was sewn; what remains unknown is whether these scrapped were patched with stitches meant to run from a dark history or reverse back right into its thicket, a sprinted revival back towards racist propaganda and (re)memorabilia.

⁵² Michel Foucault, *The History of Sexuality: Volume I: An Introduction*, trans. Robert Hurley (New York: Random House, 1978).

⁵³ Heather Love. *Feeling Backward: Loss and the Politics of Queer History.* (Cambridge and London: Harvard University Press, 2007), 27.

⁵⁴ Martin, 68.

⁵⁵ Katherine Lennard, "The Running Stitch," Journal of American Studies 52, no. 4 (2018).

A consideration of memory's reverse flow finds further inversion as Love draws attention to the privilege of forgetting as a forward gazing modernist society. If progress is forward, and no tug of the past is felt, what then is lost in the present through the act of forgetting? Nothing, if there is the promise of racing forward with a running stitch, recreating ahead anything that was willingly lost behind. The risk of feeling and gazing backwards becomes emphasized by Love's portrayal of the marginalized. For the "dominant" culture, acts of looking back or going back offer less risk when an identity has roots to ground it or enough resources to keep replanting itself in the present. For other subsects of culture, whose relevance in the present and place in the future feels more precarious, might that act of going backward jeopardize their place in the privileged and of the undermined? Perhaps the distinction lies between choice and necessity, the ability to rewind without self consequence or the call to reverse in order to secure stitches that could so easily be unpicked away.

In her book *Time Binds*, Elizabeth Freeman examines mainstream cultural enforcement to align with specified directional orientations of sexuality and productivity.⁵⁶ Her term chrononormativity- "the use of time to organize individual human bodies toward maximum productivity"- speaks to the measures by which industrialization has thrust a speed and direction upon *preferable* development, as epitomized through Love's historicization of queerness as a "backward races".⁵⁷ Freeman engages quite a bit with Freudian psychoanalytical perspectives of homosexual behavior as perverse and undeveloped, casting queer sexual desire as a backwards movement towards unproductive sexual behaviors and therefore un-reproductive in terms of the human species. She speaks to the capitalist imperative of productivity within time considerations, writing "the logic of time-as-productive thereby becomes one of serial cause-and- effect: the past seems useless unless it predicts and becomes material for a future".⁵⁸ Unproductive material of the past would then be best forgotten or disregarded under this regime of modernism. I am reminded of Love with the concept of temporal

⁵⁶ Elizabeth Freeman, *Time Binds: Queer Temporalities, Queer Histories.* (Durham: Duke Up, 2010).

⁵⁷ Freeman, 3.

⁵⁸ Freeman, 5.

drag, Freeman's term for "the visceral pull of the past on the supposedly revolutionary present".⁵⁹

Like Love, Freeman considers how social and cultural progress has turned and returned upon itself through reversals. Her work has caused me to consider social reform reversal, legislative progress that has been overturned, and reversions of social behavior that harken back(wards) to movements that reek of regression. By considering how time binds, Freeman's reversals speak directly to sewing reversals as a form of binding- of backstitching to recall, recount, and suture the open seam/wound of a timeline. She writes, "in the dialectic between linear-national history and cyclical-domestic time, history appears as damaged time; time appears as the plenitude that heals the historical subject. Time, then, not only 'binds' flesh into bodies [...] but also appears to 'bind' history's wounds".⁶⁰ Love too speaks of reversing history as re-entering injury, each in their own way positing that there is no queer future forward without gesturing back.

A hand sewn backstitch is composed of forward and then backward looping threads, the reversing of directions integral to its stability as it steadily and incrementally progresses forward. A sewing machine doesn't...can't... mechanically backstitch in the same way. It sews in its running stitch and then must be directed to reverse backwards; the moment of backtracking is the occasion, not the constitution. Security is precarious until a disruptive mechanical backstitch, whereas the hand sewn seam is secured through each slowly inching, backward gazing stitch.

In their installation/performance *Moving Backwards*⁶¹, Renate Lorenz and Pauline Boudry articulate reverse action's dual capacities of defiance and defeat. The piece features live and filmed retrograded choreography, as well as performers who wear shoes backwards in reference to female Kurdish guerilla fighters who reversed

⁵⁹ Freeman, abstract.

⁶⁰ Freeman, 7.

⁶¹ Pauline Boudry and Renate Lorenz. (2019). *Moving Backwards*. [Performance]. Italy: Swiss Pavilion Biennale Arte.

their shoes to throw off the direction of their movements as tracked in snow.⁶² A review of Lorenz and Boudry's work in *The Art Newspaper* offers, "their film installation is both mesmerising and exhilarating at turns. The unifying motif-a backwards-forwards movement, with shoes worn the wrong way round—becomes a symbol of ambivalence, turning a disadvantage into an advantage, and the exercise of freedom."⁶³ The ability to disorient, subvert, and mislead the enemy through reversed actions becomes a tactical, empowering capacity of backwardation. Still, through a manifesto addressed to the viewer, the artists dissuade a sweeping consideration of reversal as a sign of empowerment, calling attention to the reasons behind the need of backward motion, "for turning disadvantage into a tool".⁶⁴ They ask, "[d]o you sometimes feel as if you are massively being forced to move backwards?", addressing frustration over broader social movements that appear to be moving backwards, reverting to times of oppression, prejudice and complacency.⁶⁵ Even with reverse movement as a tool against reversed social movements, "[c]an its feigned backwardness even fight the notion of progress's inevitability?"⁶⁶ Like Solo Olos, the original and the reversed directionalities of choreography become muddled and at times are indecipherable, as the promise of deception looms as a tactic available for whoever walks with their shoes reversed, able to throw off an enemy who may realize too late the deceit of the tracks. Boudry and Lorenz conclude their open letter with an intention to reverse motion against socially backwards currents, proclaiming, "We will move backwards, because strange encounters might be a pleasant starting point for something unforeseen to happen."67

⁶² It feels important to note that the Kurdish fighters wore their shoes backward, rather than wearing shoes forward and *walking* backward.

⁶³ Alison Cole, Julia Michalska, Hannah McGivern, and Jose da Silva, "Venice Biennale 2019: the must-see pavilions in the giardini," *The Art Newspaper*, (2019): https://www.theartnewspaper.com/review/venice-biennale-2019-7-must-see-pavilions-in-the-giardini

⁶⁴ Boudry and Lorenz, *Moving Backwards* open letter/installation manifesto, 1.

⁶⁵ Boudry and Lorenz, 1.

⁶⁶ Boudry and Lorenz, 1.

⁶⁷ Boudry and Lorenz, 1.

Yinka Shonibare's choreographic work also articulates backwardation through a history that cycles upon itself, spiralized by social regression and progression, the act of going back not feared so much as the mark a reversal returns to. In her article "Gesture to Opera: Yinka Shonibare's Un Ballo in Maschera", Rebecca Schneider speaks to the retrograde choreography of Shonibare's film which appears to be shown in reverse, but is in fact retrograded choreography.⁶⁸ The play of choreographic and filmic directionality within Shonibare's work, as well as Schneider's exploration of its discourse on history's near repeatability through re-cycled behaviors, speak to the twisting of backwards movements within a historicity which aims to maintain an appearance of ever-forward progression. The performed retrogrades are of course not perfectly replayed and rehashed units of respun film, but rather human-produced bits of history, rewound in vibrating mimicries of near but never complete symmetries. The choreography of Un Ballo also retrogrades unobviously; its likelihood at forward action is no doubt a commentary on the often imperceptible reversions society engages in that might not at first be recognized as socially backwards. Schneider speaks through the vernacular of sewing herself, describing Shonibare's inversion of operatic production through the imagery of a reversed garment, describing how the dancers "have turned the opera inside out, showing the gestic fabric of its inner lining foregrounding background in a 'consumptive' semiophagy of form".⁶⁹ Recognizing Shonibare's iconographized use of "African" fabric, Schneider details the forward and reversed transactions of pattern designing, weaving and printing between European and African nations, as the claimants of determined ethnic pattern identity become muddled within the back-andforth exchange that Schneider calls "recognition/misrecognition loop".⁷⁰

Unfixing the Archive

In a culture of perceived fixed entities, do we torment over an unfulfillable longing to reverse what we feel as solidly staid and realized? Is the compulsion to crave reversal a bizarre misreading of the ever becoming, slipping, sliding, and seeping that already

⁶⁸ Rebecca Schneider, "Gesture to Opera: Yinka Shonibare's Un Ballo in Maschera," *The Opera Quarterly* 31, no. 3 (2015).

⁶⁹ Schneider, 156.

⁷⁰Schneider, 159.

surrounds us? What ideologies offer alternative accounts where everything is in constant forward and backwards, making and unmaking, to that point that there is less supposition of agency over reversals, and instead an acknowledgement that reversals are integral to existence beyond a call to action?

In her essay *Performance Remains*, Rebecca Schneider offers, "the archive is habitual to western culture",⁷¹ where memory fixes itself through fixities. The tangibility of the archive releases reliance on memory, again emphasizing forgetting as a privileged act of the archivable elite, who use items to stand in for flighty intangible (re)collections of remembrance. Preserved as measurable remains, relics offer (albeit faulty) antidotes to the death or obliteration of a history. Dance, oral traditions, and other un-calcifiable events are counted as unfixed performances that risk disappearance through their lack of remains. But Schneider argues against the total reversal of performance into undoneness, insisting that "disappearance is not antithetical to remains".⁷² She posits that even conditioning performance as ephemerality, loss, or an inverse of making caves to the imperialist favoritism of the inheritable accountability of the archive.⁷³ The very notion that "[t]he important recuperation of 'lost histories' goes on in the name of feminism, minoritarianism, and its compatriots" derives from the "this privileg[ing] of siteable remains", crediting these marginalized histories only through the condition of securing locatable remants.⁷⁴

Flow reversal, a performance through its shifting nature and movement expression, nestles into Schneider's consideration of the duel life and death of performance, the coming into being through, while, despite, and because of its disappearance. She writes, "[d]eath appears to result in the paradoxical production of both disappearance *and* remains".⁷⁵ On rethinking ephemerality, Schneider pushes us to reconsider the paradox of death and birth within reversal itself, which at once both lives through and kills aspects of itself by its performed (un)doing. Doane also draws attention

45

⁷¹ Rebecca Schneider, "Performance Remains," *Performance Research* 6, vol. 2 (2001): 100.

⁷² Schneider. "Performance", 104.

⁷³ Schneider. "Performance", 101.

⁷⁴ Schneider. "Performance", 102.

⁷⁵ Schneider. "Performance", 104.

to flow's simultaneous death and promise of immortality through thermodynamic's claim that "energy ultimately and irreversibly exhausts itself" and dies, yet no energy can be created nor ultimately destroyed.⁷⁶ The archive offers a chance to reverse away from such totalized death, curated to immortalize the *type* of life we wish to revert remembrance back into. If deemed unarchivable, death has no counterbalance to leverage itself away from thermodynamic's threatened demise. But Schneider positions that "performance *does* remain",⁷⁷ that for retrograded dance- a recalled history- to be achieved, it must exist because of and through the remnants and ruins of that which has not entirely disappeared. Schneider causes me to wonder if reversal is a recognition that there is something historicized to reverse back into. Could the predication of reversals include archivability in rigid *or* intangible forms, for can we reverse into what cannot be recalled?

A closer look at Indigenous practices of reversal has opened wide my consideration of reversing as a forward leaning act rather than a relic rewinding towards the past. In "Dancing Chiax, Dancing Sovereignty: Performing Protocol in Unceded Territories", Miqeu'L Dangeli offers an Indigenous approach to turning backwards, a striking counterpoint to Western and capitalist aversion to backwards or reverse development.⁷⁸ In her article, Dangeli beautifully conveys the Squamish invocations of Chiax, or protocol, which recounts ancestral roots, harkening backwards *before* moving forward in a dance to create something new. Dangeli writes, "In the case of an entry song (a song used to enter the dance floor), all of this information is shared through oratory just after the song is sung".⁷⁹ Chiax invokes archive, not the staid and filed sort, or necessarily a historicity of tactile ruins, but rather the remains Schneider attends to through a recognition of performance, an acknowledgement that the past *performed* itself and that its disappearance has a reappearance and resuscitation in the now, through the multi-temporal induction of Chiax. In considering remembering as a form of

⁷⁶ The difference being closed and open circuits...for those of us who are not physicists the duality may remain enchantingly antithetical. Doane, 114.

⁷⁷ Schneider, "Performance", 102.

⁷⁸ Mique'L Dangeli, "Dancing Chiax, Dancing Sovereignty: Performing Protocol in Unceded Territories," *Dance Research Journal* 48, no. 1, (2016).

⁷⁹ Dangeli, 78.

archiving, Schneider offers "[t]o read 'history' as a set of sedimented acts which are not the historical acts themselves but the act of securing an incident backwards- the repeated act of securing memory- is to rethink the site of history in ritual repetition".⁸⁰ This emphasis of inheritance suggests the backward gazing glance, a recognition integral to Indigenous ceremony and progress. Referring to the construction of Stanley Park, Dangeli describes the building methods as destructive reversal practices: homes were plowed through and human burial sites destroyed to pave new roads in reckless erasures of Indigenous life.⁸¹ Here, the relentless forward gaze of colonialism is bitterly positioned against Indigenous practices of retrograded and historical reclamation as a method of continual looping and rewinding in order to move forward.

Contrary to the unpicking of colonialist ambitions that tear at the fabric of cultures in order to carene forward with the new, Chiax casts reversal as a handsewn backstitch where the past becomes rooted and less susceptible to being unraveled by the present. Might gratitude serve as a reversal practice itself, thankfulness requiring a conjuring of the past to re-emerge at the threshold leading to the next? Thinking against the stoicism of time's arrow, reverse flow offers a perspective of pulsating action that circulates between undoing and doing, a constant exchange that does not require nor wait for the bookend of a film, a history, or life as it continuously churns in and out, forward and back, then and before, able to create and destroy with the acknowledgement of incompletion through the process of flow.

Reversing Notions

I have a hunch I'll wind up with Pepita Hesselberth in the end, who speaks beautifully of reversal as a "thickening" of time.⁸² Sewing captures this so vividly, as backstitching adds strength and density through its layering, thickening of thread. The

⁸⁰ Schneider, "Performance", 105.

⁸¹ Dangeli, 82-3.

⁸² Tohline references Pepita Hesselberth's concept from her book *Cinematic Chronotypes*. Tohline, "Towards", 28. Pepita Hesselberth, *Cinematic Chronotopes: Here, Now, Me*. New York: Bloomsbury, 2014.

ephemera of a running stitch is regrounded by the traversal of trampling feet;⁸³ fixed effervescence, known through measures of securing that reversal has been backstitched.

In sewing, a notion is a smaller object- a bit of trim or lace- affixed to a larger piece of work. I imagine these notions as concepts attached to broader beings, stitched on top of entities rather than interwoven as integral, structural components. This research has caused me to reverse notions I had sewn onto reversal itself, unpicking at the threads that once bond constructs of going backwards as simple acts of attempted erasure. Surely reversals may gesture toward the undone, but I now wonder how reversing and doing might be entangled, blurring distinctions of forward and back, doing and undoing, through an unraveling of faulty binaried epistemology. And if we are to assert a separation of the two, how might the reverse come first? It feels far stranger to consider the second as the original, the first as a derivative. Are we clinging to these first encounters as a grounding of stability and then assume the existence of a reversal ceiling to reinforce that we are standing up and not hanging down?

When sewing on a machine, the arms reach forward and push away from the body; the material that has already been stitched moves farther away from the self, while unsewn cloth dangles in the lap or on the floor, around and behind. Contrary to the customary act of gesturing forward to designate the future and behind to reference the past, the Indigenous population of Aymara is the only known community to reverse this orientation, gesturing forward to refer to the past, and behind to designate the future.⁸⁴ The past before them, like the sewn stitches, is known and more visible, whereas the future comes from behind, unstitched and untethered. I wonder which direction the Sankofa bird would point to designate as the future, and if it would it be just one.

Throughout these retrograde inquiries, reverse flow has unraveled my assumptions with its paradoxical desires to undo, ability to preserve, reluctance to forget and necessitation to recall, unwinding my own sense of entropy, history, cultural

⁸³ The metal bracket on a sewing machine cradling the needle is called a foot, a beautiful homage that those pieds we run(ningstitch) with.

⁸⁴ Rafael E. Núñez and Eve Sweetser. "With the Future Behind Them: Convergent Evidence from Aymara Language and Gesture in the Crosslinguistic Comparison of Spatial Construals of Time," *Cognitive Science* 30, no. 3 (2006): 401-450.

dogmas, positioning of inevitability, and suppositions of lasting. The imagery and practice of rewound dance, cinema, and sewing speaks directly to widespread imperatives of undoing tasks that desperately call for retrograde action, as this research finds itself within an era where our society, along with our planet, tackles at that which can and cannot be reversed. The multiplicitous nature of unbound practices offers a myriad of promising methods and implications of backward actions that may undo what we wish to release, reimagine what we perceive as fixed, and anchor what we hope to preserve.

Since starting on this research, I have been wrestling with the term "unpick"- to tear at the threads of a seam, usually by hand with a seam ripper, in order to undo the stitches. "Unpick" felt like an empty reversal term, as there is no forward "pick" in sewing, one does not pick a stitch. Or so I thought, until speaking aloud Barthes' punctum as a "prick" and mistakenly uttered "pick". Might the pricking of a needle into cloth entail the picking, choosing of that stitch? Did I not once pick the sewn path that I am now unpicking? The root of reversing also presents a ponderous forward counteract: versing. Are we returning to verses when we reverse, abandoning the more banal and perfunctory forward approach of prose and returning to the surreal, the magical, the rhizomatic wonder of poetry undone by logic and remade by its backwardation? Stemming from the Latin work "reversus", reversal is composed of "re" (back) and "vetere" (to turn), offering an invocation to turn back; a return to versing and back to turning.⁸⁵

⁸⁵ "reverse, v.1". OED Online. December 2019. Oxford University Press. https://www-oed-com.proxy.lib.sfu.ca/view/Entry/164783.

Bibliography

Barthes, Roland. Camera Lucinda: Reflections on Photography. London: Vintage 2000.

- Dangeli, Mique'L. "Dancing Chiax, Dancing Sovereignty: Performing Protocol in Unceded Territories." *Dance Research Journal* 48, no. 1, 2016.
- Deren, Maya. "Cinematography: The Creative Use of Reality." *Daedalus* 89, no. 1, 1960: 150-67. www.jstor.org/stable/20026556.
- Doane, Mary Ann. *The Emergence of Cinematic Time: Modernity, Contingency, the Archive*. Cambridge and London: Harvard University Press, 2002.
- Freeman, Elizabeth. *Time Binds: Queer Temporalities, Queer Histories.* Durham: Duke Up, 2010.
- Harvey, David. *The Condition of Postmodernity*. Cambridge and Oxford: Blackwell Publishing: 1990.
- Lennard, Katherine. "The Running Stitch." *Journal of American Studies* 52, no. 4 (2018): 893-912. Doi: 10.1017/S0021875818001330
- Linde-Domingo, Juan, Matthias S Treder, Casper Kerrén, and Maria Wimber. "Evidence That Neural Information Flow Is Reversed between Object Perception and Object Reconstruction from Memory." *Nature Communications* 10, no. 1, 2019.
- Love, Heather. *Feeling Backward: Loss and the Politics of Queer History.* Cambridge and London: Harvard University Press, 2007.
- Martin, Randy. "A Precarious Dance, a Derivative Sociality." *TDR* 56, no. 4, 2012. http://www.jstor.org/stable/23362772.
- Núñez, Rafael E. and Eve Sweetser. "With the Future Behind Them: Convergent Evidence from Aymara Language and Gesture in the Crosslinguistic Comparison of Spatial Construals of Time," *Cognitive Science* 30, no. 3, 2006.
- Qian, Ning, et al. The Zuckerman Institute at Columbia University. "Human brain recalls visual features in reverse order than it detects them: Study challenges traditional hierarchy of brain decoding; offers insight into how the brain makes perceptual judgements." ScienceDaily. www.sciencedaily.com/releases/2017/10/171009154946.htm.
- Schneider, Rebecca. "Gesture to Opera: Yinka Shonibare's Un Ballo in Maschera." *The Opera Quarterly* 31, no. 3, 2015.
- Schneider, Rebecca. "Performance Remains." *Performance Research* 6, vol. 2, 2001. DOI: 10.1080/13528165.2001.10871792

- Temple, Christel N. "The Emergence of Sankofa Practice in the United States: A Modern History." Journal of Black Studies 41, no. 1, 2010. https://doi.org/10.1177/0021934709332464.
- Tohline, Andrew. "Towards a History and Aesthetics of Reverse Motion." Electronic Thesis. Ohio: *OhioLINK Electronic Theses and Dissertations Center*, 2015. http://rave.ohiolink.edu/etdc/view?acc_num=ohiou1438771690.
- Viviani, P., Figliozzi, F., Campione, G.C. et al. "Detecting Temporal Reversals in Human Locomotion." *Experimental Brain Research* 237, 2011. https://doi.org/10.1007/s00221-011-2809-6