A SHAPE IS A SOUND:
REFLECTIONS ON THE BODY AND LANGUAGE

by

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B.A. African American Studies and Theater
Wesleyan University, 2009

Submitted to the Department of Architecture
in Partial Fulfillment of the Requirements for the Degree of
Master of Science in Art, Culture and Technology
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ABSTRACT

This thesis examines the practice and projects of the author as both an actor and an artist as an ongoing investiga-
tion into the relationship between the body and language, between movement, line, shape, and voice. By weaving
together diverse projects from my graduate career that explore voice and language as physical, material processes
with episodes from my work as an actor, it investigates translation—between forms, bodies, languages, and materi-
als—as a method of creation, a path of invention.

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A shape is a sound, May 2016
Introduction

She stands at the white board, marker poised.

"To create a rule, you need three components: First, you need an input. Let's call it Shape A."

She turns to the board, and carefully draws a rectangle in black marker.

"Then, you have an arrow, which means changed to, transformed into, replaced by, etc."

To the right of the rectangle, she now adds a single arrow.

"And finally, you have your output. We'll call it Shape B."

To the right of the arrow, she draws a rectangle resembling the first, with another rectangle added orthogonally flush to its side.

"And that," she says, "is a rule. From rules, you can build grammars. From grammars you can build languages, and from languages, designs."

Changed to.

Transformed into.

Replaced by.

In digital computation, these three verbs are effectively synonymous. Whether A is changed to, transformed into, or replaced by B, the result is the same. Where was A, now is B. The energy, heat, duration, and chemical processes involved are all irrelevant. In analog processing, however, the way from A to B is an unresolved question. Some thing must be made into some other thing, by cutting, moving, melting, carving, crumpling, stretching, pressing, twisting or any number of metamorphic processes. Like paths across a terrain, the way from A to B could be direct and swift; it could be meandering and long. It could contain loops and stops, dead-ends and crossroads. Failures and surprises. It could be painful, arduous and inclement; it could be slow, leisurely, or pleasurable.

In his book Lines: A Brief History, Timothy Ingold delineates between two types of lines that he calls the trace and the connector. The trace, Ingold argues, is "intrinsically dynamic and temporal…Whether traced in the air or on paper, whether by the tip of the stick or the pen, it arises from the movement of a point that…is free to go where it will, for movement's sake." The connector, on the other hand, "is in a hurry…It goes from point to point, in sequence, as quickly as possible, and in principle in no time at all, for every successive destination is already fixed prior to setting out, and each segment of the line is pre-determined by the points it connects."

The computation of shapes described above comes from an approach to design called shape grammars. Conceived as a way of computing shape and image, shape grammars are generated through a particular combination of the trace and the connector. For while the rule, or the algorithm, functions as a kind of connector with an already computed output, the process of transformation is drawn or traced. It is performed by a human body, a hand moving a pen across a surface. In this demonstration of shape grammars, the body is a translator that materializes the language. The arrow then, and its various iterations of changed to, transformed into, and replaced by, all implicate

2 Ibid. 73
and take place by way of the body. Language emerges through a bodily process. Without the hand to draw, without the mouth to speak, language would be impossible.

Before being introduced to shape grammars in Visual Computing I during my first semester at MIT, I worked and studied for over ten years as an actor. My experiences with my own body and voice resonated deeply with the approach Visual Computing took to creativity and invention, to shape and language. While acting, I always thought of my body as a kind of channel, threshold, or transmitter, through which diverse impulses, sounds, movements, trajectories, ideas and emotions would pass. My job as an actor was to convey these forces, not in the sense of representing or illustrating them, but by carrying, relaying, or translating. My body was simply a conduit.

During my time at MIT this interest in translation as an inventive, creative process of the body has motivated and driven my practice, particularly around the question of language and voice. This thesis traces the development of those interests as they have been challenged and deepened through a variety of projects. It is structured chronologically as a journey that moves from exploration to exploration in an attempt to connect the ideas and forms that I worked through along the way. Interwoven with the projects from MIT are fragments, memories from my time as an actor and my work with the body and voice that have inflected my work now as a visual artist. Together, they form a composite exploration of the voice and language as they are lived in blood, bone, sweat and muscle, and the messes, complications, and surprises that arise in the communicative event.
Voice: Running

She looks down at her hands, twirling her ring round and round with her fingers. Her glance shifts nervously, seeking something, not finding it. She avoids looking into the camera. A few times she inhales and pouts her lower lip open, only to bite her tongue as she exhales. The fluorescent lights buzz. There is no other sound. Time drags.

I remember a large ravine in the woods near my house that I loved to run down as a kid. It was quite steep and long, and, at about the ¼ mark of the run, there was a distinct shift in the relationship between my legs and the rest of my body, from my brain telling my legs to move, to my legs propelling themselves down the hill in a flight of momentum. As I accelerated, I had to trust in my legs as they dodged between rocks, around bushes and trees, through creeks, and over logs. I dreaded, every time, that tipping point. I had no control over the shape of my path. By the time I slowed down, I inevitably had cuts, bruises and scrapes on my arms and legs, mud splatters and thorns in my clothes. And when I looked behind me, I would see the way I had come, carved by broken branches, smushed moss, displaced pebbles. The path cleared in my wake looked different every time.

“It’s on a roof,” she says suddenly. For the first time she moves, finding a new nook in the chair. She breathes deeply, and continues:

It’s on a roof, and it’s summer. By the ocean. I’m in a black dress. And I’m tan and sweaty and salty. And all my friends are there. All the friends I ever knew. Like a funeral. And it’s sunset and everybody is dancing.

We’ve all been swimming.

It begins like that. Simply. One word after the other. The thoughts stay close to the ground, within a plausible real. But with time and increased speed, the words take a turn. The speaking becomes automatic, not in the sense of brainless or repetitive but rather in its strict etymological origin, “acting of itself.” When she hears her own words, she does not know anymore who is speaking:

I think he would save my ass last for dessert. When he’d eaten my shoulders, breasts, legs, cunt and crotch, he would turn me over and finish with my ass. He would start by kissing it bit by bit, slowly, and then he would rip off a chunk in his teeth, or he would chew through my asshole and that’s when I would come, and I would just explode and I would be singing forever. A mangled mess of blood and eyeball and guts and jawbone.

The words pour out of her, gushing through a crack.

“Where are they coming from?” she wonders. “Are these words mine? From me?”

My mouth, yes.
My voice, yes.

But not I, surely. And if not I, then who?

Perhaps it is not so much that I ceased to speak, but rather that I was dislocated from my brain and into my mouth. The words were coming from the tongue, from the teeth, from the lips and the throat but they had no prior in my mind, no invisible pre-immanent shape or image. They came charging through my mouth in the moment, and there emerged a feedback loop between the emotions, sensations, and images in my body and the words being spoken that felt of their own momentum, outside of my control. Though I was still speaking in words and complete sentences, in that moment I did not physically sense my words not as thoughts, or representative of my identity. The language and the voice were primarily felt and produced as substance, as material.

Physically I was most aware of the consonants: the cuts and contours of my teeth, tongue, and lips coordinated to shape the breath, shape the vibration. As I spoke I carved the air. And while my mouth moved with greater and greater speed, I felt the rest of my body relax, breathe deeply, as the mouth took on all the musculature and effort required to move at such a speed. The words had a life and movement of their own, their significance far beyond my comprehension in the moment of speech. It was only that I finished speaking that I looked behind to see the sense and shape of what I had said.
Methodologies

She found it in the trash. Strands of gold, fine as hair, swathed bluntly in black plastic. She dragged it down the long corridor back to her rehearsal studio, and tore the plastic open. Rivulets of thin yellow wire spilled out over the floor in a wild spill. She combed through the layers with her fingers, gingerly looking for an end of the filament. But it was impossible. It was endless: a single mangled loop. Though a solitary strand measured less than two thousandths of an inch in diameter, when grabbed in a clump, dragged as a whole, it felt inert and dense as sandbags. Luxuriously heavy, corpulent. A bed. A nest.

How long did I sit there touching it? Five minutes? 30?

I left to get my camera, and when I returned saw the size of the thing as if for the first time. It was as big as me. As quickly as I could, I fixed the camera to the tripod, turned it on and hit record, kicked off my shoes, and climbed inside.

Diving inside a mass of trash, computing shapes, rambling to a video camera: these are all slightly different versions or variations of the same kind of method: an intuitive, investigative impulsion to unravel. But unraveling is not simply an undoing. It is also another way to draw: it is generative of lines, loops, knots and meshes. Unraveling can also entangle. And entangling not only ensnares, or catches, but can produce a web of threads, a kind of woven surface which can in turn be unraveled. On and on. Unraveling is but one method to make and weave lines.

To elaborate on the distinction between the trace and the connector, Ingold compares each to a different perspective on traveling. Citing Rudy Wiebe’s *Playing Dead*, he contrasts the ways of Inuits and British explorers journeying in the Arctic. In Inuit culture, “as soon as a person moves he becomes a line… Thus the entire country is perceived as a mesh of interweaving lines rather than a continuous surface.”

The trace, then, is a line or a journey that is unraveled in time, with no pre-determined shape. As such, it is free to loop back upon itself, overlap, repeat: its structure is improvised. By contrast, the British ship moved across a surface, “linking a series of points arrayed in two-dimensional space.”

In the example of the British, the compositional relationship of the points has already been set, or mapped. What is left to the body to create or choose, then, is by which lines, in what configuration, and in what order, to connect the dots.

On a spread of white butcher paper ten feet square, she arrays her collections. There are squishy, plasticine mouths, meshes of Mobius strips, diagrams and equations for the acoustics of bells. There are long aluminum pipes, a bucket of metal shavings, and a 5-foot square circuit board with red and black cables spilling out in tangles. There

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3 Ingold, Lines, 75.
4 Ibid.
are poems and photos, drawings and dioramas. After ensuring that everything has a place on the large white sheet, she climbs up the ladder and perched.

How long she is up there she does not know. Eventually, though, she scrambles down and begins to rearrange. Some things go in the trash, some into stacks, some in piles; some she pastes and collages. For two days straight she futes and fiddles, stacks and sorts, all the while noting, scrawling, sketching. As she rearranges the objects on the butcher paper, she begins to draw lines between them. Images and objects of certain kinds begin to congregate in specific areas, creating little centers of orbit or gravity. Villages, roads, ridges and rivulets begin to emerge on the paper—a blueprint, or map. Groundwork for construction. A map.

Maps can be drawn in many different ways. While Australian Aboriginal used strings to show the tracks of dreams and Micronesian sailors used the ribs of leaves to plot swells in the ocean, in medieval Europe maps included illustrations and texts collaged together as disjointed fragments of a journey. In all these examples the map unfolds in time with the movement. But maps can also be the result of surveying, of seeing all at once. As Ingold says, “the names the surveyor seeks are indexed to locations in terms of their distinctive features, but without regard to how one arrives there. These named locations are the components that are then assembled into a larger totality. Occupant knowledge, in short, is upwardly integrated.” Some maps, then, assume a vertical perspective. Or what in architecture is called the plan.

In What is Philosophy? Deleuze and Guattari compare the process of art-making to the construction of a house. “When Dubuffet tries to identify a certain condition of art brut,” they remind us, “he turns first of all to the house.” Specifically, they take interest in the house as an assemblage of frames, a process of joinery and articulation: “Interlocking these frames or joining up all these planes…is a composite system rich in points and counterpoints… Frames or sections are not coordinates; they belong to compounds of sensations whose faces, whose interfaces, they constitute.” But rather than focusing on architectural examples, Deleuze and Guattari instead turn to music as the exemplar of vertical construction. Music, according to Deleuze and Guattari, consists of compounds of sensation, sonorous blocks, [which] equally possess sections or framing forms each of which must join together to secure a certain closing-off. The simplest cases are the melodic air, which is a monophonic refrain; the motif, which is already polyphonic, and element of a melody entering into the development of another creating counterpoint; and the theme, as the object of harmonic modifications through the melodic lines. These three elementary forms construct the sonorous house and its territory.

5 Ibid. 85
6 Ibid. 89
8 Ibid. 187
9 Ibid. 189
Because the components of my work are often unraveled by intuition, I need a physical sheet or frame on which to gather them, to see them or even hear them. Instead of drawing villages, roads, and topography, the process of constellating everything on a single plane is for me like composing a piece of music: an arranging of different components for their resonance, or dissonance, for their rhythmic relationship. The map is not just a plan for upward construction, but a frame that directs movement over time. A notation for music, a script for a performance.

As Deleuze and Guattari point out, however, the work of art as a house is not built to insulate or occupy, but to provide a means by which to encounter the world, to frame a threshold that offers a line of flight out into the universe. For “however extendable this system may be, it still needs a vast plane of composition that carries out a kind of deframing following lines of flight that pass through the territory only in order to open it onto the universe, that go from house territory to town cosmos.” In the case of music, they argue this line of flight manifests in a recurrence: “The great refrain arises as we distance ourselves from the house, even if this is in order to return, since no one will recognize us anymore when we come back.” The search for theme then, or pattern, or relationship that is conducted from atop the perch, is not an attempt to tie everything together but instead search for the exit, for a path to the unknown.

In this threefold process, of unraveling, mapping, and constructing, there is a paradoxical tension with the solidity of the line, frame, or joint, and the contingency of movement and flight. The method to the madness, then, is the hunt for the cliff from which to jump, the dock from which to dive, the pad from which to launch. The moment of the departure is the encounter with the in-between, and translation itself the event or movement from what is known or already expressed to what is yet to be discovered.

10 Ibid. 187
11 Ibid. 191
Reading Emily Dickinson's poetry for the first time was a bit like having the hiccups. More than the words themselves, Dickinson's poems are singular for their use of meter and punctuation that produce jolts, suspend breaths, sudden ejaculations and bursts. The punctuation marks physically disrupt the flow of the words with marks and indicators for that which is not spoken.

“Could the unsaid be touched?” She wondered. “Or traced? Could it somehow be mapped, or deciphered?”

Without thinking, she pulled a piece of tracing paper from her drawer and laid it over the poem. She held her pencil, hesitant.

She dropped the dark silvery point directly in the middle of the first line, between “lapse” and “nor,” right above the comma. She then let the line wander down, cascading and falling over the words, stumbling or tumbling over serifs and punctuation, gliding softly over dashes. She lifted up the paper and slid it over. This time, she drew distinct dots in between each word, forming beats and irregular rhythms in their spacing. Each rule of travel between the words produced new lines and landscapes. The variations, the possibilities of moving between were infinite.

But after several different experimental redactions, she returned to the dashes and exclamation points in the poem. With a fresh sheet of tracing paper laid over, she picked up her pencil and drew over the eight small dashes.

When learning to perform Shakespeare, there is a very popular exercise for actors that consists of coordinating basic body movement with the punctuation of the text. The rules are as follows:

As one speaks, one walks.

At a period, question mark, or exclamation mark, one stops and changes direction, then begins walking again on the first word of the next sentence.

At a comma, one simply changes direction without stopping to walk.

At a colon, one pauses and then leaps in the same direction one was walking before. At a semi-colon one skips and turns to walk in a new direction.

This exercise is especially common with Shakespeare's monologues, where characters cover vast ranges of emotional and philosophical territory in a very short amount of time. When an actor begins to get bogged down in trying to communicate the entire sense of a dense and complicated speech, this exercise helps her to give the thought flow and continuity by connecting the movement of sound and silence with the movement of the legs. Rather than thinking of the words as one long unbroken string, this exercise reveals the joints of the speech, and gives it definition, shape, and body.

Though as far as we know Dickinson never expressly intended for her poetry to be read aloud, her punctuation nonetheless shapes the flow of her thoughts in time. Her dashes, periods, commas, and exclamation points are traces of the poet's body, of her breath and inflection. They are the traces of her voice.
Without any understanding of what I would find, I began tracing the punctuation of all of Emily Dickinson's poems, working through in chronological order. Day after day, sheet after sheet, the stack of punctuation grew, until I had 1017 poems completed. Over and over, I flipped through the sheaf of dots, dashes, and exclamation points. An overwhelming index of so many things that could not be translated into words, that stayed somehow in the body. They offered no pattern, they yielded no grammar, system, or language. They were abundant and silent.

... 

On a small wall in a darkened room, flecks of white punctuation marks dart and flit in succession in a sea of black. Their rhythm is incessant and regular, too slow to blur but too fast to leave a distinct impression or image in the mind. In both the rapidity of the motion of the video and in the excess of markings, it is physically impossible to read along. If the punctuation serves as a kind of score for the body, a score for the breath and the voice, there is too much too fast for an actual body to perform in time. By condensing all of Emily Dickinson's punctuation into a rushed concatenation of frames, “Constellation” used projection to push the limits of communication as a physical process. It gathered a lifetime of unspeakables and fit them into 20 seconds and a rectangle four feet long by three feet wide, a space smaller than most people occupy when standing. The loop also ran in silence, giving space for the irrepressible inexpressible to resonate. In too brief a time, the loop tried in vain to convey, to translate, all of the things that get lost in the process of transcription, in the emergence of language, of all of the impulses and forces that are bursting from a body every second, but are too numerous, too overwhelming, too immense ever to be conveyed.
Voice: Cabbage

He is walking in a circle, hands clasped behind his back. His steps are wide, bounding, like a clumsy big cat. His sneakers squeak long and loud as they push off the polished gym floor. She sits silently in her chair, watching, waiting. His hand begins to crank and stir the air.

“It is very difficult to explain,” he says. “I don’t know how in English. Actors…” He changes his course from a circle to a line, pacing back and forth. Soon after his hand follows, flopping up and down, shaking his fist. “All the time actors are whores. Audience slaves. They come on stage, and go to the audience like this–” At this he breaks his path, walks straight to her, and goes down on one knee. He extends his hand out to her, palm facing up. “You come to audience like this. You think you are servant to audience. You give them your secrets. You give them everything.” He looks at her, waiting. She gives no response. He turns away, disappointed, and begins to pace again.

“I don’t know how to say it, I am very bad at explaining.” Soon he swerves back into the circle, and starts to shake his fist in front of him, about to throw a punch. Slowly, with great effort, he begins again.

“You are not audience’s servant. You should not to trust them. You should have cabbage!”

“Cabbage?” she interjects. He stops walking and looks at her.

“Yes, cabbage. Like ‘brave.’”

“Oh courage. You mean courage.”

“Courage. And what is cabbage?”

“It’s what’s in German saurkraut.” He smiles.

“Ah yes. Courage. You must have courage. Maybe you must have cabbage too I don’t know really.” He giggles gently, and looks at the floor. After a brief hesitation, he comes down and sits next to her. He stares straight ahead, slumps in the chair, and breathes deeply. He allows his head to tilt back, and stares at the ceiling. Softly, he speaks without looking at her.

“Do not give away your secrets. Don’t unpack them for the audience. The audience is very stupid. They do not know what is in your head. On the stage, you talk about the ugliest not nice things and maybe it is you and maybe it is not. They will never know. Maybe when you talk about your shame you think instead about McDonalds, about your new pants. About raping little puppies. It doesn’t matter. They don’t know. They have no way to know.”

In working on performances developed out of improvisations, the question of self-revelation comes up frequently. Because so much of the text comes from a process that is less controlled, where the mouth and body take charge of communication and expression, many surprising and even frightening ideas and emotions emerge. Rather than putting on a character, or becoming another, when I worked with text from my own improvisations, it often felt like I had to show the audience who I really was. That I had to reveal something of myself. But as Łukasz insisted, the audience cannot actually see inside the actor’s head. An actor could not reveal her inner thoughts to the audience even if she wanted to, because to the audience she is only what they see and hear in the moment.

As an actor, this idea was liberating, and a critical turning point for how I understood language and body. Before,
I had thought of language as something treated and sculpted inside the actor's head and imagination, that was then brought out and shown to the audience like a finely polished jewel. But language, I realized, is always an encounter between the actor and the audience. The meaning of the language does come from my interior or my ideas. What is communicated to the audience every night in fact has nothing to do with me or my innermost thoughts at all. Instead, I understood that even in the performance of something rehearsed, language is a temporal and bodily event for both the audience and the actor. The courage required of the actor is not the courage to reveal, but the courage to allow her body to translate freely, and to allow the language and the meaning that arises for the audience to emerge in the moment, to flow in time.
What Ship is This?

The room is cloaked in darkness. Two large, identical screens hang perpendicular to one another and form a corner. Opposite each screen are rows of benches, in which people sit, waiting. Together, the benches and screens form a square. The only light in the room is a dim spotlight on the middle of the floor, highlighting another square outlined with white tape, around which the screens and benches are set.

After a moment of darkness and silence, a small murmuring is heard from the speakers. We hear a door opening and shutting, coffee brewing maybe. Then, one of the screens illuminates showing rows of empty chairs. A few seconds later on the adjacent screen appears more rows of chairs, in the same room but with the backs flush with another wall. The shots continue to fugue between the screens, while the camera travels around the perimeter of the room, facing always inwards towards the center, facing always a side of a square. As the montages continue, the room gradually fills with people, hugging, talking. From the speakers there is a faint chatter and clatter of chairs, and “Hello!” “How are you?” “Good to see you!” What was initially an empty space starts to become populated with many, many people—first twenty, then one hundred, and eventually close to four hundred.

Just when the room seems at capacity, both frames cut to black, and the speakers cut to silence. After several seconds, a row of men, seen from the side, appear on the right screen, their mouths opening and closing in unison, their hands beating time together. The footage has been slowed. A few seconds later, the left screen shows the same row of chairs from the very first shot, dead on, only this time all the chairs are filled with people, mouths stretching open, hands moving together. In the middle stands a man, head bowed, arm moving strong in rhythm. He is washed in a soft gold light trickling through the skylight.

As the projections continue, the camera once again jumps from side to side of the square, almost always focused on the person in the center. Cut after cut, face after face, we see a people in ages ranging from 8 to 80. Though they are mostly white, and mostly wearing earth tones, otherwise, they do not necessarily seem to share very much in common. Amidst their apparent differences, their mouths all open and close in the same shapes. Their hands all move up and down at the same time.

When the screens cut out and the space is nearly darkened completely, the clack of heels are heard from behind the benches. A figure walks forward to the center of the white-outlined square, her face shrouded in darkness, but the contours of her body visible in the spotlight. In her hand she holds the same book from the videos.

“Thirty-seven on the bottom,” she calls decisively. She takes in a breath, and then she sings.

... 

The scenes described above were filmed at the 2015 Western Massachusetts Sacred Harp Convention. Also known as shape note music, Sacred Harp is one of America’s oldest non-indigenous living vocal traditions. It is called "shape note music" for the four shapes used in its notation system. Sung a cappella in four parts, the singers in Sacred Harp arrange themselves by voice around a hollow square, in which members of the community take
turns leading the music.

Sacred Harp is rather singular as an American folk tradition for many reasons, but I was not interested in it as a piece of anthropology or ethnomusicology. Instead, I was interested in its structural qualities as an event, and the relationship between the individual voice and the collective body. I was interested in the experience inside the hollow square.

The first time I went to a Sacred Harp sing, an experienced singer told me that I should feel free to sing as loud as I wanted. She may even have told me to sing as loudly as I could. While this single instruction by no means comprises the nuances and complexities of how Sacred Harp is sung, it is a common thing to be told at one’s first singing. The music is loud, and at an event of over 350 people like the one I filmed for this project, it can be almost deafening. The impression I was given that first evening was that Sacred Harp was not for pretty singers, or trained singers, but willing singers. As is stated on Sacred Harp’s website, “All events welcome beginners and newcomers, with no musical experience or religious affiliation required.” Despite the particularities of Sacred Harp’s formal structure and religious history, as a community today it defines itself as open, secular practice, and the hollow square as a gravitational center, a place for collecting all kinds of people.

The complexities that emerge from such a loud, open gathering are precisely what What Ship is This? struggled to address. For what initially appeared from the outside as a kind of structured encounter between self and community, a sense of belonging through voice, very quickly became cacophonous and dissonant with the heterogeneity of the community and its history. The treatment of the event in this initial iteration was structural, almost schematic: The footage was slowed because of an idea of time being extended or opened in the act of singing. But actually, the music itself is quite driven by its rhythm, and the sense of collectivity fueled by a common tempo. The sound of the singing was excluded because I wanted to focus in on the presence of the voice in the body. But at a Sacred Harp sing one feels the voice of others in the body: my chest often vibrates with the force of the sound. Lastly, and most importantly, I presumed when I began What Ship Is This? that the hollow square was a space of personal revelation. It was a foregone conclusion that precluded me from seeing the event of voice and singing as something sculpted in time, and something that was different for just about every person who stepped into the middle to lead.

Those difficulties aside, What Ship is This? was a critical turning point in my practice because it placed the event of voice at the center of my interests in body and language. The question asked in this project’s title is taken from a Sacred Harp song that describes the ship that transports the Christians home to God. As a larger provocation, however, I took the question of the vessel to be more generally about a line of flight, or movement. In Christian cosmogony, the ship that takes the soul to Heaven is also the ship that takes the soul out of the body. This question of flight and ascent is incredibly common in Sacred Harp music and is very often connected with the act of singing, suggesting that the voice itself is a mode of transport, a way out of the body. Yet unlike the Christian ship that goes to Heaven never to return to Earth, the voice instead functions more like Deleuze and Guattari’s line of flight that leads out, but eventually returns to the home, to the body.

It was my intuition through my encounters with Sacred Harp that this juxtaposition between language as something that exits the body and language as an embodied event was precisely the tension I wanted to investigate more closely in my work. From *What Ship is This?* I realized my questions about the body as a translator of shape and language impelled a closer investigation, or several, of the voice.
Spelunk

When she crawls out of bed it is still dark outside. Fumbling with her coat, groping for her keys, she grabs her camera, her tripod, and her zoom and heads out the door. The air is chilly inside the car, even though it’s already May. She jams the zoom into the cup holder, tries to rub the sleep from her eyes. She hits record, and turns the key in the ignition.

Before she knows it, she is on the freeway headed south, talking to herself. As the car zips fast and straight down the 93, her words come stumbling, awkward, and unsure.


...  

Though the lights in the theater have been dimmed for at least a minute, the screen is still black. After what seems like an interminable silence, a voice jolts through the speakers while the projection remains dark:

So I’m driving right now to Norton, Massachusetts. Uh to a place called “King Philip’s Cave” it’s about an hour south of Boston. And it’s called King Philip’s cave because um, uh, an Amercina Indian named King Philip, that’s what he was called, formerly known as Metacomet, allegedly hid out there. Um. Let’s see. Uh while he was trying to fight the English.

I’m not sure why I’m going out there.

I feel like I dunno I feel like I’m missing something and maybe it’s out there. It just seemed uh, important, that there was this place where this person, uh was hiding. Or or living out of sight. Waiting.

Like something about that made me very animated and anxious and upset but you know titillated too. I mean how many kids make themselves a fort or a cave, or some place out of sight. Secret. But that’s…

Hiding.

It just seems like there’s some sort of really important secret that’s there.

But.

The voice cuts out, and the screen lights up. In a clearing in a New England forest, two or three large boulders lay
haphazardly on top of one another, leaving between them a small dark opening facing towards the camera. A woman sits on one of the boulders, watching. Waiting. Ever so slowly, the sunlight creeps across the surface of the stone and across her legs. Several minutes pass in silence. She sits, relaxed, but very still. A few birds faintly chirp, some branches rustle. After several minutes lingering on the cave, the film cuts to a rock face, obscure and dark gray. From the rock dangles a fuzzy white sac. It trembles and vibrates with the currents of the air around it, sometimes violently, but does not fall. When the film cuts back to the cave, the woman is gone, but the voice returns. After a few moments, we see the same woman as before emerge from inside. Without stopping, she turns at the mouth of the cave, follows the perimeter of one of the boulders, and disappears around the back. Soon she re-emerges around the other side, only to disappear back into the cave. As the voice rambles on, she continues to circle, never finding a predictable path, never popping out in the exact same place.

I don’t want to turn this cave into a metaphor for something. But it has—cause it’s a real thing it’s not an idea. But in its in what it is, in its darkness and its coolness and its and like I’ve I think that I will go there and be able to sense this person from the past.

I like I feel something tremendous when I read something about this person in a cave hiding out. With two names. I like I’m not really succeeding at connecting the dots. There’s no thesis here there’s no there’s no thing to say you just have to keep going back and sitting there…

And it’s all really unsatisfying. And unsavory and broken…

I just I need to go here.

To this.

Cave.

And like maybe I’ll understand what it’s all about.

In that pile of rocks and trees there’ll be some sort of nugget for me to hold onto.

Originally, Spelunk was conceived as an extension or appendix to What Ship Is This? The cave and Metacomet were intended as avenues to address the vast historical, cultural complications of community and American history woven into the Sacred Harp tradition. The voice recording was simply intended to help me move my thoughts along, to brainstorm the piece as I witnessed the place. But as I drove down to Norton, Massachusetts, I found the more I spoke, the more confused my thoughts became, and the less I understood what this history was about, and
what I could ever really know of it.

When I got there, the cave itself was disappointingly small, and not so much a cave as an arc open on both sides. A gated community had been built around it, and many of the voice recordings are drowned out by the sound of hedge clippers and lawn mowers that were running in the yards nearby. I stared at this place, and felt empty. Thoughtless and dumb. Not knowing what else to do, I sat down and waited. Waited for an idea. Waited for a revelation. When nothing happened then, all I could think to do was walk around it. In both the car and at the cave itself, I kept moving and talking in the hopes that some kind of clarity would appear, that I would penetrate past a certain threshold of understanding or of knowledge. But none of it really got anywhere. From a rather exhaustive effort to excavate and unravel this history, I was met with a blank. A hole.

If the voice and language are a means of transport, or flight, there is always the possibility of getting lost. Spe-lunk was a completely accidental encounter with just such a possibility, in which the voice and language as a line of movement unraveled into a journey that was both bottomless and a dead-end, that circled round and round a gap in history, never landing, arriving nowhere.
Voice: Incantation

She is standing at the entrance to the nave, looking up. The large, white limestone arches glisten in the afternoon light. She listens. In the far recesses of the abbey she can hear the baby swallows, twittering hungrily. She hears her heart thumping, her gullet as she swallows her spit. She hears a nearby audience member's foot shuffle awkwardly. She hears their eyes on her. Her hands hover at her waist, raised expectantly. Deliberately, without haste, she brings her right hand up to her ear, and reaches gently behind her. For a moment, she waits, breath held, as her fingers stretch gingerly behind her, tickling the air, reaching for something just out of grasp. With a last inward breath, she pulls her arm just a little further back, and sends her hand forward, lightly but precisely, as if she is throwing a dart. At the same time, she begins to speak.

Her voice fills the space, traveling to the highest point of the vaults and circling back around to the heart of the nave. She is not shouting, but with every phrase as her hand retracts and lances forward again, her voice flies out above and around her.

The words are known to her. Memorized. She knows their order and their end. But though the text is a linear sequence, she feels as she speaks that she is instead blowing a balloon; that the text, the voice, and the rhythm are stretching space-time, extending towards a small portion of eternity. The voice not only resounds, but rebounds with the rhythm, gaining energy with every return and refrain. As the text accelerates and the church resonates with her voice, she hears the words coming not from her body, but from the walls, from the arches. Unlike the kind of displacement in the mouth that she had felt in front of the camera, this was another kind of flight entirely. While in the improvisation her voice rolled and tumbled, accelerated by a kind of downhill momentum, in the vacuous vaults of the church she felt her voice soar up in flight, weightless and free.

An incantation is a kind of vocal alchemy, a ritual action that with speech and repetition is intended to work on space and time: to transform them. So when I was asked to recite a text in one of the oldest and largest Cistercian abbeys in Europe, I did not at all feel up to the task of filling or transforming such a space. For months I pushed and stressed, my voice grew hoarse and strained, my jaw and tongue became sore from trying to articulate over the eight second echo. No matter what I did, my voice always came out muddy, flat, and shapeless.

One day in rehearsal, a teacher who noticed how much I was struggling pulled me aside. He explained that the space was already receptive to sound, was built to amplify it. He told me I did not need to reach towards the back wall with my voice, like stretching an arm, but rather had to send it there, like throwing a ball. When he asked me to try it, without thinking I lifted up my right arm, and when I started to speak lightly threw my hand forward, as if I was lobbing a tennis ball. I was shocked. In this rather blunt and literal interpretation of his advice, the sound flew out and up into the space. As my words traveled the length of the abbey and came back to me, I heard the words as if for the first time, as if the space were speaking them.
Taken from the Song of Songs, the recitation described the coming of spring:

\[
\begin{align*}
&\text{I hear my love. He comes,} \\
&\text{Leaping over mountains, bounding over hills} \\
&\text{Now he is standing beside our wall,} \\
&\text{Gazing through the windows} \\
&\text{Peering between the stones, he says to me,} \\
&\text{‘Come my love, come away, let us run} \\
&\text{Winter is over, the rains are gone} \\
&\text{The flowers are blooming;} \\
&\text{The time of song has come…’}\end{align*}\]

In this feedback loop between my voice and my ears, the words themselves started to work on my sight, on how I saw the space. Though I had recited the words a hundred times before, when my voice was volleyed back to me by the walls of the church, the details of the nave and its carvings came alive. The brightness of the stone echoed the crags of the mountain, the iron gates to the altar harkened the gates where the lovers meet, and the ornate carvings of the wooden nave bloomed with the vines and flowers of springtime. The reality of the physical church in front of me was not covered, or fogged over by the language, nor did the space become a metaphor. Rather, the real space and time became metonymic with the space and time of the text: they stood in the place of the images, gave them new meaning and body in the present. Every time I recited the text I found new echoes, new resonances, so that the meaning was always emerging, and the affiliations between the world in the words and the physical reality of the space around were always in a process of reconfiguring, rearranging. When I think of the word incantation now, I think of this metonymic, ritual transformation, a co-articulation of sight and sound as they meet in the act of the utterance.

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14 Though based on the Song of Songs, the translation used in the performance was written collaboratively by the director and myself, translated into an English that was simpler and easier for an international audience. As such, there is no citation for this “excerpt.”
She sits hunched over in the dark, her head in her hands. Popping out through the floor, she is visible only from the waist up, anchored in the ground like a barnacle on a rock. She raises her head as the lights come up and looks calmly ahead. Around her are four diaphanous, translucent screens, hung in a square. On them float an array of shadows. With the exception of the roast turkey, all of the shadows are of inanimate objects, and almost all could be found in a typical North American middle class garage: a sandal, a badminton birdie, a ladder, a bowl, a hammer. They all float peaceably on all the screens, distributed more or less evenly around her except for the spot directly in front of her eyes. There the screen is white, and the shadows hover around the blank space.

After staring straight in front of her for about half a minute, she turns her head to glance behind her, slowly, considerately. As her head turns, the blind spot moves in tandem. Their coordination is approximate and loose, so that it is never quite clear whether her gaze is following the blind spot, or if the objects are moving around to avoid her glance. After surveying the space around her three or four times by twisting her neck round in all directions, she turns to find the shadows have all faded to black. With unchanged expression and measured, easy breath, she speaks:

*On the theory of transformation. Or, the comparison of related forms.*

With these words, the screen in front of her illuminates to reveal a shadow resembling a giant ladder, ten feet tall and with a standing span ten feet wide. As she watches it, it starts to slide to the right, off to the edge of the screen. When she turns to follow it with her head, it slides off, disappearing for a moment in the gap between the screens only to slide onto the next one. When it reappears though, the shadow has acquired an additional object, so it is a ladder and a tennis racket. As it continues to glide from screen to screen, it gathers shadows. Meanwhile, she continues to spin, smoothly, pulling herself around with her hands. Now spinning regularly but rather slowly, she continues to speak as she follows the shadows round and round.

*Of adaptation and fitness…Of the final cause…Of efficient and final causes…Of ultimate causation…of evolution and entropy…*

... 

The word “of” is defined as “expressing a relationship between a part and a whole,” “indicating an association between two entities, typically one of belonging,” and “expressing the relationship between a general category and the thing being specified which belongs to such a category.” A shadows, also, has an unknown or unavailable referent. The shadow is always a shadow of something; the light has to be obstructed by something in order to give...
shape, give an image. But what the shadow is of remains obscured. It is only outline, or silhouette. “Of,” then, can be thought of as the preposition for the linguistic equivalent of a shadow, for any phrase beginning with “of” also gives an incomplete, or partial impression of the thing described. Combined, these two incomplete collections, arrays, or sequences, seem to co-compose and implicate the missing parts of each other.

(A shadow-ladder) Of light and colour
(A shadow-roast turkey) Of surface and volume
(A shadow-sandal) Of the size of drops
(A shadow-bowl) Of the size of cells
(A shadow-lamp) Of the least of organisms
(A shadow-vase) Of molecular magnitudes
(A shadow-needle) Of scales of magnitude
(A shadow-apple) Of thin films
(A shadow-fly swatter) Of the Brownian movement
(A shadow-tennis racket) Of the effects of scale
(A shadow-birdie) Of the venation of wings
(A shadow-hammer) Of the skeleton of sponges

As the list of "ofs" continues to unravel, the shadows accrue around the ladder, so that eventually no single shape can be made out, and what is sliding over and between the screens is simply a dark lumpy blob. All the while, the speaker spins round and round, talking faster and faster, always accelerating but failing to keep pace with the whirl of shadows around her.

Suddenly, the blob bursts, and the individual shadows are sent out around her into an orthogonal orbit. She, meanwhile, has ceased to propel herself, and allows her rotation to slow gradually to a stop. After a pause, she resumes the list, quietly, sparingly, meanwhile pulling herself gently in small quarter-turns, sometimes to the left, sometimes to the right. The screens zoom in and out on the objects, cutting from so far away that they appear like floating specks, to so close that a single one takes up an entire screen. Slowly, after several of these jump cuts, the shadows on each screen begin to grow, to balloon and swallow the frame. Once again, she is plunged into darkness.

In final movement, the screens flicker alternatingly with shadow-hybrids, misfit outlines that jostle and jerk, as if they had been stuck or jammed together by mistake and are trying to get loose. Hurriedly, unsteadily, she pulls herself around, trying to catch each one and name them before they disappear.

Of skeletons.
Of eggshells
Of the tight fit of teeth
A list of brittle, fragile scaffoldings. As the flickering screens begin to dim, and the light above her begins to fade, she repeats her last refrain:

*And other hollow structures… And other hollow structures…And other hollow structures.*

OFOFOF was a collaborative project with close friend and classmate Anne Macmillan. While Annie had been developing several projects on observation and attention, I had been turning more and more towards the materiality of the voice and the event of language. While I had not thought of my experiences with the Song of Songs when making the piece, the structure we created worked as a kind of parallel processing of shadow and sound similar to the mutual inflection of space and text that took place in the abbey. In both the text that I developed and the shadows animations that Annie made, we created an encounter with likenesses and associations. Both the shadows and the list seemed endlessly iterative because they were always in the process of becoming, because something of them remained unseen or unsaid. Together, they created a third kind of communication. Through the shadows and lists, sight and language formed a polyphonic composition: independent and parallel, while simultaneously gaining new dimensions and depth from their resonance with each other.
no yet–, November 2015
no, yet–

Lights up.

A lump of gold, tangled wire sits on the floor, limp, and heavy. It glints the bright studio lights back into the audience's eyes, the thin strands creating strange patterns of twinkles and lines. The room is silent. Then, softly, the lump begins to stir. Simultaneously, as it undulates, it also begins to hiss.

*Sssssssssssss P!*

At the plosive, it gives a jolt, a jump. Then it begins again.

*Sssssssss P! Llllllllllll T!*

Lingering on the L, the wires swirl round each other, softly spiraling, while at the “T” it jerks to the right. Whether movement is causing speech or speech causing movement, it is not clear. The two seem to co-emerge from the material in the same instant.

*Thhhhhhhhhhh Lllllllllllrrrrrr K!*
*NNNNNNNNnmmmD.*
*yyyyyyyyyy LLLLLLLL Lllllllllll Ffffffffnnnnnnnnnnnnnn D.*
*MMMMMMmmMmMMMmMmMmMmMmMmMm SS-K.*
*BlllllIlB T-rrrr Bllllllllllb*
*nnn nn sssssIIIlllllllllvvvvvvvvvrrrrrrrrrrr*
*rrrrrrrrllllllllll D.*

As the speed increases in both the movement and the voice, it becomes more difficult to distinguish where one consonant ends and the other begins. By the last line, a kind of fluidity is found, an undulation that carries each breath, each jerk or spasm into the next.

Lights out.

Lights up.

The mound is where it was, but this time an arm is sticking out from its meshes. The arm lays lifeless, or nearly so, though as it rests on the gold both it and the entire tangle can be seen to breathe. Upon the fifth exhale, a low, soft moan escapes, held on a tone.

The voice now sings in vowels, on long, meandering tune. The mesh sighs up and down steadily, the arm continues to rest. Unlike the consonants that stuttered and halted, struggled to find their pace, the music breathes easy and gently. Though never growing loud, the song grows warm, the vowels expanding, opening. Just as gradually as
it entered, after a few minutes the song fades to silence. The mesh continues to breathe.

Lights out.

Lights up.

A head protrudes from the top of the mound, facing sideways. It blinks. It stares. Suddenly, it speaks.

Oh – did I offend it – [Didn't it want me to tell the truth] Daisy – Daisy – offend it – who bends her smaller life to his (it's) meeker (lower) every day – who only asks – a task – [who] something to do for love of it – some little way she cannot guess to make that master glad –

The voice, though coming out in a steady rhythm, is nonetheless cut and clipped, like a child skipping and jumping over rocks in a creek. The thoughts are broken, fragmented, and scattered. The head is fixed forward. Only the mouth moves.

As she continues to speak, her head periodically jerks, up left, down right, as if she has several different people, or objects, she is talking to scattered about the room. Each fragmentary thought or exclamation seems to come from a new person, each utterance somehow born independently of the one before. A totally disjointed speech. And just as abruptly as it began, without any clear conclusion, the text stops, there is a breath, and the lights cut out.

... 

no, yet – was an exploration of the materiality of voice and of language, and the relationship of both of those to the body. It was structured in three different configurations between the body, the voice, and the tangled mass of brass wire. At the time, I was in a linguistic phonetics class that was studying a phenomenon called co-articulation, which occurs when the pronunciation of two conjoined phonemes is different from how they are pronounced when spoken separately. I was interested in language as something that could be discretized and cut up, and wondered what was left when parts of a phonetic system or grammar were taken out. Each vignette described above was an experiment, an exploration of what could be conveyed by these individual parts when recombined or rearranged. In parallel, I wondered about the emergence of body as a composite image, and how that too could be cut up and fragmented. In the performance, both body and language were taken apart in or by the mangled mess of gold wire. The fragments of voice and body intersected and met within it. It was a site, or material, of dissection and recombination. It was a kind of machine I was far from understanding at the time, but that carried over into the next project as an avenue for investigating communication, translation, and metamorphosis.
A shape is a sound, May 2016
A shape is a sound

She sits on the ground, buried or hidden from the waist down in fine gold threads, coiled round and round one another in dense loops. She seems somehow to be related, or affiliated with the wire, with a mass of tangled hair, gold hoops around her wrist and nose, She lays her hands over where her lap would be, and gently sifts through the layers of loops. She flips them, like she is reading a book.

S, I ask her, What do you think of when you think of loops?

She pauses in her reading, looks off to the left and up. Then she resumes her sifting, and starts to talk.

No beginning and no end. Like on and on. I think of repeating, and I think of ducks…Cause ducks are very simple I think. And I think it just reminds me of a friend who would repeat everything all the time and it was like you know. Quack quack quack quack. But you know. I dunno I don't speak duck so, maybe they're not all the same quacks.

Um…umm…I think it’s hard to know it’s hard to recognize a loop. Maybe like, maybe our bodies are kind of like loops. We have orifices right that go through the air, and then through our mouths and out our butts. Or maybe our ears and eyes to. It’s like a loop through I think our body. But maybe it’s the opposite of a loop maybe it’s the air that’s a loop and we’re what goes inside.

S, is there a difference between a loop and a knot?

O ya. No. That’s a hard question. That’s not easy.

And so she talked. On and on. About toruses, excluded middles, stomachs, Wittgenstein, math, sound, and shape. Self-described as a vomit-talker, S spoke in spews, in wandering lines and tight circles. Each sentence or thought led to the next which led to the next which led to the next. With very little provocation, she kept thinking, speaking, weaving thoughts, making abrupt jumps and cuts to something else entirely. Her mouth was a machine, sifting, cutting, and recombining words and ideas, breaking them apart, putting them back together. Her body was a processor, a metabolizing matrix of inputs and outputs.

This project began with one long line. 50lbs in weight, about 37,900 yards in length, it was made of brass wire about two thousandths of an inch in diameter. When I found it, it was in a trash bag, unspooled and sprawling. I found no end to it, no place to begin unraveling, so instead I climbed inside. For two months I lived in it not knowing what it was. I learned to wear it like a coat, a skirt, and make it move like a second skin. Then, someone told me
they thought it was from the Center for Bits and Atoms, and was called EDM wire, or electrical discharge machining wire.

EDM wire, I found out, is used to cut incredibly fine lines and contours in metal. Instead of cutting by contact or abrasion, EDM machines cut by generating an electrical charge that cuts both into the material and the wire itself. The massive, golden tangle is not only a line, it is a blade of the finest caliber.

According to their website, CBA “is an interdisciplinary initiative exploring the boundary between computer science and physical science. CBA studies how to turn data into things, and things into data.”16 Or, as some computer scientists call it, how to turn “its” into “bits.” As one researcher explained to me, it is a collection of research projects concerned with the production of both the very large and the very small, with research ranging from nano-scale to kilometer long assemblies in space.17 The EDM machine is one of the many machines CBA uses for these projects.

The functions of these machines are multitudinous, and include cutting, coding, folding, punching, charging, printing, melting, molding, and conjoining. In every one of these transformations there is also vibration: the hum of motors, the buzz of electrical charge, the whirr of and whizz of blades and milling bits. Though not a stated goal of the Center, many of the researchers who work with these machines are interested in what one of them explained to me as “how can we go more directly from our design intent to final object,”18 or how to narrow the gap between idea and thing.

One of the most interesting materials I found while filming at CBA was a single packet of images of shapes and arrows, that looked uncannily like shape grammars. The shapes were simple—a square, a triangle, and a circle—and the packet comprised a series of diagrams with arrows indicating a movement or transformation from one shape to the next. At the top of each page were headings that read either “Die-cut” or “Punch-cut,” and according to these headings the lines of the shapes had different textures, alternating between solid, dashed, and dotted. The diagram drew a sequence, the evolution of a cut, the transformation of form.

The film that has come from this strange circuitous journey is a kind of weave of the various lines or threads of transformation that spin out from the Center for Bits and Atoms. It collects together images of a body and a voice tangled in a knife; of gears, sparks and hums of machines that draw, machines that carve and cut; of a code, a transcription of movement and metamorphosis; of a rambling verbal improvisation on looping, tangling, symbols, and utility. It is a meditation on the process of translation and its bodily, material components, of the vast distance traveled from an idea to a thing, and all of the scraps and appendages sloughed and accumulated on the way.

17 Will Langford, in discussion with the author, February 2016
18 Ibid.
A shape is a sound, May 2016
CONCLUSION

In the epilogue to his most recent book *And: Phenomenology of the End*, Franco Berardi evokes the historical figure Malinche, the daughter of a noble Aztec family who became the lover of Cortés. In addition to being Cortés’ mistress and the mother of one of his children, Malinche served as a translator between the explorers and several different indigenous nations. In her work as translator between cultures being violently wiped out and cultures of conquerors, Berardi finds in La Malinche an apt icon for the demands of today’s aesthetics. He argues,

> If the limits of a world are the limits of the language that makes this world consistent and meaningful, Malinche is the symbol of the end of a world, and also the symbol of the formation of a new semiotic space of world-projection at the intersection of two different codes. Malinche is able to transform the collapse of her world into the creation of a new language, and therefore of a new world that is neither the prosecution of the old, nor the mere translation of the world of the conquistadors. Only when one is able to see collapse as the obliteration of memory, identity, and as the end of world can a new world be imagined. This is the lesson we must learn from Malinche.¹⁹

The future, according to Berardi, belongs to the translators. The messengers, the go-betweens. Those who can communicate fluently in more than one world.

In this thesis I have talked at great length about language, the body, and a bit about alchemy, but through my work and particularly this most recent project with machines, I have come to consider all of them variations of translation. Deriving from the French ‘transférer’ or the Latin ‘transferre,’ translate originally meant to bear across or to transport. In one way then, translation as a line is a connector: it moves from point A to point B. Yet, as anyone who has attempted to translate between two languages knows, the journey is never actually direct. In this way a translation is both a trace and a connector at once: it both connects two points, or positions, by transferring something between them, but its path is never straight and always improvised. As Berardi insinuates, the translator imagines new paths, and new worlds with each traversal from one language to another. In translating, she invents and creates.

Berardi is fixated on Malinche for very similar reasons that my most recent project has been so taken with the Center for Bits and Atoms: both evoke a kind of approaching precipice or horizon, a kind of end to knowledge and phenomena as we understand them today. As Berardi explains it, we now live in an age in which everything can be digitized, translated into information, allowing for infinite compatibility and recombination. “Recombination,” as he defines it, “is totally different from recomposition, [and] implies...functional inter-operationality between deterritorialized working bodies. In order to circulate in the network, language has to be made compatible with the code.”²⁰ This compatibility of language, Berardi insists, will also have an effect on the body, as “[t]he human beings

¹⁹ Franco “Bifo” Berardi, *And: Phenomenology of the End*, (Pasadena: Semiotext(e), 2015), 335

²⁰ Ibid. 175
involved in the productive process...are transformed into fractals, perfectly recombinable segments of a modular flow of information.” Translation, then, in a world of increasing codification, becomes a line of flight, of escape.

But translation offers no easy answers: it is not a utopic solution. Malinche is a deliberately disturbing example because her life is emblematic of the very violent consequences of change, of transformation of language and body. And just as Malinche did not, could not prevent the destruction of many cultures and peoples across the Americas, there is no aesthetic, no language or bodily process that can entirely preclude or prevent destruction in the evolving communication between machines and people or between language, code and bodies. Certain ways of being in the body, of speaking in language will be lost, and certain others have been lost already. The question is not how can to reverse this destruction, but how can it be taken and translated into something new.

Though offered within the Design and Computation, Visual Computing is unique in its department in that for the entire semester the students never touch a computer. All “computations,” all algorithms and transformations of shapes are “calculated” by the students through drawing with tracing paper and pencil, through assembling blocks with glue and tape. It approaches computation on a fundamental level as a translation of material with the body, and presumes that in engaging the body, students acquire the ability to approach translation creatively, inventively. In having to navigate the process of transformation physically, Visual Computing not only teaches a way of seeing shape as a language, but also introduces a method of creation that is both physical and algorithmic, both bodily and grammatical.

The voice as a concept and as a material has become so crucial in my practice because I see it, too, as a kind of physical, bodily encoder, a particularly locomotive and aerobic process of language-creation: the voice travels through the breath, comes from a circulation through the body only to launch the imagination into new realms outside. In many ways I predict my practice will never depart from voice as fundamental to the problem-space proposed in that very first lesson of shape grammars: that language is not as an output, but a translational process that runs through the body, through the voice, constantly re-iterating and re-inventing itself over time.

21 Ibid.
BIBLIOGRAPHY


