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Meaning in Motion

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by

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ABSTRACT

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This thesis essay and accompanying exhibition examine the capacity of interactive art to stage situations for participants to explore embodiment. In presenting the four-part interactive suite *Body Language* by Nathaniel Stern, the exhibition invites viewers to engage with digital projections that track and respond to movement by producing animated text and spoken utterances. Through the juxtaposition of motion performed by the viewer's physical body with computer-generated words and speech, *Body Language* explores the complex ways in which the body and language depend upon each other to create and communicate meaning. This essay also proposes that the gallery uses its power as a trusted cultural institution to construct language that shapes how audiences understand art.

TABLE OF CONTENTS

LIST OF FIGURES

Chapter I. — Introduction

I. Moving — Thinking — Feeling[1]

The *Dictionary of Philosophy and Psychology* published in 1901 defines interaction as "the relation between two or more relatively independent things or systems of change which advance, hinder, limit, or otherwise affect one another."[2] Such a relation between two or more independent things that have an impact on the other is one that exists between all art and its viewers. In this sense, all art is to some degree interactive — to view, touch, or even imagine a work of art creates a relation between it and the viewer. New media theorist Lev Manovich explains that: "Art is 'interactive' in several ways. Ellipses in literary narration, missing details of objects in visual art, and other representation 'shortcuts' require the user to fill in missing information."[3] The term "interactive art" may seem redundant, then, if all art truly is interactive.[4] So what sets interactive art apart — what makes it that much more interactive?[5]

Interactive art creates situations through which participants perform actions and explore the potential power of their bodies to create and give form to ideas and concepts. Through these situations, viewers see and hear the ability of their bodies to alter the world around them. Curator Söke Dinkla broadly defines interactive art as "computer-supported works in which an interaction takes place between digital computer systems and users."[6] Artist Nathaniel Stern, whose series *Body Language* is the focus of this exhibition, affirms the common employment of technology within interactive art, but specifies that this technology must operate in a system that responds to the bodies of participants in order to be considered interactive art.[7] "Interactivity," Stern states, "is understood as the required physical activity of a viewer-participant in order to fully realize a technology-generated and process-based work."[8] As a result of the inclusion of

[1] Nathaniel Stern, *Interactive Art and Embodiment* (Canterbury: Glyphi Limited, 2013).

technology, interactive art is often grouped within the wider umbrella of new media art. While the designation "new media art" has long been contested, it has come to refer to, as Christiane Paul puts it, art with the "lowest common denominator" of being "computational and based on algorithms."[9]

Despite being included within the new media art canon, the use of technology to visibly react to the physical presence of bodies allows interactive art to involve the participants in the installation space directly in its composition. The unique qualities and capabilities of interactive art are not often highlighted in exhibitions, where the basic novelty of technology and physical engagement of audiences in a gallery is taken at face value. Interactive art needs to be framed in terms of what it does and how it does it.

The four-part interactive suite *Body Language*, which consists of the works *enter*, *elicit*, *stuttering*, and *scripted*, created by multidisciplinary artist Nathaniel Stern that is presented in this exhibition exemplifies how interactive art can explore matters of the body in a way that no other art form can. The series goes beyond simple action and reaction to demonstrate how the body and language depend upon each other to forge and communicate ideas and feelings, together. It confronts the body/language relationship by using participant movement and responsive technology to stage not only how the human body creates, embodies, and conveys information, but also how that information reflects the body.

Body Language seeks to counter how easy Stern asserts it is to "forget the body" and to bring its crucial role as an architect of language to the forefront. The series negates this bodily neglect by engaging the body with a purpose and, through its interactive technology, encouraging participants in the gallery space to move consciously. In remembering the body, this series pulls the process of embodiment, or the physical manifestation of language through the

body, to the forefront and makes it visible in the gallery space. When participants pass in front of the work, their movement is picked up by a motion sensor that triggers the work to generate and project text and sound that constitute language against the gallery wall.

Through its projections and prerecorded sentences, the suite not only shows that language is made through and with the body, but that these two forces depend upon each other to both exist and function successfully. Without the bodies of participants to initiate their digitally programmed responses, the works in *Body Language* do nothing but sit silently in the dark gallery. Without *Body Language*, viewers merely stand before a blank wall, doing nothing with their bodies. Inside and outside of the work, there can be no meaningful conversation without a body to speak it, write it, hand sign it, or to convey it through gesture, literally "body language." The body and language grant each other significance where they otherwise would possess none.

II. The Gallery

Body Language not only draws attention to the formation of language with and through the body, but to the physical space in which the suite itself is exhibited. The four works are cast via projector directly onto the gallery walls, using the structure of the gallery as a proverbial canvas upon which the responsive quality of the work to movement is shown. Through their interactive format, the works engage people in movements that would otherwise not be seen, or be considered appropriate, in an art space. Viewers are often initially hesitant to perform free movement in front of interactive art, aware that they are in a gallery space and of the social norms of quiet and composure that come along with it. However, upon spending more time with such art, participants become more comfortable with their body, realizing that they can and should move around as they wish — no one is going to scold them.

Body Language breaks open the gallery, transforming it into a place of engagement where the body is encouraged to be a three-dimensional object in space and to explore its potential for movement and gesture. There are few places in which audiences are encouraged to whirl around and wave their arms about, perhaps least of all the hushed, contemplative art gallery where bodies are expected to take up as little space as possible to avoid hitting the art or other viewers. The low lights of the gallery where the works are installed that make its projections more visible also recall the dimming of a theater when the curtain opens and the show begins, echoing that *Body Language* stages situations for the performance of actions.

The exploration of the symbiotic connection between body and language in producing meaningful communication can also be related to the relationship of language and the gallery as an institution that creates and disseminates information. The gallery holds a position of authority that is accepted by society because of its highly educated curators, whose mission it is to communicate information about art to their audience. Galleries use their long-established trustworthiness and art expertise to construct the meaning of art through the linguistic trappings of an exhibition, such as wall labels, catalogues, and curator talks, that all impress ideas about art upon art audiences.

As *Body Language* traces the construction of context through the parallel formation of the body and language, the same can also done with the gallery space as a conduit for building narratives. The gallery cannot function without both language and bodies. Without language, there is no means through which to express information about art, but without the bodies of visitors in the gallery, there is no one to receive, process, and understand such information. As such, both the gallery and *Body Language* depend upon the same forces in order to operate. The embodiment that the suite illustrates through its production of language in response to bodily

movement relates to the gallery itself also as an embodiment, or physical representation, of its institutional power. The gallery uses its historically-established authority to make meaningful language within its material structure and/or space, language that is imparted to recipients who enter into it with the intention of seeing and learning about art. By projecting enter, elicit, stuttering, and scripted directly onto the walls of the gallery where it displays language through text panels and wall labels, Body Language overlays its message on top of the gallery's own. Visitors can simultaneously interact with the works to make language while reading the gallery text that appears on the wall next to the projection of the work. The intent of the series that is illustrated through language is coupled with the information that the gallery is also trying to communicate through text in its space.

III. Technology in *Body Language*

Often when interactive art like *Body Language* is presented, the technology that it uses becomes a fascination for both the curators of the exhibition and those who visit it. Many audiences have not encountered art supported by technology and are understandably intrigued by it. Similarly, curators find it important to the canon of art history to show how art that uses technology is developing in the twenty-first century. Rather than emphasize it, Stern asserts that "we must forget technology and rather study the encounters it creates, the quality of our movements with [it]…."[2] But discussing and framing interactive art is a balancing act of finding the proper ratio between both acknowledging technology and also directing attention back onto what the artist is using the technology to accomplish. Completely ignoring the technology will only make viewers more curious, but explicitly addressing the technology and explaining its function to viewers may dispel any questions or lingering exoticism.

[2] Nathaniel Stern, *Interactive Art and Embodiment* (Canterbury: Glyphi Limited, 2013), 21.

All the works of *Body Language* were developed with openFrameworks, a toolkit that allows coders to combine other programming utilities and use them simultaneously. The files for *Body Language* can be altered and allow for the visual elements of the works to be adjusted, including as how fast or slow words fly across the projected space on a wall. Each of the works is run by a Mac Mini, or a desktop computer without the screen, keyboard, or mouse. They are cast onto the wall via small projectors either mounted onto the wall or placed on the floor and sense motion with an Xbox Kinect device. Xbox Kinect was developed by Microsoft for use with its gaming consoles, but many artists working with interactive art have adopted it into their practice because of its availability, quality, and relatively low cost.

Body Language uses these technological components to set up a situation, a possibility, for the creation and embodiment of language. By physically interacting with the works, participants see and hear their bodies construct language. It emerges, appears, and becomes visually and audibly apparent because of their presence, both upon the gallery wall and throughout the gallery space. By using the interactive format of the series to make language through their bodies in motion, participants are activating embodiment, or the representation of a concept in physical form. Their bodies *are* language in that they make it happen, they are its incarnation and the vessel through which it exists. Without them, the works produce nothing and are meaningless, lacking a function to carry out.

This small encounter in the gallery provides a platform for the much larger bodily construction of language and, in making it visible through projected text, shows participants the ever-present connection between their presence and their language. Participants watch words move across the wall and feel themselves dart after them. Participants quickly step sideways and hear the sentences the work yells out in response. The effective interactive nature of the *Body*

Language works makes this corporal instigation obvious to those who engage with it, as can be seen in the included figures.

At this stage of human evolution, the process of making language with bodies is automatic and innate, like blinking or breathing. Because of this, it often goes unnoticed unless attention is specifically brought to it. Simply recognizing that making language is a physical process requires conscious effort. *Body Language* brings this overlooked process into focus by illustrating the bodily making of language through the waves of letters, darting words, and speaking boxes that arise directly because of the participant motions that bring it into being. Both inside and outside the interactive situation, bodies manifest this language through brains, hands, mouths, faces, and perpetuate it both verbally, textually, and gesturally. There is no language without a body to write or speak it, and no body (or no-body) without the language to allow it to communicate, express itself to others, and to provide the mechanism to label its parts and qualities. In this way, the inherently physical creation of language is embodiment itself.

As Stern declares of interactive art and *Body Language*: "We move and are moved."[3]

[3] Ibid., 4.

Chapter II. — Body Language

"Why should our bodies end at the skin, or include at best other things encapsulated by skin?"[4]

"Body language" is a term that refers to feelings and thoughts that manifest themselves through gestures, whether intentionally or accidentally. Psychological emotions can be expressed in the crossed arms that can indicate irritation or the fidgety hands that betray nervousness. These feelings relay information to others without the use of language, but rather use the body has a means of nonverbal communication. They become embodied, or tangible and visible outside of the mind, and the body itself creates a message without verbalized language that can be understood by others. When someone sees the slumped shoulders and downcast gaze of a friend, they immediately know that this friend is upset without needing spoken confirmation. However, despite the ability of the body to convey thoughts and feelings without words through gestural communication, it is language that gives these emotions their power and grounds them in reality. What is "sadness" if there is not a word to describe it? What is "anger" if there is not a body to feel it? Neither the body nor language can exist without the other — they are constantly pulling each other into existence.

The four interactive works that make up *Body Language — enter*, *elicit*, *stuttering*, *scripted* — all stage the dual production of language and bodies. Artist Nathaniel Stern began thinking how language becomes embodied while learning to develop physical computer projects and vision software. Stern wondered: "How might I actually instigate exploratory movements, and place emphasis on their potential, experience, and practice?"[5] Stern found the answer in the form of interactive art. The titles of the works in the series themselves point to the aim of

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[4] Judith Butler, *Bodies that Matter: On the Discursive Limits of 'Sex'* (New York: Routledge, 1993), 235.

[5] Nathaniel Stern, "Body-Language*," a (networked_book) about (networked_art)*, last modified April 12, 2013, http://stern.networkedbook.org/body-language/.

enticing audiences to physically participate with them. *Body Language elicit*s viewers to perform movement with their body; viewers *enter* environments of exploration; bodies jerk back and forth in a *stuttering* pattern; participants enact the *scripted* nature of letters with their bodies.

I. Nathaniel Stern as Continuous Creator

Body Language is a series thirteen years in the making, conceptualized in 2000 and completed in 2013. Stern began the first iteration of *enter*, the earliest work in the series, while taking a Physical Computing course at New York University. He proposed the concept of what would later become *enter* to his classmates: to create a work that would "invite participants to experience and practice meaning-making and bodiliness [sic] as relationally emergent activities." This statement came to be the core of *Body Language* as the series developed.[6] Stern recalls the silence that pervaded the room upon the conclusion of what he describes as a "long and energetic" monologue until his professor responded with, "'It'd be great if you could get people to move the way you do when you talk.'"[7] This thought resonated with Stern and inspired him to take up and continue his interactive practice, through *Body Language* and beyond.

Stern has never focused solely on the visual arts in a traditional sense. His artistic practice is imbued with philosophy and is the axis around which *Body Language* revolves. As the body and language cannot be produced without the other, neither can Stern's art exist without the conceptual theories of what he calls "moving — thinking — feeling," or how all human bodies, minds, and emotions are codependent and the ways in which they influence each other. Stern seeks to demonstrate that art and all philosophies are "potential *practices* of one another" and that they both possess the ability to "create, transform, and mobilize each other." [8]

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[6] Nathaniel Stern, *Interactive Art and Embodiment* (Canterbury: Glyphi Limited, 2013), 1.
[7] Ibid.
[8] Ibid., 4.

II. *Body Language* (2000-2013)

Each of the works in *Body Language* poses a different situation in which the physical body and language bring each other into being through motion. *enter*, *elicit*, *stuttering*, and *scripted* all produce both computer-generated words that are projected onto a blank wall and audible sound (except for *elicit*) that respond to the presence of the viewer's body. *enter* traces the body of a participant in a blotchy, black line while words soar across the wall, turning red prompting a voice to announce them aloud when the viewer's outline grabs them. Approaching *elicit* produces a flurry of letters that appear from the shadow of a body, swirling across the wall and flying off the edges of the work. Loud and jarring, *stuttering* places words contained by boxes around the outline of a participant's body that each trigger a spoken statement when touched by their outline. *scripted* asks its audience to use their heads as a pencil to write digital lines to form letters that are vocalized by the work's program before vanishing.

During the early stages of developing *Body Language*, Stern became intrigued by the work of language philosopher J.L. Austin. Stern saw correlations between Austin's "speech act" theory and his own interest in making bodies "do" things. In Austin's most influential work *How to Do Things with Words*, Austin proposed that language possesses the ability to enact discrete and discernible effects. As Austin describes: "To say something is to do something, or in saying something we do something, and even by saying something we do something."[9] Austin named utterances that do something "performatives" and "speech acts." To be a performative, Austin defined, an utterance cannot not describe nor report a true or false fact, like stating the weather or date. Rather, to qualify as a performative, an utterance must be part of the doing of an action in a way that would not normally be described as "just" saying something.

[9] J.L. Austin, *How to Do Things with Words* (Cambridge: Harvard University Press, 1962), 94.

Austin gave several now well-known examples of performative utterances, such as the speaking of the words "I do" that weds two individuals in a marriage ceremony, or betting money on an outcome ("I bet you sixpence it will rain tomorrow.").[10] In these situations, and in many others, words effectively perform an action that would not have otherwise occurred without them. Although Austin focused on spoken performatives, his speech act theory has also been applied to written textual language. To write something is also to do something, as in the writing of a will that legally grants parties the ownership of physical assets. Austin's speech act theory was and is instrumental to Stern's investigation of the tangible affect that language possesses. Austin directly influenced his exploration of how language and the body make each other act.

Stern also notes the influence of theorist Judith Butler on the study of speech act theory. Butler famously applied the theory to the creation and perpetuation of gendered bodies through the embodiment of language. Butler defines performatives as "that discursive practice that enacts or produces that which it names."[11] Language creates material things such as bodies by establishing what they are, what they should be should be, and what they signify and mean. Butler emphasizes that social norms, particularly those relating to gender and sex, are created through language that then become embodied through repeated linguistic citation.[12] To this end, Butler asserts that "the regulatory norms of 'sex' work in a performative fashion to constitute the materiality of bodies and, more specifically, to materialize the body's sex…."[13] For one such example: a body can be defined as "male" by society at large and by being defined as male, that

[10] Ibid., 7.
[11] Judith Butler, *Bodies that Matter: On the Discursive Limits of 'Sex'* (New York: Routledge, 1993), 13.
[12] Ibid., 236.
[13] Ibid.

body becomes saturated with predetermined, repeated significance like "strength" and "bravery." The male body equates to those qualities; its existence is those qualities. A body without this significance is a body that does not "exist" because there are no characteristics established by society to define it. It is not recognizable by others because it does not conform to what culture has decided it should be and the linguistic qualities (like strong and brave) that it should embody. It means nothing.

Butler's assertion that language creates the body resonates strongly with *Body Language.* Stern himself describes the series as an exploration of "the reaches and limits of bodies and language, *together*, in order to better understand how they are formed, *together*."[14] Stern chose to use interactive art specifically for this purpose. *Body Language* employs technology to first prompt viewers to perform motions and then to react to them by producing computer-generated words and sounds. Through the obvious visual and auditory change in the work, participants see their bodies doing something – they are the reason the work appears to be anything more than a few pieces of nondescript electronic equipment in a gallery space. To physically interact with *Body Language* is to cause the artworks to generate language that participants who engage with them can understand. Participant bodies trigger the works to make language as the work calls their bodies to spring into action and to make themselves, or to see themselves, known through the change they cause in the art.

Language needs the body to produce and process it and the body needs language to interact with others, to define itself, and to convey the ideas and qualities it possesses. Vocal chords, mouths, hands, faces, and brains all instigate and process communication — language does not exist outside of the bodily attributes that bring it into being. Bodies do not exist beyond

[14] Nathaniel Stern, "Body Language," *nathanielstern.com*, 2013, http://nathanielstern.com/artwork/body-language/.

anything more than their material makeup without language to name them, give significance to their parts, and allow them to express themselves to others. This is the system of embodiment, the becoming of bodies through language (I am [this]) and of language through bodies (speaking, writing, signing), a process that interactive art powerfully demonstrates through its activation of the body. To illustrate how *Body Language* specifically stages meaning-making, each of the four works will be considered individually with respect to their composition and Stern's artistic practice.

III. *enter*

enter (fig. 1) is the earliest work in *Body Language*, having been conceptualized when Stern was completing his Master's degree at New York University in 2000. *enter* represented Stern's first exploration into interactive installations. He had previously undertaken constructing an "old skool net.art" website called *hektor.net* that presented clickable, downloadable elements that wove a narrative around character of Stern's imagining named "hektor" (fig. 5, 6).[15] Around the same time, Stern crated another project that told the story of a second character "odys" through a multi-video installation.[16] Both works incorporated text, with an emphasis on poetry, into their interface and engaged viewers through clicks and videos, but did not physically interact with their bodies on a larger scale because they were viewed through a computer screen. In making *enter*, Stern sought to get participants to perform movements beyond their everyday gestures in a manner he saw as reminiscent of the "jerky expressions and exaggerated gestures" exhibited by hektor.[17] In presenting an installation, Stern came to see the gallery space as a performance space, a kind of stage, imagery furthered by the curtain that often separates art that

[15] Nathaniel Stern, http://hektor.net, 2000.

[16] Both hektor and odys are names intentionally pulled and altered from the Homeric poem *The Iliad.*

[17] Nathaniel Stern, "Body-Language," *a (networked_book) about (networked_art)*, last modified April 12, 2013, http://stern.networkedbook.org/body-language/.

incorporates audio as *enter* does from the rest of the gallery in order to muffle the sound and avoid distributing those not interacting with the work. This platform of performance was born out of his hektor series, in which he acted as hektor and provided both the voice and the face for the character, making his body the primary medium for the work that the website made viewable.

It was during the development of *enter* in early phase of his interactive practice that Stern became fascinated by the speech act theory proposed by J. L. Austin argued that language can be "performative" and enact (perform) tangible effects upon people and things. *enter* uses the Xbox Kinect motion sensor to detect the body of a viewer and create a dotted outline of it against the projected space on the gallery wall across which words then begin to dart, inviting the participant to chase after them. When the words are touched with the outline of the participant's body, they turn red and set off a statement recorded by Stern in hektor's almost flamboyant voice. The scattering words convince viewers to become participants and to perform actions in an attempt to grab them and see what will happen, how the work will respond. The words are "doing something" that is made observable and physical by the chasing, jumping, stretching of the bodies of participants as they go after the words. In setting off Stern/hektor's voice, participants are producing body language — their bodies move, the work speaks. Although the movements performed by participants are spontaneous as opposed to the rehearsed motions of everyday, they are intentional in that they serve the specific purpose of tapping the flying words. In doing so, *enter* stages a situation through which audiences become aware of their performance and the effect it has on the words.

The outline of the body that the openFrameworks coding creates acts as a mirror to the physical body while the cascading words collapse text, speech, and language into one. The projected words exist as text because they are written characters, speech in that they are audibly

spoken, and language because they both communicate meaning that can be understood. *enter* creates a direct physical and visual relationship between language (text and speech) and the moving body through its interactive combination of technology and reactive framework. Participants prompt the work's programming with their bodies to create language that manifests itself in meaning that they can comprehend. Without such comprehension, the language is not language, but gibberish.

By existing as interactive art, *enter* does nothing without the body and the language it could produce is ultimately purposeless without a body to both initiate and make sense of it. Without *enter*, the viewer's body stand before a blank wall, generating no language and thus no substance to be interpreted. Both inside and outside the space of *enter*, the two cannot exist without the other. In *enter*, as with the other works in *Body Language*, body and language emerge *together* through movement.

IV. *elicit*

elicit (fig. 2), the second work in the series, continues Stern's exploration of the interaction of the body and language and the significance they jointly communicate. As he did with *enter*, Stern borrowed elements from another one of his earlier projects while building *elicit*, this time from his character "odys." In *the odys series* (2001-2004), Stern plays odys in a collection of videos that focus largely on poetry and memory, again using his own body and voice to create his character as he did with hektor. Also like *enter*, *elicit* draws on Stern's fascination with poetry. When someone approaches *elicit*, the Xbox Kinect registers their body and the openFrameworks program triggers letters to burst from wherever the participant moves, flying across the projected space on the wall and disappearing past its edges. The faster the movement, the more letters appear, rendering them unrecognizable within a dense, layered cloud.

These letters are parts of dissolved words that, if one looks closely and moves slowly, can be pieced together in a manner similar to a word search puzzle. The openFramework file for *elicit* can be altered to change multiple aspects of the work, including the text that these words and letters are a part of. This dynamism falls in line with the dynamic nature of interactive art – should the artist choose to do so, programs can be adapted throughout the life of the work. The text that Stern includes is an edited passage from a novel by French author Marcel Proust entitled *In Search of Lost Time* that contemplates the entanglement of senses, specifically taste and memory:

> "No sooner had the warm liquid mixed with the crumbs touched my palate than a shudder ran through my whole body, and I stopped, intent upon the extraordinary thing that was happening to me…. An exquisite pleasure had invaded my senses...with no suggestion of its origin…. Suddenly the memory revealed itself. The taste was of a little piece of madeleine which on Sunday mornings... my Aunt Leonie used to give me, dipping it first in her own cup of tea .... Immediately the old gray house on the street, where her room was, rose up like a stage set ... and the entire town, with its people and houses, gardens, church, and surroundings, taking shape and solidity, sprang into being from my cup of tea."[18]

Not only does this excerpt reflect Stern's continuing interest in prose, but the consideration of the relationship between the sense of taste and memory echoes both *elicit* and *Body Language* in general. Many are likely familiar with associating a taste with a particular memory of people or places and, upon encountering that taste at a later time, recalling that specific memory almost automatically. Memory grants that taste its special significance, otherwise the taste of a cup of tea is just a cup of tea. Likewise, *elicit* has no significance without the body, the presence of which brings it into existence through movement. Unlike the other works in *Body Language*, *elicit* is silent, focusing its attention on birthing letters and words

[18] Marcel Proust, *Remembrance of Things Past Volume 1: Swann's Way & Within a Budding Grove*, trans. C.K. Scott Moncrieff and Terence Kilmartin (New York: Vintage, 1982) 48. Exact passage provided by Nathaniel Stern.

through the motion of the body. Like Proust's emphasis on taste, *elicit* prompts contemplation on pure, soundless physical movement and the language that the body brings into being through the interactive interface of the work. In following the motion of the body, the letters in *elicit* illustrate the presence of the body, crowding around where the activity is happening. They reflect the body, build its image, and make the language that defines it visual through projected text. *elicit* calls the body to action through its interactive framework, using it to produce language generated by its digital program that in turn becomes embodied by shaping and illustrating the body's presence.

V. *stuttering*

The third work in the series, *stuttering* was partially born out of Stern's practice of observing people in the gallery while they interacted with *elicit*. When programming *elicit*, Stern had envisioned participants performing jerky, staggered movements, but instead found them engaging in fluid motions to produce waves of text across the projected space. The act was almost too effortless, too clean. Like a pleasant conversation, the words of *elicit* flowed easily from participant's movements, illustrating the formation of language as a harmonious and continuous process. While the ongoing activity of imparting comprehensible concepts with language was something Stern did intend to display with *Body Language*, he also wanted to show the overt power that language can have over the body to make it do things. Noting this, Stern devised *stuttering* as the opposite of *elicit*. Where *elicit* is quiet and contemplative, *stuttering* is chaotic and almost abrasive.

When a participant moves into the motion sensing range of *stuttering*, an outline of their body appears on the wall in a manner similar to *enter*. As the body is moved, boxes containing words appear around the outline that each trigger a loud, recorded statement read by Stern. The

number of boxes that materialize relate to the speed of the participant's motion — if someone moves slowly, only one or two boxes will emerge, whereas quick movement yields more. When multiple boxes pop up simultaneously, all the statements attached to them are set off at once, creating a wave of sound that reverberates around the gallery and the words being spoken become unintelligible. The words rattle around their enclosures as if in response to the racket, jittering back and forth erratically while flashing red.

stuttering seeks to make participants hyperaware of their movements through its abrasive audio and vibrating text. Stern wants bodies to stutter, to extend and retract in response to the barrage of noise that incautious motion causes. Bodies manifest the linguistic stutter through lurching between movement as they provoke the speaking boxes and stillness as they wait for them to disappear and become quiet once again. *stuttering* breaks the smooth discourse between the body and text that occurs in *elicit* and instead stages the difficulties that often accompany communication and the consciousness it necessitates by forcing the body pause in its actions. The overlapping statements recited in *stuttering* make them nearly impossible to understand unless the participant slows their motion and listens carefully, echoing the intentionality that accompanies active interaction between two or more people. Participants embody the multi-sensory activity of the formation and receiving of information that is conversation as *stuttering* pushes them to perform the labors of attentive communication through its interactive framework. *stuttering* also physically correlates the body and language by getting participants to enact a verb and/or adjective typically used to describe a way of speaking with gesture.

VI. *scripted*

scripted is the final work in *Body Language* that brought the suite to completion in 2013. With it, Stern takes up the action of writing, one that the other works in the series do not address.

scripted also differs from the other works in the way that it senses motion. Instead of tracking the entire body, its program targets the head of the participant and follows its movement specifically. A participant is then able to draw a continuous line that disappears slowly across the projected wall space as they step left and right, forward and backward. By moving purposefully, the viewer can control the line and use it to scrawl across the marbled paper-like surface that *scripted* projects upon the gallery wall with their body. The movement is awkward and slow, like attempting to write out words in Microsoft Paint with just a mouse. If and when the participant manipulates the line into a shape reminiscent of a letter of the English language alphabet, *scripted* transforms it from a clumsy scribble into readable typeface and recites the letter aloud in a long, drawn-out voice in which the letter "A" becomes "ahhh" and "B" becomes "buhhh." Some letters are more difficult to write than others and the participant must try repeatedly to get *scripted* to recognize their body-writing. This body-writing frames gestures as their own form of communication.

The practice of writing is an explicitly physical activity. Regardless of how one writes, the action requires a body to create the language that writing conveys. *scripted* makes this dependency upon the body apparent by showing the process of writing as laborious as participants try and try again to scratch out the cumbersome characters. Letters, the building blocks of language, are embodied by their overt construction through the motion performed by the participant's body. The work draws its title from French philosopher Jean-Luc Nancy's concept of exscription, or his argument that language goes beyond merely referring to or representing something, but that it has its own bodily materiality, that it exists through a body. "Exscription," Nancy defines, "means that the thing's name, by inscribing itself, inscribes its property as name *outside* itself…." He continues: "In truth language always ends outside of

itself."[19] Language ends up outside of itself through the physicality of writing, making it a material thing rather than an invisible form of spoken communication. It manifests itself as script, as written or printed characters, through the body that inscribes it.

The word "scripted" can also refer to the predetermined nature of the making of language. The letters of an alphabet that are used to form words all signify something that is understood by speakers and writers of the language. It is this universally understood system that allows for effective communication between speakers. Participants who interact with *scripted* know what characters to write with their bodies because they know and understand the alphabet that the program will recognize. Although the connotation of words can change throughout time and new words are coined while others fall out of use, the alphabet remains the constant framework upon which both written and spoken communication is based.

Body Language sets up four situations through which participants make language with their bodies by means of the interactive, digital format that lets the series react to physical movement. Participants see their bodies being performative by doing something through bringing text and sound into existence. Hardly one-sided, the works *enter*, *elicit*, *stuttering*, and *scripted* also perform upon the bodies of participants through the interactive quality that calls them to move in particular ways with the intent of seeing how each work will react, what it will do. The works give purpose to bodies in the context of the gallery in they encourage participants to embody language by calling it forth with their bodies through consciously acting out gestures. Through these motions, bodies manifest the significance and intent that language communicates with their bodies rather than the unconscious and invisible process that occurs in everyday connections.

[19] Jean-Luc Nancy, *Being Singular Plural* (Stanford: Stanford University Press, 2000), 175-176.

Chapter III. — The Gallery Creates Meaning

Body Language explores the relationship of dependency of the body and language. The body creates language by mentally developing it, speaking it, and writing it for the purpose of communicating thoughts and ideas. Likewise, language formulates the body by giving it the tools to define itself. They grant each other with significance. One does not exist without the other.

The gallery and the exhibition that surround *Body Language* follow a similar pattern. The vinyl wall text that visitors are directed towards, the labels that accompany each work, the catalogue, and any curator or artist talks that happen in the gallery all use language to convey information about the art to an audience. Through this language, the curator expresses their own ideas and interpretations of the art that are pressed upon the audience and shape the encounters visitors have both inside and outside the gallery. Gallery exhibitions rarely exist without any form of language. Although some may forgo the extended explanations in lengthy text panels, exhibitions normally include labels that indicate the title, artist, and date of each work. Regardless of the form that it takes, language in the gallery tells visitors something with the intent of enacting both objective and subjective knowledge upon them. It is not put there accidentally, but is carefully planned and executed to achieve the specific goal of giving meaning to the art it describes and imparting that meaning to viewers. *Body Language* itself projects its language onto the gallery walls, passing on its own message to its participants through the physical structure of the gallery.

Language in the gallery is primarily manifested through the introduction placed near the entrance and the theme-specific panels of text that line the walls of galleries, along with the placards that accompany the individual works. Language does also occasionally appear as gallery talks, but these come and go and not all visitors may experience them. Text panels and

labels, however, are a major and consistent part of the art viewing experience that serve as checkpoints between different sections of an exhibition. They also provide historical facts about the life of the artist, the cultural climate in which they worked/are working, and share the curator's subjective ideas about the content of the art.

Through research conducted on the activities of art audiences, curators know that many visitors merely skim text panels before moving on through the gallery. It is with this in mind that such text is meticulously constructed to draw readers in with statements that are not overburdened with dense art jargon, but that focus on the broader themes of the exhibition. Despite the short attention span of some viewers, an exhibition without these points of reference could make visitors uncomfortable in the absence an otherwise universal fixture of a gallery. The complete lack of the voice of a highly educated expert curator may even call the legitimacy of an exhibition into question. If an art professional has nothing to say about the art on view, why is it being shown in a gallery? Why should art audiences take art seriously if those in the know-how cannot specify why it is relevant enough to spend time looking at?

The language in galleries, whether it be wall texts, catalogues, or gallery talks, derives its power from the centuries old position of the gallery as a locus for displaying art and other artifacts under the guidance of skilled curators. Publics generally trust establishments with a history, as their continuity demonstrates their enduring importance and the wisdom of having survived the test of time. It is important to point out that galleries can exist as individual entities and/or as separate spaces within a museum, but both iterations have acquired authority from their culturally cemented reputation as purveyors of knowledge of art. What can be said about galleries in a museum and also be said about those outside of it.

The history of the gallery as a site for the examination of art stretches back to the ancient Greek concept of the *museion,* or as a temple devoted to the muses of art, but the public gallery and museum space as it is understood today was not developed until the eighteenth century, initially in Western Europe.[20] Museum theorist Donald Preziosi speaks to this authority by asserting that: "[Museums] are so natural, ubiquitous, and indispensable to us today that it takes considerable effort to think ourselves back to a world without them…. Our world is unthinkable without this extraordinary invention."[21]

Indeed, the space of a gallery has become the primary place for connecting with and learning about the different parts of a culture including fine art. Students take trips with their classes to galleries to engage with individual works of art and to absorb what the curator who put them there see as significant about them. The authority of the gallery stems both from its heritage as a cultural institution and from its experienced staff. Visitors trust that the prestige of the gallery commands that it works with only the most well-informed curators who then study and present art in the most neutral, objective way possible. Art historian Janet Marstine offers a statistic from a survey conducted by the American Association of Museums that vividly illustrates this confidence: "87 percent of respondents deem museums trustworthy while 67 percent trust books and only 50 percent trust television."[22] Clearly, if people believe in the gallery, by direct extension, they also believe that the specific language of the gallery is far more dependable than the information that other popular mediums produce and circulate.

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[20] Jeffrey Abt, et al., "Museum," *Oxford Art Online Grove Art Online*, September 2010, http://www.oxfordartonline.com/subscriber/article/grove/art/T060530.

[21] Donald Preziosi, "Brain of the Earth's Body: Museums and the Framing of Modernity," in *The Rhetoric of the Frame: Essays on the Boundaries of the Artwork*, ed. Paul Duro (Cambridge: Cambridge University Press, 1996), 97.

[22] Janet Marstine, *New Museum Theory and Practice*, (Malden: Blackwell Publishing, 2006), 4.

The widely-held status of the gallery as a reputable establishment shapes the art that is shown within it. Work put on view in the physical space of the gallery is aligned with its honorable pedigree and with all other art that has been installed on or within its walls, connecting it to an art historical lineage. This power is such that exhibiting a work of art increases its financial worth, should it be sold by its artist, gallery, or auction house. Its presence demonstrates that it is "good" enough to be there because a curator, whose education and association with the gallery speaks to their command of art, has deemed it to be. The word "curator" itself is derived from the Latin *curare,* "to care," a title that speakers to their long-held role as the caretakers who look after and guard art, making them the highest arbiters.[23] "Visitors believe they have a transformative experience because the director/curator is a connoisseur," Marstine argues. "The expertise of the 'museum man' […] gives an assurance that the […] objects are 'authentic' masterpieces that express universal truths in an established canon or standard of excellence."[24] But the mere presence of the art is only half of the process of building its value. The curator must also communicate with explicit language to the audience why the art that is showcased holds distinct significance out of the wide and long history of art. Curators working behind the gallery hold the right to decide what art "means," or what a work is trying to tell and show its viewers, assertions that are relayed directly through the language of wall text, labels, catalogues, and tours.

The language used by the gallery specifically derives its power from through the established authority of the gallery. This power allows the gallery language to affect the way that art audiences see and interpret art, with the opinion of the curator usually trumping the personal

[23] Ibid., 10.
[24] Ibid., 9.

thoughts that viewers may have. When visitors read a text about a work of art, they often take it as gospel truth. "No, no, it says over here that it's actually about *this*," is not an uncommon statement to hear in a gallery. The entrenched authority of the gallery and its curators is such a cultural norm that it is rarely even considered, let alone questioned.

The author of a gallery text is usually not identified, but rather, it seemingly descends from an invisible and unanimous source. This is not to say that galleries and curators should not be taken seriously or are wrong in providing educated commentary on art, but rather that it is crucial to recognize that the language they use does something. It plants seeds within the minds of visitors to the gallery that can mold how they view history, their own culture, and other cultures from around the world, all of which inform the content in art and the messages behind it. A curator can use language to subjectively privilege specific works, mediums, or movements of art by framing them in certain ways. One example of this can be seen in the prevalent discussion of African masks on view in galleries only as objects that inspired the Western artist Pablo Picasso, rather than as works of art with their own considerable cultural history. This privileging can also be done through the sheer amount of words that are used to analyze a work of art. Viewers do not even need to read a lengthy wall text to deduce that the more a curator has to say about a specific work, the more worthwhile it must be. There would not be so much to be said about something if there were a not a deep meaning behind it that needs to be elaborated upon for the viewer's understanding.

This smoke screen of information weaves a tight narrative with little room for other voices. Galleries and curators should and will always operate as experts, precisely because their specialized knowledge does give them educated insight, and because they do guard and preserve art for posterity. However, discussing how galleries and their curators explicitly and implicitly

utilize language in order to fabricate what they see as the message behind art lends art audiences their own kind of power. Being able to recognize that the gallery is directly influencing and shaping the thought processes of viewers because of its institutional power gives visitors the agency to question its absolute authority, to consider what they are being told and why. It also allows for a more dynamic relationship between visitors to a gallery and the art that they encounter. In taking language in the gallery as a guideline rather than absolute fact, viewers can feel more free to express their own ideas without needing to validate them against the gallery text. People within the audience can use the curator's voice as a springboard to give art their own personalized significance, in their own language. Language produced by the gallery should operate as a dialogue, rather than as a trickle down of the supposed intentions behind art as determined by the anonymous curators on high.

enter, *elicit*, *stuttering*, and *scripted* all depend upon the bodies of visitors to activate them and give them significance as more than pieces of electronic equipment in the gallery. Without participants to perform gestures before them, the works produce no language and are effectively meaningless in that they do not pass on any concepts or intent to an audience. Likewise, the gallery cannot function without both language and the bodies of an audience. Without language, the gallery is unable to impart any information on or interpretation of the art that it exhibits. Its elevated position in society and the knowledge of its curators are of little value if there is no means through which to use them to convey a message that will be understood and taken seriously by audiences.

Yet this language is also useless if there is no audience to receive it. Without bodies to read and hear the language of the gallery, all the prestige and expertise of the gallery does nothing. It does not function in its role as a creator and disseminator of the purpose and history

of art. If *Body Language* was not shown in the gallery, it would be little more than a white plaster and gray concrete room. It could be a gallery, but it could also be a classroom, garage, or studio loft. The exhibition of *Body Language* brings bodies into the space and thereby makes it a gallery, providing a reason for it to produce and for visitors to absorb it.

By the same token, the gallery makes *Body Language* in a similar way. If not for the gallery, there would be no physical space for visitors to converge in and no bodies to activate the works. No language would be made tangible without bodies and thus no embodiment would occur. There would also be little reason to consider *Body Language*, and what it does in general, should it not be presented in a gallery. The gallery gives legitimacy to the series. Why should anyone bother to interact with the works or contemplate what concepts they illustrate if an educated individual has not deemed them significant enough to do so? The body and language are dependent upon each other. The gallery is dependent on language to convey information and the bodies of visitors to receive it. Both the gallery and *Body Language* need each other to be significant and reach an audience.

Chapter IV. — Continuing the Narrative

Nathaniel Stern wears many different hats. Given the parade of non-metaphorical hats that he includes in his wardrobe, this is not surprising. Stern is an artist, educator, "public citizen" (as he puts it), author, and autobiographer. He is an author in the traditional, academic sense, having published what he calls an art philosophy text about staging embodiment through interactive art, to which this catalogue and exhibition are indebted. But Stern is also a narrative writer of his own life. Stern reimagines "somewhat fictionalized" experiences he has encountered throughout his artistic development and practice. He retells conversations candidly, both as a record for his future self, but for others who may wish to see the internal workings of an artist. Stern engages, interacts, with his reader on a close level, dissolving the wall of mystery between the artist and their audience.

It is a narrative I want to continue. I believe that it echoes the consideration that language in the gallery does not appear there with the completely objective intent of providing pure fact, but that it is carefully created and placed by someone with the purpose of telling visitors what *they* think about the art that *they* have selected to be in an exhibition. It is important to be able to peek behind the curtain and see what goes on beyond the production on stage, to understand why the curator is doing what they are.

In a poignant and very relatable memory of a conversation, Stern relives the nervousness he felt while visiting his doctoral advisor:

> "On the balls of my feet, I involuntarily hover in the doorway to my supervisor's office. "'Was there something else you needed?' Linda asks me, not even turning to face me from her computer. I want there to be. I rack my brain for a second, trying to think through how to voice my anxieties, before I finally summarize them with two simple words.
>
> "'I'm…scared?' My tone is surprised; the words come out along with a laugh. And it isn't a nervous laugh; I find my fear funny. And it isn't even real fear; it's academic fear. In both my personal and professional lives, I've done and endured far

> worse than simply exiting my comfort zone whilst researching and writing a paper. Still, 'I don't know if I can do this.'"[25]

The fear Stern remembers is a familiar one, the doubt that we can accomplish what we want to. Preparing a thesis is a sleepless endeavor, one that necessitates many cups of highly caffeinated tea and teary calls to friends. I knew from the outset that I wanted to frame my thesis exhibition around interactive art. While interactive art is not a new medium, it is still relatively unknown to most art goers. I have long been interested in the ways that the gallery interacts with its visitors, so explicitly interactive art seemed like a natural progression. Originally, I had imagined an exhibition that simply looked at what interactive art "is," i.e. reactive art that is supported by technology. My investigation of Stern's work took me in a different direction, one far more important.

Too often, interactive art is framed in terms of its sheer interactivity. The fact that visitors to the exhibition space are encouraged, and needed, to perform physical gestures in the gallery with art that does something in response to this motion with technology, no less, is novel. And it is indeed novel. New media art, or art that uses or deals with technology, is beginning to appear in mainstream art venues with increasing frequency while interactive art trails shortly behind. But framing interactive art in terms of its physical engagement of viewers and the technology it uses is like discussing painting only in terms of it being a painting, prepared canvas over wooden stretchers, and never addressing its symbolism or what the artist was trying to do by painting it. This has led to a rather two-dimensional understanding of interactive art, both by general art goers who may have seen it only once or twice and by many curators themselves, who are juggling so many other projects that they do not have the time or energy to delve deeper

[25] Nathaniel Stern, "Introduction to an Experiment," *a (networked_book) about (networked_art),* April 12 2013, http://stern.networkedbook.org/introduction-to-an-experiment/.

into the niche of interactive art. If visitors are far more intrigued by technology in the gallery and getting to run around in a way that would other not be appropriate than anything else, why not give them what they want.

With *Body Language*, I saw the opportunity to push beyond a simplistic survey of interactive art and to instead investigate how and why it directly engages the physical bodies of participants and makes them part of its medium. I wanted to understand what makes artists choose the interactive format over any other type of art. Interactive art uses the body with the purpose of confronting us with its presence. It forces us to become conscious of our bodies and what they are doing when we stand in front of interactive art and wave our arms around or cartwheel across the room. Bodies are the reason we exist, but the separation of the higher functions of the brain use the body as a tool that carries our consciousness from place A to place B. We do not pay attention to them unless something goes wrong.

Interactive art prompts us to not only take a step back and look closely at our actions to see that they have a tangible affect that we might not otherwise recognize. *Body Language* examines the causality between the body and language, but by prompting bodies to move and reacting to that movement, interactive art can and does explore how our bodies affect external things, such as the natural environment and other human beings. It illustrates the relationality or connectedness between our bodies and the world around us as we embody and call into being the forces that we shape and that shape us, through our movement in the gallery. Interactive art has the capacity to teach us to be aware of our bodies and to use them purposefully and carefully. It calls unseen occurrence to the forefront and makes visible how bodies are implicated in it. As the global population expands past 7.5 billion people, it is more important than ever to be conscious of the power of our bodies. We cannot ignore them anymore.

Body Language does so much more than get people up and moving in the gallery. The suite demonstrates that neither our bodies nor language exist in a vacuum. Language is not an immaterial entity that floats above our heads — it *is* us. We use our bodies, mouths, hands, vocal chords, and brains to produce language that allows us to communicate with others and to give our bodies, ourselves, signification. We build our bodies out of words. What is something if there is no way to convey what it is, what it does? With its interactive format, *Body Language* involves participants directly in the creation of language as letters, words, and sentences burst forth from the projected image of their body. This is a continuous process that does not stop once visitors leave the gallery. Rather, *Body Language* reflects our perpetual system of creation. We are always making language through communication while language is always constructing us, giving us the words to express who we are, the qualities and ideas that we possess. We are always embodying language not only by making it with our bodies, but in existing as the physical manifestations of what it describes, of the words we use to define ourselves. *enter*, *elicit*, *stuttering*, and *scripted* are all works of art, but they are also us, in a sense.

What they do, we do.

FIGURES

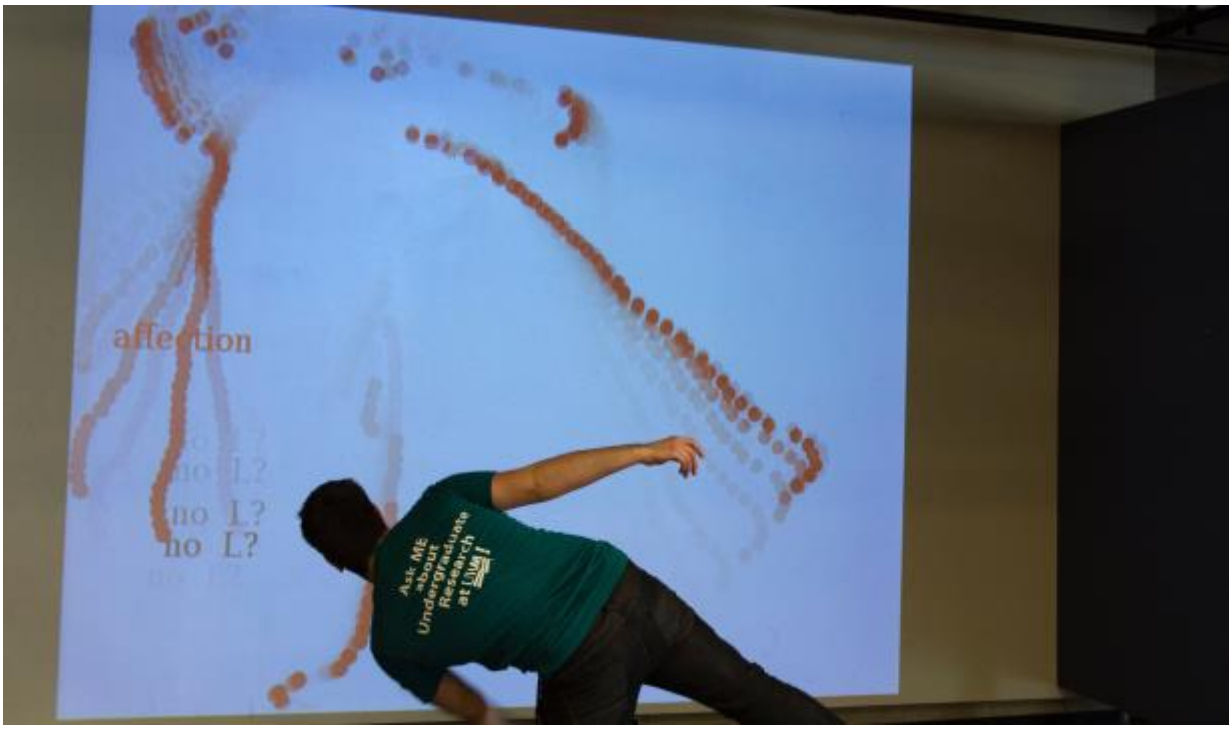

Figure 1.
Nathaniel Stern
enter, 2000-2013
Mac Mini, Xbox Kinect, digital openFrameworks program, projector, speakers

Figure 2.
Nathaniel Stern
elicit, 2000-2013
Mac Mini, Xbox Kinect, digital openFrameworks program, projector, speakers

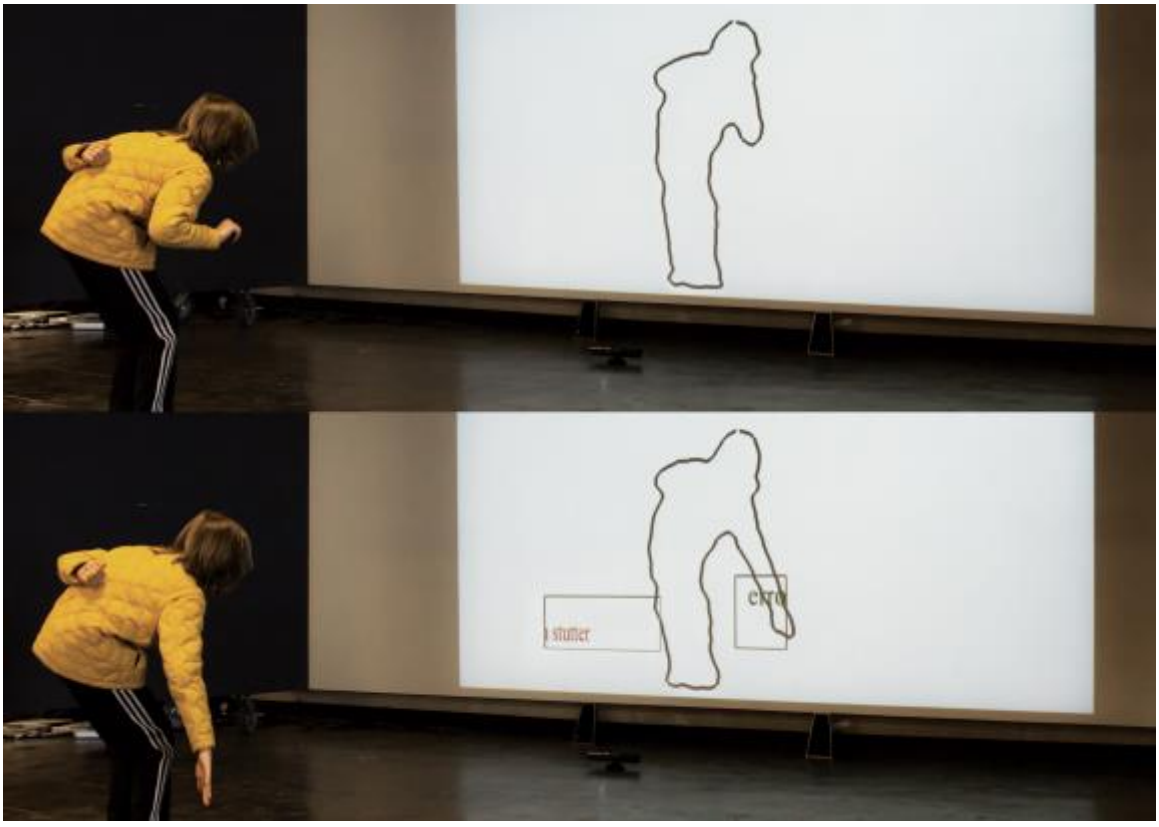

Figure 3.
Nathaniel Stern
scripted, 2000-2013
Mac Mini, Xbox Kinect, digital openFrameworks program, projector, speakers

Figure 4.
Nathaniel Stern
scripted, 2000-2013
Mac Mini, Xbox Kinect, digital openFrameworks program, projector, speakers

Figure 5.
Nathaniel Stern
enter: hektor, 2000
Screengrab from Quicktime video

Figure 6.
Nathaniel Stern
[hektor] w/o helen, 2000
Screengrabs from Flash video

BIBLIOGRAPHY

1. Abt, Jeffrey, et al. "Museum." *Oxford Art Online Grove Art Online.* September 2010. http://www.oxfordartonline.com/subscriber/article/grove/art/T060530.

2. Austin, J.L. *How to Do Things with Words.* Cambridge: Harvard University Press, 1962.

3. Butler, Judith. *Bodies that Matter: On the Discursive Limits of 'Sex.'* New York: Routledge, 1993.

4. Dinkla, Söke. *Pioniere interaktiver Kunst von 1970 bis heute: Myron Krueger, Jeffrey Shaw, David Rokeby, Lynn Hershman, Grahame Weinbren, Ken Feingold.* Ostfildern: Cantz, 1997.

5. Kwastek, Katja. *Aesthetics of Interaction in Digital Art.* Cambridge: MIT Press, 2013.

6. Manovich, Lev. *The Language of New Media.* Cambridge: MIT Press, 2002.

7. Marstine, Janet. *New Museum Theory and Practice.* Malden: Blackwell Publishing, 2006.

8. Nancy, Jean-Luc. *Being Singular Plural.* Stanford: Stanford University Press, 2000.

9. Paul, Christiane. *New Media in the White Cube and Beyond: Curatorial Models for Digital Art.* Berkeley: University of California Press, 2008.

10. Preziosi, Donald. "Brain of the Earth's Body: Museums and the Framing of Modernity." In *The Rhetoric of the Frame: Essays on the Boundaries of the Artwork,* edited by Paul Duro, 96-110. Cambridge: Cambridge University Press, 1996.

11. Proust, Marcel. *Remembrance of Things Past Volume 1: Swann's Way & Within a Budding Grove.* Translated by C.K. Scott Moncrieff and Terence Kilmartin. New York: Vintage, 1982.

12. Stern, Nathaniel. *Interactive Art and Embodiment.* Canterbury: Glyphi Limited, 2013.

13. Stern, Nathaniel. "Body-Language." *a (networked_book) about (networked_art).* April 12, 2013. http://stern.networkedbook.org/body-language/.

14. Stern, Nathaniel. "Body Language." *nathanielstern.com*, 2013. http://nathanielstern.com/artwork/body-language/.

15. Stern, Nathaniel. "Introduction to an Experiment." *a (networked_book) about (networked_art).* April 12, 2013. http://stern.networkedbook.org/introduction-to-an-experiment/.