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Abstract

Echoes of Balance and Push is an immersive video art installation that explores how a new mother's daily life relates to tumultuous and unpredictable experiences of weather. This paper describes an interdisciplinary collaboration between the authors, who are artists and researchers. The researchers in tandem with the artist explored the creative process and experience of viewing Echoes of Balance and Push. Through the lens of an iPhone, an improvisatory experience of maneuvering a large weather balloon in the open elements creates the environment for exploring struggle in relationships to motherhood. We describe the design process and results of the work through concepts of Experience Prototyping: using methods of Rasaboxes, RSVP Cycles, ritual interaction. improvisation, and Bodyweather performances. Echoes of Balance and Push presents an exploration of improvisatory performance art through a perspective of design prototyping in order to highlight the creative process of a sensorial-based art practice.

Keywords

Video; art installation; Experience Prototyping; Rasaboxes; RSVP Cycles; ritual; improvisation; Bodyweather; dreams; embodiment; performativity

Introduction

Echoes of Balance and Push is an immersive art installation that questions how one transcends the physical experience of motherhood through the lens of weather patterns and environmental changes. Using Butoh Bodyweather movement, a practice that acknowledges and compares the internal processes of the body with the movement of weather around the earth, a link is made between mother earth and human motherhood including issues of care, control, and prediction. As with any complex system, weather is tracked, monitored, quantified and predicted yet remains outside of our control and even long range forecast. Mother earth provides a ground for these sometimes violent dynamic processes -- containing, absorbing, and being subject to them. Similarly motherhood at once envelops and engages with the chaotic entry of a new agentic life. Using a weather balloon as a metaphor, the interaction between the artist and the balloon illustrates this juggling act of agency. Conceptually, the Echoes of Balance and Push merges imagery and ideas of life changing processes such as bringing life into this world, decreased control, and the overwhelming powerlessness that can result..



Figure 1. *Echoes of Balance and Push* Installation View at Emily Carr University Art + Design, 2014. Digital Photograph courtesy of Amanda Arcuri

Echoes of Balance and Push was presented at It's Not You, It's Me at Emily Carr University's Concourse Gallery from March 27th to April 9th. The artwork consists of three 22inch video monitors with built in speakers placed along a wall and showing looping video clips. Videos are of the performer dancing with a weather balloon on three separate days: one windy, one snowy, and one rainy. The audience witnesses the constant shifting of elements in changing weather patterns. A 12-foot white weather balloon centered in the middle of the concrete floor accompanies the viewing experience. From afar, the balloon looms over the monitors, changing and shaping the viewer's experience of the videos by the sheer physical size and presence of the balloon. The soft video sounds entice the audience to move closer. As the audience becomes attentive to the videos, what emerges is a performative dance with a weather balloon around a dilapidated barn. Three videos show similar movement sequences from different vantage points and varied weather patterns.



Figure 2. *Echoes of Balance and Push* Installation Video Stills, 2014. ©prOphecy Sun

The sound experience of the work includes ambient textures of wind, rain, birds, and of a woman breathing from a struggle outdoors. The composition enhances the performance by connecting the audience with the trials the woman is encountering in the natural landscape. The soundtrack is constant, ebbing and flowing in subtle sequences throughout the gallery space. The unique soundscape projects and weaves around the space and is individualized for each video. As the audience comes into a closer proximity to the screens, they will notice that each video has a different soundscape of the woman breathing with subtle changes of timbre and vocal expression depending on the level of difficulty of her movements. The story in the videos depicts a woman's movements around an old barn, relaying daily struggles under shifting conditions. As a new mother, the artist filmed herself struggling to keep a giant weather balloon afloat as she moved continuously around a barn in these five to ten minute looping video clips.

This artwork was created through a self-reflexive performative and improvisational process in which the experience of new motherhood with its vulnerability, lack of control, and loss and reconstruction of identity are subsumed within the metaphor of weather patterns, with their larger than life unpredictability and difficult if not impossible-to-control nature. Weather patterns are analyzed by 'big data' technologies and algorithms that attempt to codify, explain, control and predict weather activity. This can be likened to medical and social interventions defining motherhood. Weather balloons chart and explore the skies in our stead. They can also be artistic objects that traverse the surface of the earth, a floating technology that caught in the delicate grip of human hands allows for the negotiation between realms, a dance between layers of conscious and unconscious movements. They have been used by others to carry tools, bodies, objects, chairs, and people. The weather balloon is a translucent and luminous instrument that has agency, buoyancy and liveliness. The weather balloon creates a performative framework that is able to ironically invoke the vulnerable relationship between motherhood, identity and the daily interplay and perception of a scale that is beyond the body's ability to control, yet beautifully poignant and even humorous in its interplay.

Artistic Inspiration For the Work

Echoes of Balance and Push was inspired by considering the experience of being pregnant as a temporary shelter for another life. In her investigations with the weather balloon, the artist used her body as a safety blanket, or a restrictive device that protected and carefully guided the balloon through obstructions. This experience was realized by using a weather balloon to depict emotions and narratives based on the work of Anna Rewakowicz and Kelly Nipper. Rewakowicz and Nipper are two contemporary artists that also use weather balloons and inflatables in their practice. Rewakowicz relies heavily on the relationship between objects (which she describes as portable architecture), the body and the environment. She creates public experiences that can be very intimate. For example in the SleepBagDress prototype 1-2, she created a multipurpose kimono dress that when inflated changes into a cylindrical contained inhabitable by one or two people [1]. Rewakowicz creates look at the portability and selfsustainability of a wearable cell, comfortable as both a dress and a temporary shelter. Nipper and Rewakowicz connect to the work by creating objects that come alive and have their own agency which depict emotions and narrative to ultimately tell a story.

Design Process

Echoes of Balance and Push began as a study to understand how movement can be improvised through tumultuous indoor and outdoor spaces with an unusual object, representing a relationship between self and other. The artist began experimenting with weather balloons after seeing a white orb tethered to her arm in a dream. She then translated that dream into a video installation using the technique 'Experience Prototyping'.

Experience prototyping "is any kind of representation, in any medium, that is designed to understand, explore or communicate what it might be like to engage with the product, space or system we are designing" [2]. Experience prototyping uses a combination of imagination, roleplaying and material tinkering to explore the potential experience of a design concept. This work refers back to the experience of participating in a design process, creating a design product or imagining a design scenario based on the physical, conceptual and emotional experiences that could be illustrated. This work can be directly related to the Art and Design world through Frayling's 'Practice as Research', focusing on embodied practice and materiality to guide the development of a work [3]. Using experience prototyping as a guide we leveraged multiple methods from artistic practice for guiding and prototyping creative exploration.

Material Qualities of the Weather Balloon

One element of the artist's experience prototyping process was the unique material qualities of the selected medium: a weather balloon. The weather balloon is a very fragile object made out of latex or synthetic rubber (neoprene) and filled with helium or hydrogen. Not only a technology for scientific mapping and exploration, the weather balloon can transport other tools, bodies, objects, chairs, and people, allowing it to become an artistic device that traverses the surface of the earth. The weather balloon is very large (8ft) and light, with a shifting exterior in relationship to contact. In the research the artist draw upon Atlas' image of holding up the Earth, portraying a woman holding a weather balloon off the ground so that it is not destroyed. The wielding of the weather balloon in conditions, such as rainfall or wind, was also used as a metaphor for disruptive change in unusual conditions.

Over time, she was able to use increasingly large weather balloons. As she became more comfortable with a 4ft. diameter balloon, she continued her prototyping using an 8ft. balloon. The more experienced and practiced she became, the more confidant her movements became and the more she could push the boundaries of the experience and her physical experiments. Because of the experience prototyping process, she was able to portray the physical struggles without destroying the balloon.

Interplay Between Dreams and Reality

Experimentation began with physical explorations of a weather balloon, using environmental forces and selfreflexivity as a guide to let the movement patterns follow the lead of the balloon travels. The artist found herself in concrete stairwells and small elevators, investigating the sounds of the balloon in confined spaces. The weight and malleability of the balloon were important. She felt that it was important to first experience the balloon indoors within a controlled environment. There she was able to experience the boundless nature of the shape in a confined space. Through experience prototyping, she was able to learn about the movement qualities of the balloon and how to carry the weight. The shape was more controllable because there is no weather inside – it felt like a sanctuary. In experimenting with the balloon in an indoor studio, the artist explored concepts of time, flight and alternate realities. The concept of time was explored by doing repetitive tasks such as lifting the balloon over her head again and again. When the task had the appropriate outline to answer her artistic question, she subtly modified it to create unique interesting movement patterns. Time felt different in alternate spaces and experiences changed due to the constraints of the architecture often shared with others. For example she had to work around people using an elevator next to the studio. She became very aware of the time it took people to exit the elevator. When there was no one else present she was able to experience timelessness and stillness. When she was alone, she created exaggerated and boundless movements with a mental freedom to get lost in time, to successfully "fly" and transcend reality. It was too difficult to create these spaces of play and experimentation when other people were sharing the space. The interplay between reality and dreams also became important to the work as the representation of the largest 12ft weather balloon felt like another body when carried and moved around spaces, shifting and reacting alongside her. There was interplay between reality and dreams. The experience itself felt like a long lucid dream. The artist investigated how rational objects move in irrational spaces that are natural, organic, non-Cartesian, and curvilinear, such as orchards and fields. Things she sees and hears in the intangible world of dreams are of interest and a recurring source of inspiration for practice.





Figure 3. *Time is Precious* Installation Video Stills at Emily Carr Graduate Studio and Elevator 2013. ©prOphecy sun

Coupled with observations from lived, waking experience, dreams offer another layer and resource for making art. The weather balloon is used as a metaphor for the entanglement between waking life and the dream, between multifarious vantage points within the reality of everyday experience.

Artistic Methods Leveraging Experience Prototyping

Buchenau and Suri's work in experience prototyping [2] was a seminal concept that has been explored and extended by many, including Lowgren's 'Thoughful Interaction participatory design research Design' [4], [5]. bodystorming techniques [6] and product experience [7]. Artistic methods that leverage the conceptual and material processes of Experience Prototyping include: Rasaboxes movement, RSVP Cycles, Bodyweather practices and ritual and improvisation. Each method contributed to a different aspect of the piece by allowing directed investigations of space and movement, which led to the final work highlighting the struggles of control in an evershifting situation.

Rasaboxes

Inspirations for the work process came from physical exercises of Rasaboxes, invented by performance theorist Richard Schechner. These frameworks for experimentation supported the prototyping process, creating a set of guidelines to test the experiences within. These guidelines are psychophysical exercises including workshops to bring out events by digging up materials in repetitive cycles or ritual experiences [8]. Rasaboxes are a physical exploration process that builds a range of feelings clustered around the emotional core using materials influenced by personal and/or historical events to immerse oneself in that experience, feel the emotions of the experience, and prototype the experience. For example, each participant will try eight different emotional and physical versions of the same experience and repetitively prototype the different versions [8]. The participants of Rasaboxes are able to access the experience without restriction and rules and give themselves over one hundred and fifty percent to the movement and emotion. In Echoes of Balance and Push, the artist emulated Schechner's Rasabox technique, explored different emotional and physical versions of the same experience, exploring and accessing emotional material and created repetitive movement structures to reconstruct her identity.

RSVP Cycles

Experimental teacher and postmodern dancer Anna Halprin pioneered a technique called *RSVP Cycles [9]*. This technique focuses on ritual experiences, the everyday life, including psychological, physical, community, and personal experiences. Her teachings and physical systems of incorporating the ordinary into the creative process has offered profound inspiration for the artist's modern dance style. Halprin's *RSVP Cycles* is a system of creative methodology for collaboration. The four components for the methodology include resources (time, physical materials, other people, ideas, limitations etc.), score (instructions for the work), valuation (dynamically responding to work based on values), and finally performance (creating the work) [6]. Within *Echoes of* *Balance and Push*, this methodology was used to create the performance by walking through these steps sequentially to create meaningful pieces that were evaluated based on the works' value as a whole and the values of the resources and score. As with Halprin's methodology to authentically explore movement through experience and ritual, the artist aimed to create "direct personal experiences using natural movement" [6].

Another element of Halprin's *RSVP Cycles* included in the artist's work is the creative process and experimentation with tactile materials. The artist's relationship with weather balloons has developed over time and through ritual and physical exercises stemming from an intuitive connection with an orb in a dream. The dream space is a place of altered consciousness filled with a succession of images, wishes, sounds, representations and vivid sensations. This space is made up of impressions from the physical world and translated and interpreted in the unconscious realm. The artist focused her experiments to use Rasaboxes and RSVP Cycles techniques to explore the materiality of the balloon through many iterations.

Echoes of Balance and Push's movement sequences transformed over time to become an investigation of a woman struggling to navigate the terrain around an old dilapidated barn in many different weather conditions. The artist is the woman, who moves around a barn in "unfixed" movement patterns while carrying a weather balloon, exploring her ability to control or be at the mercy of the environment. To design these improvisations, she used Halprin's model and created a set of guidelines with the ultimate goal of successfully moving all the way around the barn. Her actions consisted of repetitive motions such as wandering, carrying, climbing, walking, crawling, falling, and crouching to ultimately achieve her goal. Halprin's methodology is implied but not inferred and her methodologies are used as inspiration for Echoes of Balance and Push.

The artist was looking to solve the problem of moving a weather balloon around an environment in difficult conditions while creating meaningful personal connections. She was not always successful, but when the task is accomplished, the experience was profound. In addition to the task at hand, the artist's newborn baby was present in the space (just off camera), which created a constant split attention and potential distractions during the creative process. In the times that a task was not successful it was when the baby needed attending to and one iteration had to be abandoned, or when the weather balloon moved off screen, dropped, popped or deflated. The unsuccessful movements included slipping, swerving or banging into bushes, falling against the barn, and falling or skidding to the ground. To solve these issues, the artist began making smaller movements with the weather balloon, using repetitive gestures like only carrying it above the knee, and finally slowing down sequences to allow for the balloons inertia and let the object lead. She found the most successful movements and explorations were centered around simple, slow tasks [9].

Bodyweather Performance

Bodyweather is a performance practice that amalgamates the body with the environment using the metaphor of weather. Created by Japanese Butoh dancer Min Tanaka [10], the performer's body is constantly changing through processes occurring in- and out-side their body. Bodyweather is "the imagination used to directly affect the sensate material of the flesh and generate specific felt bodily experiences and environmental to inhabit" [10].

Transforming the body into imagery is the key concept of Bodyweather. The main exercise in the practice is "omnicentral imaging." This exercise consists of a mover placing "a number of images in discrete parts of their body simultaneously...[then the] imagination is used to directly affect the sensate material of the flesh and generate specific felt bodily experience and environments to inhabit" [10]. There can be different images that depict objects or feelings for every part of the body. In Echoes of Balance and Push, the artist was aware that the balloon could not drop and used imagery to assist her with this task. She visualized that her arms were nets, able to hold the weight of the balloon; her legs had the speed and boundless fullness of a gazelle and imagined that she could jump over fences. She imagined she was a hybrid human. She tried to be emotionally and physically present, aware of her environment even though she was expanding her imagination using omni-central imaging. She was able to execute the movements without succumbing to the environment.

The methodology of Bodyweather was useful to portray a specific felt body experience that in dealing with the unpredictable weather and movement. In traditional Butoh dance practices, the body is seen as "being moved as a whole" from an internal or external source rather than consciously moving a body part. In Bodyweather practice, there is a certain amount of negotiation that is done to gain the necessary level of control of the movements and performance. In Echoes of Balance and Push, many physical and psychological adjustments were made in the performance because of the weather cycles that the artist experienced. For example, negotiating changes with the environment according to how the artist was moving around the space. Also, the whole installation is based on these ideas and the videos depict snippets of the video versions that were filmed. The movements can be affected by the weather. For example, in the snow environment. the artist had boots full of water when from moving around the barn due to the deep snow pockets and rain puddles. To complete the tasks she had set out to do, she carefully traversed around the barn, imagining her feet were flippers and it was all right that they were cold and wet. These visuals assisted her and let her glide softly without falling. Ultimately, in the environment, the internal and external forces that affect the environment can be incorporated into the movement. Symbolically, the artist feels the methodology is helpful to create a conversation about the unspoken struggles of motherhood.

Ritual Interaction and Improvisation

Ritual is the process of exploring and archiving history, religious experiences, expressions, and practices in performance between people [11]. Lian Loke et al. describes ritual practices as a way to "explore alternative ways of experiencing and representing self and the world in intimate and highly physical interactions" [11].



Figure 4. *Echoes of Balance and Push* Digital Photograph, 2014. ©prOphecy sun

Ritual experiences create structure and form by using repetitive rhythms, sounds and tones. Artists are creative by nature and the act of ritual and the addition of improvisation create meaningful and intriguing experiences that would have never been possible to discover if it was not for the repetitive nature of ritual exploration. For example, when the artist stepped outside, there was a huge shift physically working with a weather balloon in the environment and atmosphere. As the artist attempted to replicate movement sequences that she had already honed and experienced in the inside environment, she popped a balloon within the first two minutes of being outdoors. The artist had to completely change her movements and explore alternate ways to move in this new landscape. She felt that the weather was a force and the balloon and her body were caught in the middle of the changing pattern. Through ritual iterations, she learned how to move with the balloon through experience prototyping. After prototyping the movement, she shifted positively through iterations and became more confident with the changing weather patterns and began to explore movement as she had done indoors.

Improvisation is created using a set of guidelines. For instance, in John Cage's 4'33" a musical composition that consists of a pianist setting at a piano, turning pages of music, opening the cover twice, and not playing a single note of music. "What [the audience] thought was silence, become they did not know how to listen, was full of accidental sounds. You should hear the wind stirring outside during the first movement. During the second, raindrops began pattern the roof, and during the third the people themselves made all kinds of interesting sounds as they talked or walked out" [12]. In 4'33", neither artist nor composer has any impact on the piece, and Cage has no way of controlling what ambient sounds that audience will hear. In *Echoes of Balance and Push* improvisation were created to relate specifically to the ambient nature of sound and the process of accidental discovery. Limitations were set with the sound due to using an iPhone and the artist did not realize what sounds would be more prominent in the video until it was recorded. For example, after she started recording the piece, she was aware the sound of the wind was very present. Therefore, to reduce the intensity of the sound, she made sure the microphone on the camera was not in the direct path. A positive accidental discovery included the beauty of the ambient birds that were picked up in the recording and amplified in postproduction.



Figure 5. *Echoes of Balance and Push* Installation View. At Emily Carr University of Art + Design, 2014. Digital Photographs courtesy of Amanda Arcuri.

Multimedia artist Kelly Nipper uses performance, video, dance and projections to tell stories. In her piece *NORMApractice for conditioner*, she presents documentation of a large site-specific installation featuring female subjects doing mundane, monotonous activating for a period of time. Nipper created *NORMA* as a starting point in her interest with the science of movement. Norma was the name given to the rulers in ancient Rome who designed the layout of stress and buildings in the city. Eventually, the designers became known as the Normans. Nipper was inspired by the city planning and used the inspiration to control her movement process through a series of steps and framing ideas in front of a camera. With the use of ritual interaction and improvisation, three dancers, weather balloons, and nitrogen tanks containing thirty hours worth of nitrogen, drained slowly through hoses into the space [13]. Nipper has an interesting way of telling stories. For example, the dancer's tasks were accomplishing over a set duration, weather and the space were important to set the tone.

Nipper's work has been an influence in the creation of *Echoes of Balance and Push*. Nipper was concerned with how she set up and tore down her installation. She was part of the experience even if the experience was not recorded or used in the final installation. Using Nipper's methodologies in *Echoes of Balance and Push*, the artist created a set of guidelines similar to Nipper's like using elements of time, place, shape, sound and the body to create pieces that tell a story through experiences.

The artist believes that improvisations are essential elements of creativity and are the building blocks of collective experiences. All the potentialities arise from the act of trying something in the moment. She believes it as an action drive or reactive experience in the moment to her immediate environment and inner feelings and this response often results in an invention of new though patterns or a new practice.

A buzz, purr, railing, weather balloon, sidewalk table, dress, humming of the refrigerator, or highchair are all opportunities waiting to unfold on a sensory level. Improvisation is conventionally seen as problem solving in situ, action driven or reacting in the moment. She used it as a tool to guide and create a safe and challenging space where she could release thoughts, ideas, and finally let go. The space is a calm, meditative place where she has contemplative freedom to create work that lives in a space of improvisation, performance, and chance.

Movement Patterns

The same movement patterns (mostly figure eight patterns) were kept with minor modifications (sometimes selfimposed and other times modifications were made due to the weather) to accomplish the goal of making full rotations around the inanimate object (barn).

Location

The videos were always recorded in the same location but used different camera angles. Another issue with the location was that sometimes other people would end up in the shot. The artist did not want any human sounds or machines (for example, cars) in the shots and had to sometimes stop filming.

Object

The artist always had to carry a balloon from one point to another, in this iteration of *Echoes of Balance and Push*, she carried the balloon around an old barn.

Technology

The experience was recorded with an iPhone and then the video was quickly edited after each take. There were added limitations in the creation of the final installation artwork due to the size of the technology used to record the videos.



Figure 6. *Echoes of Balance and Push* Process Still, 2014. ©prOphecy sun

- Sound: used the iPhone microphone and the only way the sound was manipulated was when the angle of the camera was changed.
- Memory: It was only possible to record 10-20 minutes at a time due to fixed memory/storage size. The artist only had the memory that was available on the phone so she had to make decisions after she recorded a piece and if she was going to keep the video or delete them.
- Video: Was limited to what the iPhone could record and therefore, had to make sure that her body and the balloon always stayed in frame so that she could record/ document the task.

Summary

Echoes of Balance and Push explores unspoken questions regarding how one transcends the physical experience of childbirth and motherhood through tumultuous shifts of agency, control and situations. However, the complexities of the maternal relationship in the artist mirrors the universal struggles that people experience everyday. Beginning with experience prototyping [2], the artist created an experience with inspirations from Rasaboxes [8], RSVP Cycles [9], Bodyweather [10], Ritual Interaction [11], and Improvisation [12, 13] to create guided extemporization that supports exploration, evaluation and construction of a video work. Echoes of Balance and Push contributes to the deeper understanding of how play and repetition can create engaging and meaningful experiences and transcend these ideas and feelings onto the audience. The work's process has appropriated unique guidelines and methodologies for art and design practices into an experiential exploration of performance art.

Future work of the piece includes a continuation of the ritual and improvisation process. One future gallery piece involves using a cabinet to create viewing stations showing looping clips of the performance with a weather balloon on three separate days that highlight a physical and embodied situation of challenge. Other iterations of the piece will continue to be developed as the artist continues to experience new inspirations to contemplate the ideas of motherhood.

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Karen Cochrane is a Masters of Science candidate in the School of Interactive Arts + Technology at Simon Fraser University with Dr. Thecla Schiphorst. She is interested in the intersection of movement, embodiment, and health; especially in the domain of mental health recovery. prOphecy sun just completed her Master of Applied Arts at Emily Carr University of Art + Design with Dr. Maria Lantin. Her interdisciplinary performance practice treads together both conscious and unconscious choreographies, sound, and environment, to create exploratory works that invoke deep body memory and draw from an interior landscape of dreams.

Kristin Carlson is an Assistant Professor in the Arts Technology Program at Illinois State University and is currently completing her PhD in the School of Interactive Arts + Technology at Simon Fraser University with Dr. Thecla Schiphorst. She is interested in the role computation can play in further understanding creative process in choreography, art and design.

Dr. Maria Lantin is Director of Research and the Stereoscopic 3D Centre at Emily Carr University of Art + Design. She is interested in the embodied experience of media through the design of installations and technologies that focus on the interplay of immersion and awareness. She is currently with virtual reality and motion capture technologies to study the role of physicality and movement in immersion.

Dr. Thecla Schiphorst is Associate Director and Associate Professor in the School of Interactive Arts + Technology at Simon Fraser University. Her background in dance and computing form the basis for her research in embodied interaction, focusing on movement knowledge representation, tangible and wearable technologies, media and digital art, and the aesthetics of interaction.