

Maybe Something: Chance & Materiality in Practice

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Attestation of Authorship

I hereby declare that this submission is my own work and that, to the best of my knowledge and belief, it contains no material previously published or written by another person (except where explicitly defined in the acknowledgements), nor material which to a substantial extent has been submitted for the award of any other degree or diploma of a university or other institution of higher learning.

Colleen Altagracia

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Abstract

This practice-led research uses language, thought, objects, space, sculptural casting, and action to investigate how different perspectives and meanings can be found in familiar materials and items.

Rather than attempting to achieve a fixed specific outcome in a predetermined manner, studio practices carried out explorations and experimentation with material and immaterial items. This approach provides an aspect of unpredictability referred to as a "maybe something" element. The studio process opens the possibilities of what a form could be referring to, perhaps be something or possibly something else. The works and layout allow viewers to provide their own thoughts and interpretations.

Drawing on aspects and concepts associated with Systems Theory, entropy, and foam, the research looks at how chance and materiality can be used as a studio methodology to show the "maybe something" occurring through these processual acts within the studio practice.

Introduction

My studio-based practice is constructed, made, or put together in a way that is inclusive of physical or temporary forms, shapes, and temporal representations of actions. Although construction processes are of interest to me, they are not the key focus of either my studio practice or writing. I suggest that focusing on technique can limit creative freedom, as the “maybe something” aspects derived from chance and materiality can be lost. I also suggest that showing works with “maybe something” elements can provide the viewer with an opportunity to consider meaning, make connections, and form relationships with the work. Instead of dwelling on construction process and technique, the following writing considers aspects of spatiality developed through notions of movement, flow, resistance, and the material and immaterial elements used, to which value and meaning can be associated.

I have several underlying interests, one of which is pocketed spaces. It is not so much a pocket’s physical shape that caught my imagination and awakened my curiosity; rather, I am intrigued by the interior, spatial qualities of small, private and personal spaces that are secure from the exterior, yet somehow connected to a larger structure. English art critic John Berger (1926-2017) analysed aspects associated with ways of seeing and space. In his book, *The Shape of a Pocket*, Berger describes pocketed space as a form of agreement with two or more people.¹ Berger’s book also includes a selection of correspondence with Subcommandante Marcos of the Zapatista National Liberation Army (ZNLA). In it, Marcos explains why the ZNLA was fighting. He describes acts of resistance as taking place in “small pockets ... against the inhumanity of the New World Economic Order.”² Although his statement can be interpreted in different ways, I am interested in ways space can be a place where resistance occurs, and how this might happen in my art practice. Marcos gives his interpretation of a pocket shape and challenges his reader to draw their own by stating:

So, what we have here is a drawing of a pocket of resistance. But don’t attach too much importance to it. The possible shapes are as numerous as the forms of resistance themselves, as numerous as all the worlds existing in this world. So, draw whatever shape you like. In this matter of pockets, as in that of resistance, diversity is a wealth.³

¹ John Berger, *The Shape of a Pocket* (London: Bloomsbury, 2001).

² Marcos’ full letter was published in several news outlets, including *Le Monde Diplomatique*, September 1997, quoted in John Berger, *The Shape of a Pocket* (London: Bloomsbury, 2001), 130.

³ Subcomandante Marcos, “The Fourth World War Has Begun,” *Le Monde Diplomatique*, 1 September 1997, <https://mondediplo.com/1997/09/marcos>.

Instead of thinking about pockets found on clothing, Marcos' interpretation challenged me to consider pockets as other types of spatial forms. My decisions were also informed by ideas discussed in a Funambulist Podcast, "A Political and Philosophical Reading of the Systems of Objects." Miami-based artists and writers Gean Moreno and Ernesto Oroza discussed their use of the term *generic object*.⁴ Moreno and Oroza suggested that objects become generic when they lose authorial presence or brand name, enabling them to fit into more extensive networks due to associated attributes. The podcast discussion broadened my analysis when considering objects to use. As well as thinking about an object's spatial form, I considered the material composition and function of an object, and word association, to ensure choices I made could be linked to other systems and networks.

Concepts and the theory of *co-fragile systems*⁵ presented in German philosopher and cultural theorist Peter Sloterdijk's (b.1947) third volume of a trilogy, *Foam*,⁶ informed my use of foam. Sloterdijk describes foam in terms of a metaphor for human space. He explains how each cell or pocket in the foam system provides a space of safety and immunity from the immediate surroundings, including other foam cells and spatial, immaterial elements forming the atmosphere.

Serendipitously, at the start of the first COVID lockdown, instructions were given to be at home in our personal "bubbles." Hearing this, I imagined maps showing areas of neighbourhoods and countries worldwide transforming into an architectural mass of foamy bubbles, shifting shapes in response to various mandate changes imposed on them. My interest in spatial and ephemeral matter, combined with the lived COVID experience, broadened my understanding of how associations can be attributed to generic objects, such as foam and latex balloons. Enclosed spatial attributes and the physical structure of foam, combined with metaphorical associations, link foam to health, political, and economic networks. The lived experience of a global lockdown also enabled me to reflect on changes in perception of the value and meaning of material with regard to Systems Theory.

⁴ Gean Moreno and Ernesto Oroza, "A Political & Philosophical Reading of the Systems of Objects," *The Funambulist Podcast*, April 4, 2014, <https://soundcloud.com/the-funambulist/gean-moreno-ernesto-oroza-a>.

⁵ Peter Sloterdijk, *Spheres. Volume 3, Foams: Plural Spherology*, Semiotext(e) Foreign Agents Series (South Pasadena, CA: Semiotexte, 2016), 38.

⁶ Sloterdijk wrote a trilogy about spheres, or "sphereology": *Vol 1, The bubble*; *Vol 2, Globes*; and *Vol 3. Foam*.

Systems Theory is widely used across various and diverse disciplines such as social and environmental sciences and can be summarised⁷ as:

- A study of the processes and functions carried out to achieve an outcome within open and closed systems.
- An understanding of open systems as those which include relationships and interactions with their environment, and closed systems as autonomous.
- The use of cybernetics to control the system and processes carried out within it.

American artist and critic Jack Burnham (1931-2019) redeployed Systems Theory. Burnham acknowledges how the advances in science and technology that were starting to automate business and financial processes were also beginning to impact sculptural form and medium. We are, he wrote, “in transition from an object-oriented to a system-oriented culture. Here change emanates, not from things, but from the way things are done.”⁸ Burnham also described how “conceptual focus rather than material limits defines the system.”⁹ I find Burnham’s identification of the conceptual focus thought-provoking. Instead of focussing on the material limitations in my practice, a conceptual focus could enable the “maybe something” elements to be thought about or connected to the work somehow. Work by New York-based German artists who took an interest in Burnham’s writing, such as Hans Haacke (b.1936), helped me understand how to think about concepts that define systems. Haacke thought “the term ‘system’ should be reserved for sculptures in which a transfer of energy, material, or information occurs, and which do not depend on perceptual interpretation.”¹⁰ He produced several sealed *Condensation Cube* works during 1963-65 (Fig. 1), that showed the changes in the state of water placed within the cube in response to the surrounding environment.

Haacke’s acknowledgment suggests that his works do not depend on perceptual interpretation and indicate that he was interested in the performativity¹¹ of the material.

⁷ Visual Culture writer Francis Halsall defines what systems are and provides a discussion of systems theory in his PhD thesis, “Art, Art history and Systems-Theory,” (University of Glasgow, December 2003), <http://theses.gla.ac.uk/5392/1/2004HalsallPhD.pdf>, 59.

⁸ Jack Burnham, “Systems Esthetics,” *Artforum*, 2, 1968. <https://www.artforum.com/print/196807/systems-esthetics-32466>.

⁹ Ibid.

¹⁰ Hans Haacke, *Working Conditions: The Writings of Hans Haacke*, MIT Press Writing Art Series (Cambridge, Massachusetts: The MIT Press 2016), 35.

¹¹ Performative artwork is described by *Contemporary Art* writer Dorothea von Hantelmann as “Any visual artwork that relates to a here-and-now, and thus in some way or another refers to the idea of performance without being a performance” von Hantelmann, Dorothea. “The Experiential Turn.” In *On Performativity*, edited by Elizabeth Carpenter. Vol. 1 of *Living Collections Catalogue*. Minneapolis: Walker Art Center, 2014. Accessed 1 June 2022. <http://walkerart.org/collections/publications/performativity/experiential-turn>.

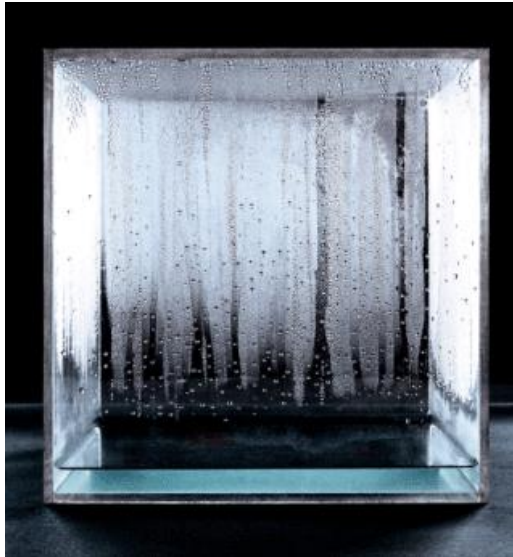


Figure 1: Hans Haacke, *Condensation Cube*, 1965/2006.
Sourced from <https://www.flickr.com/photos/explorearchive>

The space within the sealed boxes used to construct Haacke's *Condensation Cubes* are not physically connected to an external environment and could be seen as a "closed system," as opposed to an "open system." Definitions of "open" and "closed" systems imply that a closed system has no outside relationship beyond its boundaries. However, I prefer to use the term "enclosed" when describing a system associated with pocketed space, as elements of a system can be analysed separately but are usually part of a sub-set that is connected to, or combined somehow within, another system. Instead of system processes, I am interested in exploring how to alter or effect movement and action using contingencies such as resistance and displacement to redistribute energy and material. Redistribution occurs within or against a system's processes and, combined with the performative aspect, shows how the "maybe something" possibilities could be considered in the final works. To name the works, I have used "verbal definitions"¹² that describe an action, state, or occurrence. This also helps a viewer to bring their own associations to, and develop their own interpretation of, the work.

My approach in studio practice involves overlaying several aspects of chance when working with different materials. Elements of chance include differentiation in timings when mixing solutions or allowing immaterial properties of air to interact with the material being used. For clarity, I have structured this exegesis into three chapters. Each chapter's content is sub-divided into areas that discuss the concepts I have used to inform and develop my methodological approach, and that explain and clarify the choices and shifts that occur in the studio practice.

¹² Italian art critic Giorgio Bonomi (b.1946) describes how artist Paolo Icaro (b.1936) ensures works are not seen as objects through his use of "verbal definition" to name his work, and how he prefers to use "name" and not "title" to overcome the condition of "object." Taken from a Google translation from Italian into English. Giorgio Bonomi, "Paolo Icaro," *L'edicola Digitale Delle Riviste Italiane Di Arte E Cultura Contemporanea*, Anno 17, no. Numero 54 (autunno 2007). Accessed 14 June 2021 .<https://1995-2015.undo.net/it/magazines/1196949959>.

Chapter 1 - Systems Theory outlines why Systems Theory is of interest and how I have incorporated the theory into my studio practice. Choices of various forms of spatio-temporal materiality I use throughout my studio practice are discussed. These include the immaterial, and actions associated with air and breath.

Chapter 2 - Chance considers how aspects of chance within a system can be utilised by engaging with concepts related to entropy and resistance. I discuss the spatial interconnection and flow to networks associated with the generic objects used in the studio work.

Chapter 3 – Observation describes Systems Theory's use of observations as an analytical and methodological tool and how the shift from seeing to observing can make chance and action visible. I situate the analysis within observations of my studio-based, practical research using thought to consider the "maybe something" associations of works and placement.



Figure 2: Colleen Altagracia, *Shaping Air*, 2022, balloon, air, steel wire, expandable foam, cardboard, 40 cm x 30 cm.

Chapter 1 - Systems Theory

Burnham's article, "Systems Esthetics," reminds us how systems can contain interacting components of material, energy, and information. He proposed that when "evaluating systems the artist is a perspectivist considering goals, boundaries, structure, input, output, and related activity inside and outside the system."¹³ Burnham's proposal of the artist's role provided a way of considering the structural elements of a system. An understanding of the function and process of a system helped me to identify areas or parts where resistance of some sort might be enabled.

Burnham was not the only art critic analysing what was happening within the art world. His observations about what he saw as a move away from an object-orientation towards a systems-oriented perspective, can also be applied to *Arte Povera* artists' use of non-traditional medium and form.¹⁴ Italian art critic and curator Germano Celant (1940-2020) comments that "*Arte Povera* artists had a tendency not to 'satisfy' systems, but rather 'dissect' them."¹⁵ A press release statement for a group exhibition titled *Contingencies: Arte Povera and After* (23 October - 16 December 2017)¹⁶ commented how the works "similarly react to a world in turmoil by rejecting the autonomy of the art object to harness, engage, or interrupt systemic flows – whether those are organic, social, or technological – on a distinctly material level."¹⁷ In moving away from individual objects and bringing other aspects of systems thinking into consideration, *Arte Povera* challenged the traditional, symbolic function of art and its commodity status. Focusing on the open mechanical-systems process itself and how cybernetics is managed and organised for maximum efficiency, presumes that the system is of benefit to all within it and that the control of the processes is in the system's best interests. This implies that processes' ethical aspects – those associated with trust and transparency – take into consideration all group members.

¹³ Burnham, "Systems Esthetics."

¹⁴ *Arte Povera* is a term coined by Italian art critic, historian, and curator Germano Celant (b.1940-2020) to describe an art movement produced by a group of artists during the late 1960s in Italy. He observed their response to the country's upheaval and changing values following World War II due to the industrialisation and consumerism that were taking place in Italian culture.

¹⁵ Luxembourg + Co (Gallery). *Contingencies: Arte Povera and After*. (Exhibition Press Release), 23 October – 16 December 2017, Accessed 8 January 2022 https://luxembourgco.com/exhibitions/56/press_release_text/.

¹⁶ The exhibition showed historical works of *Arte Povera* artists as well as more contemporary artists, including Nina Canell.

¹⁷ Luxembourg + Co (Gallery). *Contingencies: Arte Povera and After*.

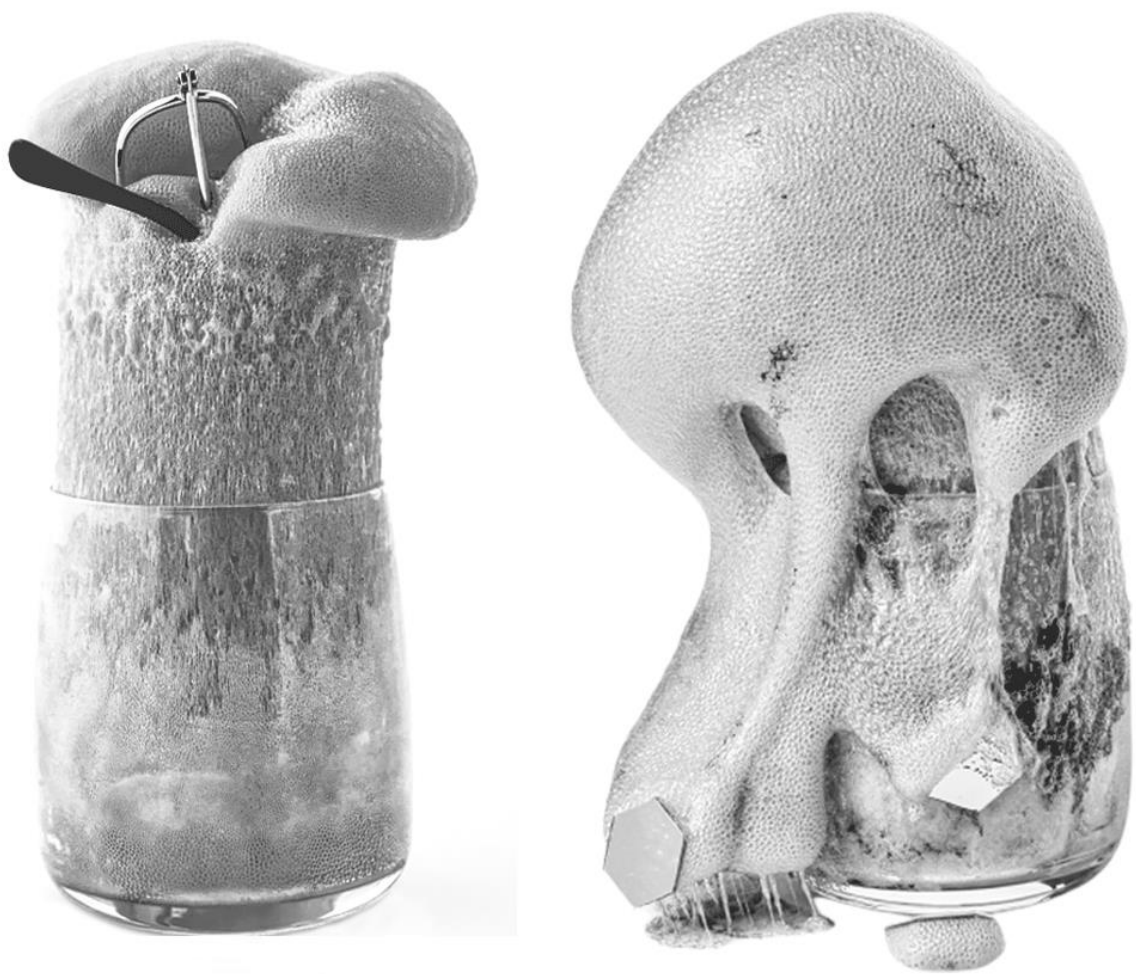


Figure 3: Colleen Altagracia, left: *Glasspocket Work # 1* with reading glasses. Right: *Glasspocket Work #5* with black ink and mirrow pieces, 2021, 350 ml glass tumbler, expandable foam.

Generic object

In one of my earlier body of works, *Glasspocket Works* (Fig. 3), I used short glass tumblers as a type of pocketed space. Due to its ability to serve a variety of liquids, the tumbler could be seen as a generic object.¹⁸ The use, material, and spatial form of the tumblers provided associated attributes that linked the object to economic fields including charity groups and non-governmental organisations (NGOs). Such NGOs use the term *glasspocket*¹⁹ to indicate the openness, transparency, and accountability of the flow of movement related to their work. I used two forms of structures: the glass tumbler to hold content, and a ledge to put the tumbler on. A ledge is a narrow shelf that protrudes from a vertical surface, providing a suggestion of an external relationship. Table 1 (Appendix A) lists the content and concepts of the items I placed within each tumbler. Liquids and foam have a number of similar aspects that I found useful to consider when manipulating the flow of expandable foam within each of these works. Table 2 and 3 (Appendix A) details linguistic definitions for “drink” and “fluidity of flow.” The definitions were also used to analyse associations of relationship with the choice of content placed in the glass tumblers. The process of making the *Glasspocket Works* provided me with an understanding of the materiality of the casting foam. However, after reviewing the outcomes, I felt the works were object-oriented and decided not to continue with them. I realised that my construction process was too controlled, and I had not allowed an opportunity for aspects of “chance” to provide the “maybe something” elements to appear in my works.

Spatio-temporal

Extending the work of German Philosopher Martin Heidegger (1889-1976), Peter Sloterdijk commented that Heidegger considered “that people in Western culture should be grasped not only as mortals but also as house residents.”²⁰ Sloterdijk uses the single spatial element of a soap bubble as an analogy to illustrate Heidegger's temporal existence of being within a place.

¹⁸ The short 350 ml glass tumbler, also known as the old-fashioned glass, rocks glass, and lowball glass tumbler, is used for serving alcohol cocktails or spirits such as whisky either neat or with ice cubes described as “on the rocks.” *Wikipedia*, c.f., “Old Fashioned Glass,” https://en.wikipedia.org/wiki/Old_fashioned_glass. Accessed 25 May 2022.

¹⁹ Candid. *About Glasspockets*. <https://glasspockets.org/about-glasspockets>. Accessed: 25 May 2020.

²⁰ Peter Sloterdijk, “Talking to Myself about the Poetics of Space,” *Harvard Design Magazine*, No. 30 (Sustainability) + Pleasure, Vol. 1: Culture and Architecture, Accessed September 2, 2021 <http://www.harvarddesignmagazine.org/issues/30/talking-to-myself-about-the-poetics-of-space>.



Figure 4: Colleen Altagracia, *Ferment day I*, (monochrome), 2022, 30 cm balloon, air, steel wire, expandable foam.



Figure 5: Colleen Altagracia, *Ferment day 6*, (monochrome), 2022, balloon, air, steel wire, expandable foam, 26 x 17 cm.

Sloterdijk suggested that Heidegger's subjectivity approach overlooks the spatial relationships with external systems. Sloterdijk also suggested that as well as time and space, relationships should be considered, including temporality aspects of atmospheric conditions and the fragility of spatial boundaries. He proposed a new approach to spatial existence using structural elements of foam to demonstrate his concept.

I have explored spatio-temporal elements associated with foam within my studio practice. I identified material and immaterial elements associated with air in the structural form of foam, as well as actions associated with the use of expandable foam as a casting material. Casting is a dynamic process involving a liquid solution expanding and solidifying to take on the structured form it is applied to or contained in. Over time, and dependent on atmospheric elements such as air and humidity, the boundary surface of the balloon displays strength and agility to shift size, shape, and texture. Temporal associations with the fragility of boundaries appear in the exterior structural change of balloon works (Figs. 4 and 5) and are further discussed in this chapter.



Figure 6: Eva Hesse, *Contingent*, 1969. Sourced with permission from <http://www.thecollector.com/eva-hesse-the-life-of-a-ground-breaking-sculptor/>.

Material

The choices made about how to represent enclosed spaces are evident in material items such as glass tumblers, cardboard boxes, balloons, and foam. I have used a two-part foam solution that, when mixed, transforms by expanding from its liquid state into a solid mass of foam. While expandable foam is used for casting within the sculptural practice, it is primarily used as an insulation material in the construction industry. I find the association with insulation relevant as it connects with the concepts associated with ventilation systems and atmospheric properties in my works. While my use of balloons provides a focus on a single structural element of a foam cell.

The durational qualities of expanding foam are reminiscent of the fibreglass used by German-born American artist Eva Hesse (1936-70) in her work *Contingent* (Fig. 6). Originally the fibreglass had been a soft texture with pale blond tones that deepened subtly depending on the viscosity of the solution. Over time the atmosphere has aged the colour and texture of the fibreglass. In my work, the evolving appearance of the expandable foam will also take place.

Immaterial

Air is a topic of interest in the writing of British literary scholar Steven Connor (b.1955). He acknowledges how, “air is unique among the elements²¹ in having this affinity with nothingness, in signifying the being of non-being, the material of the immaterial.”²² Air is invisible matter composed primarily of oxygen and nitrogen gases. While air is all around us and is an essential component of life, it is also a substance with no visible form, yet one that is capable of occupying space. This ambiguity makes air both contradictory and paradoxical.

In his book, *Terror from the Air*, Sloterdijk writes extensively on the use of weapons during World War I that poisoned the atmosphere rather than killing an individual. He describes how the damage inflicted on the environment necessitates appliances to recycle and cleanse the air.²³ Sloterdijk’s reflections on atmospheric poisoning and pollution also consider the artificial use of equipment, air-conditioning, and immune systems.

²¹ Air is one of the four classical elements along with Water, Earth and Fire in ancient Greek philosophy and in Western alchemy, *Wikipedia*, c.f., “Air (classical element).” Accessed 10 April 2022, [https://en.wikipedia.org/wiki/Air_\(classical_element\)](https://en.wikipedia.org/wiki/Air_(classical_element)).

²² Steven Connor, *The Matter of Air: Science and the Art of the Ethereal* (London: Reaktion Books, 2010), 31

²³ Peter Sloterdijk, *Terror from the Air*, trans. Amy Patton and Steve Corcoran. (Los Angeles: Semiotext(e) Foreign Agents, 2009), 109.

I have used air in several different ways in my work, including the implied motion of air blown through a respiratory system, and the use of a pump to inflate balloons. Modern understanding of the respiratory system is comparatively recent. The Ancient Greeks were aware that various states of infection could impact respiratory organs, including the lungs, as excess phlegm and bile.²⁴ However, it was not until the Renaissance that physicians understood that the lungs are part of the respiratory system working together with other organs to assist in the breathing process.²⁵ Steven Connor suggests that the lungs are neither closed nor open systems: as they are “secluded in the body, they are nevertheless the body’s form of exposure to its outside.”²⁶ Connor seems to be suggesting that there is a oneness to the exposed and enclosed form of air that implies connectivity with everything. When writing about artist Tomás Saraceno’s *Aerosolar Journeys* project, culture and media theorist Heather Davis summarises that “the action of breathing and the use of the lungs is what connects us.”²⁷ My studio practice has involved inflating latex balloons. However, the movement of air is only implied through the viewers’ prior knowledge of balloons. A flow of movement in the form of airflow is taken from the open outside, into the organ of a lung and then transferred out by being blown directly into the inside of a rubber balloon until the balloon swells to its limit. The use of expandable foam to cast the outside surface shape of an inflated balloon results in a collapsed form as the balloon cannot hold its shape or the volume of air within. The air around the balloon creates a pressure environment interacting with the high pressure created by the air within the balloon, resulting in a shift of air from the internal cavity of the balloon into the surrounding air – as can be observed in the forms created by the shifting air (Figs. 2 and 5). As Connor notes, air “encompasses its own negation, indeed perhaps even negativity itself. Take away the Air, and the empty space you have left still seems to retain most of the qualities of Air.”²⁸ The spatial and material qualities of air that enable negation arise from a quantitative perspective through the ability to come into existence when being blown into the latex balloon. As the air is blown into the balloon cavity, the air is able to expand and occupy the space in a different way to how it occupies space outside the balloon. A gradual state of balance takes place with the air inside the high-pressure balloon environment leaking through the skin membranes into the surrounding low-pressure environment until an equilibrium is created with the external air space. While the

²⁴ Gregory Tsoucalas and Markos Sgantzios. “Hippocrates, on the Infection of the Lower Respiratory Tract among the General Population in Ancient Greece.” *General Medicine: Open access*, (October 11, 2016): <https://www.iomcworld.com/open-access/hippocrates-on-the-infection-of-the-lower-respiratory-tract-among-the-generalpopulation-in-ancient-greece-2327-5146-1000272.pdf>. Accessed 18 June 2021.

²⁵ “A History of the Lungs.” <https://web.stanford.edu/class/history13/earlysciencelab/body1/lungspages/lung.html>. Accessed 18 June 2021.

²⁶ Connor, *The Matter of Air*, 36.

²⁷ Heather Davies, “To Breathe in the Cosmos.” In *Tomás Saraceno: Aerosolar Journeys*, ed. Tomás Saraceno (Köln: Verlag der Buchhandlung Walther König, 2017), 7.

²⁸ Connor, *The Matter of Air*, 31.

boundary of the balloon changes form, impacted by the act of inflation, there is no perceptual change in the air.



Figure 7: Colleen Altagracia, *Ferment day 6* (surface detail, monochrome), 2022.

As I consider how the expandable foam sets on the balloon's structural surface, I notice how it produces a change, a form of resistance that could be described as a type of fermentation. Connor describes fermentation as a process that "represents the blending of airiness or spirit with resistance of matter, and thus a spiritualizing of the 'primary paste,'"²⁹ which is the ideal form of the imagination of matter."³⁰ Figs. 4 and 5 also show the foam-cast balloon process and the impact of the fermentation taking place on the external boundary from the first to the sixth day of the process. The structural surface of the balloon has also reacted and adjusted in response to the movement of air from the internal space to the exterior. The foam transforms from a uniformly soft, supple, smooth surface to a shifting, randomised, textural mixture of lumpy and indented dry surface areas (Fig. 7).

²⁹ In terms of my studio practice, I suggest the expandable foam solution is viewed as a "primary" that is stirred to incorporate elements of air to create a "paste".

³⁰ Connor, *The Matter of Air*, 312.

A number of other immaterial aspects associated with the atmosphere also impacted the casting process I used to make the *Acrylic Box Flow Works*. The time frame for the expansion of foam is dependent on atmospheric conditions, including humidity and temperature. The casting of expandable foam used to make the *Acrylic Box Flow Works* took place outdoors, rather than in an atmospherically controlled environment, enables different forms and types of flow in works shown in Appendix B.

Connor also explains how air has “traditionally been thought of as the favoured element or state of matter through which to body forth the thought of thought.”³¹ While air's quantitative qualities enable it to take a physical shape, as observed with an air-blown balloon, the qualitative dimensions link air with other associations such as consciousness, emotions, and spirituality. Such associations enable air to be shaped by thought.

³¹ Connor, *The Matter of Air*, 31

Chapter 2 - Chance

The written text by American artist Carl Andre (b.1935), illustrates the interplay and fluidity of action in the shift of meaning and interdependence that can take place between form, structure, and place. Using a few lines, he describes how:

FORM IS APPEARANCE
STRUCTURE IS RESISTANCE

FORM APPEARS
STRUCTURE SUPPORTS
PLACE

FORM, APPEAR
STRUCTURE, RESIST
PLACE, YIELD³²

In *The Practice of Everyday Life*, Michael de Certeau describes how forms of action incorporate strategy and tactics.³³ I use a similar approach in making my works by strategically enabling aspects of resistance and entropy to spontaneously occur in response to the interaction of elements, providing the opportunity for the “maybe something” elements to emerge.

A systems-thinking approach is more than considering the material processes being carried out. Jack Burnham identified that the systems approach also looks for connections and relationships, and analyses what takes place. Reflecting on this, I realised an association between Sloterdijk’s foam cell and Marco’s drawn outline of pocketed spaces. In my studio practice, I recognised that the surface boundary of a structure can form connections and relationships in which the “maybe something” can occur. The boundary of the foam cell provides a place for resistance to occur due to the agility of the foam to redistribute its spatial form and boundaries. When planning the *Acrylic Box Flow Works*, I evaluated various ways of bonding the components

³² Carl Andre, *Cuts: Texts 1959-2004*. The MIT Press Writing Art Series. (Cambridge, Mass.: MIT Press, 2005), 99.

³³ Michel de Certeau, *The Practice of Everyday Life*, 3rd ed., Trans. Steven F. Rendall (Berkeley: University of California Press, 2011), 21.

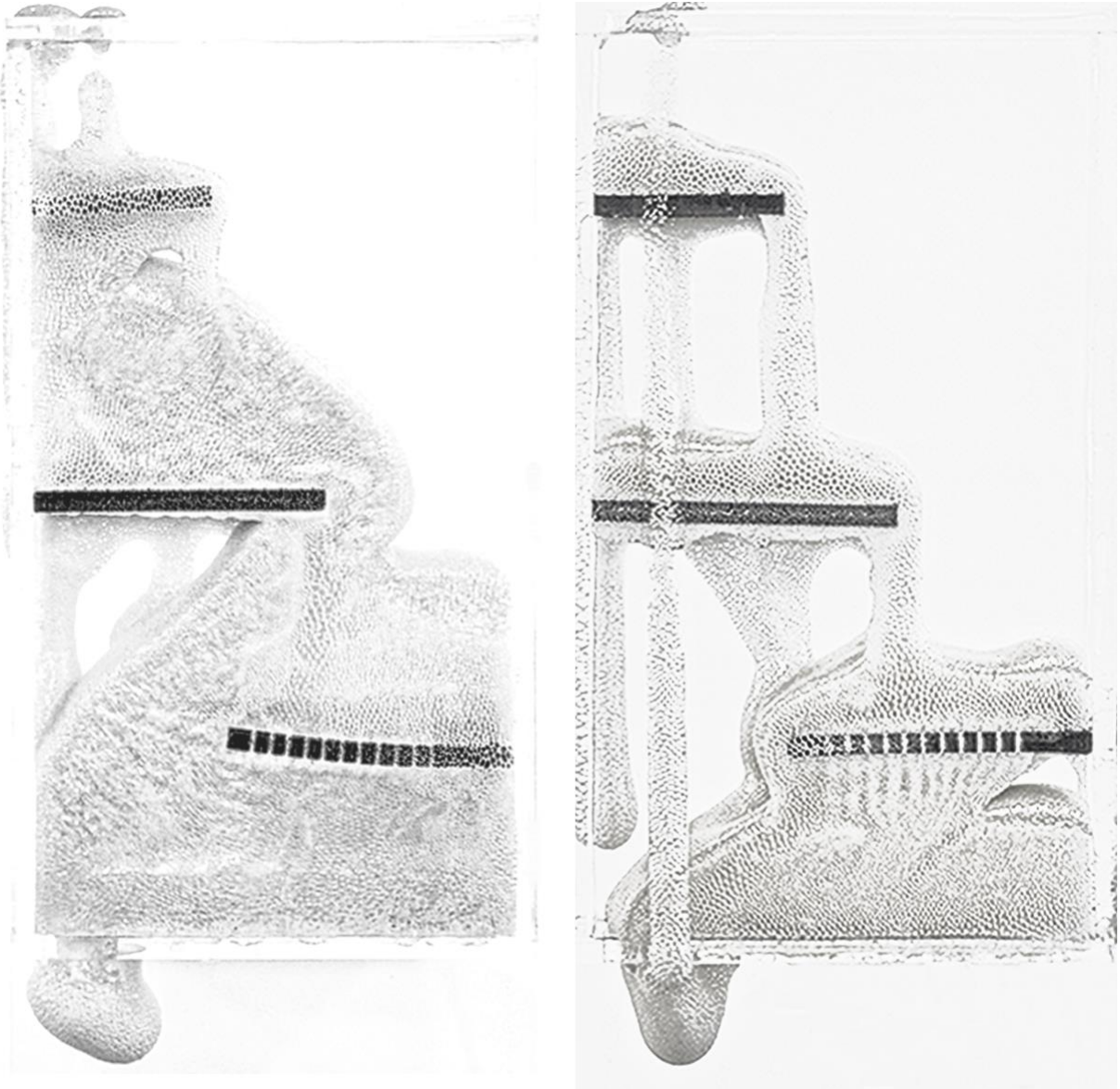


Figure 8: Colleen Altagracia, *Acrylic Box Flow Work*, left: #1, right: #2, (detail;) 2021, Perspex box 13 x 7 x 1.5 cm, expanding foam casting.

making up the boxed space (Appendix C). I chose to use a liquid plastic welding kit to construct the boxes. The welding process produced a clean bond and was also easy to manipulate in order to create partial bonds on some of the sidewalls of the works. The partial bonding of the boundary wall enabled some of the flow of foam to seep and leak as can be seen in the left side wall in *Acrylic Box Flow Works #2* (Fig. 8).

Resistance

Professor in Architecture, Laida Aguirre, has written about the state of transience associated with shipping and distribution of objects across the world's surface. Aguirre suggests that when systems strive "for efficiency, 'difficulty' becomes an act of resistance."³⁴ The suggestion reminds me of Marcos' correspondence with John Berger, which describes resistance taking place within pocketed spaces, and considers the actions taking place as the prime focus, rather than the physical shape of the pocket.³⁵ This led me to think of ways to create "difficulty" for the flow of foam and how to alter its distribution.

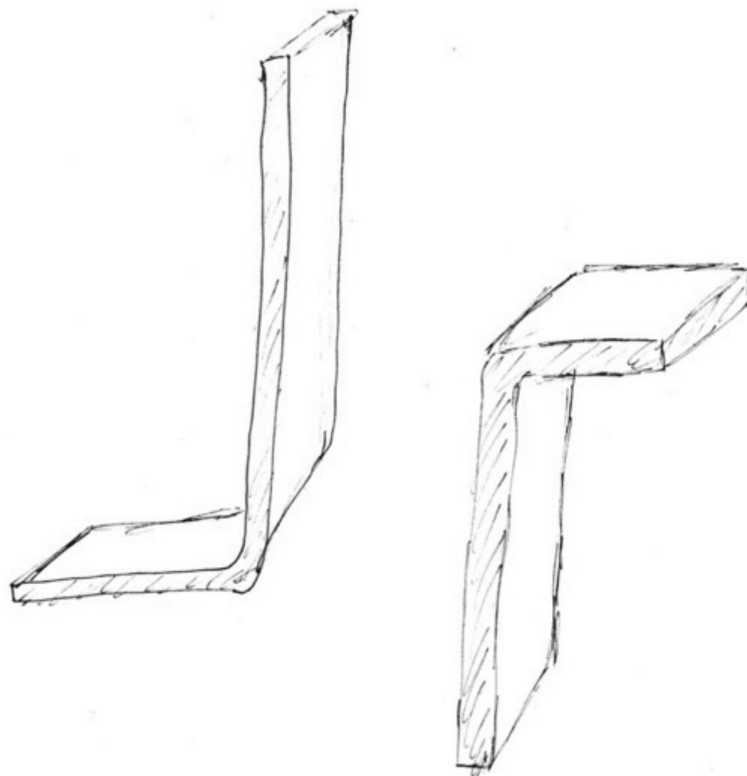


Figure 9: Colleen Altagracia, *L-shaped Perspex elements for acrylic box works*, 2022, graphite drawing on paper.

³⁴ Laida Aguirre, "Becoming Digital, Boxed In: The Aesthetics of Material Circulation," *E-flux Architecture*, July 2019, <https://www.e-flux.com/architecture/becoming-digital/248072/boxed-in-the-aesthetics-of-material-circulation/>.

³⁵ Berger, *The Shape of a Pocket*, 130.

I constructed 37 identical rectangle boxes from clear Perspex. As an individual shape, the acrylic box could reference some handheld device, correlating to Sloterdijk's suggestion that "postmodernity is a by-product of the remote control."³⁶ Each box is attached to a clear L-shaped Perspex length, providing a hint of a link or an external relationship of some sort to something else (Fig. 9). The rectangular shape of the box has opening holes at either end, providing another spatial relationship and the suggestion of a space of connection or communication. The difficulty is introduced by the placement of three horizontal bars made of blue Perspex in each box. The placement of the bars was a strategy to create resistance by slowing down the impact and distribution of the liquid solution poured into the internal space via the top opening hole. Jack Burnham suggested that the internal "consistency of a system within a fixed physical form may be altered in time and space."³⁷ The same amount of expandable foam solution was used for each of the 37 works. I thought of the flow of the foam solution during the process as a 'consistency that alters'; this is also associated with the liquid solution expansion into foam, and both of these were parameter to consider.

Rheology is a general term referring to the science of studying the flow and deformation of materials. Viscosity is defined as the resistance of a liquid to flow. While an exact quantity of two-part foam casting solution was used for each piece, I was able to manipulate the viscosity by deviating slightly from the standard mixing times. By varying the timing of the stirring process, I enabled different levels of viscosity of flow to take place.

Resistance as a property of flow in the strength and relationship of a form over time can be seen in Argentinian artist Jimena Croceri's work *Strong and tender* (Fig. 10). Croceri's cardboard box shows aspects of tension, resistance, and fragility that are created as the water seeps out of the box changing relationship between the two elements. Rather than the enclosed space of the acrylic box providing an environment for the action to take place, Croceri's work shows the movement of activity from the interior interacting with the boundary of the box and the surrounding floor area. The durational process of resistance is shown in the strength and fragility of the box's structure as it responds to the movement of water.

I find Croceri's work compelling because observing the activity on the boundary surface of the box shifted my focus from from casting interior spaces and to think instead about casting the boundary areas of a form. It also led me to re-analyse the type of structure I was using in the studio and informed the development of works focussing on the external and internal surface boundaries of balloons.

³⁶ Sloterdijk, *Spheres. Volume 3*, 554.

³⁷ Burnham, "Systems Esthetics."



Figure 10: Jemena Croceri, *Strong and tender* (detail), 2015. Reproduced with permission of the artist, <https://www.artsy.net/artwork/jimena-croceri-strong-and-tender-detail-2015-installation-object-performance-4-hours>.

Entropy

The term entropy is used more broadly in areas associated with randomness, chaos, uncertainty, and disorder, depending on the degree of concentration of available energy within a system. American social and economic theorist and writer Jeremy Rifkin's (b.1945-) book *Entropy: Into the Greenhouse World* introduces the various viewpoints of scientists who discovered and developed the concepts and laws associated with entropy.³⁸ The First Law of Thermodynamics describes how the amount of energy in the world is fixed, and while it cannot be created or destroyed, it can be used and transformed into other forms. The Second Law clarifies the state of entropy as an isolated system, that will always increase over time. Matter is defined as anything that has mass and occupies space. In 2019 an exhibition *Entangle/Physics and the Artistic Imagination* was held at the Arts at CERN. The book accompanying the exhibition includes essays covering various topics such as entropy, matter, time, and space. In the introduction, the founder and curator of the programme, Ariane Koek, proposes that particle physics is the area of science closest to the artist, as it includes material elements and topics that question behaviour and existence in our world.³⁹ In an essay in the catalogue, "On Entropy," theoretical physicist, Subodh Patil summarises entropy as "the number of ways a system can be with a given energy."⁴⁰ The work of Italian artist Paolo Icaro (b.1936), *Subliminale* (Fig. 11), depicts the use of stone, place, space, and metal rod. The structural use

³⁸ Jeremy Rifkin., *Entropy: Into the Greenhouse World*. Rev. ed.. New York: Bantam Books, 1989.

³⁹ Ariane Koek, forward to *Entangle: Physics and the Artistic Imagination*. ed. (Berlin: Hatje Cantz: host institution Umeå universitet Bildmuseet, 2019), 18.

⁴⁰ Subodh Patil, "On Entropy," in *Entangle: Physics and the Artistic Imagination*, ed. (Berlin: Hatje Cantz: host institution Umeå universitet Bildmuseet, 2019) 84.

of the rods creates a grid of fluid lines that both separates and merges space. Icaro's grid separates by providing both inside and outside dynamics. The horizontal lines indicate that they could be ongoing, as they look dashed – something light in the process of a continuous flow of movement rather than something heavy and permanent. The two angles come together into a single plane, merging different perspectives and viewpoints to give the visual impression of dynamic movement and action taking place.

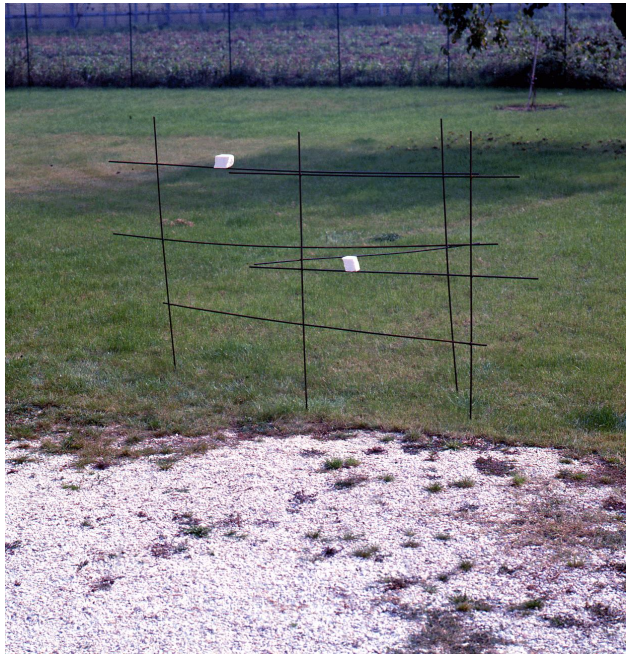


Figure 11: Paolo Icaro, *Subliminale*, 1990, steel and marble, 200 x 386 x 125 cm. Photograph provided and reproduced by permission of Paolo Icaro. © 1990 by Paolo Icaro.

My entropy drawings shown in Fig. 12 explore how matter can be redistributed with the use of multiple layers of acrylic sheet to explore spatial dimension and movement. I made a sequence of four drawing works using cloth tape and thread on various widths and opacity of sheet.

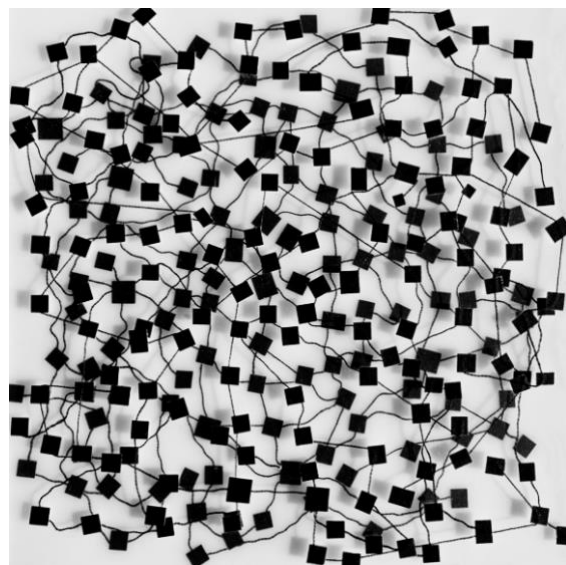
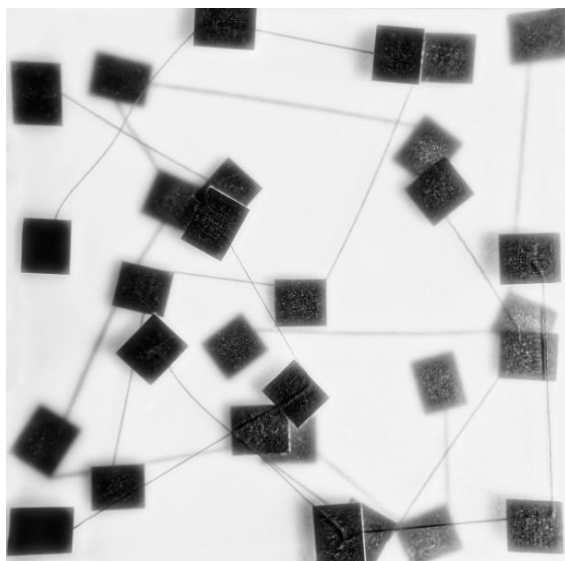
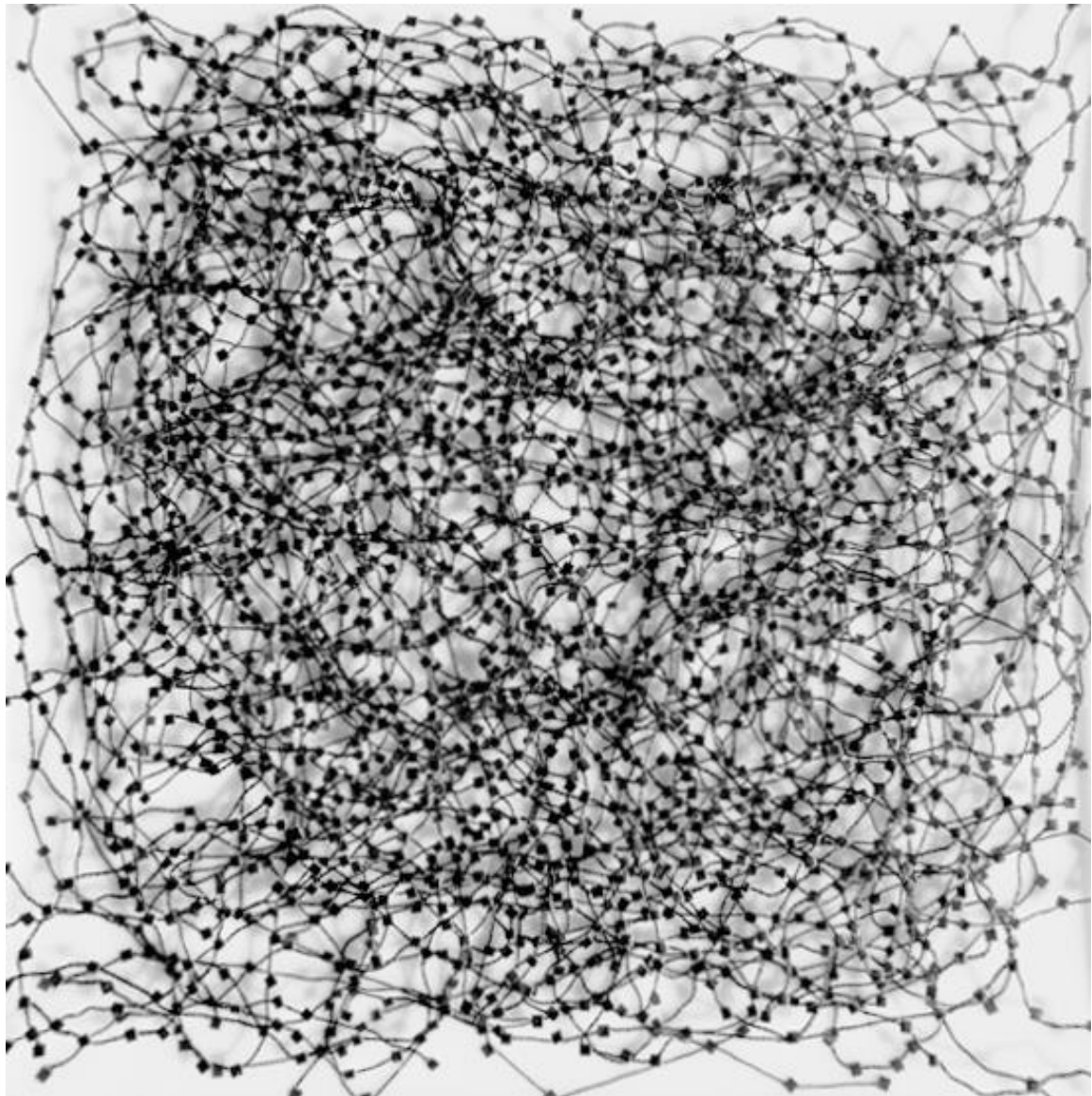


Figure 12: Colleen Altagracia, *Black Entropies*, (detail of 3 from sequence of 4), 2022, Perspex sheets 25 x 25 cm (variable width), cloth tape, thread.

The use of tape gives the perception of action and energy. The colour and fabric of the tape have qualities and visual associations that add a different value or relationship to the final work. The only limitation I placed on the construction of the work was to use a 12cm square of tape for each drawing. The use of thread connects pieces of tape, creating fluid lines that suggest a process between the action taking place and the use of tape: a visual indication that something took place, which also gives a spatial quality to the depth of continuous flow.

Maybe Something

Professor of physical chemistry, Arie Ben-Naim (b.1934) has a special interest in the theory of liquids and thermodynamics. His book *Entropy Demystified*, describes how “information can always be associated with entropy”⁴¹ while noting associations “with ‘disorder,’ ‘missing information’ and the ‘arrow of time’.”⁴² Ben-Naim clarifies his use of the term “information” explaining that “as a description, information is even more appropriate than the term ‘entropy’ itself in describing the thing that changes.”⁴³ To clarify his theory, Ben-Naim provides a response that considers questions of what, how, and why, that I used as prompts to understand what can be observed in the *Acrylic Box Flow Works* (Appendix B).

My question is, What is the thing that changes in the experiments? It is variable and based on what changes can be observed taking place over time and location. In terms of the *Acrylic Box Flow Works*, the thing that changes is the solution used in the expansion casting process. The process is one of expansion that is a spontaneous reaction when part A and B solutions are combined. Once the two parts are added together, energy is created by stirring the two compounds until they have fully integrated and mixed, ready to expand. The change taking place in the expansion process is information.

The next question addressed is, How did we get from the original to the final state? In the context of the *Acrylic Box Flow Works*, two specific information changes occur involving the molecular identity of the solution and the re-distribution of energy from a liquid state to a solid as it flows through the internal cavity of the *Acrylic Box*. Ben-Naim explains that as there is an element of randomness with probability, the question is not exactly “how,” but rather “how effectively,” and what is the difference between the initial and final state. I devised a system to ensure the outcome of the velocity and movement of the flow of the liquid foam by using a

⁴¹ Arie Ben-Naim, *Entropy Demystified: The Second Law Reduced to Plain Common Sense (Revised Edition): The Second Law Reduced to Plain Common Sense with Seven Simulated Games* (Singapore: World Scientific Publishing Company, 2008), 230.

⁴² Ibid., 227.

⁴³ Ibid., 234.

consistent measurement of the expanding foam solution. I introduced an element of randomness to the system to create a conflict with the outcome by using different combinations and sizes of blue resistance bars. Another element is introduced by carrying the casting process out of doors. This allowed the immaterial elements such as humidity and temperature to impact the flow of liquid and its state of solid foam.

The last question Ben-Naim raises is why. The forms of flow I created in the *Acrylic Box Flow Works* are all different. They show how implementing aspects of resistance and chance into the system can alter even and consistent outcomes, allowing for the elements of “maybe something” else to occur.



Figure 13: Jim Speers, *English Electric*, 2004.
Reproduced with permission of the James Wallace
Trust, <https://collection.wallaceartstrust.org.nz/persons/990/jim-speers>

Spatial Interconnection

Entropy, as a form of information, has also been described as something linear that moves in one direction. An interconnected system that uses light can be observed in New Zealand-based artist Jim Speers' lightbox works (Fig. 13).

Speers notes how the reflection of light can suggest an “openness – a beyond.”⁴⁴ I find the use of light in Speers’ work compelling because of the spatial relationship to the immediate surrounding environment of the work, and indication of another spatial element associated with the internet. I had initially carried out a sequence of drawing works to explore matter distribution. Spatial dimension was also explored through the depth of perception by stacking various widths of acrylic sheets. After observing the Speers’ lightbox works, I developed the drawings (Fig. 12) further into lightbox structures to explore how the properties of light could further impact and create other spatial dimensions. With the digital era and mass internet usage, could the flow of information be multi-directional, not just linear?

Art critic and philosopher Boris Groys's suggests that “as long as the internet exists and functions it will allow us to return to the same information – as earlier the non-digital archives and museums allowed us to return to the same objects.”⁴⁵ In other words, the internet is not just a flow but a reversal of the flow. The mathematical processes of probability and statistics are associated with what may happen with entropy, which means that there could be different outcomes and exceptions. It is not an absolute law. Theoretically, one could argue that it could be possible to go back in time. However, as Ben-Naim has discussed in his writing, it is unlikely, as entropy is not an exact law within thermodynamics and includes other variable factors depending on the situation. Aspects of reversal of flow are associated, for instance, with acts of memory, archaeology, and retrieval. This means that information brought forward from past events would always have some sort of loss associated with it. While it is possible to trace back steps and processes on the Internet, it is still a form of retrieval. Groys’ essay “Art Topology: The Reproduction of Aura”⁴⁶ suggests that an artist’s work can never fully enter into a flow, because such work would need to appear as something finite. Instead, Groys proposes that works document “attempts to enter the flow.”⁴⁷ It could be suggested that the flow of casting material (Fig. 8) has been frozen and solidified in time and space, and that the dynamics of a durational process are lost to a viewer. Aspects of a durational process can be observed in the work *Gum Shelf* by Swedish artist Nina Canell (b.1979), which explores changes in the viscous properties of mastic gum⁴⁸ taking place over the duration of an

⁴⁴ Robert Leonard, *Jim Speers: Everything Is in Two Minds*, 2002, <https://robertleonard.org/jim-speers-everything-is-in-two-minds/>.

⁴⁵ Boris Groys, *In the Flow* (Verso, 2016), 12.

⁴⁶ Boris Groys: “Art Topology: The Reproduction of Aur”. The essay is part of the publication accompanying the exhibition “When Attitudes Become Form: Bern 1969/Venice 2013”, curated by Germano Celant. Presented at Fondazione Prada in Venice in 2013, exhibition reconstructed “Live in Your Head. When Attitude Become Form.” Bern 1969. Fondazione Prada (podcast). Accessed 19 April 2022. https://soundcloud.com/fondazione_prada/groys-eng.

⁴⁷ Groys, “Art Topology”

⁴⁸ The earliest record of mastic gum dates back to the 5th century BC. Since ancient Greece, resin from the mastic evergreen shrub (*Pistacia lentiscus*) has been harvested on the Greek island of Chios and is used as chewing gum. “Mastic tree resin is one of Greece’s most valuable products,” December 10, 2021. Greek City Times. <https://greekcitytimes.com/2021/12/10/mastic-tree-resin->

exhibition. In these works, Canell placed a square slab of mastic gum on a steel shelf. The combination of gravity, weight, and the viscosity of the gum material resulted in the mass slowly spilling over and stretching towards the ground. The stress of the stretching and pulling of material over the steel shelf can be seen in Fig. 14. A press release for the work shown at the Artists Institute in Belgium in January 2018, describes the transitional aspect of Canell's *Gum Shelf*: "Gum pools in blobs, creeps along the floor, looks and feels sticky but is hard to the touch."⁴⁹ The work also demonstrates entropic qualities of randomness, chaos, uncertainty, and displacement in association with the degree of concentration of available energy. However, the viewer of the work is still in the "here and now" process of the durational flow.



Figure 14: Nina Canell, *Gum Shelf*, 2017. Reproduced with permission from the artist. <https://artviewer.org/nina-canell-at-the-artists-institute/>.

In 1970 German-born American artist Eva Hesse (1936-70) made a work using two lengths of entangled ropes, called *No Title*. Hesse did not provide any specific installation guidelines. The only instructions were for the use of 13 hooks to suspend the ropes from a ceiling. This meant that the placement of the hooks would be different in response to the allocated architectural space, enabling the rope work to change its appearance for each installation.

Installations of work that do not have a specific way to be hung or placed provide a form of resistance between the maker and the outcome being shown. The unpredictability associated with randomness is created by the number of different ways work could be shown, and the uncertainty of which version a viewer sees. I have considered how to incorporate resisting a specific situational reference with my lightbox works. Rather than the two-dimension viewing

is-one-of-greeces-most-valuable-products/.

⁴⁹ Art Viewer, "Nina Canell at The Artist's Institute," (Press release, 3 January 2018), <https://artviewer.org/nina-canell-at-the-artists-institute/>.

approach of an up-down or a top-bottom positioning, the drawing works have been constructed to be approached from any side. A viewer can approach from one direction and have a different viewing experience from someone approaching it from another direction. The frames for the lightboxes were also constructed to ensure no situational reference. The sequence of lightbox works comprises four individual boxes that can be placed on the floor, a plinth, or the wall in any spatial configuration, including random scattering, a linear line, or a cluster arrangement.

Chapter 3 – Observation

In 1972 John Berger challenged art's historical ways of seeing.⁵⁰ Berger provided an alternative way of seeing that considered the relationship between the viewer and the object. Francis Halsall extends this conversation by suggesting the incorporation of a Systems Theory approach.⁵¹

Halsall suggests that Systems Theory could be extended by asking what is being *observed* rather than what can be seen. Halsall's writing discusses the approach presented by several writers, particularly the German sociologist Niklas Luhmann (1927-1998). Luhmann describes observations carried out within a defined system as "nothing more or less than distinguishing indications."⁵² *Distinguishing indications* means observing the difference or contrast between similar things and people. Luhmann's definition of observation has been broken down into two main subcategories: first-order observations and second-order observations. A second-order observations is when, for instance, I watch someone else (the first-order observer) carrying out a role. In this situation, the second-order observation includes what the first-order observer sees; it also includes some or all the "blind spots," that the first-order observer cannot see for example, the overall environment, relationships, and conditions. I realised that observation could be used as an analytical tool as well as a method in my studio practice. Observation supplements the visual aspect of seeing with thought to provide connections, meaning, analysis of difference, and contrast. From a Systems Theory perspective, the question asked is, What can be Observed?

The *Cardboard Box Works* (Fig. 15) series demonstrates how observation as a tool can be used when thinking of how to place works to exhibit, and how to use the viewer as part of the work. A viewer's performance can be observed by another viewer. Observation as a tool was employed by ensuring that the spatial placement of the work created in the viewer a sense of

awareness of each piece's physical form and space. Works were also placed to ensure that a viewer would need to move and engage with them by, for instance, leaning into the wall to see the internal space created by the cardboard. The viewer's presence and interaction in these

⁵⁰ Berger wrote a book and presented a series of four video series titled "Ways of seeing," John Berger, "Ways of Seeing" 1972, https://www.youtube.com/watch?v=OpDE4VX_9Kk.

⁵¹ Francis Halsall, "Art, Art history and Systems-Theory," (PhD thesis, University of Glasgow, December 2003), <http://theses.gla.ac.uk/5392/1/2004HalsallPhD.pdf>.

⁵² Niklas Luhmann, *Theories of Distinction*, (Stanford University Press, 2002), quoted in Francis Halsall, "Art, Art history and Systems-Theory," (PhD thesis, University of Glasgow, December 2003), <http://theses.gla.ac.uk/5392/1/2004HalsallPhD.pdf>.

works became the fluidity within the human space of the cardboard box. Thinking through the question of what can be observed from the perspective of the viewer, *observation* is understood as an analytical tool that also ensures that the viewer thinks about connections and relationships. The viewer's observation allows the thinking and feeling about the work to happen.



Figure 15: Colleen Altagracia, *Cardboard box works*, (installation view) 2021.

Change in Perception

In the introduction to *The Sublime*, British artist and historian, Simon Morley (b. 1958) comments on the contemporary use of the sublime in a modern art context. Morley suggests that the “sublime experience is fundamentally transformative, about the relationship between disorder and order, and the disruption of the stable coordinates of time and space.”⁵³ Peter Sloterdijk, however, suggests a turning point in the meaning and association of the sublime has taken place and proposes that

From Romanticism onwards, the decay products of majestic terror developed into the political aesthetics of mortal danger, which bourgeois philosophy after Burke and Kant mystified as to the ability of the human spirit to pass judgement on sublime or distressing objects.⁵⁴

To unpack this and understand how it could apply to my practice, I started with Sloterdijk's description of the “decay products of majestic terror.” He could be referring to the mind's need to be overwhelmed by objects or events; that the mind has become immune to this kind of overwhelming effect, and so is left with decay – things which are known, and which no longer produce the impact of sublime. Fig. 16 show the translucent qualities of the cast balloon interacting with the natural light, which a viewer could interpret as having a transcendental aspect. The transparent aspect combined with the sunlight provides a reflection rather than a shadow, which could hint at some sort of transcendent or sublime experience. The dictionary explains that the word “sublime” is based on Latin: a compound of *sub*, meaning under or up to; *limin* meaning threshold; and *limes*, meaning a boundary or limit.⁵⁵ The use of sublime is used to describe something that is awe-inspiring or a situation where you could be lost for words. Sublime also has associations with spirituality and transcendence. Sloterdijk suggests that

homesickness for the sublime leads to a misunderstanding of the nature of regulation in the modern nomotope⁵⁶: life according to the existing rules of the community simply seeks – if it is modern – to be something other than merely a “permanent residence in the domain of the law.”⁵⁷

Here Sloterdijk seems to be suggesting an alternative. Instead of looking for the traditional idea of the sublime as a permanent resident within, for instance, the laws of nature as seen in the Romantic Period, “majestic terror” is now an effect of the tensions that arise from the changes

⁵³ Simon Morley, *The Sublime*. Documents of Contemporary Art Series. (Cambridge, Mass.: Whitechapel Gallery; MIT Press, 2010), 12.

⁵⁴ Sloterdijk, *Spheres*. Volume 3, 449.

⁵⁵ World Wide Words, s.v. “Sublime” Last edited 21 March 1998, <https://www.worldwidewords.org/topicalwords/tw-sub2.htm>.

⁵⁶ Peter Sloterdijk described the nomotope as “the space of the legal tensions that provide a group with a normative backbone.” Peter Sloterdijk, *Talking to Myself about the Poetics of Space*.

⁵⁷ Sloterdijk, *Spheres*. Volume 3, 451.

made to pre-existing rules, and is found in the unstable and multi-platform area of political aesthetics. American Philosopher Crispin Sartwell (b. 1958-) introduces the concept of Political Aesthetics by stating that “Not all art is political, but all politics is aesthetic; at their heart political ideologies, systems, and constitutions are aesthetic systems, multimedia artistic environments.”⁵⁸ Sartwell suggests that due to financial constraints, a feeling of sublime is difficult to achieve. Rather, sublimity is being used within political aesthetics to achieve a response from mass groups of people. It could be argued that Nature – the biosphere – has been co-opted as a political aesthetic because environmental issues such as extreme weather conditions, global warming, and pandemics are now providing the “majestic terror” on a worldwide scale. Instead of being a concept applied to a unified area, the sublime (or majestic terror as referred to by Sloterdijk), can now encompass the use of written and oral words as well as all forms of visual art methodologies.



Figure 16: Colleen Altagracia, *Sunlight Interaction*, 2022, air-filled balloons, expandable foam.

I am interested in exploring how to change a viewer’s perception of my works by incorporating an aspect of uneasiness or uncertainty into my works shown. A press release describes how Nina Canell presented works for her exhibition *Stray Warmings*, including a small work that was

⁵⁸ Crispin Sartwell, *Political Aesthetics*, (Cornell University Press, 2011), 1, ProQuest Ebook Central.

“hidden in the corner.”⁵⁹ I found the comment about a small work interesting, as I am aiming to present works with spatial considerations in the layout that enable some sort of relationship or connection for the viewer to engage with. Individual pieces also provoke an immediate predictable response to what is being seen.



Figure 17: Colleen Altagracia, *Shit Happens*, 2022,
faeces from a dog called Perspex, gold leaf, 4.5 x 3 x .75 cm.

Providing a smaller work that shows some sort of negation of, or paradox to, the larger works could also provide a strategy of resistance against the viewer’s immediate thoughts about what they are seeing. Perhaps placing a piece hidden in a corner could trigger other ideas in contrast to the primary thoughts associated with the larger works exhibited. Fig. 17 and 18 show works that could act as a paradox or contradiction to aspects of flow due to shape and materiality. The material use of defecation in *Shit Happens* (Fig. 17) is a substance everyone is familiar with as waste matter. Perception of shift in value is achieved with the use of gold leaf on the discarded material. Relationships to financial systems are implied with the material use of \$10 note (Fig. 18). The link of shredded money appearing as a blue line provides an illusion of either an inward or outward flow, or perhaps a leak or crack in a financial system.

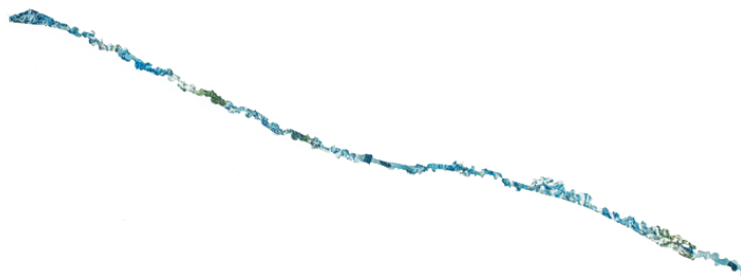


Figure 18: Colleen Altagracia, *Leak*, 2022,
shredded \$10 note, 11 cm.

Connections and Relationships⁶⁰

⁵⁹ Sheila Regan, review of *Stray Warmings* by Nina Canell, Midway Contemporary Art, Minneapolis, April 6, 2013. <https://mnartists.walkerart.org/currents-of-memory>.

⁶⁰ I have written this section using a different font and style of writing. The content reflects my thoughts about possible 'maybe something' aspects that a form or placement of a work could reference.

The studio space is made up of a two-sided angled wall. A corridor provides a link to other studio spaces and separates my third wall panel. An invisible line marks the 4th wall, providing a boundary between my studio space and another's. I have a large desk facing a side wall, and use of a plinth. The works and layout within my studio space provide different thoughts and interpretations.

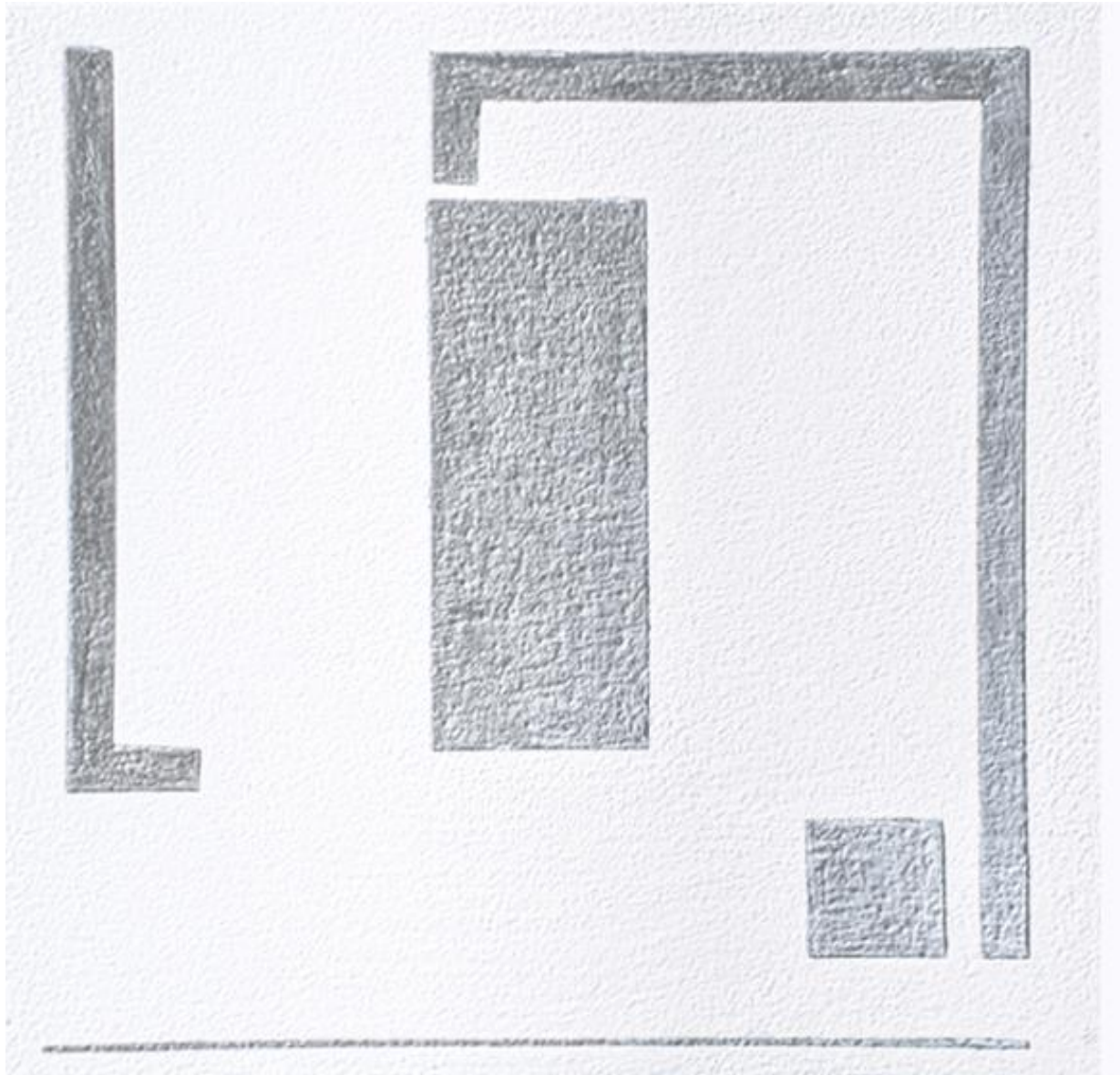


Figure 19: Colleen Altagracia, *Layout of studio Space*, 2022, drawing, silver ink on gesso board, 252 x 252 cm.

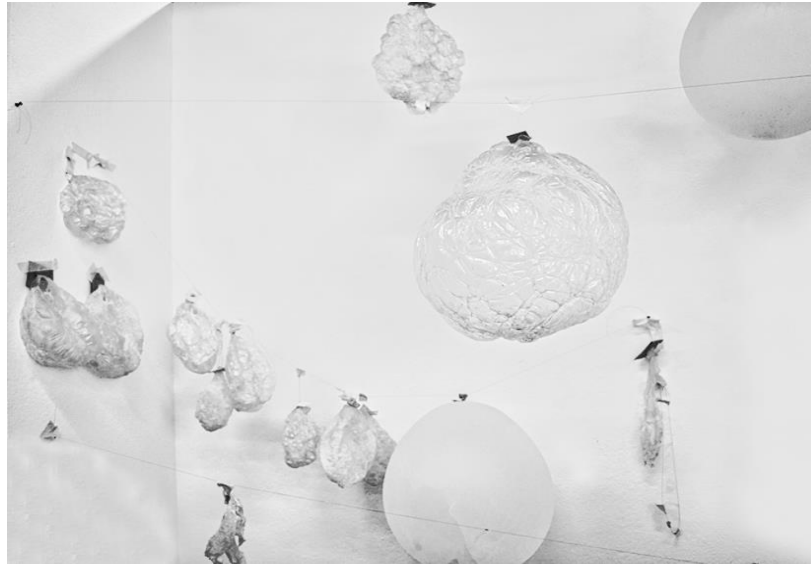


Figure 20: Colleen Altagracia, *Studio front wall*, (detail, monochrome), 2022.

On 23 March 2022, I take a series of photographs to document what is taking place. As I look around the space, thoughts and words immediately come to mind - it looks chaotic. Messy. Using observation, I see experimental works in process. I analyse the work and its placement to identify relationships and connections. Stuff going on, balloons in various forms of a process.

Four layers of nylon thread are strung across the front wall dividing the space. Thread used to suspend balloon works, linking back to the threads on the desk.

Breath, blowing – the energy of the action used to fill the balloon space with air is implied. A natural order of things like lungs and breath and breathing in and out. Balloons in various stages of inflation and exhalation can be seen.

In other works, resistance and tension created by the flow of movement between the immediate outside space and internal pocketed air space stretches and pulls the balloon's surface

The action of entropy shows on the casted material. Some have smooth, soft, and malleable surfaces. Others are brittle, dry, lumped, and crumbled. The material sounds like autumn leaves when touched.



Figure 21: Colleen Altagracia, *Top tier* (detail, monochrome), 2022.

The tape left on the top tier of the suspended thread indicates the presence of a past event. Used tape on the nylon thread records the presence of where a balloon had been.

A piece of cardboard forms the U-turn for the balloon tube - to prevent air from leaving the internal space.

A U-turn is a form of resistance – against the onward flow – and provides the opportunity to turn back and restart.

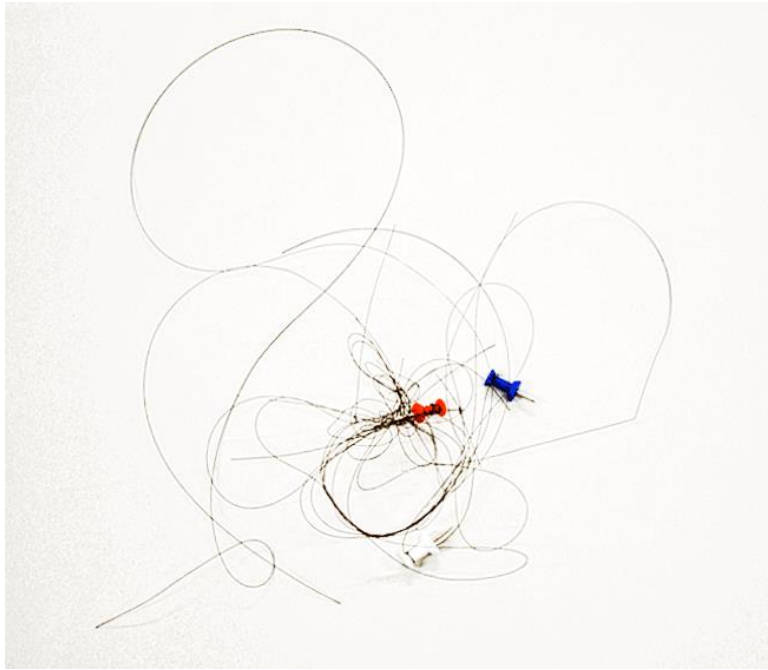


Figure 22: Colleen Altagracia, *Entanglement*, 2022,
map pins, nylon thread, 252 cm.

Threads link, connect and point to one another. Thin physical lines link relationships between the various things that can be seen.

On the desk I see a fluid tangle of monofilament – a drawing of action in space – a realignment of boundaries; red, white, and blue mapping pins have been pulled out from a previously mapped territory so they are ready for the next.

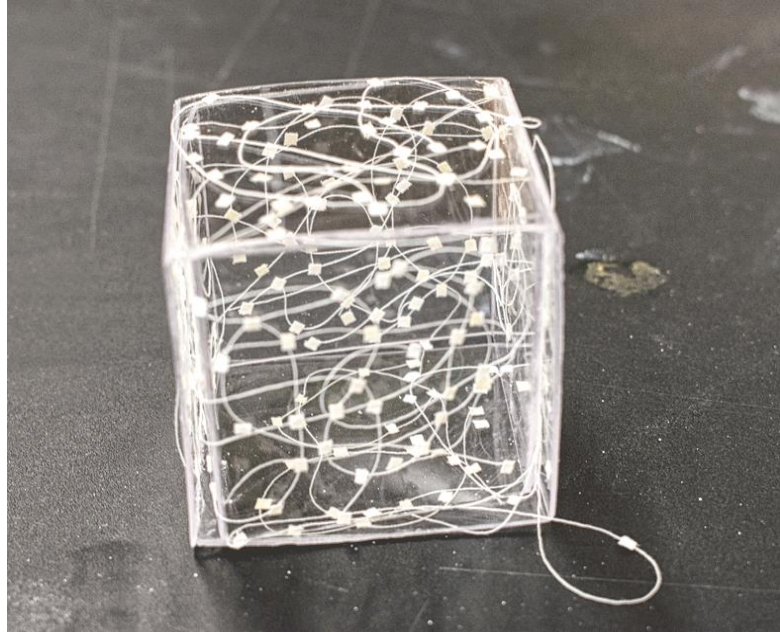


Figure 23: Colleen Altagracia, *Entropy Cube #1*, 2022,
PET crystal clear sheet, white tape and thread, 5.52 x 5.52 x 5.52 cm.

Two small cube works are also on the desk. Both cubes have evidence of energy in the form of pieces of tape used to capture where the activity and action had taken place – something happened there.

There's a change in direction – a movement made by a thin line of cotton thread. It's ongoing and non-linear:

down
bend
over
under

Both small works have a leak of some kind.

A side of a cube wall is not joined. Left open it creates a gap allowing something else to happen.

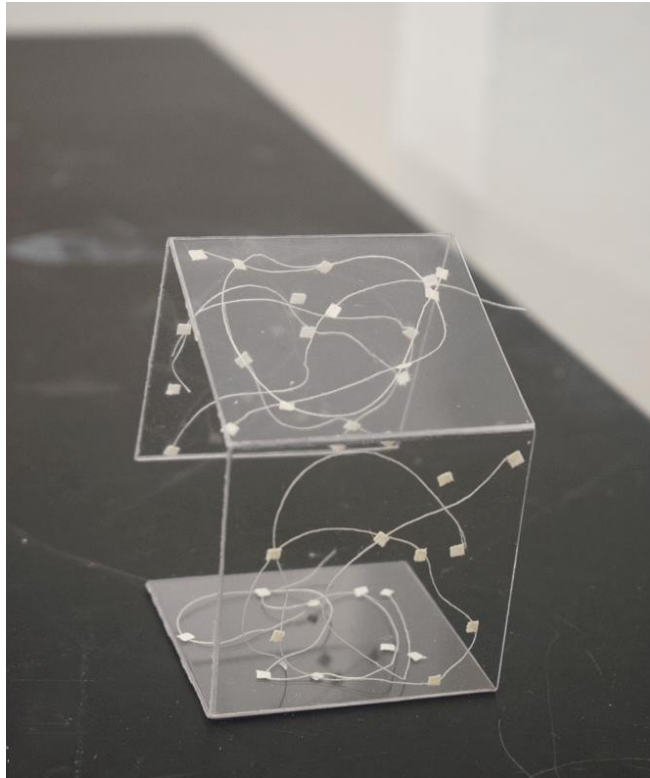


Figure 24: Colleen Altagracia, *Entropy Cube #2*, 2022, PET crystal clear sheet, white tape and thread, 5.52 x 5.52 x 5.52 cm.

The gap seems to connect to something beyond itself and its immediate surrounding space. The open gap of the box links the space between the table and the wall, allowing air to flow and move.

A gap between the table and wall, presenting a choice of direction – which way to go?

Folded creases of the *Small Cube* work also connect to the angle of the desk and corner of the wall.

Bends show a change in trajectory – point to other things.

The small white tape used in the small cube works now becomes an enclosed space in the form of a balloon.



Figure 25: Colleen Altagracia, *Internal Action*, 2022,
30 cm balloon, adhesive, cardboard.

The inside surface boundary of the balloon has been lined, to create a resistance to the flow of air from the inside to the outside space. Hints of something happening can be seen in the interior balloon space. Action taking place on the balloon's surface can also be seen as the transparent balloons show signs of oxidation – turning white. Moving gently, the internal membrane in the balloon cavity seems to – have a life of its own. It could be a wave – of water. Membrane connections provide another link. A mucous membrane stretches across the inside space of the large balloon: the separation of the inside cavity into two cosmos areas joined together by the horizon's thin line. Or like a spit of saliva ready to be expelled.



Figure 26: Colleen Altagracia, *Slump*, 2022, expired cast balloons, nylon netting, 90 x 45 cm.

On the right-hand side wall, some grouping of balloons can be seen attached to a tangled web of suspended thread, connecting to the work left on the floor.

Thin lines also connect to the works on the table (Figs. 22, 23, and 24).



Figure 27: Colleen Altagracia, *works on the ceiling* (detail), 2022.

The suspended foaming mass of balloon castings (Fig 26) does not seem to connect with its former matter and energy (Fig. 27).

At that time, I had suspended air-filled balloons off a network of threads across the ceiling of a walled space to prevent them from floating away: looking up a spatial form of white floatiness – of breathing membranes – light interacting – an ethereal experience.



Figure 28: Colleen Altagracia, *Expired*, 2022,
cast balloons, 49 x 50 cm.

Lines of nylon thread from the netted web drop (Fig. 26) point to a pile of scum-like froth on the floor. Texture of the forms are dry and brittle to touch.

There was no need to attach these helium-filled balloons to a net. They had created a similar visual experience to the air-filled balloons but behaved differently.

Rather than drifting, floating away like the air-filled balloon - each individual, helium-filled balloon pushed up against the net – trying to continue the upward trajectory. The webbed netting acts as a barrier of resistance to movement until the balloons start to expire and eventually drop to the floor.



Figure 29: Colleen Altagracia, Gasping, 2022,
three balloons on a plinth (16 x 10 x 5 cm).

Looking back to the desk a small white plinth provides a resting place for three expired balloon works.

The balloon necks reach out, mouths open as if gasping for the last breath of air.

The pocket shape of the balloon provides a private place for crumpled tissue.



Figure 30: Colleen Altagracia, *Pour*, 2022,
balloons, air, expandable foam, nylon thread, 50 x 8.5 cm.

A link between two joined wall areas can be observed in the work hanging on the left studio wall.

There, a work involving two joined spherical forms floating together. Contrasting action of pour/flow between each of the balloons within one work with resistance to the flow of movement suggested by one balloon tied with a nylon thread.



Figure 31: Colleen Altagracia, *Hanging off the Wall*, 2022, balloon, expandable foam, tape, cardboard, nylon thread.

On either side of the left and right studio walls, a conversation in blue takes place.

The light blue work on the plinth looks like an organ, perhaps a brain quietly thinking.

Thoughts are like shades of blue and the air.



Figure 32: Colleen Altagracia, *Light Blue Thinking on a Plinth*, 2022, balloon, expandable foam, air.

When I think of blue, I see the sky

The oceans, the sea, the air

I observe the different shades and density of blue

It's vast – the shades and scale

When I put my hand out

My hand reaches out

I can't touch blue

I push through air

I can feel the air when the wind blows

Same old thing is always different

The air ahead

Is not the same as before

Breath in and through my lungs; I am touched by you,
through your breath that breathes out

I think blue

I smell green

When I smell green, I think of summer.

A thought of green can be poison.

Conclusion

Researching Systems Theory confirmed to me that it is not something separate from our lives. Instead, it is an intrinsic element in everyday life, such as the respiratory system. A key factor I identified in art critic and system theorists Jack Burnham and Francis Halsall, was how the use of observation underpins Systems Theory, and how to incorporate this into my studio work. Understanding a system's structure allowed me to consider where aspects of resistance could occur within a spatial form and to consider relationships and connections.

My studio practice shifted by exploring spatial concepts and using forms of enclosed spaces to investigate the idea of pockets of space. The shift in focus enabled the known and familiar to be challenged and rethought. The approach changed my understanding of what spatial form and space a pocket could take, and helped me identify what types of forms and structures to use. Experiments involved using material items such as latex balloons, expanding foam solution, and cloth tape. Non-materiality was also used, including associations with air, the action of breath, and entropy. Experimentation with the boundary surfaces of objects allowed the durational aspects related to “chance” inherent in the materiality of items to take place. Writing I primarily focused on were British literary scholar Steven Connor's discussions of the properties of air and German philosopher Peter Sloterdijk's theory of foam as “co-fragile systems,” both of which broadened my thinking. In my studio practice, a rethinking of rules created a different making approach.

Recognising the performative aspect of my casting process methodology, and the action involved in inflating latex balloons, ensured I observed what was happening and considered what the different stages were doing during the process. Rethinking the different aspects of studio work processes meant a shift from making to a methodology that is experimental. The experimental approach also enabled the engagement of thinking about space, resistance, and the borderline or limit poetically. The use of poetical thinking provided a means for commentary and interpretation to ensure that possibilities of the “maybe something” to occur within the works. Placement consideration of pieces were identified as a means to enable a paradox or contradiction for the viewer, providing them with the opportunity to engage and consider their meaning and associations.

Appendix A

Table 1: Concept & associations for *Glasspocket Works*

Work	Content	Associated ideas/concepts
1	Reading glasses	Reading, observation
2	NZ\$1, \$2 coins	Gold coin, charity donation
3	Pilot V5 Blue	Disposability, writing
4	Credit cards, Bank Biz cards	Artificial money – credit, debt
5	Black ink, mirror pieces	Deception, Smoke and mirrors
6	Mask	Fear, tension
7	Nuclear Submarine, green ink, wood, snails	Military, nuclear, environment
8	Caste acrylic cubes	System failure, drink, environment

Table 2: Words related to flow and movement of fluid liquid and drink⁶¹

break burst cast catch channel come in course crest dash deepen disgorge drain dribble drip ebb	eddy empty flood flow flow glug go out gush lap meander overflow percolate pour pump ripple	rise roll run rush seethe silt up siphon slop slosh sluice soak in spatter splash splatter spout	spray squirt stagnate stand stir up stream strengthen subside swill syphon trickle tumble turn wash well
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Table 3: Words related to drink⁶²:

Transitive verb:	Intransitive verb:	As a noun:
Swallow, imbibe – drink a glass of water To take in or suck up: absorb To take in or receive avidly – usually used with in – drank in every word of the lecture	To take liquid into the mouth for swallowing – eating and drinking To receive into one’s consciousness – drinking deep of the culture which surrounds To partake of alcoholic beverages To make or join in a toast	A liquid suitable for swallowing Alcoholic beverages A draft of portion of liquid Excessive consumption of alcoholic beverages A sizable body of water – for example sea

⁶¹ Macmillan Thesaurus, s.v. “what liquids can do.” <https://www.macmillanthesaurus.com/topics/what-liquids-can-do>

⁶² Merriam-Webster, s.v. “drink.” Sourced from: <https://www.merriam-webster.com/dictionary/drink>.

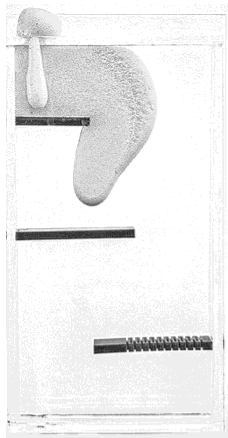
Appendix B

Following pages show different forms of flow created from foam casting created for the *Acrylic Flow Works # 3-36* (detail, monochrome), 2021, Perspex box 13 x 7 x 1.5 cm, consistent amount of expandable foam solution used for each individual work.

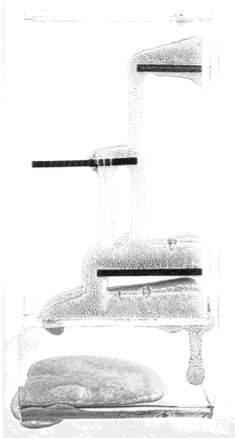
Please see Fig. 08 for *Acrylic Flow Works # 01 and 02*

Acrylic Flow Works # 31 and 37 depicted below.

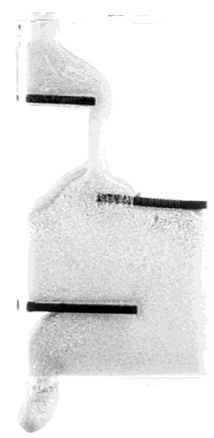




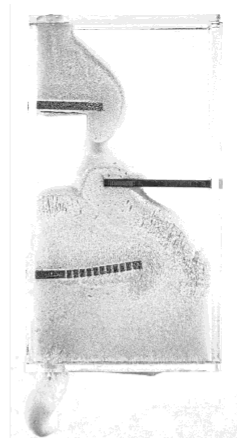
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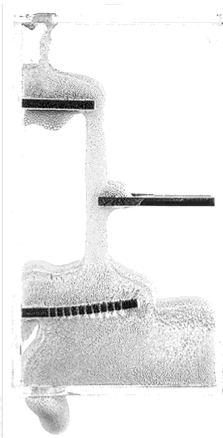
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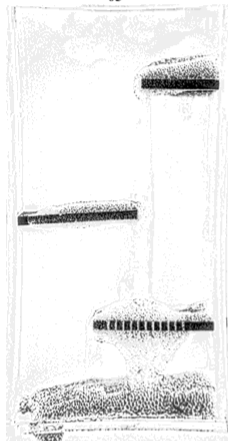
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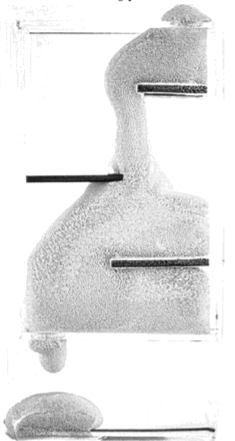
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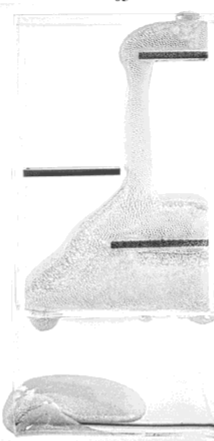
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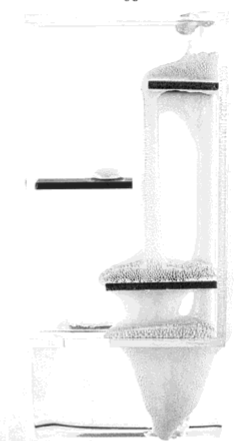
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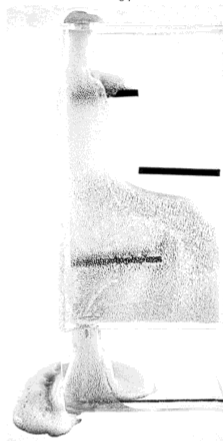
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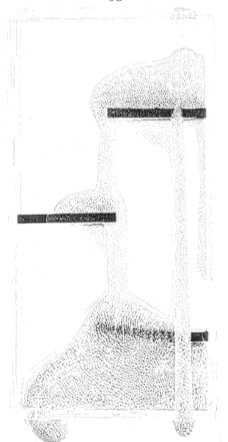
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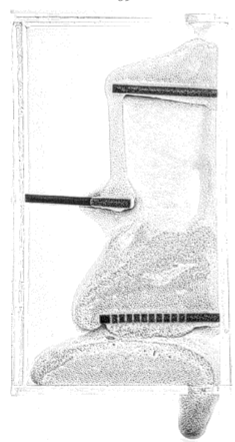
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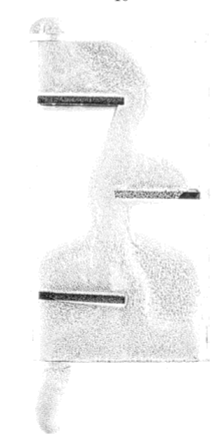
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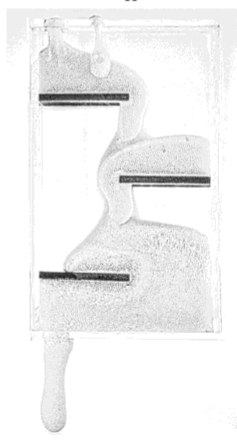
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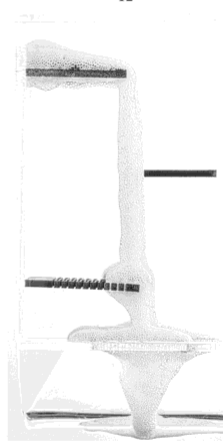
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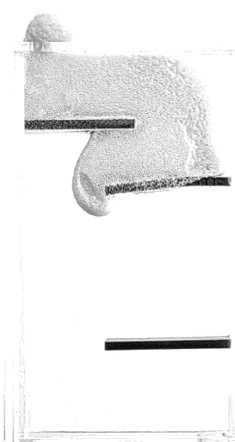
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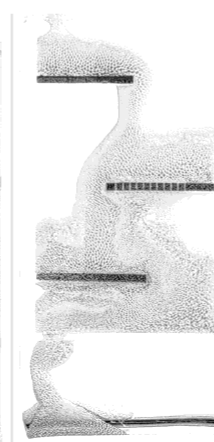
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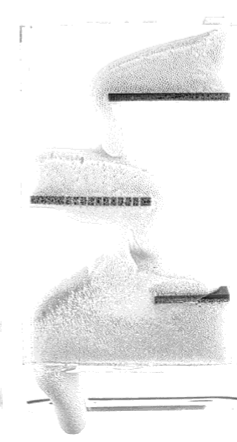
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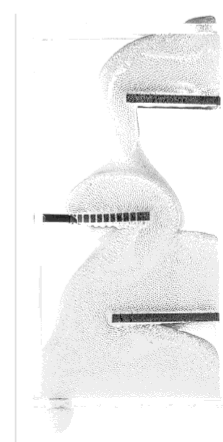
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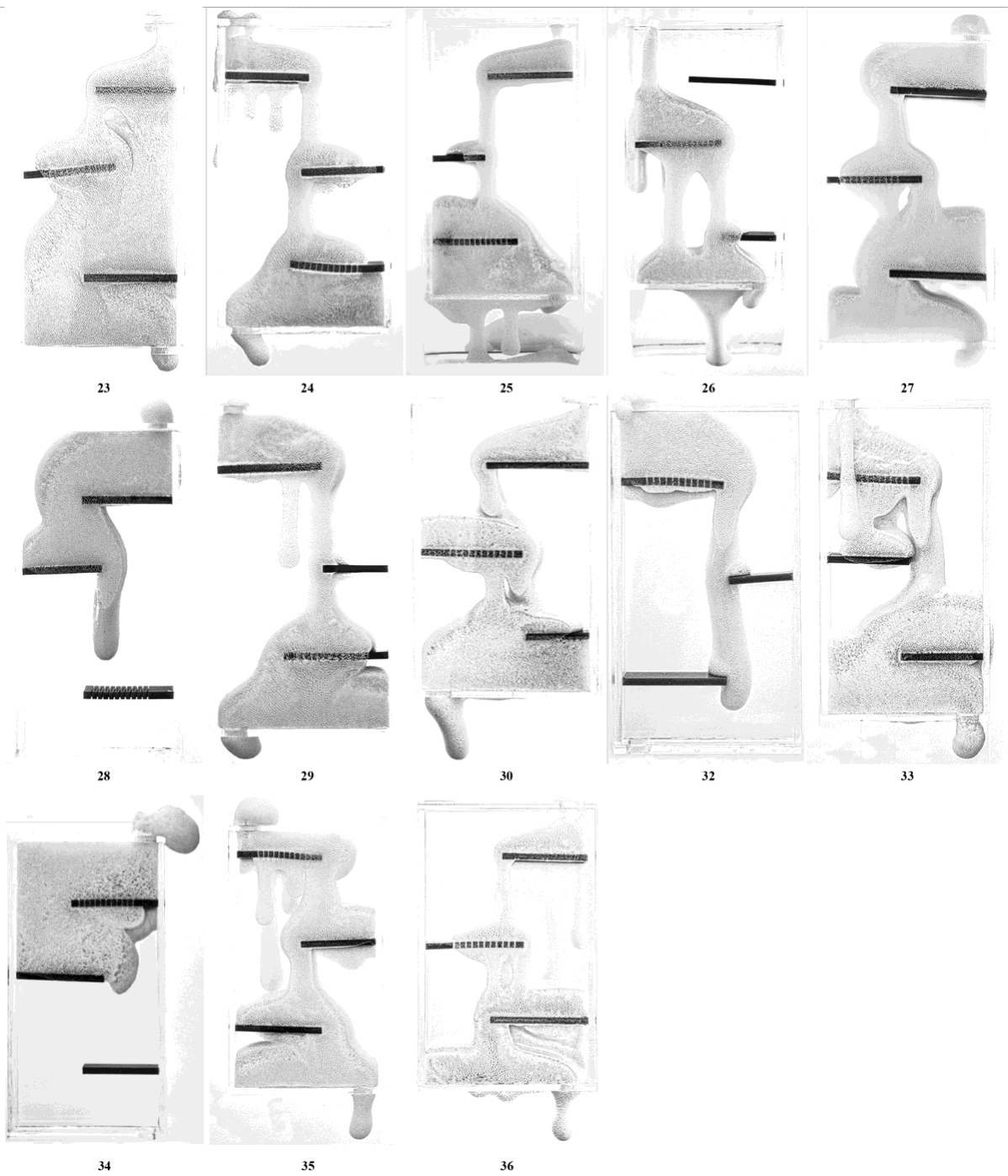
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22



Appendix C

Adhesive product workability

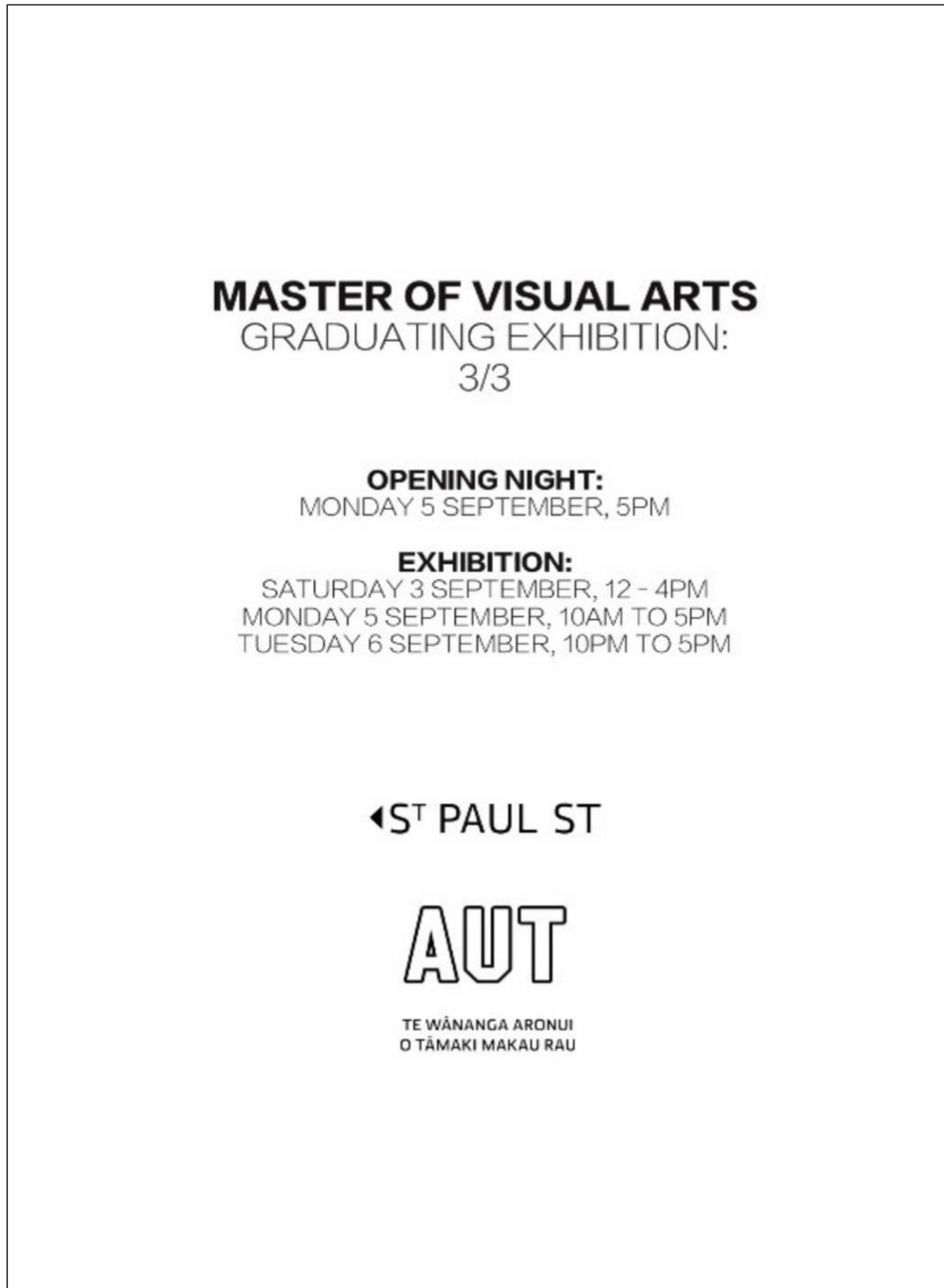
Product	What worked	Issues
DCM or methylene chloride <i>A liquid substance is applied with the use of a syringe needle.</i>	Bonding was very firm and withstood finger tests to try to break pieces apart. Had small air bubbles in some places. I carried out a site visit to Modern Plastics' workshop to research how they worked with acrylic. I was advised to "flick" the needle and squirt a little fluid out before applying to the joined areas.	Methylene Chloride is a toxic substance, that requires precautions when using, including wearing protective clothing, safety gloves, and chemical splash goggles. Working in a very well-ventilated space with a fume extractor.
ADB 4 Minute Clear Epoxy <i>A two-part epoxy resin Non-shrinking, colourless</i>	Fast setting (4-6 minutes). Managed to have a clear, tidy seam that appeared firmly to adhere to the acrylic sheet pieces.	The following day managed to snap away from the pieces of acrylic sheet.
Loctite® ALL Plastics Bonding System <i>A two-part cyanoacrylate adhesive specifically designed for adhering to all plastics</i>	Very fast setting, bonded in seconds Managed to have a clear, tidy transparent seam that appeared firmly to adhere to the acrylic sheet pieces.	The following day managed to snap away from the acrylic sheet pieces.
Selleys Araldite 5 Minute epoxy adhesive <i>A two-part epoxy. Designed for adhering to a variety of material</i>	Fast setting Managed to have a clear, tidy transparent seam that appeared firmly adhere to the acrylic sheet pieces.	The following day managed to snap away from the acrylic sheet pieces.
UHU <i>A cold-welding adhesive designed for all plastics</i>	UHU substance was difficult to control and work with. The substance seemed to take on the properties of melted cheese: very stringy, messy. Stringy pieces quickly moved across other surface areas, which that needed to be wiped quickly before they started dissolving the surface. I managed to adhere to the acrylic sheet test pieces; however, the join was not tidy.	The following day I was not able to split the acrylic sheet pieces away. However, the join was neither tidy nor clear. Also, it was not liquid-proof, as when pouring the casting solution into the container, the solution seeped through part of the join.

Product	What worked	Issues
<p>Bondic® <i>Utilises dental technology. Bondic® is a liquid plastic welding product that hardens only when UV-LED light source is applied to the join area for 4-5 seconds</i></p>	<p>Very easy to use. Roughen surface to be joined with a fine sanding paper. A laser-cut surface edge worked perfectly; care needs to be made to ensure that the surface roughening is evenly done and not too scratchy; otherwise, the join will look scratched. The solution kit is a handheld applicator with a built-in fine point nozzle. I was able to squeeze out a thin line onto the joining surface. I used a sharp blade to spread the surface liquid out evenly over the join surface and remove any bubbles. Could spend time spreading the Bondic® liquid and ensure an even distribution as the liquid does not dry out. The liquid hardened very quickly (4 seconds) only when applying the UV-LED light over the joined areas. Crystal clear seam. Very strong bond. Worked well on clear and opaque coloured acrylic test pieces. Non-toxic.</p>	<p>No issues. Very easy to use. Only sets when applying the light source. The only slight consideration when using the liquid is that it is clear, meaning the workspace's lighting conditions need to be very good.</p>

Appendix D

Exhibition documentation

My graduating exhibition was part of the 3/3 cohort, taking place in Gallery 1, St Pauls St Gallery at AUT. Dates and timeframes of the exhibition are detailed in the poster below obtained from the MVA Round Three Instagram post movie file.

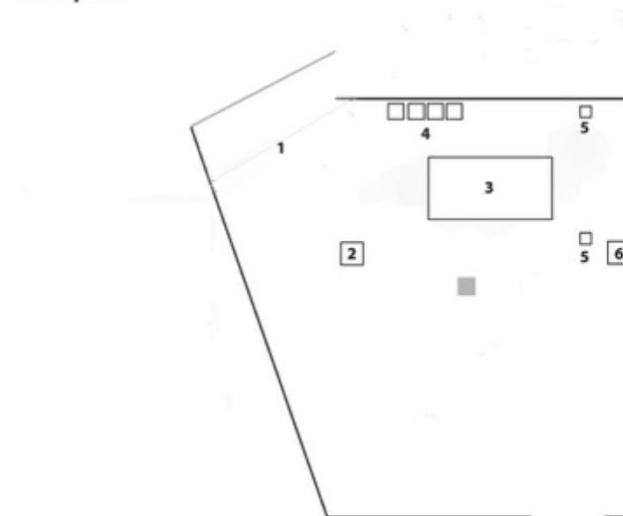


My approach to the exhibition layout was to treat the interior gallery space as an enclosed pocketed space connected to the infinite exterior space indicated through the window view. Consideration of connections and relationships between the scale and material used in the different groups of works exhibited informed their placement and layout.

I also considered the viewer's physical engagement with the works. The viewer needed to walk through the gallery space to observe and explore the different groups of works. Using smaller plinths meant a viewer was required to bend to see the pieces placed on them. The large balloon works placed on the floor were attached to a lead sinker by a filament thread. The threaded lead sinker provided some degree of resistance to the balloon's position. As a viewer walked by, their movement created a slight change in airflow, facilitating shifts in the balloon's placement. Performativity could be observed in the vibration of the membrane within the large-scale floor balloon work movements. Durational elements and performance were heard and seen with a bursting explosion of an expired balloon.

The individual cast balloon works used near the window had a performative aspect. Each work had a different date and time of casting, ranging from individual pieces created several months ago to those made a few days before the exhibition. The age differences enabled different responses to the air pressure. Changes in shape, size and surface texture could be observed throughout the duration of the exhibition. The following pages provide images taken from the exhibition.

Floorplan



Works shown:

1. Window installation work: *Untitled*, Air, balloons (variable 20-40cm), expandable foam, nylon thread, cardboard, tape.
2. Large plinth: *Shit Happens*, faeces from a dog called Perspex, gold leaf, 4.5 x 3 x .75 cm.
3. Balloon floor work: *Untitled*, Air, balloons (80-90 cm), expandable foam, lead sinkers, nylon thread, cardboard, tape.
4. Wall light box works on the wall: *Grey Entropies*, acrylic sheets 25 x 25 cm (variable width), cloth tape, thread.
5. Two small plinth works: *Untitled*, balloons, adhesive, plinth 23 x 18 x 11 cm.
6. Corner cluster of small plinth works, 2022, sequence of four small balloon works on plinths, balloons, adhesive (variable heights and widths: maximum 4.5 x 18 x 11 cm).



Figure 33: Colleen Altagracia, window installation work, *Untitled*, 2022.

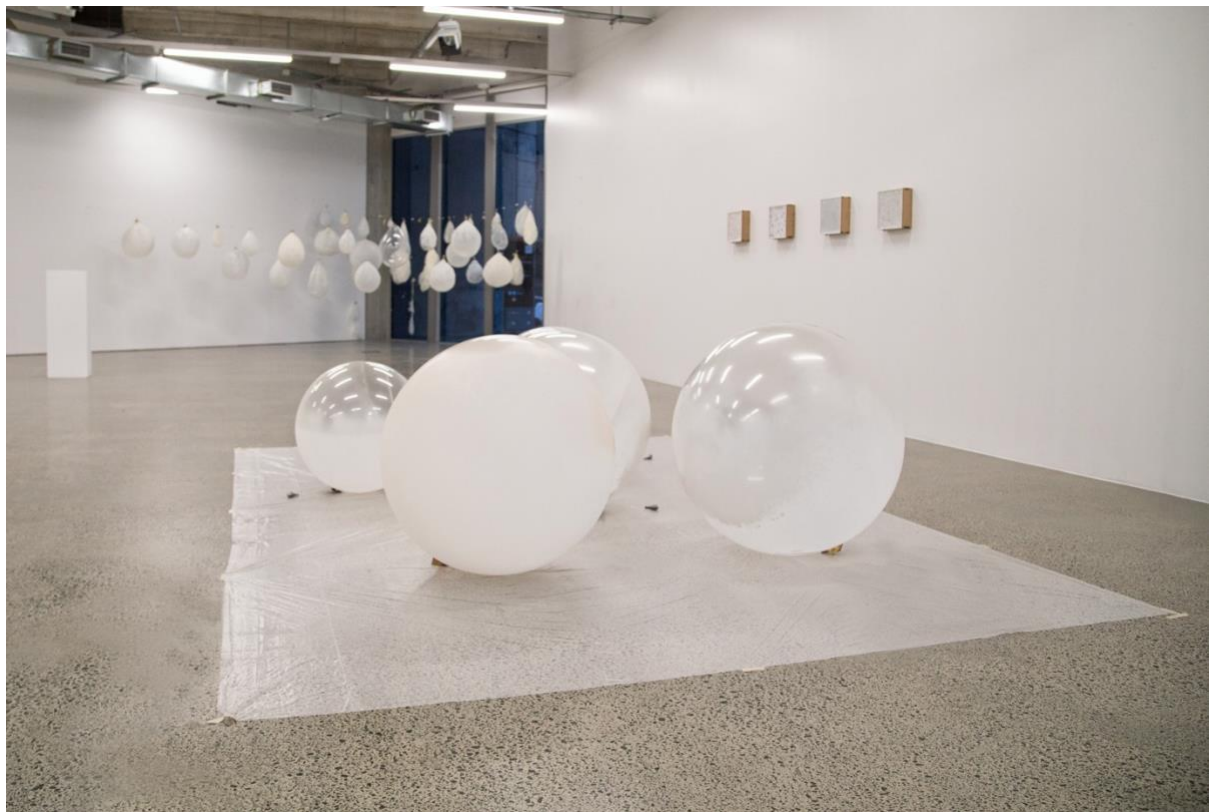


Figure 34: Colleen Altagracia, Installation view, 2022, window installation work, *Untitled*, large plinth, *Shit Happens*, wall light box works on the wall, *Grey Entropies*, balloon floor work: *Untitled*.
The image was taken and provided with permission by Emily Parr.



Figure 35: *Black and white images above show the membrane within the large-scale floor balloon works and the attachment of the balloons to lead sinkers by a filament thread.*



Figure 36: Colleen Altagracia, wall light box works on the wall, *Grey Entropies*, wall light box works, *Grey Entropies*, balloon floor work, *Untitled*, two small plinth works: *Untitled*, 2022.



Figure 37: Colleen Altagracia, Corner cluster of small plinth works, 2022



Figure 38: Black and white images detailing one work from two small plinth works, *Untitled*, 2022

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