

Master of Fine Arts Thesis

Alt Language

perception, language, gestures in our interactions

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Submitted in partial satisfaction of the requirement for the degree of
Master of Fine Arts, School of Art and Design
Division of Sculpture/Dimensional Studies
New York State College of Ceramics at Alfred University
Alfred, New York

2018 - 2020

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Acknowledgments

Thank you to everyone that took the time to meet with me and as a result, collaborated in this ongoing conversation. Thank you for unknowingly being a participant in my research here at Alfred University.

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Hey, How are you?

Are you interested in bicycling? It's one of my favorite pastimes. You may already know that I'm assertive and you'll have noticed my large nose. I hope that won't be a problem for you?

You look very tall and extremely handsome. I particularly like your dark eyes. you're not controlling though, are you? I don't think so.

Come out with me this weekend and I'll show you just how thoughtful I can be.

Love from,
Looking4Love

P.S. There's a small chance that I might already be romantically entangled. If this is a problem for you, please give me plenty of notice.¹

¹ Computer-generated love letter, 2018

How Are You?

This can be a deeply personal question from one concerned friend to another. It can be an algorithm from one anonymous person to another. This question does not necessarily need an answer.

I am interested in how context changes depending on our perception. I remember thinking when I first started using messaging apps, how I had seconds longer to react to the person on the other end. I was a lot funnier than I could ever hope to be in real life because I had space and time to react; to think “fast” and reply with the perfect response.

I'm just trying to get to know you, explores conversation through a series of drawings prompted by a back and forth conversation with a computer. I think about the complexity involved in even the most simple conversations. Through language, we attempt to not only relate to the other person but also make our beliefs realized as well. With this push and pull of one person's input versus another, conversations can meander and ultimately transform into a completely different topic.

Technology serves as an important medium for these types of conversations. Specifically, conversations that ask: Hey, how are you? Technology can alter a conversation, but, more importantly, it can also facilitate it. I am using [Alt Text] as one type of system that moves a conversation along. Alt Text bridges the gap between what is written and what is heard. It gives access to a larger audience, making language a prominent medium to communicate.

With the use of fundamental alternative text software, I can fabricate conversation with the computer through an image to text conversation. The software used for, *I'm just trying to get to know you*, is integrated into a PowerPoint system online. Once an image is entered into a PowerPoint slide, the computer automatically describes the image with a word or phrase. I provide a

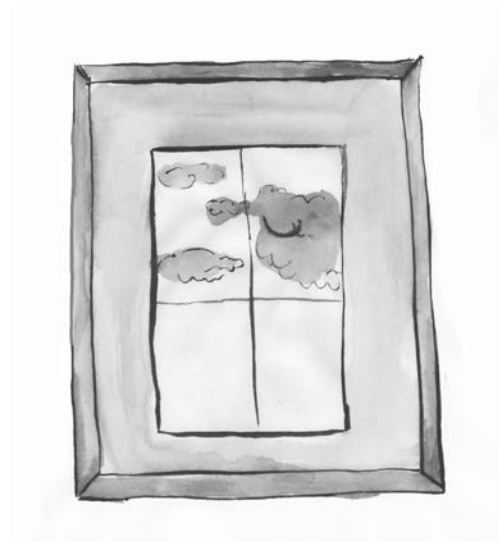
drawn image, and the computer generates a simple text description in response (an example of this conversation is illustrated in *diagram 1*). The computer never describes exactly what I am intending; most of the time it interprets something completely different. Rather than seeing this as a failure on the computer's part, I use the computer's descriptions as prompts for the next drawing. I am curious to keep drawing in this way, wondering if I will eventually understand the computer's system. As a result, a series of black ink drawings are made one after the other.

When I begin with a drawing of what I think looks like a view of the sky outside a window, the computer counters the image with a description, "a picture containing indoor, wall, white, photo." I then respond with what the computer sees: a drawing of a photo on a white wall; but the computer tells me it is "a picture containing sky." I draw a sky and show the computer, but it is interpreted as "a picture containing wall." This process created an endless cycle of misinterpretations, a language that evolved and changed over time creating a bizarrely interesting storybook narrative of drawings and text.

I began to understand the language the computer was using and could predict the general format of what it was "seeing." For example, my drawing of clouds is

interpreted by the computer as a wall. The computer consistently interprets images as indoor, white wall spaces because it is programmed to see office spaces that would be used in a PowerPoint system.

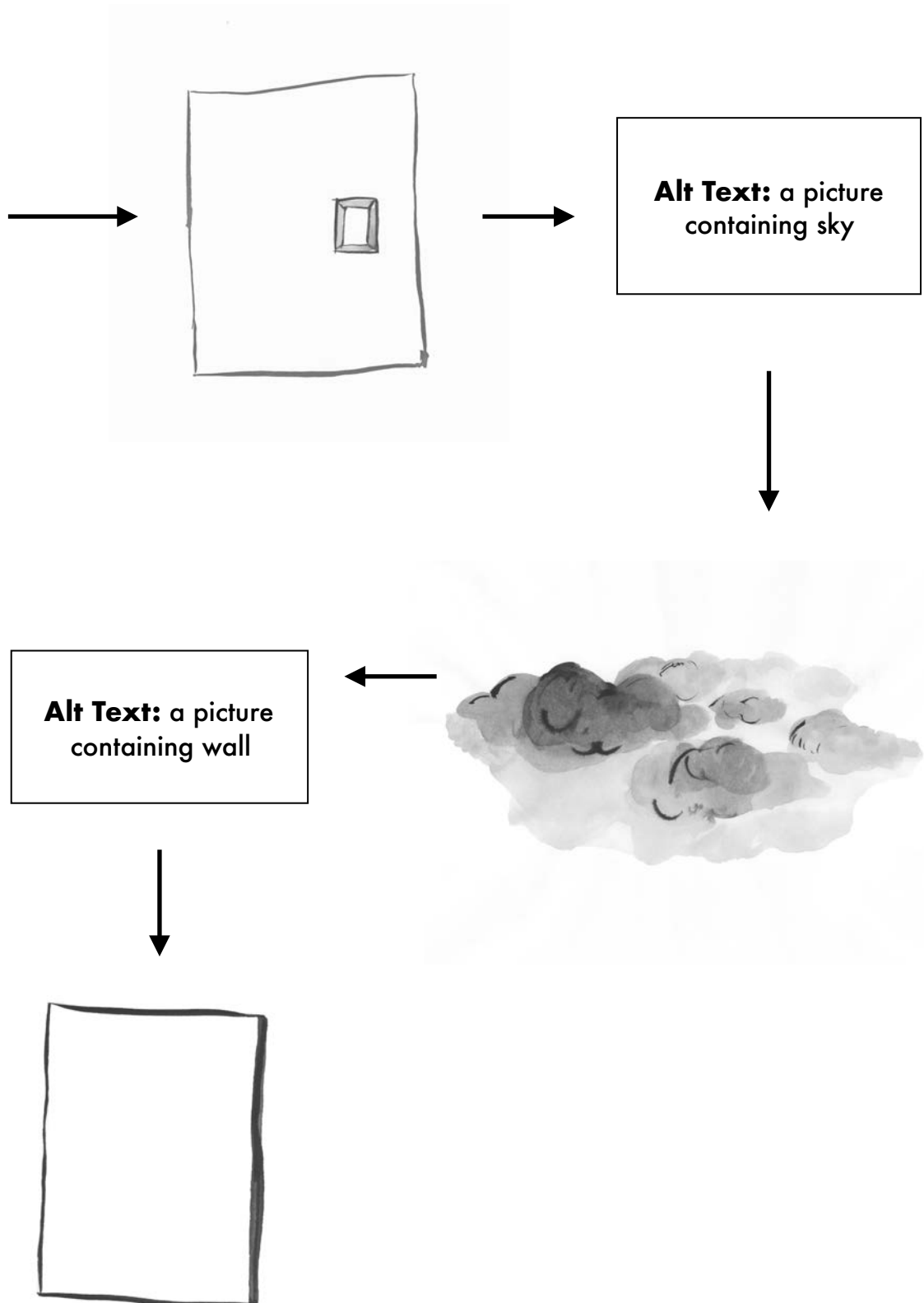
diagram 1



Alt Text: a picture
containing indoor, wall,
white, photo



diagram 1, cont.



"We live together, we act on, and react to, one another; but always and in all circumstances, we are by ourselves. ... Sensations, feelings, insights, fancies—all these are private and, except through symbols and at second hand, incommunicable. We can pool information about experiences, but never the experiences themselves. From family to nation, every human group is a society of island universes."²

² Aldous Huxley, *The Doors of Perception*, 10.

My Here Is Your There

Human interactions are based on our perception of and orientation in space. As a result, speech relies on the context that is given to understand *where* and *when* something is uttered and by *whom*. [Deixis] is a linguistic term used to identify words in our language that represent who is speaking, where they are speaking, and when. Deictic words are void of context and often require more words to understand them:

“You had gone there.”

“I am here.”

“She will be there.”

Phrases that are uttered in the English language are made solely from the speaker’s deictic [center], the point where the speaker is talking in the present tense:

I, here, now.

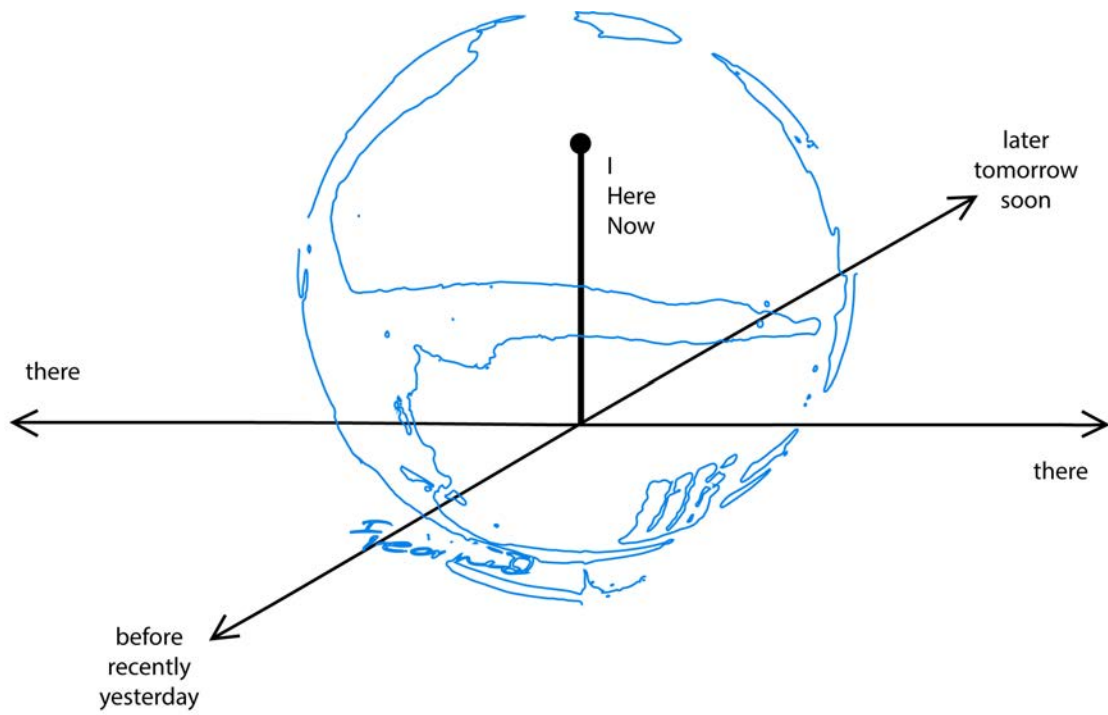
We are constantly living in our deictic center no matter how much we relate or empathize. Our perception is funneled through our own human-centric made

lenses—where we are in the world and how we communicate that to others
(*diagram 2*).

We can relate to others, and attempt to understand outside of our deictic center. Empathetic deixis, according to linguist John Lyons³, is used to explain when this happens. [Empathy] is defined as the ability to identify or even experience the feelings, thoughts, and attitudes of another. This is where our imagination is necessary in order to grasp what another feels. Language is a verbal and written tool to interact and steer our moral compass around each other. It is how we represent ourselves and how [misunderstanding] is created with or without our attempts to empathize with another.

³ Hadumod Bussmann, *Dictionary of Language and Linguistics*, 358.

diagram 2



When thinking about my deictic center, I think about growth and change over time and how my perception changes in relation to my body. The lens symbolically plays a large role in my work, it is a phenomenon that, allows most of us to interpret our world visually. Made of transparent crystallin protein, our lenses are sitting behind our pupil, directing the refraction of light to help us see the world. Crystallin is a water-soluble protein that is packed tightly into fibers making refraction of light possible because of its transparency. These crystallin proteins last a lifetime and are created in a small four-millimeter cluster before we are born. As soon as we open our eyes the lens that is used to form our perception never changes.

Although the lens that I use to see the world has not physically changed, my interpretation of the things I see through it is constantly changing. We edit and modify to understand, simplify, and give value to the things in our lives. The sculptures in my studio represent the symbols of my developing language.

Reflecting on Anne Curzan's⁴ research regarding the change in ourselves through words, I find echos of my own work. Curzan, a language historian, studies our use of slang in language and views it as, "...rich, vibrant and filled with the

⁴ Anne Curzan, TED Foundation

creativity of the people who speak it.” Our language changes as we change because of the ways we continually interpret and reinterpret the world around us.

A conversation is a type of active wandering: a back and forth of what we say and what we see. Alt Text is a way to link these perceptions and show the evolution of language. Rather than using drawings in *I’m just trying to get to know you*, I began to describe images of sculptures in my studio with Alt Text. To visualize my sculptures along with the computer’s text language, I began making illustrations (*diagram 3*).

These sketches relate closely to the Situationists’ movement in the 1960s. The Situationists were a group of people that were known for their concept of the *dérive*. In French, the *dérive* translates directly to drift. The Situationists promoted wandering in order to lose yourself: to break the monotony of everyday life and to be pleasantly surprised with what you find. In order to show this drift in our perception, I created the work, *Neural Net*.

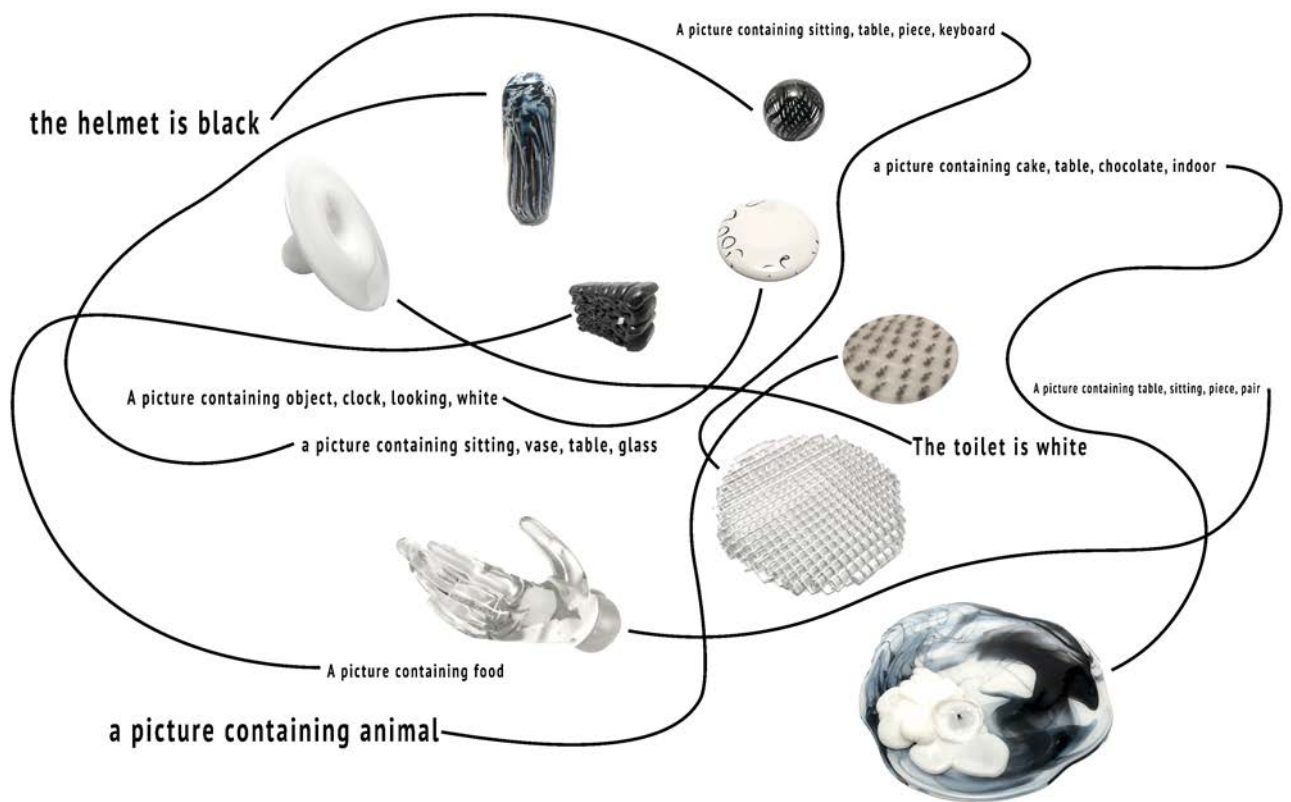


diagram 3

In *Neural Net*, I use the same Alt Text software as before but also incorporate a second system, DenseCap (short for dense captioning). It is a network that is created to “describe salient regions in images in natural language”⁵. The DenseCap program offered multiple options, allowing me to get more varied descriptions of my sculptures. I could ask it to identify one part of the image or multiple. DenseCap uses the Visual Genome Dataset which is a continually evolving collection of images and their matching descriptions. Currently, this knowledge base has 108,077 images collected and 5.4 million region descriptions.

Alt text is important for web accessibility, it gives us access to textual information of images and sometimes the creators of the descriptions themselves. Describing images is a subjective and personal endeavor. How we describe something can change dramatically depending on the context. DenseCap is separate from the previous Alt Text generator because it is a project that can be linked to the individuals that created it.

Even with our advancing datasets and smarter neural networks, the sculptures I create have no chance of being interpreted by this software as I see them. They

⁵ Justin Johnson, et al. “DenseCap: Fully Convolutional Localization Networks for Dense Captioning.”

are uniquely my own. Using Alt Text directly with my sculptures proves how difficult it is to describe anything accurately. For example, if I show the computer an image of a cylindrical-shaped piece of clear glass it is always seen as a “glass of water”.

The installation, Neural Net, alludes to data or information that can be interpreted in multiple ways; however, the information is not so direct. A black and white marble is interpreted as a “black and white shoe”, a white funnel becomes a “toilet”, and a conglomeration of ‘S’ shapes is read as a “brick of food”. The objects are arranged together as a unit, on the floor of the gallery, sitting on individual white platforms like points on a map. Black vinyl lines run from the base of each object to its computer description. The grid that forms on the ground connecting and crossing paths give a physical distance to the strange interpretation.

The text is [derived] from digital images of the sculptures. When looking at the installation as a whole, the idea of following a path or reading a system is obvious from its mapped lines taking up a large landscape on the floor. Since the text is derived through a system that is not aligned with my perception, it allows

the viewer to drift between real and imagined two-dimensional and three-dimensional spaces.

The sculptures are symbols of my developing language in the studio. They are parts of different ideas. The objects are black and white, or clear. Some of them have a bright blue or greenish color. They range in size from the palm of my hand to the height of my body. Some are soft and round like a drop of water, some are hard and square like a brick, and others can be as thin as hair. I come back to these shapes and colors repeatedly as my material language.

Matching the ellipsoidal shape of our lenses, some of these glass sculptures are clear and round. Not many things in the world are transparent: Water, air, glass, plastic, and our lenses through which we view the world. In this installation, you will see a clear glass hand, a tall solid glass cylinder, and a series of distorted looking screens, to name a few. The clear optical quality of glass is unmatched and creates depth and distortion that I compare with our vision.

Trying to understand and have others understand is an ongoing trial and error.

The pieces in *Neural Net* are parts of a whole system, they are isolated universes.

What *happens* to words that are spoken?

I wish I remembered exactly what people say to me. Most of the time I just remember how they made me feel.

Displaying individual letters made of particles of glass, the sculpture *gr(a/e)y* explores the fragility of language. This installation is made entirely of glass through an unconventional process. Glass particles are heated by a laser engraver. The laser runs across a smooth quarter of an inch layer of glass powder leaving the surface, where the laser touches, tacked together. The correct speed and power allow each grain to fuse at a molecular level. Very carefully, each symbol is picked up by and fused to the end of a thin glass rod.

As the letters break apart they represent the creative transformation of words themselves. The curious onlooker can create a gust of breath or a small vibration to cause the pieces to break apart. Over time, even without direct interference, they will slowly deteriorate, as their connections are brittle.

A glass bowl hovers below the letters, catching the small particles as they fall apart. The steel armature that supports the bowl is hidden from direct sight,

making it appear as though the vessel is hovering below the cluster of letters.

The vessel functions as both a bowl that contains and a plate that offers. It is white like a piece of paper but ellipsoidal. There is a small dimple that pulls the center of the bowl further toward the ground creating a belly button space where the glass powders find themselves traveling toward.

I find importance in seeing text, not as a formal and definitive symbol but one that gives us insights into our changing society. To better understand one another is to be open to the many nuances in meaning. The title, *gr(a/e)y*, is an example of the creative qualities of language as the American English word “gray” has the same meaning as the British English word “grey”. It is the *gr(a/e)y* area that makes [communication] malleable.

Highlighting the contradictory nature of our everyday communication, the formal elements of *gr(a/e)y* involve conflicting characteristics. The font is a bold and simple sans serif that turns out to be a delicate and deteriorating material. The wall acts as a blank slate for the installation, allowing the text to stand out like ink on paper. However, the shadows on the wall show the distance that is created between them, adding depth and fuzzy gray zones.

Gr(a/e)y becomes more complex when the viewer questions the materiality of the characters. They can be interpreted as sugar, sand, or some other granules. Glass powders are used to show what happens when words are spoken. The material goes through a transformation from symbols to sand. Glass, which is mainly composed of silica, holds an archival quality. The characters will not last forever; they will break down over time and return to the silica sand particles they once were.

Encountering what is happening to the text rather than what it is saying is important. Tiny holes, gaps, and rough deteriorating edges are seen through the symbols. It is as if you are watching the communication unfolding and fall apart all at once. Overtime the breakdown that you witness is to show that there is still residue left from what was said.



The Waiting Space

Oftentimes, the most impactful interactions were moments where nothing was said at all.

Representing an omission, the [ellipsis], or the (...), is used in our written sentences and also the gestural pause in our messaging apps. The term for this expression is the [typing awareness indicator]. Originally these symbols were invented to give us comfort in our digital conversations. They are there to reassure us that we are not talking into a void. More recently they have come to represent the symbol of nervous anticipation. In the neon work, "*did i go too far?*" I am calling attention to that suspenseful waiting space in a conversation by displaying the ellipsis as a neon sign.

Part of the Wellsville, NY group show *Twice-Removed*, "*did i go too far?*" consisted of three sky blue neon circles that illuminate in sequence one after the other. They are displayed in a long and narrow transom window; above the door and street windows. Placed to the far left of the ten-foot window frame, the neon dots are read as a sentence in progress. The majority of the window, a blank box, waiting for the response.

Held in a high storefront window, the ellipsis sits above the threshold of the gallery. The space is in-between one place and another. It is where we see a message and can choose to enter, or walk away. Placing the ellipsis in this midway space symbolizes the back and forth of conversation.

Enticing by nature, neon has the mysterious ability to lure the viewer into a direct message. It is a universal symbol that calls for our attention. The aesthetic lends itself to seeing a message as a glowing illusion, one that we desire. The ellipsis illuminated as a neon sign holds this space that not only references words but is completely void of them. Blinking nonstop in a repetitive pattern lures the viewer into the hypnotic message that will never be delivered. It gives us a space to think, anticipate, what *could* be said.

Rather than being an eye-catching neon sign; it is camouflaged by the rest of the advertisements that litter the storefronts. Papers, LEDs, and posters are all competing to be noticed. The subtlety of the ellipsis blinking in the day time becomes more obvious at dusk. Their rhythmic presence is a reminder of the impact spaces void of language hold.



did i go too far?

...

A Tap On The Shoulder

Interruptions are part of our interactions with or without a screen.

Communicating via messaging device may be a distracting tap on the shoulder but it eliminates the question of when it is our turn to respond. With the (...) signal on a messaging app, we know to wait for a response.

However, when we interact face to face we are constantly interrupting one another. How do we know the correct time to interject with a response? Gretchen McCulloch writes in her book, *Because Internet*, that “Conversation analysts find that ‘interruptions’ aren’t randomly distributed in conversation: instead, they’re at points when it seems like the main speaker could be finished talking but it turns out they aren’t.”⁶ Overlaps that happen in language are oftentimes the social cues we need to keep a conversation going. When we hear a pause after a question we assume it is our turn to answer.

The coordination within a conversation is something we learn. We have the amazing ability to think of a response while someone is talking and also try to find a point to interject. Oftentimes we overlap conversation with the other

⁶Gretchen McCulloch, *Because Internet*, 209

person we are talking to. These overlaps, as McColloch points out, are much more challenging when communicating via technology.

We have advanced our chat systems since their inception in the mid-1960s to accommodate our natural desire to communicate. An operating system invented in 1969 called TENEX had a chat feature that involved mostly overlaps. It was composed of a single text file that allowed multiple people to edit it and thus have a conversation. What ended up happening is that some conversations were interrupted by others in a single thread. There were no separate boxes for different users, just one dialogue box with text. You would have to wait until you were sure the other person finished their thought to continue with a response. Otherwise, the message could look like this:

Hi, i hope you are doing oyke?s i am gotohdats good!

These first systems of our attempts to communicate beyond face to face were less than perfect. I find the malleability, or the error in the message, a natural human quality. It is rooted in our desire to connect regardless of the physical presence of the person we are interacting with. More importantly, it is crucial to recognize how methods of communication continue to change.

Created to show overlaps in communication, I approached [*Interface*] as a type of interaction. It juxtaposes real-time (face to face) communication with digital (distant) communication. *Interface* is an interactive work created to allow time-sensitive drawings to occur between the viewers. This is done by using a large sheet of glass coated with phosphor powder. The powder is made of strontium aluminate, a rare earth mineral that can hold a natural glow for up to six hours. These naturally occurring elements can charge in the sun or UV light.

The glass is displayed at eye level and is attached perpendicularly on one side to the wall, allowing people to walk on either side of its six-foot length. Since the glass is coated in phosphors the surface remains an opaque, creamy white. The only way to see the person or people on the other side is to walk around the sculpture. Six light pens are provided, referencing a quill pen or futuristic writing implement. The pens hold a 365-395nm range of non-visible light that is safe for humans to see. The light emitted takes on a deep purple color which allows the phosphor powder to hold a charge. By pressing the button on the side, the pen illuminates, leaving a mark where it is pointed. The viewer is prompted to interact and create marks of their own. Tic-Tac-Toe, faces, squiggles, and text fill the surface of the glass in the form of a glowing blue line.



The glass becomes a two-sided [screen]. One person can write, **hey there!**, and the person on the other side would see the reverse, **!ereht yeh**. Since up to six people can interact at the same time, drawings can be edited or drawn over.

I am interested in the duality of the word screen because it relates to our everyday interactions. We are constantly deciding what parts of ourselves to show one another and what we want to conceal. *Interface* is an installation where anyone can collaborate and what is revealed can be immediately concealed by another person or with time, fade away forever. The word, screen, is a [contronym]. It can show something to us like a movie or an ad. It can also have an opposite meaning: to hide something from view, like a privacy screen.

Interface is also representative of face to face communication. With people participating, it becomes an active space, full of signs and symbols. The work is alive with these back and forth, real-time, interactions. The messages drawn will weaken after a few minutes and eventually disappear. This work allows you to draw alone until someone on the other side of the glass interrupts your thought. With or without invitation, there is no restriction as to who can draw on the surface or where they can leave a mark. These interruptions become collaborations.



How Are You, (Now)?

Today, this phrase is less of a question in passing, but a question with significant meaning. Spreading worldwide, the COVID-19 disease is creating a global pandemic and healthcare and economic crisis. As a result, the greatest defense we have against the virus, according to the CDC, is through social distancing.

Gaining prevalence in the United States since March 2020, the term [social distancing] refers to the physical exclusion of individuals or groups from each other's lives. I wonder how much social distancing we are already partaking in; we have been connected via social media since the late 2000s. Regardless of whether we can partake in each-others lives physically, we are still able to cause widespread panic, humor, or concern to others without even seeing their faces. We chat in messaging apps, emails, and letters to check on one another, but because the virus is extremely contagious, we rely on our devices in even the hardest moments. Some have said goodbye to their loved ones through video chat, the image on the screen is the last interaction they have. The social distance in these instances has become more tangible than ever.

The necessity of technology today has shifted my extremely critical viewpoint to one that includes a deeper understanding of what I cannot change. The messages that go viral now spread like this disease. Both seem impossible to control.

Communicating out of context and through devices has become more complex than ever. Words that are spoken now have the power to be long-lasting. The silence that lingers between those words can be even more impactful still.

I realize that this technology has afforded us the ability to connect, even in strict distance. When we message someone, “How are you?”, the intention behind the message is no longer void of meaning—it can bring solace to someone in isolation. Now, more than ever, is an important time to question how we communicate.

CODEX

[Alt-text] alternative text is a word or phrase used in an HTML (Hypertext Markup Language) document. It helps viewers understand the content of an image online. The version used in my thesis was a part of a Microsoft360 online PowerPoint system or the DenseCap program.

[Center] inward self-reflection referring to our deictic center. It is who we are and how we see the world.

[Communication] An exchange between two or more people, involving signs, symbols, speech, or writing.

[Conronym] words with opposing definitions. The cononyms in this paper are:
screen (to present or conceal something)
dust (to have fine particles or to remove them)
transparent (invisible or obvious)

[Deixis] Words that need more words in order to understand them, specifically contextual markers. English pronouns are examples of deictic words.

Deictic words are broken down into person, place, and time:

Person- describes the speaker or the person being spoken to

Place- refers to locations. The place can be used to refer to someone that is not physically there but metaphorically. In other languages, the spatial locations can become more complex where the actual distance from the speaker or the addressee is included.

Temporal- relates to the time the sentence is referencing (later, soon, and now).

[Derived/ Derive..] - interpreted or taken from something else. In this context, I am also thinking about the french word (dérive) which means to drift. In my process, I am constantly deriving new meaning with objects and language allowing them to drift in and out of conversation.

[Dustsceawung] This word no longer exists in modern English. The origins are the beginnings of our English language as Old English. This one word portrays the lofty idea of what all things become. It is a humbling reminder that we and everything else eventually turn to dust.

[Ellipsis] or elliptical n. v. adj. adv. the grammatical reference to ellipsis or the (...), the actual form of an ellipse, and a type of speaking or writing

[Empathy] an emotion that is shared with someone else. It requires a full understanding of another's feelings. It runs deeper than sympathy because you can feel the actual emotion of someone else.

[Interface] The surface between separate spaces that creates an intersection or commonality between them. Like the screen, it creates a barrier but it unites two people in communication.

[Misunderstanding] The disconnect between two or more people. Where one person's perception does not match with another person's thought. When I use this term in this context I mean the deep underlying misunderstanding, the one where the other person hears you but can never fully grasp all the experiences that led you up to the point of speaking in this way.

[Screen] a contronym that can mean to reveal or to conceal. The screen is the material representation of our interactions.

[Social Distance] socially engaging with one or more people at a distance, something we partake in every time we use a screen.

[Typing Awareness Indicator] the (...) in a messaging app. I don't know what to say anymore, my thoughts are trailing, or I could say more but I don't want to get into it.

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