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Acknowledgements

For the past two years, my studio has been my safe space, and it's been good for my creative health. On my worst days, I found value in the process of getting my hands dirty.

I would like to start by expressing my gratitude to the MFA department for their endless support, and for giving me this opportunity, it has been a privilege to experience this. I would especially like to thank my committee, Rab McClure, Thomas Modeen, Michael Wirtz, and Richard Blackwell, for pushing me to create the very best outcome. Special thanks to Rab McClure for believing in me, and helping me exceed the expectations I had set for myself. Thank you Dr. Thomas Modeen for constantly reminding us that the sky is not the limit, and "we only go onwards and upwards".

To my parents, thank you for always going above and beyond, none of this would have been possible without your lifelong sacrifice to get me where I am today. To my siblings, Shahd, Abdulla, Abrar, and Fawaz, thank you for your endless support and love. Sam and Mimi, thank you for being my second family. Aisha, thank you for everything, especially your creative space and energy. To my classmates: Hazem, Sidra, and Nourbano, we've experienced so many good times and bad times together, but we still made it. I'll always value sharing this experience with all of you.

Here's to going onwards and upwards.
“Stay motivated, continue to learn, remain curious, be open to the unexpected, and use the power of your creativity well.”
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Abstract

Twitter has over 313 million users, with 500 million tweets produced each day. Society's growing dependence on the internet for self-expression shows no sign of abating. However, recent research warns that social media perpetuates loneliness, caused by reduced face-to-face interaction. My thesis analyzes and demonstrates the important role facial expressions play in a conversation's progress, impacting how people process and relate to what is being said. My work critically assesses communication problems associated with Twitter. By isolating and documenting expressive facial reactions to a curated selection of tweets, the exhibition creates a commentary on our contemporary digital existence, specifically articulating how use of social media limits basic social interaction.
I was experiencing FOMO (Fear of Missing Out). FOMO leads to the inability to enjoy the present moment due to the fear of missing out on an opportunity for social interaction. I found myself on the California Coast, sitting by the most beautiful beaches, and witnessing the most stunning sunsets. Hiking on my own, I reached the top of a mountain and got the most amazing view of the Black Sand Beach. I was in one of the most beautiful places in the world, and I felt like I was missing out on a daily routine in my home country.

As the days went by, it stopped being uncomfortable, and it started to become liberating. I began to notice that my surroundings were so beautiful. I wondered how many beautiful sights I have missed, obsessed with my phone. I realized that I had been substituting virtual obsession for real experience.

I made the decision to delete all social media apps from my phone for a week. The second I deleted the apps, I felt a wave of relief. At first it was lonely, I had a hard time keeping my days busy. When I started making friends, I realized how valuable conversations and interactions really were. I would spend my mornings reading in different coffee shops, and that itself was a conversation started with strangers.
I would get approached by people who have read the book I was reading, or thought about reading it. I found that what people had to offer was more life-altering than what the internet had to offer. I was also aware that the internet was a place to hide out in, because if you were having a bad day, you can appear to have a good day on social media. In a way, social media gives us the ability to be two different people at the same time. After my trip, when I was able to reflect on it, I realized that technology, specifically social media, which has become a pervasive factor in our contemporary society, has resulted in an emotional void caused by not having immediate personal contact.

Whenever I had a conversation with anyone, I would not want it to end. When the conversation ended, I would find myself wanting to share the insight I learned with just about anyone. I began sketching to keep myself busy, and writing about my interactions.

As humans, it is important for us to feel a sense of belonging. Research has shown that excessive engagement in social media intensifies feelings of loneliness. According to the article "How People Judge Us Online", posted by Psychology Today, people are more comfortable sharing their thoughts online rather than in person, out of a fear of being judged.
We tend to believe that our feelings and problems are unique to us. We forget that there are 7.6 billion people who have probably experienced a similar feeling. In a journal article published by the Journal of Medical Internet Research, research has been conducted to prove that face-to-face communication becomes intimidating, whereas tweeting about a problem is a more appealing option to some people.\(^1\)

It provides them with the opportunity to voice their opinions. Tweeting is used to connect, socialize, and reduce isolation.

Many Twitter users voiced that Twitter is the only setting where they feel they can connect and socialize with others.

It is a venue for communication, because they feel like they are not being heard in the real world. One user said, “I am able to communicate with other people that share the same experiences”.\(^2\) Another user said, “I do it so I do not feel like I am the only person in the world with these concerns.” Based on the data analysis, tweeting provides the users a sense of community.

At the end of the day, knowing that we are not alone and having a sense of belonging in this world can go a long way.
This thesis aims to create a commentary and raise awareness regarding our current digital era.

Intention

This research aims to address how social media has resulted in an emotional emptiness caused by not having immediate personal contact. Sometimes, social media depersonalizes experiences, which results in people searching for physical, tactile experiences. The boundaries of this research are limited to exploring virtual entities and representing them through analogue means - by developing them into physical representations.

I am creating analogue response to a digital experience. This research is an exploration of specifically Twitter. My research intentions are to understand and show why the users have found a sense of community online, and to target the Twitter users to understand that finding a sense of community outside the Twitter community is more valuable.

Although this research explores various social media aspects and Cyberpsychology, it is not meant to be a treatise within social science. This thesis aims to create a commentary and raise awareness, but it is not meant to be applicable to all aspects of online activity. The purpose of this thesis is not to say that technology is bad. It is simply a way to raise a discussion of our digital existence.
Literature Review

Social Communication Via Nonverbal Expressions

My research examines face-to-face communication, an important aspect of human interaction vital to understanding human behavior. Facial expressions are part of a complex nonverbal communication system. A person’s facial expressions shape the behavior of those with whom they interact. Facial cues signal whether to approach or avoid a person, and influence judgment and decision-making. During the first years of life, infants assess their parents’ facial expressions—and displays of fear, anger, and happiness—to determine whether or not it is safe to approach new people and unclear situations. Darwin argued that the facial expressions happiness, sadness, anger, and disgust are universal, and can be recognized in all cultures all over the world. His claim was supported by a study done by Dr. Paul Ekman, proving that these universally recognized expressions are the basic emotions beyond humans, each with its own characteristics, though he identified two additional emotions to Darwin’s list. According to Ekman, the six basic emotions are happiness, sadness, fear, anger, surprise, and disgust.

Recently, a new study published in the journal Current Biology challenged this view and asked volunteers to distinguish between fear and surprise. Their findings showed that those two emotions were confused with each other, which suggests that there are actually four basic facial expressions, rather than six. Thus, the four basic emotions of humans are happiness, sadness, anger, and disgust. Despite the fact that research has categorized basic facial expressions, within each of the basic categories, nuances exist. Gestures such as eyebrow flashes, narrowed eyes, raised eyebrows, and instant smiles communicate information. When we communicate using social media, we eliminate this face-to-face interaction, omitting vital cues conveyed through nonverbal expressions. For example, sincerity can be mistaken for sarcasm when received on a screen. Assessing the writer’s “tone” becomes tricky, risking miscommunication. The ability to read the nuance in facial expressions is a crucial part of understanding what people are trying to say.

4 “Fundamentals of Verbal and Nonverbal Communication and the Biometric Issue,” V.
6 Tracy, Randles, and Steckler, 27.
7 The University of Glasgow, “Written All over Your Face,” 1.
8 The University of Glasgow, para. 15.
According to Bruno Edmond, Cyberpsychology is defined as, “…the study of the impact of internet, multimedia, and virtual reality on behavior and society”. The internet’s evolution has resulted in two groups people: digital natives and digital immigrants. Peter Paul, a researcher from Gallaudet University, defines digital natives as people who have grown up surrounded by technology, who have never experienced life without it.

In terms of self-identity, this study shows increased internet use comes from the attraction towards electronic communication, because the disappearance of facial expressions and eye contact makes electronic communication less threatening. This can lead to increased levels of social isolation, which thereby leads to low self-esteem, fear of rejection, and weak social skills. Digital immigrants are people born earlier, who became accustomed to the use of technology as it emerged, who may not be as comfortable with it as digital natives.

The existence of addictive internet use has been correlated to social, psychological, and occupational impairment. Kimberly Young, a licensed psychologist and an internationally known expert on internet addiction stated, “Increased levels of depression are associated with people who are addicted to the internet, and excessive internet usage is a symptom of anxiety and depression”. Erik Erikson, a psychologist known for his theory on psychological development of human beings, stated “The quality of our understanding of life experiences, values, and beliefs fosters a level of continuity that strengthens our fidelity towards self-understanding.”

11  Young and Rogers, “The Relationship Between Depression and Internet Addiction,” para. 2.
Social media has its pros and cons, however, the negatives often outweigh the positives. According to Peter Paul, the internet makes us more knowledgeable. Searching for information is now an easier task, given the effectiveness of online digital search engines. Moreover, the fact that our brains are exposed to so many different ways of online learning has led our brains to evolve and change. New words and phrases have been added to our mental dictionary such as “tweeted, blogged, googled.” The idea of a “story” now also refers to an Instagram or Snapchat story, as well as a person’s identity.

However, having access to too many platforms can also be detrimental. Paul also argues that excessive engagement in social media leads to people being unable to think for themselves. Kimberly Young, a psychiatrist at the University of Pittsburgh, complements this statement by arguing, not only are we unable to think for ourselves, we are also unable to communicate our wants and needs to others. Virtual friends begin to appear less intimidating than the real world. This trend negatively affects self-identity, because social isolation leads to low levels of life satisfaction.

According to Larry Dossey, an MD at the University of Wisconsin, increased social media use leads to increased feelings of loneliness due to the fact that real face time with others is being substituted by virtual relationships and social media contact. Thus, despite the fact that social media can have positive effects on self-identity, it has significant downsides as well.

14 “The Digital Generation: The Good, the Bad, and the Ugly,” 408.
15 “The Relationship Between Depression and Internet Addiction,” 27.
Handmade VS Digital

Despite the popularity of machine-made products, handmade products still have a place in the market and are widely appreciated. Dr. Christopher Fuchs, who interviewed handmade producers to gain insight into the appeal of handmade artifacts, concluded the answer is simple: love.”17 Fuchs references Karl Marx, saying, “Artisans often devote years to master their craft, and artisans invest some of their selves in their craft.”18 Passion, or love for one’s work, has been identified as what makes handmade products more attractive. It seems possible that handmade (versus machine-made production) affects production attractiveness through psychological and symbolic cognition. An object that is handmade is seen as infused with love, which makes it more appealing than a machine-made object. Not only do handmade objects have greater appeal to consumers, they also benefit makers in terms of the evolution of human intelligence.19 Frank Wilson discusses the human hand’s evolution and how its communication with the brain affects areas such as neurology, and psychology. Wilson mentions the dynamic interaction between hand and brain, and how it relates to the unique character of human thought, growth, and creativity.

We are guided by our hands, and we are permanently shaped by the knowledge that comes to us through our use of them. Our hands influence learning and we, in turn, use our hands to leave our personal stamp on the world. He also states it is important to remember what can be done without computers and to remind ourselves of what may be lost when we do use them.

Peter Paul has mentioned that several scholars have declared our brains are evolving and changing due to digital exposure. Repeated exposure to network connections through activities such as e-mailing, Googling, and other technological experiences can sharpen our cognitive abilities.20 Thus, both handmade and digital productions could potentially benefit cognitive development and physical development.

17 “The Handmade Effect: What’s Love Got to Do with It?,” 98.
FOMO, (fear of missing out), is considered a form of social anxiety—a compulsive anxiety that one might miss an opportunity for social interaction. It is the belief that some other satisfying or more rewarding event is happening elsewhere. Research psychologist Andrew Przybylski investigated FOMO and found that it is the driving force behind social media use. His study also linked low levels of life satisfaction to high FOMO. Individuals with high levels of FOMO end up feeling lonely because they substitute social media contact for true human interaction. FOMO and internet addiction have become a public health crisis in South Korea.

In order to battle the problem, over 200 counseling centers and hospitals now offer treatment for internet addiction. A person suffering from FOMO feels happier online than in the real world, and panics when cut off from the internet. Brain damage has been documented among heavy internet and social media users. Scientists have found signs of damaged gray matter in the brains of internet addicts, and have proven that it not just our brains that are suffering from FOMO, our physical health is too. Texting and driving is now the leading cause of death for teen drivers worldwide, and it comes from the fear of missing out on a social interaction. Thus, FOMO creates problems for both our mental and physical well-being.
Precedent Studies

Daily Haptics

Daily Haptics, an interactive sculpture by Marie Rouillon, is designed to respond to society’s current digital era and aims to re-engage people with tactile, material experiences. The sculptures consist of seven seemingly-identical cups that have very different physical properties. This project is relevant to my design direction because I am exploring how the digital world lacks a multi-sensory experience, and the idea that visual information alone is often not enough. One needs to touch in order to get full information. For example, in this precedent one cup is light, another is heavy, and one is soft and hard to grab. The audience is asked to interact with the objects to understand how they function. Through my research I have explored attraction to materiality and tactility, and it is hard to get that tactile experience when dealing with digital objects or forms. The application of a surface texture changes the original form of an object. The sense of touch communicates sensations and feelings, and we are able to react to what feels good and what does not feel good.

Rouillon, Daily Haptics.
Touch

Touch, by Zanat + Studioisle is a collection of hand-carved furniture composed of benches, trays, and lamp tables. The collection aims to engage the audience in our instinctive impulse to feel and touch the objects we see, and it reflects our craving for more tactile surroundings in the digital age. The collection of objects is fully handmade, without use of any digital or technological assistance. It is interesting to me and relevant to my design approach because I am exploring the haptic nature that is lacking in the online environment. Textures that can be created using hand tools have endless possibilities. Tactility emphasizes the idea that what we are missing from the digital world is materiality. There is a physical, tactile connection between us and the objects with which we interact. When we are able to manipulate an object by touching it, it begins to feel like a living thing, stimulating our senses.
#Mask-Sensing The Internet

#Mask-Sensing The Internet, by RafaelElbaz aims to create a more emotional and sensual response to what is be written in an online environment. The internet has turned into a place where human conditions and their thoughts are in documented form. It is a visual experience, focusing on written text.

The #Mask encloses the head in order to isolate the individual from distractions around them, and the eyes are covered to intensify the sense of sound. The headphones that are covering the ears convert online text into a 3-D stereo sound sensation. The content is a live stream from twitter, giving the user the ability to access thoughts and tweets of others.

The function of the #Mask is to create a more empathetic understanding of human feelings. The social media platform, Twitter, is a modern method for humans across the globe to interact and exchange ideas.

The #Mask will be simply manufactured from three components: a head covering, a set of over ear headphones and a blackout eye mask. By modifying the way in which we perceive the world, the #Mask is designed to create a more empathetic understanding of human feelings.

Glitches are synonymous with the internet. A glitch pattern will be etched into the acrylic before being vacuum formed to produce the outer shell. This will enable the user to touch a unique digital texture, providing a more sensual experience.

232 million users posting 500 million tweets per day not being heard........

Twitter is a rich vibrant extension of human communication, providing an extensive and continually updating resource. This project will humanise the never-ending tweets and offer a backdoor into the minds of others. Twitter provides a huge database of tweets that can be transformed into sound for this project. Engaging with specific areas of interest will provide the most thought provoking results, for example searching:

Location e.g. London / Milan
Language e.g. Japanese / Danish
Phrase e.g. Terrorism / Design

Figure 9.0

Figure 9.1

Figure 9.2
Apple Animoji

Apple’s Animoji is a camera that projects and analyzes 30,000 dots across a user’s face, creating a high-resolution map of facial features.\(^{27}\) Apple has the ability to track more than 50 muscle movements and map those features onto the user’s choice of emoji.\(^{28}\) As the user’s face changes from a frown to a smile, the emoji changes in sync with it. Currently, the function of the face-tracking software is to create talking animojis that mimic the user’s emotions, however in the future the goal is to allow it to predict the user’s emotions as well. Apple is working with a face-tracking software that analyzes and predicts human emotion. In essence, machine learning is beginning to figure out how humans feel.\(^{29}\) This relates to my thesis in terms of understanding the effect of social media. Apple creating this program expresses the need for facial communication or something that displays human emotions during communication on a flat screen. Emotion-revealing facial expressions provoke responses, and the response is usually mirroring the other member of a conversation. It is a mirror response that helps promote feelings of belonging, relatability, and understanding. Moreover, the feelings of connectedness due to these nonverbal signals foster sympathy. Emotional expressions presented by a face are a communicative component, can also entice an empathetic response.

\(^{27}\) Stinson, “Apple’s Animoji Will Teach You To Love Face Tracking,” para. 1.

\(^{28}\) Stinson, para. 1.

\(^{29}\) Stinson, para. 9.

\(^{22}\) "FOMO, Digital Dementia, and Our Dangerous Experiment," 70.
Religious Art + Social Media Culture

In Religious Art + Social Media Culture, by Carlo Fantin, Fantin uses paper as his artistic medium. He was drawn to its physical properties, such as the ability to manipulate the dimensions of the sheet and the fragility of the material. Fantin crafted a series of hand-cut paper compositions that depict portraits through the back-and-forth relationship between negative and positive space. He wants people to experience how the image changes depending on their distance from it. The series he created represents religious iconography and symbols from today’s social media culture. Facebook, Instagram, and Twitter logos are added onto the face and body of Virgin Mary. This relates to my design approach because I am looking into internet addiction, and how people religiously refresh their social media apps. The portraits raise questions about what we value and prioritize in our current internet age. The artist’s pairing of religious iconography and social media logos comments on our religious devotion to modern social media, suggesting the internet has become our modern day religion.

30 Fantin, Religious Art + Social Media Culture.
Realistic Human Masks

Realistic Human Face Masks is a project done by REAL where photorealistic human face masks are custom-made for each client, mimicking their faces on the masks. The Japanese company creates masks and mannequins of human subjects. The company does this by using a 3D photo form technology, a technique of taking photographs from a range of angles and imprinting the images on vinyl chloride resin stretched over a 3D-printed mold. This process is able to replicate details such as skin texture, wrinkles, and blood vessels. The reason this applies to my design approach is because I aim to create human expressions as either masks or head mannequins. My goal is to get them to look as realistic as possible. Experimentation will involve molding, 3D scanning, and 3D printing.
Experimentation
When I started this project, I looked at the power of words. As humans, many of us have the urge to give voice to our feelings and thoughts. Twitter is a place for people to empty out the contents of their minds, with the option of revealing or withholding their identity. I started searching for tweets with the hashtag #venting, to explore how individuals express themselves on Twitter. What came up was a variety of emotions, but the common thread amongst them all was how raw and expressive people were online. I began the selection process by choosing the tweets that felt like conversation starters, sentences that were hanging and begging for a response.

Figure 13.1

I’ve never felt more uncomfortable and gross in my own skin than I do right now 💓 #venting #ignoreme

Figure 13.2

That #feeling you get when you take that first sip of your #Coffee 🍵

sometimes you feel empty without knowing why, like you lost something precious but completely forgot what it was.

Figure 13.2
I started showing tweets to people I know, while observing their reactions. At first, I labeled each tweet as an emotion, such as “sad,” or “disgusted.” Then I realized that my approach was wrong; people react to things differently, and my idea of “happy” is not necessarily someone else’s idea of “happy.” More importantly, judging the tone of the tweet is difficult. For example, in Figure 13.2, some people laughed, believing it was meant to be a joke, whereas other people cringed. Also, the tweets got people talking. Many of the reactions were “I can really relate to this,” or “that must be really difficult.” The reactions to the tweets varied from empathetic, to sympathetic. I used a survey process to finalize the four tweets I would be using, and it was based on what people reacted to the most in terms of either being able to relate to it, or empathize and attempt to understand what the Twitter user was experiencing.
This led to my next reflection. Despite the idea that the absence of facial expressions makes electronic communication less intimidating, absence of facial cues also leads to needless miscommunication. Things get lost in translation, and when we become too engaged in the world of social media, we give up our social skills, and our ability to read/understand people. Rather than expressing the universal emotions through tweets, I decided to visually represent the reactions of the audience reading the tweets.

Why Masks/Faces

Specifically, the nuances that come with reading the responses in regards to people exposing their thoughts online. The purpose of this is to create a physical manifestation of a digital dynamic. The facial expressions are a way to show the twitter users that people are listening, and they want to listen. Rather than sharing these thoughts online without getting a response, this is a way to display that people do care. There is a connection between verbal communication of emotions, as well as facial expressions. Therefore, I began by exploring facial expressions, and how to best represent them.
I began by using a 3D scanner to assess the accuracy of the facial details. The most important factor is capturing the traces of laugh lines, wrinkles, slight eyebrow raises, the nuances that would distinguish one reaction from another. I found that the 3D scanner did not give me the accuracy I was looking for, so I moved onto Smooth On, which is a molding material used to mold faces, and capture the detail of skin. The initial attempt was to note the quality of the detail, and it was great. The detail was down to the last strand of eyebrow hair. After that, I molded my face whilst maintaining a smiling facial expression, and it was more difficult than I expected. Holding that expression for 10-15 minutes was not that easy, therefore molding was an option I decided to turn away from.
Photogrammetry

Afterwards, I began experimenting with photogrammetry, the technique of taking multiple overlapping photographs and stitching them together to create a singular 3D object. The idea is to get as many photographs of the face as possible, from all angles.

Figure 15.0
Import the pictures taken into the software

Figure 15.1
Use the “Align” command to align the various camera angles - This will build a sparse point cloud

Figure 15.2
Use the “Build Dense Point Cloud” command to create more points to help the reconstruction of the mesh

Figure 15.3
Use the “Build Mesh” command to create a 3D mesh from the point cloud
Use the “Freeform Marque Tool” to select un-used points and delete them. This is done to clean the mesh and make it more optimised.

Import the 3D scanned mesh into Maya and use it as a reference to recreate a clean mesh of the model’s expression. This is done to optimize the mesh for 3D printing.

Use the “Build Texture” command to create a high resolution (8K) texture map for the mesh. The texture information comes from the pictures taken at the start.

Import the 3D scanned mesh into Maya and use it as a reference to recreate a clean mesh of the model’s expression.
After printing the 3D models, I started to mold and cast them, to experiment with materiality. Tactile touch is lost in the digital world, and touch also influences cognitive processes in humans. Something that is cold to the touch is uninviting, whereas something warm feels like home. I began exploring how materiality can represent, or oppose my concept.
Material Exploration

Using the 3D prints as a starting point, I began to experiment with the qualities of materials. I started looking at the concept of Aware Anthropomorphic Form. Anthropomorphism is the attribution of human characteristics to objects. Aware Anthropomorphic Form recognizes the social qualities of being human, and it emphasizes that nature. They are forms that suggest they possess a knowledge of self in relation to others, and how objects or materials can have the same qualities that humans possess.

<table>
<thead>
<tr>
<th>Material</th>
<th>Material characteristics/qualities</th>
<th>Human characteristics/qualities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pine Wood</td>
<td>A living, breathing material. Strong, but easily bruised. Qualities include strength, stiffness, and stability. A warm material. Character emerges with the passage of time as the grain and texture deepen.</td>
<td>A living, breathing animal. Strong, but vulnerable. Character emerges with the passage of time, as a lifetime of emotions register on one’s face, in the form of expressive lines and wrinkles.</td>
</tr>
<tr>
<td>Resin</td>
<td>Certain types of plants, when injured, produce resin, becoming even stronger as they heal.</td>
<td>Certain types of people respond to injury (emotional or physical) by producing and creating art. Creative activity feeds energy and builds strength.</td>
</tr>
<tr>
<td>Paint</td>
<td>A painting is the result of a layering process. The accumulation of brushstrokes, colors, and textures make up the artwork.</td>
<td>The accumulation of gestures, interactions, and moments build up our personalities and characteristics.</td>
</tr>
<tr>
<td>Sand</td>
<td>Dynamic, shifting, windswept; responsive to environmental influence. Without containment, will disperse and scatter.</td>
<td>Dynamic and adaptive, responsive to influence and nuance. Without focus and motivation, our energy and efforts go to waste.</td>
</tr>
<tr>
<td>Wire Mesh</td>
<td>From joined individual wires, a strong fabric develops, flexible but tough. Can form a self-supporting structure, transparent but resolute.</td>
<td>People are wired together from the inside, with built-in tendencies and instincts. Social connections and links form supporting structures.</td>
</tr>
<tr>
<td>Material</td>
<td>Material characteristics/qualities</td>
<td>Human characteristics/qualities</td>
</tr>
<tr>
<td>--------------</td>
<td>---------------------------------------------------------------------------------------------------</td>
<td>---------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Paper Pulp</td>
<td>Separation leads to creation. Pulp is made by separating fibers from materials. An abundant raw material, a paper pulp fiber, alone, is weak. Formed with other fibers, under pressure, a new material is born.</td>
<td>Humans are shaped by life’s circumstances. The people surrounding us shape who we become. Alone, we feel vulnerable. Together, we form communities and accomplish remarkable things.</td>
</tr>
<tr>
<td>Gold Leaf</td>
<td>Begins as a nugget—but is transformed through persistent effort and beating into a delicate foil, light as air.</td>
<td>Flexibility, in the face of life’s challenges, yields wisdom and lightness of being.</td>
</tr>
<tr>
<td>Concrete</td>
<td>Fluid at first, then rock-hard and enduring; strong in compression, but weak in tension. Perceived by many as rough and crude, its grace and beauty emerge when formed with care.</td>
<td>Rather than seek approval and shape oneself according to the expectations of others, a person has to value herself and feel good in her own skin to truly feel beautiful.</td>
</tr>
<tr>
<td>Soap</td>
<td>Cleansing, bubbly, purifying, fragrant.</td>
<td>Capable of self-help, healing, growth, and positive improvement. Able to cleanse ourselves from the inside out.</td>
</tr>
</tbody>
</table>
This was the reaction to the tweet below, and the main form I was working with. I began by manipulating it through different materials, and observing how the material itself can also tell a different story.

“I’ve never felt more uncomfortable and gross in my own skin than I do right now.”
In the figures shown above, I experimented with the qualities of resin and how to manipulate its transparency. My observations showed that when using a different material to manipulate the original form, instead of the reaction looking so angry and disgusted, it started to look more neutral and calmer than the response of clay and PLA. After that I tried concrete, because the nature of the material is cold to the touch and feels uninviting.

Using different materials on the same form began to show nuances of expressions. The materiality began to affect how the original form can be seen. For example, in the figure shown below, the resin and gold face might look disgusted but might also seem hopeful. It has a calmer feel to it. Whereas the face on the left looks extremely disgusted, and the frown lines appear to be sharper.
Figure 17.3

“That feeling when you take the first sip of coffee in the morning.”
“Missing a dead person is painful.”
During the process of this thesis, my aim was to reflect on and question our current digital era. By researching the depths to which social media depersonalizes experiences, I was able to explore this topic and gain more knowledge throughout the creative process, mostly because I had a very hands-on, analogue approach to a digital issue.

Within my exploration of materiality, I was able to reflect and find value in disconnecting, and to look at materiality and haptic touch from a new perspective. The experience of creating and using materials is a sensory experience that allows us to explore our surroundings and understand ourselves better. Tactile sensations allow us to discriminate between objects and (unlike vision), provide us with a full sense of space.

Even though digital devices are evolving, as humans we crave the sense of touch. A multi-sensory experience allows us to empathize and sympathize with others. Facial expressions are a huge part of the multi-sensory experience that we lack in the digital world. By shedding light on the absence of facial expression in online communication, and expressing emotions through materiality, I was able to understand that both vision and touch are essential to developing a greater understanding of ourselves, as well as others around us. The facial expressions serve as an empathetic understanding of human feelings. Responsiveness through face-to-face communication enables a sense of community in the real world, rather than finding belonging in an online community. Although Twitter can be a venting platform, it is also isolating us from exchanging ideas and interacting with the people around us.

In terms of future direction, from a neurological perspective this can be expanded on in terms of how each material can affect us and can expand our thinking. Different materials make our bodies respond differently. A rough surface gives us a different biological response than a smooth surface.

I see this project evolving in the future in different directions. It would be interesting to explore how different facial structures differ in their features and expressions. Taking this project further would mean getting multiple reactions from different people, instead of using the same person for all the emotions. To add to this, people of different ages will surely make a difference in facial expressions as well. Someone with deeper wrinkles will have more expressive, accented frown lines and laugh lines.

The facial expressions offer empathy and understanding in our daily lives and interactions, and interacting with materials as living beings helps us disconnect from the digital world, and find value in haptic involvements. In the future, bringing the haptic nature to the online environment would be a way to build a bridge between the analogue and digital world.
Social Soul

I've never felt more gross in my own skin than I do right now.

That feels bit of shit.

Sometimes you feel so empty and you don't know why.

Missing a dead person is painful.
Missing a dead person is painful.
Sometimes you feel so empty and you don’t know why.
I’ve never felt more gross in my own skin than I do right now.
That feeling when you take the first sip of coffee in the morning.
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